

Becoming Equity-Minded: An Organizational Learning Approach to Improving Black Student Success

by

Gina M. DeGenova Vance

Bachelor of Science, Mount Union College, 1995

Master of Education, Kent State University, 2001

Submitted to the Graduate Faculty of the
School of Education in partial fulfillment
of the requirements for the degree of
Doctor of Education

University of Pittsburgh

2022

UNIVERSITY OF PITTSBURGH

SCHOOL OF EDUCATION

This dissertation was presented

by

Gina M. DeGenova Vance

It was defended on

July 7, 2022

and approved by

Kenyon R. Bonner

Vice Provost for Student Affairs, Office of the Provost

Heather N. McCambly,

Assistant Professor, Department of Educational Foundations, Organizations, and Policy

Sharon E. Ross,

Associate Professor, Department of Health and Human Development

Dissertation Advisor: Linda DeAngelo,

Associate Professor, Department of Educational Foundations, Organizations, and Policy

Copyright © by Gina M. DeGenova Vance

2022

Becoming Equity-Minded: An Organizational Learning Approach to Improving Black Student Success

Gina M. DeGenova Vance, EdD

University of Pittsburgh, 2022

This study explored the potential of a training intervention to build equity-minded capacity among practitioners in higher education. The goal of this Dissertation in Practice was to determine if a workshop grounded in organizational learning theory could be effective at changing practitioner language, beliefs, and practices around racial equity in student success. In their efforts to understand and address retention of Black students, Westminster College practitioners were engaging in practices that reify racial inequity in student outcomes. Racial equity persists as a problem throughout higher education; therefore, Westminster College is not alone in its struggle to remedy the equity gaps in student success (Banks & Dohy, 2019; Ching, 2018; Johnson, 2013; McNair et al., 2020b). Because the focus of this study is to prepare practitioners to change their practice in equity-minded ways, the results of this study may have broad application in higher education.

The training intervention brought together the frameworks of improvement science and organizational learning theory. Improvement science is an iterative methodology employed to define problems, understand systemic influences, apply and test interventions, and spread change (Bryk et al., 2015; Hinnant-Crawford, 2020). Double-loop learning, a component of organizational learning theory, is essential for examining the root causes of a problem and invites practitioner reflection such that beliefs and practices change (Argyris, 1991; Argyris & Schon, 1996). As such, improvement science and organizational learning theory collectively informed the intervention

design so that practitioners might see the equity problem as a problem of practice. A third framework, Bensimon's (2005) cognitive frames (i.e., diversity, deficit, equity) was used to assist practitioners in recognizing the beliefs that both promote and hinder racial equity. The cognitive frames were also used to measure participants' pre- and post-intervention frames.

Fifty practitioners, consisting of faculty, staff, and administrators, participated in a two-part, six-hour training intervention. Forty-six of those participants completed a pre-post-test which measured change in practitioners' beliefs across the discourse, orientation, and strategies associated with each cognitive frame. The results of this study demonstrate that practitioners' beliefs and assumptions can change and that the training is an effective way to promote this change.

Table of Contents

Acknowledgements	xiv
1.0 Problem Space, Organizational Context, and Problem of Practice	1
1.1 Site Description	2
1.2 Problem of Practice	4
1.2.1 Influence of the Language Used by Practitioners	4
1.2.2 Influence of Athletic Recruitment	5
1.2.3 Use of Cultural Stereotypes in Student Support Services	5
1.2.4 Researcher Observations of Deficit Framing	6
1.2.5 Black Student Experiences	7
1.3 Understanding the Problem.....	8
1.3.1 Dominant Paradigm.....	8
1.3.2 Cognitive Frames	9
1.3.3 Color-evasiveness	12
1.3.4 Organizational Learning	14
1.4 Invested Parties.....	15
1.4.1 Black Students	15
1.4.2 Practitioners	16
1.4.2.1 Faculty	16
1.4.2.2 Student Support Staff.....	16
1.4.2.3 Coaches	17
1.4.3 College Leadership.....	17

1.4.4 Invested Party Analysis	18
1.5 Overview of the Intervention and Study	19
1.6 Significance of the Study	20
1.6.1 Call for Accountability	20
1.6.2 Institutional Survival	21
1.6.3 Call for Justice	22
2.0 Literature Review	23
2.1 Purpose of the Review	23
2.2 The Dominant Paradigm: Current Retention Strategies	23
2.2.1 Diversity Offices and Personnel	24
2.2.2 Race neutral approaches to student engagement	24
2.2.3 Student Support as a Student Responsibility	25
2.2.4 The way practitioners talk about racial equity	26
2.2.5 Retention strategies employed at Westminster College	27
2.2.6 Considering the role of the practitioner	28
2.3 Equity-Mindedness: New Approaches to Retention	29
2.3.1 Organizational Learning	30
2.3.2 Racial Inequity in Retention: Root Causes	32
2.3.3 Reflection: Making the Problem Personal	34
2.4 Illuminating the Problem	36
2.4.1 Measuring racial equity	36
2.4.2 Equity-minded sensemaking	37
2.4.3 Achieving racial equity through critical inquiry	38

2.5 Intervention Outcomes.....	39
2.6 Conclusion	39
3.0 Methods.....	41
3.1 Intervention Overview	41
3.2 Workshop Design.....	42
3.3 Theory of Improvement	43
3.4 Intervention.....	46
3.4.1 Workshop Part 1: Framing Our Work with Black Students.....	46
3.4.1.1 Preparing participants	46
3.4.1.2 Key words and definitions.....	48
3.4.1.3 Introducing cognitive frames	49
3.4.1.4 Introducing color-evasive racism	50
3.4.2 Workshop 2: Disaggregating Data for Racial Equity	51
3.4.2.1 Preparing participants	52
3.4.2.2 Rationale for a focus on equity	52
3.4.2.3 Dimensions of racial equity	53
3.4.2.4 Equity data tools	53
3.4.2.5 Putting equity-minded data analysis into practice	55
3.5 Positionality & Limitations.....	56
3.6 Participants and Recruitment	59
3.7 Methods	60
3.7.1 Research Questions	60
3.7.2 Research Design	60

3.8 Measures.....	62
3.8.1 Improvement Science Measures	62
3.8.2 Statistical Analysis	63
3.8.3 Assessment Instruments	64
3.8.3.1 Case Statement Items	64
3.8.3.2 Scenario Items	65
3.8.3.3 Qualitative Items.....	65
3.8.3.4 Survey Preparation.....	66
3.8.4 Data Collection and Analysis	67
3.8.4.1 Preparing the data	67
3.8.4.2 Intended analysis	68
3.8.4.3 Analysis of case statements	69
3.8.4.4 Analysis of scenario items	69
3.8.4.5 Analysis of self-report.....	70
3.8.4.6 Analysis of open-ended questions.....	70
4.0 Results	72
4.1 Assessment of Use of Cognitive Frames Prior to the Intervention	72
4.2 Assessment of Change in Cognitive Frames Following the Intervention	77
4.2.1 Results of Changes Related to the Diversity Frame.....	77
4.2.2 Results of Changes Related to the Deficit Frame	81
4.2.3 Results of Changes Related to the Equity Frame.....	84
4.3 Assessment of Dimensional Change Following the Intervention	88
4.3.1 Analysis of Change Related to the Orientation Dimension.....	90

4.3.2 Analysis of Change Related to the Strategies Dimension	95
4.4 Conclusion on the Effectiveness of the Intervention	98
5.0 Discussion.....	99
5.1 Overview of Effectiveness of the Training Intervention	100
5.2 How Participants’ Orientation Changed.....	103
5.2.1 Dismantling Diversity-Thinking	103
5.2.2 Dismantling Deficit-Thinking	105
5.2.3 Toward Equity-mindedness	107
5.2.4 A Caring Equity Stance	109
5.2.5 Summary	110
5.3 Immediate Impact of the Intervention at Westminster College	110
5.4 Implications for Equity-minded Training Interventions	112
5.4.1 Training Components for Movement Across the Frames	114
5.4.2 Expanding the Impact Through Equity Teams	115
5.4.3 Measuring Change in Practitioners.....	115
5.5 Implications for Practice at Westminster College and Next Steps	118
5.6 Conclusion	120
Appendix A. Activity #1 Equity Stance.....	121
Appendix B. Activity #2 Tying It All Together	124
Appendix C. Activity #3 Identifying Vital Signs	126
Appendix D. Activity #4 Calculating Equity	127
Appendix E. Activity #5 Equity-minded Data Analysis	129
Appendix F. Introduction of Study from President Richardson.....	133

Appendix G. Participant Invitation.....	134
Appendix H. Consent to Participate in a Research Study	136
Appendix I. Pre-Test Survey Protocol	139
Appendix J. Post-Test Survey Protocol	148
Bibliography	157

List of Tables

Table 1 Self-Report on the Post-test of Cognitive Frame Usage Prior to Workshops	73
Table 2 Results for Participant Explanations of Racial Inequity in Student Success Prior to the Intervention	76
Table 3 Participant Mean +/- Standard Dev at Pre-Test, Post-Test and Mean Change in Diversity Frame Items	79
Table 4 Participant Mean +/- Standard Dev at Pre-Test, Post-Test and Mean Change in Deficit Frame Items	82
Table 5 Participant Mean +/- Standard Dev at Pre-Test, Post-Test and Mean Change in Equity Frame Items	85
Table 6 Results of Change Related to the Dimensions	89
Table 7 Results of Change Within Dimension.....	91
Table 8 Results for Participant Descriptions of Change in Orientation Following the Intervention	94
Table 9 Results for Participant Descriptions of Change in Strategies Following the Intervention	96
Table 10 Connections of Findings to Attributes of Equity-minded Practitioners	101

List of Figures

Figure 1 Theory of Improvement	45
Figure 2 Percentage of Responses that Align with Cognitive Frames on the Pre-Test	74
Figure 3 Microaggression Worksheet	125
Figure 4 Vital Signs Worksheet	126
Figure 5 Equity Index Formula	127
Figure 6 Percentage Point Gap Formula	127
Figure 7 Equity-minded Questions.....	130
Figure 8 Practitioners, Policies, Practices, Programs.....	131

Acknowledgements

The genesis of this work began with the messages from my childhood: the beauty of curiosity and learning and the belief in the inherent worth and dignity of each human being. My parents, both educators, instilled these values in me while giving me space to make them my own. **Judy Peterson DeGenova**, thank you for listening to me process my learning, especially as I talked in circles. Your patience and presence are a gift. **James DeGenova**, thank you for being a lifelong learner and for lifting me up when I doubted my own capacity.

My village includes two dear friends whose gifts are woven throughout the intervention. **Claudine Grunenwald Kirschner** taught me the art of facilitation, reflection, and of becoming. **Jennifer Price Davis**, artist and activist, taught me to engage my creative spirit and to use my voice for the greater good. As I sat down to develop each workshop, I could feel their arms lovingly wrapped around me and, for this, I am grateful.

Essential to this work was the vulnerability embraced by the Westminster community. I am acutely aware of how precious this gift was and eternally grateful to my colleagues who walked this journey with me. I am especially grateful for **President Kathy Brittain Richardson**, whose fearless leadership opened the door for equity work at Westminster College and whose commitment to developing me as a leader has been relentless. Likewise, my colleague and friend, **Dr. Jamie McMinn** selflessly guided my methodology and analysis, challenged my thinking, and made me a better writer.

My scholarly support was anchored in my dissertation committee: **Dr. Kenyon Bonner**, **Dr. Heather McCambly**, and **Dr. Sharon Ross**. I am grateful for the expertise they graciously shared, for their belief in me and this intervention, and for their constant support. Being held by

this network was so important as I found my way in this research. **Dr. Linda DeAngelo**, my advisor and mentor, took a naïve White practitioner and shaped her into a critical leader with a new set of beliefs, language, and tools for racial equity work. Linda is the epitome of compassionate and challenging mentorship, calling out my thinking when needed, while honoring the good work along the way.

My biggest cheerleaders are at home. My teenage children, **Jacob, Ella, and Meghan**, sacrificed mom's presence and attention at a time when the world around them turned upside down. I am so proud of how each of them has become a learner in their own right, how they examine the world critically, and how they refuse to give up on the idea of a better way. Jacob, Ella, and Meghan – I believe so much in your hearts, your minds, and your spirits. May you stay curious. May you live into your values. Thank you for supporting me and know that I love you always. Most importantly, I am blessed with the most amazing partner in life, **Mark Vance**. Mark generously created space and time for me to dedicate to my learning. He lovingly stepped into every gap I left behind, caring for our children, our home, our pets, and anticipating my needs. Grounded in his strength and love, I was able to dive into this experience with a willingness to unlearn, to dismantle my thinking and ways of being, and to learn anew. I love you, Mark.

1.0 Problem Space, Organizational Context, and Problem of Practice

The Civil Rights Act of 1964 introduced access to higher education for Black students where Black students had formerly been excluded. According to the latest digest of the National Clearinghouse Research Center (2020), the proportion of Black students enrolled in higher education grew from 9.6% to 13.3% between 1976 and 2019. While access to college improved for Black students, access does not necessarily result in more equitable educational outcomes. Racial equity, achieving racial parity in educational outcomes such as retention and degree attainment, persists as a problem in higher education today, especially at predominantly white institutions (PWIs) (Banks & Dohy, 2019; Ching, 2018; Johnson, 2013; McNair et al., 2020b). The National Student Clearinghouse Research Center report (2021) on persistence and retention for 2019 demonstrates these trends. Overall retention for traditional age, first year students was 66.2%, while retention of Black students in the same cohort was 56.1%. Similarly, the National Student Clearinghouse Research Center (2020) reports the latest four-year graduation rates for Black students at 25.7%, while the overall student graduation rate was 45.3%. The difference in retention and degree attainment rates between Black students and the aggregate are evidence that racial parity remains unachieved and should be cause for concern for higher education professionals. Higher education practitioners must be invested in closing the racial equity gap in retention and graduation rates so students of color may realize the benefits associated with a college education (McNair et al., 2020a).

Retention of Black students at Westminster College, where I am the Vice President for Student Affairs and Dean of Students, follows the national patterns and is significantly lower than the first-year fall-to-fall retention rates for the total student population. Specifically, Black student

first-year retention for the 2019 fall cohort was 52%, while the overall retention rate for the 2019 cohort was 80%. Practitioners at Westminster College have implemented many of the student success initiatives described in the prevailing literature, but have had little success reducing the racial equity gap.

1.1 Site Description

Westminster College, a small, private liberal arts college in New Wilmington, Pennsylvania, was founded in 1852 in affiliation with the Presbyterian Church, proclaiming the spirit and values of the Christian faith while promoting the intellectual, spiritual, and social development of every individual. Its mission is “to help students develop the competencies, commitments, and characteristics that have distinguished human beings at their best” (Westminster College, n.d.a). From the very beginning, Westminster College opened its doors to men and women alike, regardless of racial and religious identity. This heritage sets Westminster apart from many church-affiliated, private institutions. While its admission policies did not exclude, women were not among the first graduates and Black students did not attend until later in the life of the institution. An institution’s historical legacy of inclusion or exclusion as well as its historical policy that benefits one group over another influences current practice (Hurtado et al., 1998). While the founding principles of Westminster College are rooted in inclusion, it is important to acknowledge that the strong connection to the church and the prevailing Christian views of the 1850s may have also served to exclude.

Westminster College, a predominantly White, residential institution, situated in northwestern Pennsylvania, a geographic area with a shrinking college-age cohort and regional

community ripe with skeptical views of the value of a college education. The surrounding community, specifically Lawrence County, is rural and tends toward conservative values and political ideologies. According to the United States Census Bureau (n.d.), 92% of the population of Lawrence County is White, 4% Black, and 4% other racial and ethnic groups as of July 2019. Only 22% of Lawrence County residents have a bachelor's degree or higher. Approximately 75% of the student body draws from local communities, usually within a 60-mile radius of the College. Undergraduate enrollment averages 1100 students; 74% White, 5% Black/African American; 3% combined among students who are American Indian or Alaska Native, Asian, Hispanic, Native Hawaiian or Pacific Islander. It is important to note that nearly 20% of students choose not to report race or ethnicity (Westminster College, 2020a).

The Westminster College mission statement challenges practitioners to acknowledge potential in all students: "Westminster's quest for excellence is a recognition that stewardship of life mandates the maximum possible development of each person's capabilities" (Westminster College, n.d.a). Surveys, observations, and empathy interviews were used to understand how Westminster College is achieving the mission and where it is falling short. A 2020 campus climate survey for diversity shows some conflicting results. Three hundred nineteen faculty, staff, and students completed the survey. Participants reported the following races/ethnicities: 3% African American or Black, 1% Asian or Asian American, less than 1% Hispanic and Middle Eastern, 7% multiple races/ethnicities, and 86% White. It was encouraging that the majority of participants reported satisfaction with the campus climate for diversity and equity and the extent to which the institution supports diversity. Students, faculty, and staff generally agree that recruitment and retention of historically marginalized students, faculty, and staff are leadership and institutional priorities (Westminster College, 2020b). The same survey indicates, however, that some students,

faculty, and staff have encountered discrimination or harassment on campus within the last year. For example, 56% of Black respondents, regardless of their role at the institution, reported experiencing discrimination. Respondents report various types of microaggressions, such as being left out or excluded, intimidation, derogatory remarks, or low performance evaluations.

1.2 Problem of Practice

1.2.1 Influence of the Language Used by Practitioners

As I explored retention of Black students as my problem area, I observed the deficit framing utilized by some faculty and staff throughout the institution which Bensimon (2005) argues reifies racial inequity in student success outcomes. Deficit framing is rooted in racial stereotypes and individual beliefs that differences in student outcomes are a function of such student characteristics as inadequate preparation or lack of motivation (Bensimon, 2005; Bensimon & Harris, 2012; McNair et al., 2020b; Solórzano & Yosso, 2001). Further, Bensimon (2007) stresses a need to turn the lens onto institutions and practitioners in an effort to seek improvement in student success outcomes such as retention. Faculty and staff at Westminster College tell stories about the equity gap using language such as these students “don’t have many financial resources,” “are underprepared,” “are better suited for community college” or their “motivation is athletically focused, they aren’t here to be students.” This type of language is considered racially coded because it substitutes seemingly neutral terms that are based on racial stereotypes and disguises racial bias (Pollock, 2004).

1.2.2 Influence of Athletic Recruitment

A recent development that needs to be considered in understanding this problem of practice is the institutional shift to bring back the Titan tradition of winning football. The arrival of a new football coach brought about a new recruitment strategy. This new strategy targeted low income areas in Florida in predominantly Black communities where young Black males who played football in high school were eager to continue their athletic career. Specifically, athletes who were not considered competitive for Division I were recruited to come to western Pennsylvania to play Division III football. This was an attractive option as there are virtually no Division III athletic opportunities in Florida. As Black male athletes came to Westminster to play football the compositional diversity of the student body began to change. The phrase “the Florida boys” was used by some faculty and staff. While never explicitly defined, the racially-coded term was understood to mean Black students who are academically underprepared, football players, more committed to their sport than their education, and quite likely to withdraw.

1.2.3 Use of Cultural Stereotypes in Student Support Services

Without explicitly naming race, faculty and staff apply these racial and cultural biases to Black students in the language used to describe concerns about student behavior. In particular, this language is used in CARE alerts which are academic and mental health behavioral alerts shared with the CARE Team. The CARE Team is made up of student affairs and academic support professionals, as well as faculty and athletic representatives, who work in a coordinated manner to connect referred students with campus support resources. Black students are disproportionately referred to CARE based on their perceived deficits – lack of motivation and poor participation in

class. For example, a faculty member who teaches a first-year seminar submitted CARE alerts for nine students following the first writing assignment. Seven of the nine students were Black men and the alert language indicated that they were too focused on football and not taking their academics seriously. Of those seven Black men, two were not student athletes, though the alert indicated otherwise suggesting that the faculty member assumed any Black male student must be a football player.

1.2.4 Researcher Observations of Deficit Framing

As the coordinator of the CARE Team, I commonly read and hear deficit language used to describe faculty concerns. Examples include “this student may not be ready for college,” “this student does not have the right motivation,” “this student is too focused on athletics and not academics,” or “he is a good student, but lacks the chops for this major.” While these deficit-based comments reference students who are referred to CARE regardless of race, the descriptions are more likely to be associated with Black students. In my weekly review of alerts, I see an imbalance in the way faculty use the language to describe Black student behavior as compared to White students. At weekly CARE Team meetings, team members may repeat these deficit-based ideas when relaying their own interactions and assessments of students. The general message across practitioners is that Black students often arrive at Westminster underprepared or ill-motivated or unable to navigate college successfully and this sentiment squarely places the blame for not succeeding on the student. Use of racially coded language and placing blame and responsibility on the student alone as an explanation for higher attrition rates for Black students shapes a discourse of deficit which poses barriers to achieving racial equity in student success (DeAngelo et al., 2021; McNair et al., 2020a).

1.2.5 Black Student Experiences

Empathy interviews with Black students revealed how Black students are impacted by the systemic use of deficit discourse. Participants spoke of the importance of meaningful relationships with faculty in building their academic confidence and success. None of the participants encountered meaningful connections with faculty until late in their second year of college. Sasha reported feeling invisible to her faculty in her first year when she was discerning her major choice and struggling academically. Alone, she decided to try a new major and was fortunate to find a supportive advisor who demonstrated belief in her ability to achieve educational success. Likewise, Ben struggled in the biology major. Without the benefits of supportive faculty who invested in his success, Ben experienced academic probation at the end of his first year. He credits the faculty athletic representative (FAR) for taking interest in him as a student and guiding his academic career. Ben graduated on time and acknowledged that he would not have found success without being seen and valued by this faculty member. Of course, neither of these students were privy to the beliefs, perspectives, and assumptions used by their faculty during their first year. However, my experience with colleagues around student success suggests that deficit framing and racial stereotypes may have been at play. As such, my problem of practice is that practitioners at Westminster College engage in practices that perpetuate racial inequity such that retention of Black students continues to fall below retention of the total first year fall-to-fall cohort.

1.3 Understanding the Problem

To understand why Westminster faculty and staff may be engaged in a discourse of deficit, it is useful to understand the dominant paradigm for student success that anchors the practices Westminster relies upon, as well as ways common frames related to race are used by White practitioners. From this starting place, I explored how practitioners, and thus the institution, can learn differently in an effort to prioritize racial equity in student outcomes.

When referring to the problem of practice, I use the term Black students to describe the population experiencing racial inequity in my context. However, studies included in the review often focus on broader populations of students of color. With regard to the literature, I use the phrase students of color to represent groups referred to by the authors of the literature as minority, underrepresented, or students of color. When the study referenced focuses on Black students, I match the terms of the authors of those studies.

1.3.1 Dominant Paradigm

The dominant paradigm for student success is “the existential image of the student as autonomous and self-motivated actor who exerts effort in behaviors that exemplify commitment, engagement, self-regulation, and goal-orientation” (Bensimon, 2007, p. 447). The dominant paradigm for student success, then, is the shared idea that success is associated with student effort, behavior, interaction with campus agents, and characteristics (DeAngelo et al., 2021). In contrast, students who are not successful are assumed to lack the characteristics that yield success which is an assumption that rests in deficit framing. Awareness that the dominant paradigm is situated in a deficit approach is important because training of individual practitioners in higher education,

especially in student affairs, relies heavily on the dominant theories and research on student success (Bensimon, 2007; Harper, 2009; Kinzie, 2012). If the dominant paradigm for student success rests in a deficit frame, so too will practitioner perspective. Practitioners may be well-meaning in their hopes for racial equity in student success, but will be limited if they remain committed to training and education associated with the dominant paradigm (DeAngelo et al., 2021; Harper, 2009). If practitioners are relying on the dominant paradigm, how might they rely on new ways of developing their practice to improve racial equity in student outcomes?

1.3.2 Cognitive Frames

Understanding the cognitive frames of practitioners is instructive because it reveals both barriers to and possibilities for improvement in practitioner approaches to racial equity. Bensimon (2005) uses the term cognitive frames to describe the “interpretive frameworks through which an individual understands a situation” (p. 101). In other words, frameworks are the modes of thinking, informed by individual beliefs, expectations, and values that shape the way practitioners engage in their work. Individuals develop cognitive frames over time to help them interpret why things are the way they are and they use this sense making to design their practice (Bensimon, 2005). Cognitive frames are often implicit, which means practitioners engage frames automatically and unconsciously (Bensimon, 2007). Cognitive frames are also incomplete; operating from specific frames causes practitioners to not see what is not included in the frame (Bensimon, 2005). As such, cognitive frames both shape and limit practice. Bensimon (2005) describes three cognitive frames used by practitioners – a diversity frame, deficit frame, and equity frame.

Individuals using a diversity frame are attentive to demographic numbers that increase opportunities for interracial interaction and view diversity as an institutional characteristic that

fosters mission central learning outcomes such as cultural and global awareness and preparation for a diverse workforce (Bensimon, 2005). Practitioners using the diversity frame believe that demographic diversity yields a panacea of culture sharing, reaping the benefits of interracial interactions for students and campus communities (Bensimon, 2005). The discourse of diversity began following the Civil Rights Act in direct response to increased access to higher education (Bensimon & Harris, 2012). The subsequent creation of diversity offices and related policies reflects institutional efforts to improve interracial relationships and meet learning outcomes associated with diversity (Bensimon, 2007; Iverson, 2007). Like many institutions, Westminster created an office for diversity charged with recruiting more “diverse” students and facilitating programming that celebrated various cultures. However, diversity work is limited in its ability to improve equity in student outcomes in that diversity-minded individuals fail to see that the very students who make the institution diverse often experience a resistant campus climate and unequal outcomes (Bensimon, 2005, 2007). Again, the campus climate survey conducted at Westminster College revealed that students of color experience microaggressions which are often dismissed as unintended actions. Practitioners acting from a diversity frame may explain away students’ racialized experiences as cause for departure in favor of more race neutral explanations such as fit.

The deficit frame places emphasis on gaps in student backgrounds, skills, and knowledge as an explanation for differences in success (Bensimon, 2005; Bensimon & Harris, 2012; McNair et al., 2020b; Solórzano & Yosso, 2001). College readiness, or lack thereof, is a racially coded term used to rationalize the use of deficits as a predictive measure of student success (McNair, 2020a; Patton, 2016). Bensimon (2012) contends that the language of deficiency renders race invisible or is used to provide comparison of students of color with their White peers. As a result, students of color may be viewed as less capable or differences in success may be decontextualized

from students' racialized experiences on campus (Bensimon, 2005). The idea that Black students are less college ready is evident in the language used in CARE submissions. Furthermore, individuals operating from a deficit frame do not assume ownership of solutions because they view the differences in outcomes as inevitable based on students' racial identities (Bensimon, 2005, Ching, 2018; Solórzano & Yosso, 2001). Consequently, students of color are blamed for their poor outcomes. When Westminster faculty experience Black students who do not submit their classwork, faculty using a deficit frame will assume the student is "high risk," abdicating themselves of the responsibility to assist the student and shift it to the CARE team to resolve the student's deficits.

Alternatively, the equity frame shifts the focus from demographics (diversity) and student (deficit) characteristics to a focus on the influence and role of individual practitioners (Bensimon, 2005; Bensimon, 2012; McNair et al., 2020b). Individuals who operate from an equity frame take seriously their responsibility for racial equity in student success outcomes because they understand that beliefs, expectations, and attitudes of individuals influence how Black student abilities are perceived (Bensimon, 2005, 2007; Bensimon, 2012; McNair et al., 2020b). Individuals guided by an equity frame are reflective of their own lack of knowledge of the historical and sociopolitical context of inequality and are committed to learning (Bensimon, 2005, 2007, Bensimon, 2012; McNair et al., 2020b). Equity-minded individuals intentionally focus on success outcomes of student groups experiencing inequity, effectively acting in a racially conscious manner that is affirmative (Bensimon, 2005; Bensimon, 2012; McNair et al., 2020b). Bensimon (2012) identified four attributes of equity-minded practitioners: being color-conscious by noticing patterns of educational outcomes and viewing the differences within a historical and exclusionary context; being aware that beliefs and practice perceived to be neutral perpetuate inequity; being willing to

assume responsibility for eradication of inequity; and being aware that racism is a part of institutional policies and practices. The equity frame, then, represents a sharp departure from the diversity frame which permits color-evasiveness and the deficit frame which limits the likelihood that practitioners will invest in the educational potential of students of color unless they are perceived to be exceptional (DeAngelo et al., 2021). The aim, then, at Westminster College is to help practitioners become equity-minded through an intervention for improvement.

1.3.3 Color-evasiveness

Before I discuss how to build capacity for equity-mindedness, it is important to explore how color-evasive practices complicate the idea of the practitioner's role in student success (DeAngelo et al., 2021). Color-evasiveness is a commonly used practice within the United States; therefore, it is likely to be used by practitioners (Annamma et al., 2017; Bonilla-Silva, 2015). In fact, Pollock (2004) details the ways White educators regularly use language that claims to not see race, yet assigns blame for low rates of educational success to students of color. Bonilla-Silva (2015) offers a more expansive understanding of the racial dynamics at play with individual practitioners. He discusses a racial ideology in which White people use raceless language to explain or justify racial matters (Bonilla-Silva, 2015, Bonilla-Silva, 2017). Annamma et al. (2017) expanded the concept through a critical dis/ability lens and coined the term color-evasiveness. Color-evasiveness also addresses the intersectionality of racism and ableism and clarifies that racism occurs in a multi-modal way, that is beyond sight.

As it relates to my problem of practice, color-evasive racism is displayed in the language practitioners use to explain racial differences in retention. Two of the color-evasive frames are instructive in explaining how practitioner use of racist language may shape and be shaped by the

cognitive frames of diversity and deficit. Minimization of race involves diverting attention to other factors, thus claiming race is not a factor (Bonilla-Silva, 2017). This obstacle presents itself when college administrators “substitute race talk with poverty talk” or claim that socioeconomic factors outrank race in creating unequal outcomes (McNair et al., 2020b, p. 31). White practitioners dismiss race as a factor by claiming that social class is the primary cause for differences in student success. Diversity-minded practitioners cannot recognize inequity; therefore, they are likely to attribute difference in student success to factors other than race such as ability to pay for their education (DeAngelo et al., 2021; McNair et al., 2020b). Similarly, cultural racism parallels the characteristics of the deficit frame in that it relies on racial stereotypes that are used to explain racial inequity (Bonilla-Silva, 2017). Cultural racism is rooted in the historic untruth of biological inferiority of people of color and serves to reduce people of color to their shortcomings (Bonilla-Silva, 2017).

Exploring the dominant racial frames of color-evasive racism is important because practitioners who operate from a diversity or deficit frame are likely engaged with each of the racial frames as color-evasive racism is prevalent in American society (Annamma et al., 2017; Bonilla-Silva, 2015). In fact, expanding on the work of Bensimon (2005, 2007) on deficit framing, McNair et al. (2020b) lay out obstacles inflicted by practitioners which predominantly reflect behavior described as color-evasive. These obstacles reflect common color-evasive rhetoric and include blaming racialized success outcomes on students themselves, replacing race with poverty to explain difference in student success outcomes, and uttering racially coded language to disguise issues of race.

1.3.4 Organizational Learning

Practitioners operating from color-evasive frames, as well as diversity and deficit frames, share language and practices with one another, creating a collective institutional frame that reinforces views that excuse, explain, and normalize inequitable student success outcomes (Pollock, 2004). Also, racial equity in student success is an organizational problem in that student success and diversity are often espoused values of institutions of higher education (Iverson, 2007). As such, racial differences in student success is both a learning problem of practitioners as well as an organizational learning problem (Bensimon, 2005; Ching, 2018). Because individual practitioners influence how institutional work is conducted, organizational learning is an effective tool for improving practice and effecting change.

Organizational learning is a framework for understanding how organizations may change as a result of the learning of individuals within the organization (Argyris & Schon, 1996). Individuals are shaped by organizational norms and practices which, in turn, shape the way organizations function. Argyris (1991) argues that organizations can change through strategies that help practitioners understand the way they think about organizational work. Double-loop learning results in changes in practitioner beliefs and attitudes about the root causes of a problem followed by reflection on changes in practice that can positively effect outcomes (Argyris, 1991; Argyris & Schon, 1996). Because double-loop learning aims to change practitioner beliefs and attitudes, organizational learning can be an effective strategy in addressing the problem of racial inequity in retention.

1.4 Invested Parties

While practitioners are the focal point of the study, all invested parties were considered in the design of the intervention. Three main categories of invested parties were identified related to my problem of practice: Black students, practitioners, and college leadership. The category of practitioners is broken into meaningful sub-categories, including faculty, student support staff, and coaches, based on their relationship to Black students and their specific job responsibilities.

1.4.1 Black Students

Just four percent of the student population, Westminster College enrolls approximately 60 Black students annually and the retention rate of this population ranges from 18-55% over the last four years. Many, but not all, Black students are male, student athletes. Black students were the key stakeholder for my problem of practice and the user whose experience was most centered in the work. Compared to the overall incoming student cohort, they are retained at much lower rates signaling a problem in their collegiate experience. Empathy interviews suggested Black students struggle to find academic confidence or academic identity within the first semester enrolled. Students internalized racist messages and reported questioning their own academic preparation, major choices, academic skills and study strategies, and difficulty navigating campus resources. Additionally, they described feeling alone in this experience and lacked meaningful connection with classroom faculty or faculty academic advisors early in their college experience.

1.4.2 Practitioners

1.4.2.1 Faculty

The empathy interviews revealed the unparalleled importance of faculty in the development of the academic identity for Black students. The faculty are predominantly White (4% people of color). Faculty, both full-time and adjunct, draw from the rural, predominantly White geographic area adjacent to the institution. Faculty serve both as classroom instructors and academic advisors for students within their discipline. Each student interview participant named specific faculty members and advisors who eventually became instrumental in the development of their academic confidence and their decision to remain enrolled at Westminster College. Specifically, students described these influential faculty as genuinely interested in the student and in their success. The influential faculty expressed a belief in the student's overall ability and potential which made a powerful impact in what the students believed about themselves as learners.

1.4.2.2 Student Support Staff

Student Support Staff is an amorphous group best described by their connection to the umbrella organization for campus support resources called the CARE Team. Personnel who oversee student support resources are represented on the CARE Team, including the Academic Success Center and Wellness Center staff. In addition to the support resources, the CARE Team includes staff from a wide variety of offices, including career services, residence life, diversity and inclusion, student engagement, academic affairs, and athletics, who act as student success coordinators and triage alerts submitted by faculty. They meet with students to assess the situation

and refer students to an appropriate CARE support resource. Thirteen staff members make up the CARE Team and coordinated student support staff. Approximately 50% of support staff were recruited from the surrounding communities, while the other half came to Westminster from different regions of the United States. Student support staff are predominantly White – 7% of support staff are Black.

1.4.2.3 Coaches

Because many Black students are athletes and due to the nature of the coach/athlete relationship, coaches were identified as a stakeholder for my problem of practice. The coaching staff, including head coaches, assistant coaches, and graduate assistants is almost exclusively White. One coach holds professor status and two coaches serve on the CARE Team. In accordance with the NCAA, a faculty member serves as the Faculty Athletic Representative (FAR) and acts as a liaison between the Athletic Department and faculty.

1.4.3 College Leadership

Unlike faculty and staff, the majority of Westminster College's leadership team were recruited from areas outside the surrounding geography. The leadership team is comprised of the president, five vice presidents, and three chief executives for priority areas. All leadership team members are White. The president is the first female president in the institution's history and her cabinet boasts the largest number of women in leadership. The leadership team is in its infancy in understanding the problem, but is committed to doing so.

The Board of Trustees (BOT) at Westminster College is predominantly White and composed largely of alumni. There are approximately 35 members of the BOT annually and membership is secured through invitation. Selection is a collaborative initiative between the board and college leadership. In recent years, the BOT has made much progress in including women and preparing them for board leadership. Fifty percent of BOT members and fifty percent of committee chairs are women. Present leadership of the board is attentive to the lack of racial diversity in their membership and is actively seeking new board members to address the inequity. The BOT has expressed deep interest in the campus climate for Black students and has charged College personnel with developing a strategic plan for diversity and inclusion.

1.4.4 Invested Party Analysis

When considering invested parties, it was important to consider the role of power and influence they may have over the problem of practice. A power versus interest grid is a tool for stakeholder analysis described by Bryson et al. (2011). Those with high interest and low power (Subjects) were Black students. Black students hold little power over their situation, yet express high levels of interest in making the educational experience better for other Black students who eventually attend Westminster.

Players (high power and high interest) included coaches, student support staff and motivated faculty. Coaches hold high levels of power over student athletes which enable them to influence athletes' academic engagement and schooling behavior, but coaches hold little power over students' academic experiences. Student support staff hold a modicum of power in that their role on the CARE Team has been given legitimacy by the College's Leadership Team as a key retention tool. CARE Team members hold high levels of interest in creating programs that serve

to improve academic skills and success, thereby increasing academic confidence of Black students. Westminster faculty are both classroom instructors and academic advisors yielding them high levels of power related to the problem of practice. Their interest in the problem is more complex. As such, faculty may fall in the Player quadrant as well as Context Setters (high power; low interest). A core group of faculty have expressed high levels of interest in improving the experience for Black students, while others remain uninterested or indifferent at best.

Because faculty and staff at Westminster College play many roles in the life of the student, invested parties were made up of a complex network of individuals who might find themselves with varying levels of interest and power related to the role they represented in the current moment. Therefore, the influence and power held by invested stakeholders are not necessarily defined by practitioners' institutional role alone.

1.5 Overview of the Intervention and Study

The intervention for this study was composed of two capacity building workshops targeting faculty, student support staff, and coaches at Westminster College. The goal of the intervention was to build equity-minded practitioners by first helping practitioners understand the tacit perspectives and practices they used that shape their interactions with Black students. Consequently, practitioners might become more aware of how they were hindering the success of Black students. Secondly, practitioners were introduced to tools that helped them engage new practices and habits better suited to assist Black students in finding more equitable success. The content of the workshops was grounded in theories developed by Bensimon (2005, 2007) and

Bonilla-Silva (2017) and learning activities were adapted from the Center for Urban Education (2020b, 2020d) at the University of Southern California.

The impact of the intervention was measured via a pre-post-test survey. Paired samples *t*-tests were used to measure the change in practitioners' beliefs about racial equity in student success following the intervention. Specifically, the change was evaluated across the dimensions of orientation, discourse, and strategies as they manifest in each of the cognitive frames. Cohen's *d* was used to measure the effect size of the change or the practical significance. Finally, a thematic analysis was used to demonstrate change in practitioners' beliefs through the open-ended questions.

1.6 Significance of the Study

1.6.1 Call for Accountability

As evidenced in data from the National Student Clearinghouse Research Center (2020, 2021), racial equity in retention and degree attainment continues to be a problem across higher education in the United States. While the Civil Rights Act of 1964 opened up access, higher education has not accomplished the intended outcomes of this act which were ultimately to create opportunities for higher education and subsequent social mobility for people of color (Johnson, 2013). That said, forces outside higher education are calling on the academy to become more accountable. Generally, accountability for student success in higher education has been measured by retention, persistence, and degree attainment. In more recent years, government agencies have been asking for these data to be disaggregated by race. In 2008, Congress amended the Higher

Education Act of 1965 (HEA) by passing the Higher Education Opportunity Act of 2008 (HEOA). The HEOA protects the consumer rights of prospective college students by requiring reporting of institutional data, including enrollment, first-year fall-to-fall retention, and graduation rates disaggregated by gender and race (National Postsecondary Education Cooperative, 2009). In the most recent accreditation report for Westminster College, we received collegial advice to make disaggregating data by race and ethnicity standardized institutional practice. Accrediting bodies, like government agencies, are attempting to hold institutions accountable for improving racial equity in student success. As such, accreditation bodies adopted standards of quality focused on diversity and equity in student outcomes which are often reported as enrollment, first-year fall-to-fall retention, and graduation rates among other indicators (Suskie, 2015).

1.6.2 Institutional Survival

Retention, as a success measure, is also important economically. Many institutions of higher education are tuition dependent, meaning that more than 60 percent of their total revenue comes from tuition (Shewey, 2019). This is especially true for small, private institutions where no revenue is derived from state funding. Recruitment and retention matter deeply to these institutions. Selingo's (2018) assertion that "falling a few students short in admissions or watching a handful transfer because they are dissatisfied is the difference between a balanced budget and a deficit" resonates deeply with campus leaders (p. 11). At Westminster, recruitment and retention have been labeled our top strategic goals precisely because the financial security of the institution rests on overall improvements in enrollment (Westminster College, n.d.b). Efforts to improve racial equity in retention will have positive outcomes for retention generally and in ways that will improve the institution's financial strength.

1.6.3 Call for Justice

It appears that institutions of higher education across the United States, particularly predominantly White institutions, have gained renewed energy for equity work in response to the killings of unarmed Black men and women which came to light in the summer of 2020. A Google Scholar search for racial equity in higher education displays nearly 900 articles and initiatives focused on understanding and improving equity in higher education. One example includes the Liberal Arts Colleges Racial Equity Leadership Alliance (LACRELA) which was launched in June 2020. Spearheaded by Lori White, president of DePauw University and in partnership with Shaun Harper of the University of Southern California Race and Equity Center, the alliance is comprised of 68 member institutions. The aim of the alliance is to move beyond performative measures and to embark collectively to serve students of color and address systemic racism (Anderson, 2020). Westminster College is an inaugural member of the alliance. While not a new conversation, racial equity in student success continues to be tended to in higher education. Therefore, this study has the opportunity to contribute to the research because it addresses how practitioners and institutions may more positively impact racial equity in student success.

2.0 Literature Review

2.1 Purpose of the Review

In Chapter 1, I defined the problem of practice and argued that practitioners play a role in achieving racial equity of student success. As such, the intervention described in Chapter 3 was constructed in order to build capacity of practitioners for equity-mindedness. The purpose of this review is, first, to examine the ways in which retention is taken up through the dominant paradigm, both throughout higher education and at Westminster College, in particular. Then, I discuss how practitioners can develop equity-mindedness, thus taking up retention in promising ways. I return to the concept of organizational learning and double-loop learning to ground the intervention and advance practitioner learning. Next, I explore the value of disaggregated data in revealing racial patterns in retention and suggest critical inquiry as a method of sensemaking which results in practitioner change. Finally, I identify the outcomes of similar interventions at institutions across the United States.

2.2 The Dominant Paradigm: Current Retention Strategies

Retention is often taken up by institutions through the dominant paradigm for student success which manifests in initiatives such as diversity offices, race-neutral opportunities for student engagement, and student support programs that assume a deficit-based orientation.

2.2.1 Diversity Offices and Personnel

Diversity programs align with the dominant paradigm when they are oriented as part of the array of co-curricular offerings of which students are expected to take full advantage. Campuses have charged diversity staff with the responsibility of supporting students of color and providing educational programs that celebrate difference in an effort to fulfill institutional missions that espouse inclusion (Iverson, 2007). Positioning the work of retention of students of color within an individual office is performative, negates the influence of practitioners across campus, and ignores the racialized experiences students face across campus that present barriers to student success (Ahmed, 2012; Museus et al., 2020). For these reasons, diversity offices and programs perpetuate difference in outcomes precisely because they are oriented through the dominant paradigm or the diversity cognitive frame.

2.2.2 Race neutral approaches to student engagement

The dominant paradigm also manifests in race-neutral approaches to student engagement in that it places emphasis on providing a wide variety of opportunities that encourage all students to participate meaningfully such that all students have equal opportunity to thrive (Kinzie, 2012; Museus et al., 2020). In the dominant paradigm, practitioners aim to offer sufficient engagement opportunities working under the assumption that successful students will act autonomously to take advantage of what is offered. Also, because the prevailing research on student engagement is limited to traditional-aged students at residential colleges, student engagement opportunities informed by the research are designed with the supposition that all students arrive with the same level of readiness (Bensimon, 2007; McNair et al., 2020a). Unfortunately, one-size-fits-all

approaches leave out the experiences and perspectives of students of color and do not create equitable access to a rich and deep learning experience (Museus et al., 2015). Finally, the dominant paradigm amplifies traditional notions of engagement, such as attendance at co-curricular programs, study abroad experiences, or service activities, without exploring the barriers that may prohibit or discourage students of color from engaging (Harper et al., 2018; Rendon et al., 2000).

2.2.3 Student Support as a Student Responsibility

Student support resources, another common strategy rooted in the dominant paradigm, are often oriented in the notion that students who lack skill can exert effort and demonstrate adequate motivation to resolve gaps and become successful. Tutoring services, academic and wellness coaching, and behavioral intervention teams are expressly designed to help students develop the missing skills that define the classic successful student (JED Foundation, 2008). To be clear, research has demonstrated that student support services are instrumental to improving student success (JED Foundation, 2008). While effective, retention strategies centered on student support continue to put the sole onus of responsibility for success on the student (Bensimon, 2007). Like race-neutral student engagement opportunities, student support resources framed in the dominant paradigm cannot tend to the alienation and psychological impact experienced by students of color as they navigate White spaces (Parades-Collins, 2012). For example, family and work priorities impact the ability of students to engage in high quality experiences such as study abroad and deficit views of faculty negatively impact classroom engagement for students of color as they may fear being reduced to a racial stereotype (Patton, 2016; Steele, 1997). If racialized experiences are not considered, students of color may engage in behaviors that are defined by practitioners as “high risk.” Practitioners may wrongly assume students’ non-engagement is a matter of low motivation

or undeveloped goals and priorities and may unfairly reduce their expectations of students' educational abilities. The label of "high risk" is misguided, reinforces stereotypes, and perpetuates unequal student outcomes (Harper et al., 2018; Parades-Collins, 2012). Student support efforts remain integral to retention work, but practitioners should examine racially-conscious and non-deficit-based approaches as methods that will enhance the capacity of student support work to promote equity. Examples of emerging practices will be discussed in the next section.

2.2.4 The way practitioners talk about racial equity

Informed by the dominant paradigm, practitioner rhetoric plays a role in reproducing the racial equity gap in retention as well. The way practitioners in higher education talk about Black students' potential to succeed holds power. Much of the discourse on Black student success is framed around cultural deficits which may explain why retention strategies are framed around student characteristics as well (Bensimon, 2005, 2007; DeAngelo et al., 2021; Pollock, 2004; Solórzano & Yosso, 2001). Researchers, too, use two common strategies to explain unequal student success outcomes. First, researchers rely on assorted explanations in which differences are described using deficit or vague terms, yet racism is not named as one of those causes (Bonilla-Silva, 2017; Harper, 2012). Secondly, the role of race is minimized in the research as a result of semantic substitutes such as "unwelcoming" or "unsupportive." Such color-evasive rhetoric is often used by White practitioners exacerbating feelings of isolation and alienation for Black students (Annamma et al., 2017; Bonilla-Silva, 2017; Patton, 2016; Pollock, 2004; Solórzano et al., 2000). Both strategies downplay or ignore the role of racism in student success outcomes leaving gaps in understanding why minority student educational outcomes lag behind those of students from dominant groups. Likewise, Patton (2016) argued post-racial and color-evasive

rhetoric are pervasive in higher education and result in the deliberate exclusion of students of color. Taken together, deficit thinking and color-evasive practice shape the way institutions understand Black student success and dilutes the impact of student success work.

2.2.5 Retention strategies employed at Westminster College

As retention became an institutional strategic goal, Westminster College implemented or adapted a number of one-size-fits-all initiatives that have been effective in moving the needle in overall retention. Like those discussed broadly, the retention initiatives at my place of practice are focused on remedying students' deficits, providing ample engagement opportunities, and are delivered to a general student audience. High impact practices and student support resources are the two primary retention strategies employed at Westminster College. The first-year experience, a high impact practice, aims to help new students successfully transition to college through a comprehensive series of programs, events, and courses. All incoming students are required to participate in the first-year experience. In response to the strategic plan goal of recruiting and retaining students, three student support initiative were adopted: the Academic Success Center (ASC), TRIO student support services and wellness coaching. The ASC provides peer tutoring, academic coaching, and facilitates workshops that hone note-taking, study, and test-taking skills. TRIO provides similar services for eligible students as well as regular advising aimed to augment guidance from academic advisors. Wellness coaching aims to develop self-regulation and executive functioning skills like time management. Since the inception of these retention initiatives, first year Fall-to-Fall retention has increased from 75.5% to 80%. Black student retention has also increased from 17.6% to 55.2%, yet the equity gap persists. Black student

retention still falls 24.8% below that of their peers and 27.2% below White students in the same cohort.

2.2.6 Considering the role of the practitioner

Because retention strategies have not been effective at reducing the racial equity gap, practitioners must consider other points in the system of higher education that can positively impact change. The role of practitioners should be considered in the conversation about achieving racial equity in student success because practitioners are influential in the lives of students (Bensimon, 2007; DeAngelo et al., 2021; McNair et al., 2020a). Research demonstrates that caring relationships between students and at least one adult is important to student success (Kramer & Gardner, 2007; Lerner & Brand, 2006; McNair et al., 2020a). Students of color, in particular, can benefit from caring relationships with practitioners if those practitioners share and understand students' cultural backgrounds (DeAngelo et al., 2020; Guiffrida, 2005; Harper & Quaye, 2007; Museus, 2014). Westminster faculty and staff lean into the power of student-practitioner connections and have developed a reputation for providing strong levels of support for students though strategies have often been race-neutral. Many practitioners at Westminster have expressed a desire to serve Black students equitably; however Black students report difficulty in establishing caring and supportive relationships with practitioners, while practitioners express the need and desire for learning and training.

2.3 Equity-Mindedness: New Approaches to Retention

In order to take up retention work differently, practitioners should employ an equity frame in the way they think about Black student success. Equity-minded practitioners understand racial identities, recognize racial patterns in outcomes, accept personal responsibility for racial equity, and acknowledge that institutional policy and personal practice contribute to racial inequity (Bensimon, 2005; Bensimon & Malcom, 2012; Center for Urban Education, 2020b; Center for Urban Education, 2020d, McNair et al., 2020b). Equity-mindedness is a competency that can be developed and capacity building workshops can be a useful tool in that effort (Bensimon, 2005; Bensimon 2007; Bensimon & Malcom, 2012). This section explores how practitioners might develop equity-mindedness through a capacity building intervention.

Developing equity-minded approaches is paramount to achieving racial equity in student success as equity-mindedness makes space for examining both practitioner and institutional impact on student success (Bensimon, 2012; DeAngelo et al., 2021; Kinzie, 2012; McNair et al., 2020b). In a review of the existing student success literature, Kinzie (2012) affirms the importance of refocusing attention away from student characteristics as it “places onus for student success on institutional conditions and action, rather than ascribing all the responsibility for success to students” (p. xxi). Shifting blame from students to institutional and practitioner responsibility is a critical component of becoming equity-minded, a way of approaching practice that is more likely to reduce racial inequity in student success outcomes (Bensimon 2005, 2007).

In order to move beyond the dominant paradigm, practitioners will need new funds of knowledge (Bensimon & Bishop, 2012). New funds of knowledge include research, training, and tools that alter practitioners sensemaking. Research suggests practitioners must understand students’ cultural backgrounds, approach students with empathy, validate their ability to succeed,

and take personal responsibility for student success (Bensimon, 2007; Kuh & Love, 2000; McNair et al., 2020a; Museus, 2014; Museus & Quaye, 2009). These attributes align with the competencies of an equity-minded practitioner. How might a capacity building workshop be designed to help practitioners unlearn the dominant paradigm and develop an equity-minded orientation to retention? Here I return to the concept of organizational learning. Because practitioners use strategies in ways that impact the fabric of the organization, a workshop that targets practitioners will build their capacity to serve Black students better, but will also yield organizational change that can improve the overall educational experience for Black students as well.

2.3.1 Organizational Learning

The contributions of individual practitioners shape organizational outcomes. Conversely, the tacit practices of the organization shape how practitioners approach their work. The interplay between individual and organization, therefore, becomes immutable. Argyris & Schon (1996) liken an organization to an organism, a whole made up of individuals that work collectively and in concert with one another. Individuals change themselves in relation to the whole and the whole is changed based on the individual members of the organization. As such, an intervention grounded in organizational learning theory can positively impact both individual practitioners and organizations (Bauman, 2005; Ching, 2018; Dowd & Liera, 2018).

Organizational learning occurs when individuals in an organization become aware of a problem and take initiative to understand it on behalf of the organization (Argyris & Schon, 1996; Bauman, 2005). Inquiry into the problem may reveal a conflict between expected outcomes and “theories-in-use” or routine activities formed through individual beliefs and attitudes. Theories-in-use are often implicit in that they are developed and passed down by individuals making them

difficult to explain (Argyris & Schon, 1996). For example, the processes used to recruit, enroll, and house students are steeped in institutional history and values that are not often discussed as practitioners complete their daily tasks. Additionally, barriers may exist that make discussing routine activities untenable. Practitioners who ascribe the lack of success of Black students to students themselves are unlikely to examine their own daily routines.

In order to reconcile racial inequity in student outcomes and espoused values, institutions will need to grapple with the underlying values and norms that prevent equitable results from being achieved. The notions of single-loop and double-loop learning are useful in understanding how organizational learning might address these underlying values. Learning for problem solving is referred to as single-loop learning and often focuses on the external factors that contribute to a problem (Argyris, 1991). Single-loop learning addresses the error and concentrates on organizational strategies, thus resulting in a change in strategy (Argyris & Schon, 1996). But, the values and institutional norms are not changed. In the case of racial inequity, single-loop learning is likely to attribute responsibility for differences in student success to external factors. Having learned about the problem of racial inequity in student success through single-loop learning, practitioners may implement a strategy that addresses the shortcomings of students, thereby changing the organizational strategy to address the issue. However, single-loop learning will not address the underlying values or institutional norms that will more likely result in improvement in student success.

On the other hand, double-loop learning focuses on the root cause of a problem and aims to shift the way practitioners think about the problem (Argyris, 1991; Bauman, 2005). Double-loop learning, requires awareness of the current knowledge used to inform practice, understanding of new approaches, and a look inward or a critical reflection of how practitioner's think (Argyris,

1991; Bauman, 2005; Ching, 2018). When double-loop learning is applied to problems of racial inequity, use of data disaggregated by race can illuminate the problem for practitioners and can be used as a tool for further inquiry (Bauman, 2005; Bensimon, 2005; Bensimon, 2007; Bensimon, 2012). Then, practitioners can ask critical questions about the data that identifies problems of personal practice where changes can be implemented (Ching, 2018). As practitioners make changes to both their strategies and values, they may apply these changes on behalf of the organization. Data-driven, equity-minded inquiry into the problem of racial equity in student success can address the underlying values and norms such that change occurs at both the individual and organizational levels. This next section explores organizational learning, specifically double-loop learning, as the framework for the intervention.

2.3.2 Racial Inequity in Retention: Root Causes

Practitioners at my place of practice must find new and culturally appropriate ways to explain and understand racial inequity in retention. We must move toward a more diunital view of retention work, critically taking up the valuable lessons from the prevailing literature, while considering cultural perspectives as equally sound frameworks (Bensimon, 2012). The dominant paradigm identifies numerous predictors of student success such as students' pre-college characteristics, campus involvement, and sense of belonging. However, studies that center students of color suggest Black student success is associated with fewer predictors than White students. In particular, student characteristics and campus involvement are not predictive for students of color (Parades-Collins, 2012). Therefore, retention strategies that focus on traditional predictors of student success are not likely to result in improvement for Black students. On the other hand, sense of belonging, cultural identity development, and supportive interactions with faculty are significant

factors in Black student persistence (DeAngelo et al., 2020; Museus, 2014; Parades-Collins, 2012). Culturally relevant views of student success include developing student engagement opportunities that prioritize Black students' ability to learn about their cultural histories, that affirm their potential and backgrounds, and where extra effort is made to enroll Black students in high impact practices (Museus, 2014).

Equity-minded practitioners can cultivate sense of belonging and cultural identity development by employing newer frameworks for student success. Strengths-based models of advising and student support align with equity-mindedness in that these models place responsibility for student success on practitioners (Louis & Schreiner, 2012; Schreiner, 2013). A strengths-based perspective is rooted in the idea that all students hold potential and that practitioners can help students draw on their strengths to build confidence, competence, and address deficits without being defined by them (Louis & Schreiner, 2012; Schreiner, 2013). Investing in students' strengths is a more productive approach than anchoring support in a students' shortcomings as it empowers students to address weaknesses in the context of building their capacities (Clifton & Harter, 2003). An equity-minded practitioner can use a strengths-based approach to student success as a way to help students of color understand and harness personal strengths that are shaped by their cultural backgrounds.

Another student support model that aligns with equity-minded practices is appreciative advising. Appreciative advising is rooted in appreciative inquiry which emphasizes cooperative learning toward the end of reaching an individual's fullest potential (Cooperrider & Whitney, 2005). To the extent that practitioners use open-ended questions to deeply understand students' stories and dreams, appreciative advising allows space for students to bring their cultural identity and background into the advising relationship. Equity-minded practitioners who engage

appreciative advising are more likely to validate students of color which is critical to student success (Bloom, et al., 2013; Museus, 2014). Strengths-based approaches and appreciative advising are likely to yield supportive interactions with faculty for students of color.

Likewise, practitioners invested in racial equity must pay attention to the psychological impact related to Black students' lived experiences (Parades-Collins, 2012; Steele, 1997; Tatum, 2017). Black students are likely to experience microaggressions and this reality may strain students' ability to focus on their academic priorities (Tatum, 2017). When practitioners demonstrate an anti-racist commitment by responding to racist acts, they likewise validate the cultural experiences of Black students and foster a sense of belonging (Parades-Collins, 2012; Museus, 2014; Museus et al., 2020). However, practitioners who employ color-evasive frames are not likely to notice and name racism on campus (Annamma et al., 2017; Bonilla-Silva, 2015). Helping practitioners become aware of color-evasive practices is important to building new funds of knowledge. Finally, practitioners can tend to the psychological impact of race and racism by taking responsibility for engaging in racially inclusive practices in their classrooms (Center for Urban Education, 2020a). Intentionally designed syllabi, classroom policies, and curricular content can help reduce stereotype threat, the fear of being reduced to characteristics assumed to be associated with one's academic potential based on race (Harper, 2021; Steele, 1997). Equity-minded practitioners will promote Black student success as they engage racially inclusive practices in their day-to-day work.

2.3.3 Reflection: Making the Problem Personal

Reflection, the second component in double-loop learning, focuses on how practitioners think about a problem and can prompt a shift toward equity-mindedness (Argyris, 1991; Argyris

& Schon, 1996). Effective reflection involves introspection on “the cognitive rules or reasoning [practitioners] use to design and implement their actions” (Argyris, 1991, pp. 4-5). In other words, helping practitioners identify their current ways of knowing is critical to affecting change in organizations. Reflection, as a learning tool, allows practitioners to progress beyond a focus on what they are doing to why they are doing it (Adams, 2016; Gibbs, 1988; Kolb, 1984). Further, reflection is important to the formation and application of new ideas (Ashford & DeRue, 2012; Kolb, 1984).

If the aim of the intervention is to move practitioners beyond the dominant paradigm toward an equity frame, capacity building strategies might include an examination of Bensimon’s cognitive frames (2005) as a way to challenge practitioners’ current modes of thinking. Practitioners who are situated in diversity or deficit framing may be more clearly able to understand their contributions to racial inequity if they recognize themselves in those frames. Likewise, learning about the equity frame may make known new possibilities for practitioner’s work. Once practitioners identify their existing frames, reflective exercises, such as responding to journal prompts or sharing experiences with colleagues, can help them integrate their new funds of knowledge toward new solutions to address racial inequity. As was discussed earlier, color-evasive frames (Bonilla-Silva, 2017) also get in the way of successful efforts to reduce the equity gap. Examining the semantic moves associated with color-evasive racism is important to deepening reflection for practitioners who want to change their practices to better support Black students.

2.4 Illuminating the Problem

In the previous section, I discussed the necessity of new funds of knowledge and the role of organizational learning in building equity-minded capacity for practitioners. However, many practitioners, especially if they engage color-evasive perspectives, do not even recognize that there are differences in outcomes (Bensimon, 2005). Practitioners may be aware of culturally inclusive practices and may reflect on their own practices, but it often takes clear and compelling evidence that a problem exists before they will respond (Argyris, 1991; Bensimon, 2005). Inquiry, grounded in the systemic use of disaggregated data, results in the illumination of the existence of difference and leads to learning about the racial patterns in educational outcomes (Bensimon, 2005). As such, tools for color-conscious inquiry should be included in a capacity building intervention for practitioners. The Center for Urban Education (2020b, 2020c, 2020d) at the University of Southern California built upon the work of Bensimon (2012) to develop a set of tools for racial equity. The four data tools include identifying vital signs, measuring racial equity, equity-minded sensemaking, and setting equity goals. Vital signs include data that are already collected at institutions, though the data are disaggregated by race and ethnicity (Bensimon & Hanson, 2012). These data demonstrate the state of racial equity in key areas such as access, retention, completion, and excellence (Bensimon & Hanson, 2012; Center for Urban Education, 2020b).

2.4.1 Measuring racial equity

Measuring racial equity involves two measurement methods: equity index and percentage point gap (Center for Urban Education, 2020b). The equity index is a proportionality measure that compares participation of a disaggregated subgroup with that of a reference group. Equity index

is most useful for institutional benchmarking, but is not easily applied to personal practice (Center for Urban Education, 2020b). For data that are close to practice, the percentage point gap is more useful in that it compares the outcome of the reference group with that of the disaggregated population. Percentage point gap includes a calculation of students “lost,” meaning the number of students in the disaggregated group required to achieve equity. As a result, percentage point gap promotes sensemaking which is helpful for practitioners to see the impact of their practice. Finally, percentage point gap situates practitioners well to establish equity goals (Center for Urban Education, 2020b).

2.4.2 Equity-minded sensemaking

Equity-minded sensemaking requires a culture of inquiry that involves both access to data that demonstrates equity gaps and an introspective examination of policies and practices that contribute to the gaps (Center for Urban Education, 2020b). Analysis of equity data must be conducted from an equity-minded frame. Consistent with the attributes of equity-mindedness, equity-minded data analysis involves:

- Noticing racial inequities;
- Acknowledging that practices may not be working;
- Understanding inequity as a dysfunction of structures, policy, and practices;
- Questioning assumptions, and recognizing stereotypes and implicit biases, and
- Taking action to eliminate inequity (Center for Urban Education, 2020b, p. 36).

Equity-minded sensemaking means reframing inquiry questions such that practitioners turn the lens on themselves rather than the perceived deficits of students, thus a critical inquiry (Center for Urban Education, 2020b). Critical inquiry uses traditional research tools, such as document

review, syllabus review, web scan, and observation to investigate how an institution addresses equity. Finally, equity goals should focus both on decreasing equity gaps and improving practices and policies that can close gaps (Center for Urban Education, 2020b).

2.4.3 Achieving racial equity through critical inquiry

In summary, critical inquiry involves the use of disaggregated data, evaluating data using the equity data tools, and interpreting data via equity-minded sensemaking. Inquiry compliments organizational and double-loop learning in that it makes clear where racial inequity exists and provides practitioners with the information needed to improve their own practice. Equity data tools prompt practitioners to interpret root causes of racial inequity in student success outside the scope of the dominant paradigm. Equity-minded sensemaking requires practitioners to turn inward and analyze the way they think about student success, the kind of reflection inherent in double-loop learning. The intervention in this study takes up the issue of racial inequity in retention by a) challenging practitioners to examine the beliefs, assumptions, and perspectives that shape their thinking about retention, b) complicating their understanding through a discussion on color-evasiveness, and c) introducing practitioners to tools that assist their new modes of thinking about retention. Taken together, these concepts strengthened the work of practitioners at Westminster College.

2.5 Intervention Outcomes

Positive outcomes have been demonstrated through numerous studies and initiatives that were grounded in the cognitive frames and equity data tools using organizational learning strategies. Some studies have demonstrated that practitioners can improve practice in ways that promote racial equity in student success. Notably, practitioners have been able to improve racial equity in student access to higher education, participation in high impact practices among students of color, improve racial equity in course outcomes, and increase successful transfer of community college students of color to four-year colleges (Blake et al., 2012; Bustillos & Rueda, 2012; Center for Urban Education, 2020a; Felix & Fernando, 2018; Robinson-Armstrong et al., 2012). Other studies show that equity-minded practitioners are more effective than diversity- or deficit-minded practitioners at helping students of color find success. For example, equity-minded faculty are more likely to help students of color feel important and connected and are more likely to mentor students of color toward pathways to the professoriate than those who rely on diversity or deficit framing (Blake et al., 2012; DeAngelo et al., 2021). Finally, interventions that are iterative and grounded in organizational learning are likely to produce sustainable change in practitioner beliefs and attitudes as well as to develop institutional culture where equity is a standard of practice (Baldwin et al., 2011; Center for Urban Education, 2020a; Dowd & Liera, 2018).

2.6 Conclusion

Equity-mindedness can be developed as a capacity for practitioners. Through organizational learning and equity-minded sensemaking, change in practitioner approaches to

student success has the capacity to move the organization in a more positive direction as it relates to racial equity. Organizational learning requires that practitioners become aware of their current beliefs and attitudes and the theoretical foundations that helped to form practices. Once practitioners have grappled with their current mental models, equity data tools can introduce new tools for practitioners to develop equity-minded skills. As practitioners employ their new funds of knowledge to promote racial equity in student success, organizational practices will change as well, resulting in better outcomes for Black students.

3.0 Methods

The improvement project was rooted in improvement science, a methodological framework that helps define problems, identify potential points of change that may resolve problems, and measure whether the change is an improvement (Hinnant-Crawford, 2020). A driver diagram, a visualization of the system and points where change can be affected, was used to identify possible interventions for this improvement project (Hinnant-Crawford, 2020). Many possible change ideas were identified in the driver diagram, but the chosen intervention focused on capacity building of equity-minded practitioners. As stated previously, explanations for lower retention rates of Black students at Westminster College include students' backgrounds and deficits that place the responsibility for success squarely on the student. It is predicted that Black student retention may improve if practitioners change their beliefs and attitudes about the causes of racial inequity in student success.

3.1 Intervention Overview

The study received a “not research” designation from the Institutional Review Board (IRB) at the University of Pittsburgh (IRB# 2109001) and was approved by the IRB at Westminster College. The intervention for this study focused on capacity building of practitioners such that they move toward an equity-minded framework. The goal of the intervention was to develop equity-minded beliefs, attitudes, and practices among practitioners. The intervention included a set of two workshops. Both awareness and reflection, also called

double-loop learning, are critical components of organizational learning and grounded the pedagogical approach to the workshops (Argyris, 1991; Bensimon, 2005; Bensimon et al., 2012). The content selected for the workshops included an examination into the existing frames employed by practitioners, introduction to equity-mindedness, and exposure to equity-minded tools that can be employed to improve equity in student success. The first workshop introduced cognitive frames and attributes of equity-mindedness, specifically the cognitive frames defined by Bensimon (2005) and the central frames of color-evasive racism theorized by Annamma et al. (2016) and Bonilla-Silva (2015). The second workshop applied the critical inquiry phase of double-loop learning by introducing the use of disaggregated data and data analysis tools developed by the Center for Urban Education (2020b). To promote professional development that leads to change in practice, participants were then asked to apply these concepts to their personal practice by engaging in reflective exercises. Many of the reflective exercises were adopted and/or adapted from tools created by the Center for Urban Education (2020b, 2020d).

3.2 Workshop Design

Each three-hour workshop was originally designed to be delivered in-person and incorporated into the workday. However, the omicron wave of the COVID-19 pandemic and severe weather necessitated that both workshops be delivered via Zoom. The first workshop was scheduled the day before classes began for spring semester. The date of the workshop coincided with a wave of high infection from COVID-19, so the College decided to require re-entry testing for students which would have pulled a number of participants from the in-person workshop. Other participants felt uneasy about in-person participation because of the omicron wave. Then, an

unexpected snow storm prevented travel to campus, both delaying re-entry testing and requiring me to move the workshops online.

I created facilitator's guides to map out the workshop agenda, important points of conversation, timeframes for each topic, and instructions for activities. Each facilitator's guide was modified for virtual delivery. Power Point presentations were originally designed to deliver content and then adapted for online instruction. Specifically, I added slides to establish expectations for online engagement, share the workshop agenda, enhance instruction for activities, and remind us to take breaks. In the first workshop, I added a Zoom poll following a break to tend to participant emotional reaction to the content. Reflective activities were planned to encourage critical examination and participant reflection. Worksheets were created for each activity and converted to Google Docs, so that participants could record their thoughts, reactions, and reflections.

3.3 Theory of Improvement

The theory of improvement in this study is grounded in double-loop learning and guided an intervention designed to bring awareness to racialized patterns of student success, provide reflective opportunities for critical inquiry of personal practice, and introduce practitioners to equity-minded tools for change. Practitioners were exposed to cognitive frames and color-evasiveness, such that they would develop language and definitions that deepen their understanding of themselves and their approach to working with students of color. The equity-data tools were included to help practitioners figure out what to do with their new understanding of approaches to equity work. Equipped with both new language, definitions, and practical application, the theory of improvement is that practitioner beliefs and attitudes will shift. Further,

as a result of the workshops, practitioners will have both the equity-minded understanding and skills that they can employ to change their practice. Figure 1 illustrates the theory of improvement.

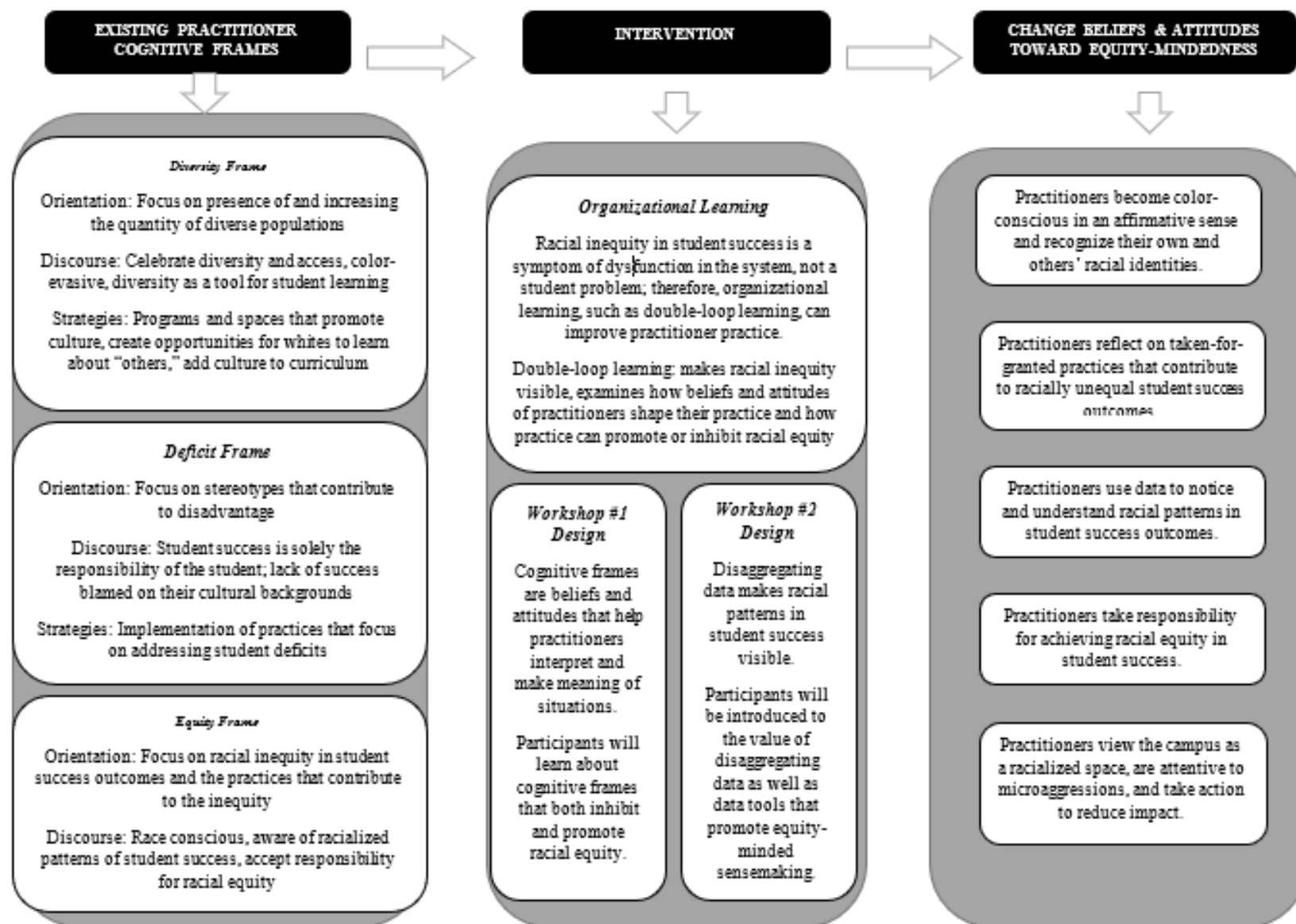


Figure 1 Theory of Improvement

3.4 Intervention

3.4.1 Workshop Part 1: Framing Our Work with Black Students

The first workshop was titled *Framing Our Work with Black Students* and was designed to meet the following learning outcomes. At the end of the workshop, participants will be able to:

- describe the meaning of key definitions: race, underrepresented, minoritized, Black students, student success, racial equity in student success, racial microaggressions
- identify examples of diversity, deficit, and equity framing in their work and conversations about Black students and;
- recognize color-evasive framing in their work and conversations about Black student success.

3.4.1.1 Preparing participants

Launching is a strategy used to design the opening of a workshop in such a way that characterizes the purpose and intention (Parker, 2018). To launch the workshop, I welcomed participants and thanked them for their participation. I set the context for the workshop by reminding participants of the institutional strategic goal to increase student recruitment and retention and displayed current retention rates disaggregated by race to make clear the problem. Then, participants introduced themselves by sharing their names, roles at the institution, and motivation for participation in the study on a Google Jamboard. As participants added their notes, I verbalized the common reasons for participation. The launching strategy concluded with

establishing guiding principles for conversation. These co-constructed guidelines named the challenges and discomforts participants may experience, while creating a set of clear and explicit norms that help participants fully participate (Adams, 2016). Some researchers offer a critique of the use of ground rules or guidelines as they may privilege those already privileged in standard forms of dialogue (Gorski, n.d.; Lambirth, 2006). Despite the critique, Gorski (n.d.) endorses the use of ground rules, though he encourages facilitators to critically analyze guidelines within a context of oppression. He suggests the following rules as a starting place for discussion:

1. Listen actively – respect others when they are talking.
2. Speak from your own experience, instead of generalizing (“I” instead of “we,” “they,” and “you”).
3. Do not be afraid to respectfully challenge one another by asking questions, but refrain from personal attacks – focus on ideas.
4. Participate to the fullest of your ability – community growth depends on the inclusion of every individual voice.
5. The goal is not to agree – it is to gain a deeper understanding.
6. Be conscious of body language and nonverbal responses – they can be as disrespectful as words (Gorski, n.d.).

I initiated the development of guiding principles by offering this prompt – “What do you need in order to fully participate in this learning and dialogue?” Participants were invited to add notes on a Google Jamboard in response to the prompt. As participants added their responses, I verbally noted themes and asked clarifying questions. Common responses included active listening, being open and okay with discomfort, challenging others in their thinking, being honest, and approaching others with understanding. One participant expressed concern with the power

dynamic resulting from having supervisors and supervisees in the same participant pool. I offered that participants were assigned to breakout rooms such that discussion could be free from this power dynamic and that breakout rooms were not being recorded. Participants affirmed this was a helpful strategy. Once the participants agreed to the set of principles, I saved the Jamboard for use in the second workshop.

3.4.1.2 Key words and definitions

After the launching strategies, I presented the content of the first workshop, using this quote from Krista Tippett, journalist and thought leader, to introduce the material:

We are starved for fresh language to approach each other. We need what Elizabeth Alexander calls “words that shimmer” – words with power that convey real truth, which cannot be captured in mere fact. Words have the force of action and become virtues in and of themselves. The words we use shape how we understand ourselves, how we interpret the world, how we treat others. Words are one of our primary ways to reach across the mystery of each other (On Being, 2021, p. 3).

I expanded upon the quote by sharing my personal curiosity about language and the way words frame how we interact with Black students. Next, I introduced key words critical for grounding the work and for which we do not have a common institutional understanding: race, underrepresented, minoritized, Black students, student success, racial equity, and racial microaggressions. I invited participants to spend three minutes making notes about what the terms meant to them and then invited a few individuals to share their definitions. While I did not share specific definitions for each term, I relied on the following definitions to guide my response to participant contributions. Race: a demographic category used to define groups of people by physical traits, usually the color of their skin. Underrepresented describes student demographics

that are not equitably represented at Westminster College. Minoritized was defined as the othering of racial and ethnic groups regardless of whether they are numerical minorities. Black students were defined as the focus of the workshop and a population of students who are both underrepresented and minoritized on campus. Student success was defined as measures of student outcomes including retention, persistence, and graduation. Racial equity in student success refers to the achievement of proportional rates of success among racial groups as compared to the aggregate. Rather than inviting participant contributions to define racial microaggressions, I offered language according to Sue (2010) as “the brief and commonplace daily verbal, behavioral, and environmental indignities, whether intentional or unintentional, that communicate hostile, derogatory, or negative racial, gender, sexual-orientation, and religious slights and insults to the target person or group” (p. 5). Then, I identified three types of microaggressions and provided examples of each: microinsults, microinvalidations, and microassaults. I invited questions and extended a break.

3.4.1.3 Introducing cognitive frames

The second focus of the workshop was diversity, deficit and equity cognitive frames, as defined by Bensimon (2005). I introduced participants to the work of Estella Bensimon, former professor of higher education at the University of Southern California Rossier School of Education and founder/director of the Center for Urban Education. Then, I explained cognitive frames as ways in which practitioners understand their work with students and that frames serve to both bring focus on some parts, yet render others invisible. Each frame was defined and criticism for each offered. Participants learned the tenets of equity-minded practitioners and compared practices that lack equity-minded competence.

Once the concepts were introduced, participants completed Activity #1 Equity Stance (Appendix A) adapted from The University of Southern California (Center for Urban Education, 2020d). The activity was designed to help participants recognize responses associated with each frame and challenged practitioners to reflect on how various responses may hinder equity in student success. The worksheet included scenarios along with potential responses associated with the cognitive frames (Center for Urban Education, 2020d, pp. 30-33). A link to the Google Docs worksheet was posted in the Zoom chat and participants were asked to take five minutes to select the stance that most closely reflects their own and note their reactions to the statements. A second worksheet expanded on these statements and challenged participants to respond to questions for those who take each stance. Participants were split into predetermined breakout rooms for 15 minutes and asked to write their responses to the questions, then share their thoughts with others in the breakout room. Finally, each group was asked to have one representative share a significant point or take away from their discussion.

Following a 15-minute break, I was concerned about how my participants were feeling about and grappling with the concepts, so I used a Zoom poll to gauge. The question asked was “How are you feeling right now?” and the response options were “I’m overwhelmed, but hanging in there,” “I’m leaning into discomfort,” “I’m not really sure how I feel,” and “I’m totally with you.” This also provided me an opportunity to encourage participants, to affirm what they were experiencing, and to acknowledge the challenge in the work they were doing.

3.4.1.4 Introducing color-evasive racism

The next topic for the workshop was color-evasiveness and its impact on Black student success. Annamma et al. (2016) and Bonilla-Silva (2015) speak to covert uses of language and practices that perpetuate racism. I began by offering a critique of the language of color-evasiveness

as an ideology that renders race immaterial, ignores cultural, social, and political histories of people of color, disallows pride in one's racial identity, and promotes policy and practice that denies the impact of race on student success (Annamma et al., 2016). Then I presented the four central frames of color-evasive racism: abstract liberalism, naturalization, cultural racism, minimization of racism (Bonilla-Silva, 2017). Because each of these frames parallels Bensimon's (2005) deficit frame, I presented examples to illustrate the similarity in concepts.

Color-evasive content was reinforced using Activity #2 Tying It All Together (Appendix B), which included a series of examples of microaggressions (Center for Urban Education, 2020d, pp. 13-14). A link to the worksheet was posted in the Zoom chat. Participants were asked to map the worksheet statements to cognitive frames and central frames of color-evasive racism. I had planned to send participants into breakout rooms to share their responses and why they chose them. I had also planned to ask participants to share an experience or story that reflects one of the microaggressions and respond to how the experience may have impacted a student. However, there was not enough time to engage either conversation. To conclude the first workshop, I invited participants to spend the time between workshops paying attention to themselves, their colleagues, social media, Black students, and particularly the language used in dialogue about Black student success.

3.4.2 Workshop 2: Disaggregating Data for Racial Equity

The second workshop was titled *Disaggregating Data for Racial Equity* and was designed to meet the following learning outcomes. At the end of the workshop, participants will be able to:

- identify reasons to focus on equity in student success

- demonstrate use of equity data tools including vital signs, equity index, and percentage point gap
- analyze data, both aggregated and disaggregated, using an equity-minded frame.

The focus of the workshop was on the use of disaggregated data to illuminate inequity at the personal, departmental, and institutional level. The work of Bensimon et al. (2012) as well as the Center for Urban Education (2020b) was used to guide this session.

3.4.2.1 Preparing participants

Similar to the first workshop, I opened the second workshop by welcoming participants, reviewing expectations for online engagement, sharing the workshop agenda, and revisiting the guiding principles for conversation. In order to remind participants how we agreed to engage with one another to support learning, I displayed the Jamboard notes from the previous workshop which were organized in themes. As a means of reinforcing the cognitive frames from the previous workshop, I sent participants to predetermined breakout rooms and asked them to post on a Jamboard notes on their observations of the cognitive frames-in-use. The Jamboard had three headers: Diversity/Deficit Frames, Color-Evasive Frames, and Equity-minded Frames. Participants were asked to post notes under the headers as they aligned with the observations. The groups were asked to provide one spokesperson who shared highlights of their small group discussions.

3.4.2.2 Rationale for a focus on equity

To begin the workshop content, I suggested reasons for focusing on improving equity. First, there are economic and demographic benefits to the College when equity in student success is achieved. Second, improving equity strengthens our ability to meet strategic plan goals and

achieve the institution's mission. Lastly, a focus on equity promotes justice which is supported in our mission as a church-related institution.

3.4.2.3 Dimensions of racial equity

Next, I introduced the dimensions of racial equity, accountability and critical. Accountability dimension is determined by proportional measures of success outcomes for historically underrepresented students. The critical dimension challenges practitioners to approach the demonstrated gaps in student success with equity-minded sensemaking and questioning. To illustrate these two dimensions, I shared an example of Westminster College data. Specifically, I displayed D, F, W rates for WST101 courses disaggregated by race. Participants were able to see that Black students experience low or failing grades in the course at much higher rates than they are represented in the class. Then I shared results of a survey administered to Black students about their WST101 experience. The results demonstrate that Black students did not experience a sense of belonging or racially inclusive materials in their WST101 course, though they did find their instructors supportive. The survey results demonstrate how practitioners might use equity-minded analysis to understand why Black students were experiencing lower rates of success in the course. Understanding the experience of Black students points to strategies or practices that can be improved.

3.4.2.4 Equity data tools

Next, I presented data tools for equity work provided by the Center for Urban Education (2020b) at the University of Southern California. The first data tool is identification of vital signs. Vital signs are a place within a practice to begin developing an understanding of where racial inequity exists (Bensimon et al., 2012; Center for Urban Education, 2020b). Disaggregating data

related to vital signs allows practitioners to clearly see the disparity in student success and to make decisions based on data rather than on assumptions. Vital signs should be connected to goals and can be selected at the practitioner level, the department or school level, and the institutional level. Vital signs can be defined as points of student success at the various levels of the institution such as access, retention, completion, and excellence (Center for Urban Education, 2020b). I provided examples of vital signs from my place of practice and then participants completed a worksheet regarding their own practice. Activity #3 Identify Vital Signs (Appendix C) required participants to name a goal and identify a policy or practice related to the goal. Once the goal was identified, participants selected indicators and vital sign data related to the goal. Lastly, participants identified how they can access data related to the vital signs which may require partnerships with institutional research or department heads. The worksheet was shared as a Google Docs in the Zoom chat and participants were given five minutes to complete it. Three participants shared the results of their brainstorming.

The second equity data tool is Equity Index (EI), a proportionality measure that is a ratio of two percentages – the percentage of the disaggregated subgroup among all students over the percentage of the disaggregated subgroup among students in the reference group (Center for Urban Education, 2020b). EI is a measure of representational equity or the representation of the subgroup in any aspect of the institution (Center for Urban Education, 2020b). The third data tool is Percentage Point Gap (PPG) that compares the attainment rate of the disaggregated subgroup with that of the reference group. This is a measure of outcome equity (Center for Urban Education, 2020b). I presented these formulas and examples using institutional data.

Participants were organized into groups of four to six based on practitioner responsibilities and provided a case study along with institutional data related to the case. Ten case studies were

developed for different areas of the institution including D, F, W rates for a course, grades of excellence in a course that lead to success in a major, a high impact practice, a student leadership opportunity, an athletic team, and demographic representation in a major. The case studies were developed in Google Jamboard for each breakout room and used for the remainder of the workshop activities.

Activity #4 Calculating Equity (Appendix D) required participants to calculate both EI and PPG and to identify how these tools can be used in their departments and personal practices (Center for Urban Education, 2020b). Rather than using real data that might cause participants to feel vulnerable, sample cases were created for this exercise. Each group was asked to present their case and their data. Finally, participants were asked to share how they might use these tools in their respective areas. Following this activity, participants were given a 15-minute break.

3.4.2.5 Putting equity-minded data analysis into practice

By this point in the workshop, participants should have been able to see where inequities exist and how to uncover other inequities. Practitioners must also be able to analyze the data in a way that draws upon the equity-minded tenants from the previous workshop. Participants were reminded of deficit and equity-minded frames and then exposed to both deficit-minded and equity-minded hunches that might explain inequities via tables from Center for Urban Education (2020b, pp. 38-39) which provided a comprehensive set of hunches and questions from each frame. Next, participants were asked to work together to complete Activity #5 Equity-Minded Data Analysis (Appendix E) which provided an opportunity for participants to apply the equity sensemaking tools (Center for Urban Education, 2020b). Specifically, participants referred to the case study used previously and documented their hunches and questions that helped them understand why the inequity exists. They brainstormed practitioners, policies, practices, and equity-minded questions

that may reframe how they understand the disparity and possible solutions. I presented an example of a completed Equity-Minded Data Analysis worksheet using the D, F, W example for WST101. A link to the Google Docs worksheet was posted in the Zoom chat and participants were returned to their breakout rooms for this activity. A spokesperson for three groups then shared how the method of inquiry was different from current thinking or strategies.

I closed the workshop with a quick demonstration of setting racial equity goals related to both the accountability and critical dimensions of achieving equity. Examples of numerical goals were shared as a measure of accountability and process goals were shared as a measure of the critical dimension. Finally, I thanked participants for their time, invited participant reactions to the workshops, discussed next steps, and urged them to complete the post-test survey.

3.5 Positionality & Limitations

As a researcher, I must acknowledge my positionality within the organization of my study. I am a White woman currently serving in a senior leadership position at Westminster College. Westminster College is a small institution and there was no way for me to avoid including participants with whom I interact daily. In fact, some participants were those I directly supervise. Because of the size of the institution, my position, and the awareness of this project across campus, participants could not be truly anonymous. Participants needed to have confidence that their participation would not have a negative impact on their employment, especially anyone reporting to student affairs. This showed up in the development of guiding principles where participants acknowledged that the presence of supervisors in the workshop needed to be addressed gracefully in order for them to fully participate. As shared earlier, awareness of this limitation drove decisions

about how to assign participants to breakout rooms and not to record the small group conversations. This also showed up during opportunities for participants to share. Student Affairs professionals participated, but often in a delayed manner and most often when small groups were expressly asked to share back to the larger group.

On the other hand, my reputation for strong leadership and collaboration at the institution was important to my ability to garner trust and willingness of others to embark on such vulnerable work. Prior to serving as Vice President for Student Affairs, I worked in various mid-level positions over 13 years at the institution. In those years, I collaborated with nearly every administrative office and numerous individual faculty. I served on cross departmental committees, task forces, and worked as a campus partner on institutional initiatives such as strengthening the matriculation process for incoming students and implementation of a new student information system. In fact, “supporting Gina” was one of the common reasons for participating in the intervention cited in the introductory Jamboard activity. The positive relationships formed in my prior work elicited strong levels of support for the intervention. This point cannot be emphasized enough. I do not believe practitioners would have agreed to participate, nor do I believe they would have been willing to be vulnerable if trusting relationships had not been previously formed.

In order to create a workshop atmosphere that created a sense of safety and inclusion for participants, I incorporated a tool called “priming” into the pre-workshop preparations. Priming is the chance to shape participants’ experiences and expectations prior to the workshops (Parker, 2018). Because I wanted to help participants be vulnerable, safe, and motivated, I sent a note ahead of the first workshop with two testimonials from Black students sharing their experiences with practitioners who positively influenced their success. Additionally, a member of the Westminster College Leadership Team who oversees participants’ departments communicated encouragement

for participation and commitment to the study. In fact, nearly all Leadership Team members participated in the study further emphasizing their commitment.

Ushering, another pre-workshop strategy, speaks to the arrival of participants at the first gathering using an intentionally crafted threshold moment (Parker, 2018). Arrival at the workshop location will set the tone for participants' initial impressions and their comfort with the content (Adams, 2016). My intention was to greet all participants at the door where they would find an easel with welcome instructions for the morning. This was modified for the online setting where I welcomed everyone as they entered the Zoom meeting and shared a slide of the agenda for the day. Had the workshops been in person, participants would have found a personalized note from me thanking them for their courage and vulnerability. Instead, I created a slide with the image of the thank you notes and shared comments about the artist, Jennifer Price Davis, a Black woman who uses her art as a form of activism. When the participants returned to campus from the snow day, they found the notes in their campus mailboxes.

In addition to workshop design, the research design was developed with my positionality in mind. A quantitative design was selected so that data collection could be facilitated with anonymity. While participation in the workshops cannot be anonymous, participant responses to the assessment instruments remained anonymous through the use of unique identifiers.

Beyond my role as a senior leader, I must acknowledge my Whiteness. The voices and perspectives of Black students must be present in my research, even though the intervention focuses on practitioners. Empathy interviews with Black students, which were conducted to develop a deeper understanding of the problem, were instrumental in the development of my intervention. I will need to continue to seek out narratives of Black student experiences and student success in order to keep their needs central to the research.

3.6 Participants and Recruitment

In the previous discussion on invested parties, I identified specific practitioners who are integral to the problem of practice: faculty, student support staff, and coaches. Integral practitioners were the priority audience, but to ensure adequate participation the workshops were open to all faculty and administrative staff with a target goal of at least 30 participants. The president of the institution introduced the study to prospective participants and expressed her support for participation (Appendix F). Prospective participants were invited via an email (Appendix G) sent by the Principal Investigator. Email confirmation and a request to complete the consent (Appendix H) precipitated the communication strategies defined as priming. Participants were assigned a unique identifier that served to connect change in beliefs in the pre-post-assessments and to provide as much anonymity as possible.

Fifty practitioners signed up for the project and forty-six participants completed both pre- and post-tests as well as both workshops. Of the participants, 65% (30) identified as woman, 28% (13) identified as man, and 7% (3) preferred not to report their gender identity. Nearly all participants, 96% (44), identified as White. One participant (2%) identified as Black and one (2%) as Other.

Faculty represented 30% (14) of participants and other academic professionals represented another 15% (7). Student Affairs professionals constituted 13% (6) of the participants. The balance of participants, 41% (19) identified as part of other administrative areas, including six that were from the executive leadership team. One limitation of the wide recruitment of participants was the varied experiences, and in some cases no direct experience, with students. The implications of having such a wide representation of practitioners will be discussed further in the Assessment Instruments section.

3.7 Methods

3.7.1 Research Questions

The following inquiry questions guided the study:

1. To what extent can the training intervention build equity-minded capacity among practitioners in higher education?
2. To what extent can a workshop grounded in organizational learning theory be effective at changing practitioner language, beliefs, and practices around racial equity in student success?

3.7.2 Research Design

In order to measure the impact of the workshops on practitioners' beliefs and attitudes, this study employed a quantitative approach using a casual-comparative, pre-post-test design. Casual-comparative design is appropriate when determining the impact of one variable upon another as the study may provide evidence about improvement (Henning & Roberts, 2016). Because this study is framed by improvement science and sought to measure the impact of the intervention, a causal-comparative design supports both the goals of the intervention and improvement science. Further, causal-comparative design is appropriate when all participants will receive the same treatment or when the independent variable cannot be assigned (Salkind, 2013). In this study, all participants were exposed to the independent variable which is defined as the workshops. Participant beliefs and attitudes constituted the dependent variables. The pre-post-test instrument was used to evaluate the beliefs and attitudes of the same group of practitioners before and after

the intervention. One advantage of casual-comparative research is the ability to assess cause-and-effect relationships when variables cannot be manipulated. However, there are limitations in that other variables not included in the study may impact differences. As such, researchers are urged to use caution when claiming causation (Henning & Roberts, 2016).

Two driving factors led to my decision to use a quantitative approach. First, quantitative approaches allow for participant anonymity (Miller, 2020). Achieving anonymity for my participants was important because I am both a researcher and a senior administrator. Participants may have been guarded in their responses during the workshop materials if they believed their words and thoughts would be readily identifiable or could be used against them. The use of unique identifiers on the pre-post-tests allowed for anonymity and was more likely to encourage authentic engagement of participants. Second, the plan, do, study, act (PDSA) format of the intervention necessitates short, iterative cycles with the workshop intervention serving as one cycle. Quantitative design allows for quick and relatively easy data collection and analysis (Dyce & Williams, 2014). The limitations of the timeframe make quantitative analysis preferable. On the other hand, a quantitative approach, specifically a causal-comparative approach, brings questions as to the validity of results (Dyce & Williams, 2014; Miller, 2020; Henning & Roberts, 2016). Most relevant to this design is the challenge of self-reporting in questionnaires and surveys, which include impression management, self-deception enhancement, acquiescence, and random responding (Dyce & Williams, 2014). These limitations can be addressed by careful construction of questions and utilization of a pilot study (Robinson & Leonard, 2019).

3.8 Measures

3.8.1 Improvement Science Measures

In order to know that the intervention led toward the aim of improving Black student retention, change must be measured. Improvement science requires specific types of measurement that are associated with the theory of improvement at different points in the driver diagram (Hinnant-Crawford, 2020; Perry et al., 2020). The measures should be embedded in the daily work and should not impose additional burden (Hinnant-Crawford, 2020). The four measures include outcome measures, driver measures, process measures, and balance measures (Hinnant-Crawford, 2020; Perry et al., 2020).

Driver measures focus on the points in the system that can impact change toward the improvement aim and the intervention is the focal point of the system; therefore, only driver measures will be considered in this study (Hinnant-Crawford, 2020; Perry et al., 2020). Driver measures are leading measures which are more indicative of immediate change and will help determine if the workshop prompts the desired change in practitioner thinking (Perry et al., 2020).

Related to this study, the driver being evaluated was change in practitioner beliefs and attitudes with regard to equity-mindedness. The impact of the intervention on practitioner beliefs, attitudes, and perspectives was measured via paired samples *t*-tests and thematic analysis of the survey responses. Paired samples *t*-tests were conducted on individual survey items as well as on the way the cognitive frames manifest in practice: discourse, orientation, and strategies dimensions.

3.8.2 Statistical Analysis

Sixty-one *t*-tests were conducted in this study which introduced potential errors associated with multiple comparisons. To reduce the risk of making false claims that the intervention was effective, I corrected for false positive results using two different methods. First, Bonferroni's correction was used to minimize the occurrence of false positives, though a common criticism is that Bonferroni's correction may exclude some data that can detect an effect (Coppock, 2020; Glen, 2022). When Bonferroni's was applied to the 61 comparisons, the *t* value, or the difference in means between the pre- and post-responses, required a *p* value of less than .001 to be statistically significant. The second method used to correct for potential error was the Benjamini-Hochberg procedure which works under the assumption that some level of false positives is expected (Coppock, 2020). In improvement science, it is helpful to know where even subtle movement is occurring within a system; therefore, I wanted to examine significance through both the more and less restrictive models. As will be explained in the following chapter, 15 items were found to have statistically significant change in means from the pre- to the post-test. Five items were significant using the Bonferroni's correction while an additional 10 items were found to have significant change when the Benjamini-Hochberg procedure was applied.

While the paired samples *t*-tests can demonstrate whether the intervention impacted participant beliefs, *t*-tests do not measure the magnitude of the change (Glen, 2021). Therefore, Cohen's *d* was used to determine the effect size of the intervention or the practical significance (Henning & Roberts, 2016). Cohen's *d* is calculated by comparing the mean performance of the two assessment groups before and after the intervention and dividing by the pooled standard deviation to measure effect size (Glen, 2021). The effect size must be greater or equal to .30 to be

considered significant. The guidelines for interpreting effect size are as follows: .30 indicates a small effect size, 0.5 equals a moderate effect size, and .80 indicates a large effect size.

3.8.3 Assessment Instruments

The assessment instruments (Appendices I & J) are pre-post-test surveys created to measure the impact of the workshop on practitioner beliefs and attitudes. The instruments were administered online using Qualtrics®, a survey software platform. Beliefs and attitudes are measured using questions that reflect behavior, judgment, feelings, accounts, and classifications which are indicators of a particular perspective (Robinson & Leonard, 2019). Beliefs and attitudes about racial equity in student success were the survey constructs that were operationalized using the cognitive frames of diversity, deficit, and equity. Bensimon (2005) identified the discourse, orientation, and strategies used by practitioners who are guided by each of the three frames. Descriptions of dimensions were used to inform development of the survey items. Similarly, learning activities created by the Center for Urban Education (2020d) provide statements that map to the orientation, language, and strategies of the three frames. The activity statements were also used to inform question development.

3.8.3.1 Case Statement Items

The pre-test and post-test share a set of common quantitative questions. Seven case statements and eight scenarios were presented. The case statements were crafted as groups of items in which participants were asked to consider the percent of time or extent to which the item aligned with their own perspective. There were nine items in each of the seven case statements which addressed beliefs about Westminster's responsibility for student success; personal approaches to

diversity, equity, and inclusion; variation in outcomes of high impact practices; difference in student success outcomes; student support; and use of language. Three of the items in each case statement mapped to each cognitive frame (diversity, deficit, equity). On a 100-point sliding scale, participants were asked to indicate how well the items aligned with their own view or how often they engaged a specific response. While the items mapped to cognitive frames, the case statements mapped to the dimensions (discourse, orientation, strategies): one case statement (items 1-8) reflected the discourse dimension, four statements (items 10-18, 19-27, 28-36, 55-63) reflected the orientation dimension, and two statements (items 37-45, 46-54) reflected the strategies dimension.

3.8.3.2 Scenario Items

Eight scenarios made up the balance of the questions aimed to measure beliefs and perspectives. Two scenarios (items 64, 69) reflected the discourse dimension, one scenario (item 65) reflected the orientation dimension, and five scenarios (items 66, 67, 68, 70, 71) reflected the strategies dimension. The scenarios asked participants to put themselves in various institutional roles and contemplate an equity issue they may face. Participants were presented with three possible responses to each scenario and asked to select the one that most aligned with their own response. The responses mapped to diversity, deficit, and equity frames.

3.8.3.3 Qualitative Items

In addition to the common set of questions, both the pre-test and post-test had a set of additional questions. On the pre-test, one open-ended question was used to ask respondents to list reasons for racial inequity in retention rates for Black students. A second open-ended question invited participations to share their current practices aimed at helping Black students succeed. Because language is an indicator of beliefs and attitudes, the open-ended question format allowed

for participants to provide feedback in their own words (Ruel et al., 2016). This was helpful in aligning participant responses with the three cognitive frames. The post-test contained one quantitative question which requested that practitioners reflect on their prior usage of the various cognitive frames and rate on a 5-point scale how often they exhibited each frame prior to the workshops (e.g. never, sometimes, about half the time, most of the time, and always). This question was only asked on the post-test because it required knowledge about the cognitive frames learned during the intervention. The open-ended questions on the post-test asked participants to reflect on their learning in the workshops. One question asked respondents to list how their explanations for Black student attrition have changed. The final question on the post-test asked respondents to predict which strategies offered during the workshops they will use in their personal practice following the study.

3.8.3.4 Survey Preparation

The surveys were pretested in order to ensure questions could be clearly understood by the respondents and to ensure responses would elicit data that answer the research questions. First, I employed a checklist for quality question design developed by Robison and Leonard (2019, pp. 167-170). Then, I conducted a pilot test of the survey. A pilot test provides the opportunity to systematically run through the survey process to examine the clarity of instructions, quality of questions, and usefulness of the data collected (Ruel et al., 2016). Four doctoral program colleagues and one professional colleague who were not participating in the study took the survey at various stages of development. Then, I met with each colleague to gather feedback about the questions and participants' ability to navigate the survey. The pilot group encouraged me to clarify terms that might not be familiar to all participants such as "practitioner" or "CARE." They suggested I begin the scenario items with "Imagine you are" to help participants take on different

roles. Finally, they responded and did not respond to questions such that I might be able to consider how to interpret or address unexpected responses.

3.8.4 Data Collection and Analysis

Data for the pre-post-test survey was collected via Qualtrics® and extracted to Microsoft Excel for analysis. Participants were assigned a unique identifier to replace participant names and to provide confidentiality for their responses. The pre-test was administered one week prior to the first workshop. The post-test was administered one day following the second workshop. All surveys were distributed to participants via email and administered outside the context of the workshops in an effort to elicit authentic responses (Menter et al., 2011).

3.8.4.1 Preparing the data

Once the data were extracted from Qualtrics®, I used Excel to prepare the data for analysis and to calculate descriptive statistics. Since the case statements were already represented on a scale from 0-100, a separate worksheet was created for each case statement item and evaluated for the number of responses on both the pre- and post-test. Because the case statements were set up in Qualtrics® such that respondents did not have to choose between nor rank responses, and a “no response” option was not made available to participants, the non-response for these items varied greatly. This impacted the planned analysis and additional data cleaning was necessary. Items in the case statements were to be grouped by dimension and analyzed together. Once the case statements were grouped by dimension, the items were to be further organized by cognitive frames and pre-post-test means were to be calculated for each frame in each dimension. Instead of using the planned preparation, descriptive statistics (mean, standard deviation, and change in mean) were

calculated for each of the 63 items associated with case statements and participants' responses were removed if they did not respond to the item on both the pre- and post-test. The number of responses dropped below 30 for five items (items 5, 11, 13, 35, and 45) which were subsequently dropped from the analysis. The pre-post-test means for 58 case statement items were used for analysis.

The scenarios, on the other hand, did not have high instances of non-response. As such, preparation of the scenarios included grouping the items together by dimension and calculating descriptive statistics for the diversity, deficit, and equity dimension. The pre-post-test means for the three scenario items, one for each dimension, were used for analysis.

3.8.4.2 Intended analysis

The intended analysis involved reducing the case statement items to a cognitive frame for each participant and then grouping all items by themes within each dimension. The discourse dimension was to be analyzed by combining the discourse case statements and scenarios into two themes: practitioner's beliefs about Black student success and the ways practitioners discuss Black student success. The questions related to the orientation dimension were to be grouped into four themes: personal beliefs, beliefs about how Westminster College should be responsible for equity, participant's response to inequity, and beliefs about what influences Black student success. The questions for the strategies dimension were to be reduced to three groups: personal strategies used, beliefs about effective strategies, and preferred strategies. Paired samples *t*-tests were to be conducted on each theme. The planned analysis could not happen for two reasons. First, the 100-point sliding scale use for the case statements could not be converted to a dominant cognitive frame. Therefore, the data type on the case statements and scenarios did not match meaning the necessary data did not exist for the paired samples *t*-tests. Secondly, a common group of more than

30 participants who answered all the items for the case statements could not be identified as the non-response rate on the case statements varied so greatly. Without a common set of participants, paired sample *t*-tests on data grouped by cognitive frames within each dimension could not be run for the case statements.

3.8.4.3 Analysis of case statements

While the planned analysis could not be conducted on the case statements, paired sample *t*-tests could be run individually on each of the 58 case statement items (eight discourse, 33 orientation, and 17 strategies) and then displayed by dimension and cognitive frame. However, running a large number of *t*-tests could increase the likelihood of false positive results (Tip Top Bio, 2021). As mentioned earlier, I applied both Bonferroni's correction and Benjamini-Hochberg procedure to adjust for multiple tests. Bonferroni's correction altered the *p* value to a more stringent value making it less likely to incorrectly assume statistically significant change (Statistical Solutions, 2022). The adjusted statistically significant *p* value for this study was .001. The Benjamini-Hochberg procedure help to identify significance that would have been overlooked using only the Bonferroni's correction. Additionally, Cohen's *d* was calculated for items where *p* demonstrated statistical significance. Because my sample size was small for each item, the results could be inflated. Therefore, I applied a correction factor for small samples sizes ($n < 50$) (Glen, 2021).

3.8.4.4 Analysis of scenario items

The scenario responses were forced choice and each possible response aligned with only one of the cognitive frames. Each frame was assigned a numeric value (diversity=1, deficit=2, equity=3). In order to address non-response from participants, I removed responses where

participants did not answer on both the pre- and post-test. Forty-two participants remained. As such, the planned preparation and analysis could be conducted. Scenarios were then grouped by dimension and the pre- and post-test means and standard deviations for each dimension were calculated.

Analysis of the scenario questions was conducted as planned. First, frequencies of means from the pre-test were calculated for scenario items within each cognitive frame. This data was used to determine participants' prevailing frame prior to the intervention. Second, the scenarios were grouped by dimension and three paired samples *t*-tests were run. The three *t*-tests conducted on the dimensions were included in the calculation of Bonferroni's correction with a significant *p* value for this study being $<.001$. The Benjamini-Hochberg procedure was run for the scenarios as well. Cohen's *d* was calculated for the dimensions where *p* values demonstrated statistical significance.

3.8.4.5 Analysis of self-report

Responses to the post-test quantitative question regarding use of cognitive frames prior to the workshops were assigned a numeric value (never=1, sometimes=2, about half the time=3, most of the time=4, and always=5). Means were calculated for each cognitive frame.

3.8.4.6 Analysis of open-ended questions

A separate worksheet was used to code the open-ended questions from the pre- and post-test from which I initially conducted a thematic analysis. Data was coded using the method outlined in Erlingsson & Brysiewicz (2017) and mapped to the cognitive frames (Bensimon, 2005). First, I identified condensed meaning units from the participant responses. The condensed meaning units were assigned codes which were then organized into categories and themes. Additionally, each

condensed meaning unit was mapped to one of the cognitive frames and dimensions. Themes and the mapping of cognitive frames were interpreted to determine whether practitioner belief and assumptions changed and if practitioners developed equity-minded competence. Following the thematic analysis, I converted qualitative data into quantitative data by tracking the number of mentions within each identified theme. The frequency of mentions helped support or challenge findings from the causal-comparative analysis.

4.0 Results

The purpose of this study was to measure a change in beliefs and perspectives associated with the diversity, deficit, and equity cognitive frames as a result of a training intervention designed to build equity-minded capacity of practitioners. The goal was to help participants move toward equity-mindedness in the way they think about, discuss, and approach racial equity in student success. This chapter provides the results of the study. First, I present the findings related to practitioners' primary cognitive frame prior to the intervention. Then, I present the data related to potential change in cognitive frames following the intervention. Finally, I contextualize the results of change in cognitive frames within the discourse, orientation, and strategies of practitioners.

4.1 Assessment of Use of Cognitive Frames Prior to the Intervention

Once introduced to the construct of cognitive frames and their respective attributes, participants were asked to reflect on their prior use of the frames and report how often they employed each. On the post-test, practitioners reflected on their primary use of cognitive frames before they participated in the intervention, and they reported they were more likely to be aligned with the diversity and equity frames in equal measure. Table 1 lists how participants qualified their pre-intervention use of the cognitive frames as reported on the post-test. With a mean score of 3, participants reported having engaged the diversity frame and equity frame "about half the time". They reported having engaged the deficit frame "sometimes" or a mean score of 2. These findings

reveal that participants considered themselves more likely to operate from a diversity or equity frame before participating in the intervention.

Table 1 Self-Report on the Post-test of Cognitive Frame Usage Prior to Workshops

Self-Report on the Post-test of Cognitive Frame Usage Prior to Workshops

<i>Variable</i>	<i>M</i>	<i>Scale Label</i>
Diversity	3	About half the time
Deficit	2	Sometimes
Equity	3	About half the time

Note. All questions were on a 5-point Likert scale where 5 represented “Always” and 1 represented “Never.”

The idea that participants were predominantly using the diversity and equity frames prior to the intervention is somewhat supported by data generated from the pre-test. Participants were asked to imagine themselves in roles of various practitioners and select a response to a scenario that most aligned with their own. Each response option reflected one of the cognitive frames. Figure 2 illustrates the frequency with which participants selected responses aligned with each frame. The results suggest that participants were most likely to approach student success from a diversity frame prior to the intervention. But, the data suggest that participants were not as likely to engage from an equity frame as they reported they were.

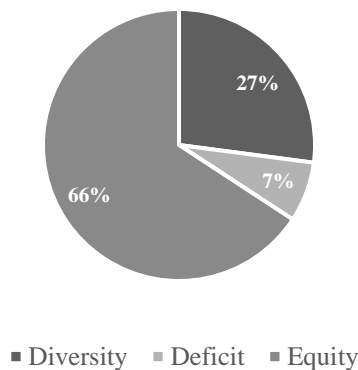


Figure 2 Percentage of Responses that Align with Cognitive Frames on the Pre-Test

Although participants were not likely to select deficit-framed responses when asked to imagine themselves in various roles, they were more likely to employ deficit framing in their own discourse on racial inequity in student success. These findings were extrapolated from participant responses to an open-ended question on the pre-test asking participants to list the reasons for racial inequity in student outcomes. When provided the opportunity to use their own words, participants relied on language associated with the deficit frame more often than on explanations aligned with diversity or equity frames. Table 2 highlights examples of language used by participants as well as the number of mentions for each category of responses and the frequency with which each frame was represented. Of the 124 explanations offered, 87 (70%) mapped to the deficit frame. These items were organized into six categories. The first category, cultural stereotypes, had the most mentions (47; 38%), which included phrases such as “less academically prepared for rigorous academic expectations.” Next, participants noted that Black students lack a sense of belonging or “feel” isolated, comprising 21 mentions (17%).

While sense of belonging can be aligned with the equity frame and is identified in the literature as a critical element of Black student success (Museus et al., 2020), I mapped participant explanations to deficit framing when the language used by participants placed the onus to develop

a sense of belonging squarely on the student (e.g., “hard for Black students to feel like they belong,” or “not feeling a sense of connection”). Furthermore, participants employed the dominant paradigm of student success in their language about how Black students do not exhibit the traditional behaviors associated with student success (nine mentions; 7%), such as academic engagement, motivation, and attendance. Additionally, seven mentions (6%) pointed responsibility for Black student success to the students themselves, noting that Black students are “embarrassed” or “unwilling” to seek help. Finally, three mentions (2%) focused on educational programs and services that will fix the student.

Table 2 Results for Participant Explanations of Racial Inequity in Student Success Prior to the Intervention

<i>Results for Participant Explanations of Racial Inequity in Student Success Prior to the Intervention</i>	
Category	Example quote(s)
<i>Deficit Frame (70%)</i>	
Cultural stereotypes (m=47)	"Pressure from home to work to support their families (also affects recruitment)" "Coming for athletics" "Less prepared academically for rigorous academic expectations"
Lack a sense of belonging (m=18); isolation (m=3)	"Hard for Black students to feel like they belong" "Feelings of being isolated"
Traditional notions of student success m=9) Responsibility for success assigned to students (m=7)	"Lack of motivation" "Reluctance to use campus resources (lending library, food pantry, academic success center, TRIO program)" "Embarrassed to seek and accept help"
Focus on educational programs and services (m=3)	"We have to find ways to provide support and services necessary"
<i>Diversity Frame (19%)</i>	
Focus on representation within campus and rural surrounding community (m=20)	"Lack of faculty/staff that look like them or serve as role models for them in their field of study or interest groups" "Relatively smaller percentage of minority students at WC" "Lack of representation of Black people in surrounding community"
Gaps in local services and activities (m=3)	" Rural community where there are fewer activities"
<i>Equity Frame (11%)</i>	
Practitioner skills (m=8)	"Faculty and staff don't want to engage in uncomfortable conversations"
Campus culture (m=4)	"Marginalization by majority faculty, staff, and students"
Focus on inclusive practice (m=1) and culturally relevant services (m=1)	"Lack of consistent inclusive community that they genuinely feel embraces them for who they are as individuals" "Lack of knowledge and experience working with Black students for faculty/staff"

Note. m=number of mentions; Frequencies of cognitive frame in boldface.

4.2 Assessment of Change in Cognitive Frames Following the Intervention

The intervention was designed to educate practitioners about the ways their beliefs and assumptions can impact racial equity in student success, thereby building greater capacity for practitioner equity-mindedness. In this section, I examine statistically significant change within each cognitive frame and discuss the effect size of the change.

Because the study involved multiple tests that increased the probability of achieving Type I errors or false positives, I conducted two types of corrections: Bonferroni's correction and Benjamini-Hochberg procedure. Bonferroni's correction is a stricter measure to remove any possibility of false positive results. This study is rooted in improvement science, which emphasizes changes in a system that move the needle on a problem of practice; therefore, I opted to also consider a more flexible method of correction. The Benjamini-Hochberg procedure allows for the recognition that some amount of Type I error is reasonable and may help identify statistically significant differences that would be missed using only Bonferroni's correction. In this chapter, I highlight survey items that were statistically significant using both corrections as well as those differences that were found to be statistically significant using only the Benjamini-Hochberg procedure, but had a medium effect size (i.e., $d = 0.5$).

4.2.1 Results of Changes Related to the Diversity Frame

Data related to the diversity frame indicated that the intervention affected participant beliefs such that they trended away from prior use of the frame, specifically related to color-evasive

practice. Table 3 presents the change in means for all diversity frame items on the survey. When asked about high impact practices, participant views changed in the desired direction. That is, their views were less aligned with the practice to *“implement high impact practices taking care not to consider race so all students have the opportunity to participate”* ($t = 3.107, p = .004, d = 0.5$). Change in means was statistically significant for this item using only the Benjamini-Hochberg procedure, yet the effect size was medium. In contrast, participant responses demonstrated the stickiness of the diversity frame. Post-test responses indicated a stronger alignment with the item *“We are a diverse community and we should celebrate the diversity we have”* ($t = -3.567, p < .001, d = 0.4$), suggesting that the intervention reinforced this diversity-framed belief. The change related to this item was statistically significant using the more conservative Bonferroni’s correction, though the effect size was small. Finally, results demonstrated significant change in participant beliefs that *“Westminster College provides Black students the same opportunity to be successful as any other student”* ($t = 2.762, p = .008, d = 0.4$). Change on this item was in the desired direction (away from reliance on the diversity frame) and significant using the Benjamini-Hochberg procedure, though the effect size was small. While the change in mean for this item is consistent with the previous diversity item that addresses color-evasive practice, I cannot confidently rule out a Type I error. Taken together, the data indicate that the intervention may have impacted practitioners’ perspective on color-evasive practice, though the intervention may have not helped practitioners extend that understanding, such that they believe celebration of diversity may, in fact, be a color-evasive practice.

Table 3 Participant Mean +/- Standard Dev at Pre-Test, Post-Test and Mean Change in Diversity Frame Items

Participant Mean +/- Standard Dev at Pre-Test, Post-Test and Mean Change in Diversity Frame Items

Question Content	Pre-Test Responses		Post-Test Responses		Change		Cohen's <i>d</i> with correction factor
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Race-neutral approaches to developing HIPs (n=34)	42.24	34.43	27.12	29.20	-15.12	**	0.5
We should celebrate the diversity we have (n=40)	28.58	25.20	43.18	28.77	14.60	*	0.4
I believe Black students have the same opportunities to be successful (n=45)	46.42	27.39	34.56	29.19	-11.87	**	0.4
Course or program outcomes prepare students for diverse workforce (n=37)	49.30	29.30	60.38	30.42	11.08		
I believe cultural celebrations positively influence Black student success (n=45)	62.56	27.27	70.07	25.31	7.51		
Global co-curricular programs will improve outcomes for all students (n=44)	64.98	25.48	57.52	27.88	-7.45		
I believe offering support services for all students will help Black students be more successful (n=41)	46.41	25.81	39.15	28.36	-7.27		
Leverage athletic relationships to encourage student athlete participation in HIPs (n=42)	71.19	26.94	64.36	30.92	-6.83		
All students can be successful because support services are offered (n=43)	44.98	30.36	39.28	29.02	-5.70		
I believe Black students should feel safe and included in our welcoming community (n=43)	40.60	26.60	35.56	29.16	-5.05		
I believe Black Student Union positively influences Black student outcomes (n=45)	78.07	19.30	73.29	22.32	-4.78		
I believe our strong sense of community is accessible to everyone (n=43)	41.93	28.56	37.53	29.27	-4.40		
Prioritize student preparation for a diverse workforce (n=45)	71.16	24.59	75.09	26.30	3.93		
I work to ensure my practices are effective for all students (n=42)	77.79	22.90	76.05	23.62	-1.74		

Prioritize an increase in diverse student and employee populations (n=45)	77.09	21.37	78.80	21.10	1.71
I believe the Office of Diversity and Inclusion positively influences Black student outcomes (n=45)	74.20	21.79	75.49	18.77	1.29
Invite all students to participate in a HIP (n=41)	76.83	24.78	77.83	25.05	1.00
More diverse enrollment in my courses would benefit all students (n=36)	82.69	21.49	83.50	19.39	0.81
Our welcoming environment helps everyone find their place (n=33)	32.06	27.37	32.64	29.48	0.58
Prioritize student learning about diversity and inclusion (n=45)	87.80	20.43	87.53	21.03	-0.27

Note: n = number of respondents who answered the item on both the pre- and post-test; All questions were on a sliding scale of 0-100, where 100 represented strong alignment with the statement and 0 represented low alignment with the statement.

*significance using Bonferroni's correction, $p < .001$, Cohen's $d > .30$. **significance using Benjamini-Hochberg procedure, $p < .008$, Cohen's $d > .30$

4.2.2 Results of Changes Related to the Deficit Frame

Data indicate that the intervention challenged participants in their reliance on traditional notions of student success as well as their use of cultural stereotypes, which demonstrated a possible shift away from the deficit frame. Significant change in the deficit frame, as measured by the Benjamini-Hochberg procedure, was found in three items as shown in Table 4. The intervention prompted practitioner beliefs to trend away from deficit framing, particularly in their alignment to the frame regarding student success behaviors. Survey items *“I can coach students all I want, but if [Black students] are going to choose not to change, not to show up for class, or not follow the rules, they aren’t going to be successful no matter what I do”* ($t = 3.268, p = .003, d = 0.7$), and, *“I want all students to be successful, but if students do not attend class, turn in their work, or ask for help, there is little I can do to help them”* ($t = 3.193, p = .003, d = 0.5$) demonstrated significant change using the Benjamini-Hochberg procedure. These findings confirm that participant beliefs trended away from deficit-based ideas and that the intervention had a medium effect on change in practitioner beliefs related to traditional ideas of how successful students behave. Furthermore, the assertion that the intervention allowed practitioners to recognize their assumptions as cultural stereotypes is supported by change in the desired direction for the item *“Black students often experience culture shock because they come from diverse, urban areas and we are rural and predominantly White”* ($t = 3.012, p = .004, d = 0.4$). That said, the change was found to be significant using only the Benjamini-Hochberg procedure, and the effect size of the change was small. As such, I cannot confidently rule out a Type I error relative to practitioner reliance on cultural stereotypes.

Table 4 Participant Mean +/- Standard Dev at Pre-Test, Post-Test and Mean Change in Deficit Frame Items

Participant Mean +/- Standard Dev at Pre-Test, Post-Test and Mean Change in Deficit Frame Items

Question Content	Pre-Test Responses		Post-Test Responses		Change		Cohen's <i>d</i> with correction factor
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
I cannot impact Black student success if they do not engage in successful classroom behavior (n=34)	43.26	27.03	26.62	24.18	-16.65	**	0.7
Black students must exhibit classroom behavior that promotes success (n=36)	38.31	27.95	26.44	23.52	-11.86	**	0.5
Prioritize recruitment of Black students who are prepared for college (n=43)	59.14	29.44	47.79	30.48	-11.35		
Black students experience culture shock because they come from more diverse environments (n=44)	74.75	22.15	65.25	27.32	-9.5	**	0.4
Prioritize Black student motivation to engage in their education (n=39)	60.64	30.68	53.13	33.10	-7.51		
Avoid offering HIPs due to financial concerns (n=32)	40.28	31.83	34.81	35.17	-5.47		
Black students are not academically prepared (n=32)	25.81	28.11	20.69	20.43	-5.13		
I believe my impact on Black students is limited because of poor academic preparation (n=28)	12.64	17.53	7.71	11.53	-4.93		
I watch for early academic warning signs in Black students (n=31)	33.45	28.36	28.61	29.77	-4.84		
I believe academic support services positively influence Black student outcomes (n=45)	74.22	21.45	69.91	24.52	-4.31		
I submit a CARE alert when Black students exhibit low motivation (n=36)	53.58	32.52	49.61	33.89	-3.97		
I believe athletic staff efforts to connect student athletes to academic support positively influence Black student outcomes (n=43)	63.19	29.67	60.19	27.10	-3.00		
Leverage athletic relationships when Black students struggle in a HIP (n=33)	41.45	30.53	39.18	31.33	-2.27		

All students can find a place to belong if they make the effort (n=39)	34.08	25.12	32.23	27.52	1.85
I believe the Academic Success Center will help improve Black student outcomes (n=46)	69.28	25.68	70.43	25.42	1.15
Refer Black students to CARE based on perceived deficit (n=40)	54.98	29.84	55.80	29.64	0.82
I believe CARE team efforts positively influence Black student outcomes (n=45)	60.47	24.86	59.69	24.20	-0.78
Prioritize connecting Black students to support services (n=45)	78.24	19.81	77.67	24.14	-0.58

Note: n = number of respondents who answered the item on both the pre- and post-test; All questions were on a sliding scale of 0-100 where 100 represented strong alignment with the statement and 0 represented low alignment with the statement.

*significance using Bonferroni's correction, $p < .001$, Cohen's $d > .30$. **significance using Benjamini-Hochberg procedure, $p < .008$, Cohen's $d > .30$.

4.2.3 Results of Changes Related to the Equity Frame

Significant change related to the equity frame appeared in three areas: approaches to critical inquiry, the role of policy, and participant beliefs about practice. Table 5 presents the change in means for all equity frame items on the survey. The strongest shift toward equity-mindedness occurred in practitioners' understanding of equity-minded data analysis, specifically related to disaggregated data and equity data analysis. Using the Bonferroni's correction, changes in means for three items related to data and assessment were significant. The effect size for these two items was large: "*We should conduct a focus group with Black students to gain a deeper understanding about why they are not participating in programs/classes*" ($t = -4.407, p < .001, d = 0.9$), and, "if we look at the data together, we'll be able to see specifically where [Black] students are struggling, and where we can take specific steps to help them succeed" ($t = -4.020, p < .001, d = 0.8$). Additionally, change in means for the statement, "*assess Black student outcomes related to high impact practices*" ($t = -3.555, p < .001, d = 0.7$) reveals that the intervention shifted practitioners' perspectives of assessment toward a more equity-minded use of disaggregated data. The effect size was medium.

Table 5 Participant Mean +/- Standard Dev at Pre-Test, Post-Test and Mean Change in Equity Frame Items

Participant Mean +/- Standard Dev at Pre-Test, Post-Test and Mean Change in Equity Frame Items

Question Content	Pre-Test Responses		Post-Test Responses		Change		Cohen's <i>d</i> with correction factor
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Focus groups with Black students will help our understanding of their success (n=38)	36.76	33.98	63.97	26.95	27.21	*	0.9
Data will help us see where Black students are struggling (n=43)	50.79	30.79	71.88	23.71	21.09	*	0.8
I believe academic policies can be revised to promote Black student success (n=43)	55.86	31.28	74.09	24.57	18.23	**	0.7
Reviewing and revising curriculum can improve Black student outcomes (n=44)	52.80	31.88	69.89	29.39	17.09	*	0.6
Assess Black student outcomes for HIPs (n=43)	65.91	29.31	82.28	22.19	16.37	*	0.7
I design my program or course to include students' cultural backgrounds (n=35)	48.77	28.27	61.23	28.22	12.46	**	0.5
I believe institutional policies negatively impact racial equity (n=41)	50.88	28.09	63.02	29.32	12.15	**	0.4
I use data to track equity in outcomes in my practice (n=32)	48.56	35.03	59.59	29.18	11.03		
I believe culturally responsive advising strategies positively influence Black student success (n=45)	72.80	21.94	81.13	21.16	8.33	**	0.4
Our founding values and heritage have both positive and negative impact on today's student experience (n=43)	56.02	26.56	64.35	27.92	8.33		
I wonder what the root cause is of behavior that looks like lack of motivation (n=38)	49.53	28.55	56.55	31.04	7.03		
Design culturally responsive HIPs (n=41)	70.07	27.70	76.98	23.25	6.9		
Invite Black students to participate in a HIP (n=40)	77.60	24.59	83.60	19.20	6		
Prioritize Black student outcomes related to high impact practices (n=45)	81.33	19.91	86.91	18.31	5.58		

Investigate institutional policies and procedures for equitable outcomes (n=45)	84.27	21.16	89.38	15.75	5.11
Prioritize increases in retention of Black students (n=45)	85.93	18.21	90.78	13.14	4.84
I believe I can influence Black student success by changing my practice (n=46)	71.96	21.35	76.61	20.06	4.65
I believe alumni mentorship positively influences Black student outcomes (n=41)	70.51	26.57	74.66	23.66	4.15
I get to know students' cultural backgrounds (n=37)	61.54	28.56	65.08	28.95	3.54
I believe faculty have a responsibility to impact sense of belonging for students (n=45)	77.87	22.06	77.22	21.39	-0.64
I believe faculty interaction positively influences Black student outcomes (n=45)	82.42	17.18	82.33	21.04	-0.09

Note: n = number of respondents who answered the item on both the pre- and post-test; All questions were on a sliding scale of 0-100 where 100 represented strong alignment with the statement and 0 represented low alignment with the statement.

*significance using Bonferroni's correction, $p < .001$, Cohen's $d > .30$. **significance using Benjamini-Hochberg procedure, $p < .008$, Cohen's $d > .30$

Next, practitioners' perspectives on the role of academic policies in achieving racial equity shifted toward equity-mindedness. Using the Benjamini-Hochberg procedure, a significant difference was found in participant responses to "*academic policies should be examined and revised to promote student success outcomes for Black students,*" ($t = -3.353, p = .002, d = 0.7$). This change indicates that practitioners were more likely to understand how policy impacts racial equity following the intervention. The effect size was medium. Likewise, the intervention had a significant impact on practitioners' beliefs that "*curriculum should be examined and revised to support student success for Black students,*" ($t = 3.692, p < .001, d = 0.6$). Both correction methods confirmed the significant difference for this item, and the effect size was medium. As such, the intervention had a significant impact on the way practitioners think about academic policies.

Practitioner beliefs trended toward the understanding that students' cultural backgrounds have a place in practice. Participant responses on two equity survey items, "*I design program/course elements that encourage students to draw from their cultural backgrounds*" ($t = -3.003, p = .005, d = 0.5$), and, "*advising strategies that position the cultural identities of students as strengths*" ($t = -3.140, p = .003, d = 0.4$), affirm change in the desired direction and the effect size was medium and small, respectively. That said, the change related to inclusive practice was found to be significant using the Benjamini-Hochberg procedure, but not using Bonferroni's correction. Given the small effect size of the item related to advising strategies, I cannot confidently rule out a Type I error. Similarly, significant change occurred for the item, "*it is likely that institutional policies negatively impact equity for Black students*" ($t = -3.033, p = .004, d = 0.4$), though it was found using only the Benjamini-Hochberg procedure. The effect size was small; therefore, a Type I error cannot be ruled out. Overall, the intervention appears to have helped

practitioner beliefs shift toward equity-mindedness, specifically when thinking about the role of academic policy and data analysis.

4.3 Assessment of Dimensional Change Following the Intervention

In addition to analyzing change related to the cognitive frames, I examined change in the ways the cognitive frames manifest in daily practice. The discourse, orientation, and strategies dimensions are constructs that depict the ways practitioners talk about, think about, and act upon racial inequity within each of the cognitive frames. In this section, I examine statistically significant change within each of the dimensions and discuss the effect size of the change. Again, I employed both Bonferroni's correction and Benjamini-Hochberg procedure to adjust for Type I errors that result from conducting multiple tests. In this section, I highlight survey items that were statistically significant using both corrections as well as those differences that were found to be statistically significant using only the Benjamini-Hochberg procedure, but had a medium effect size.

Generally, significant change did not occur in the discourse dimension (i.e., the language used to explain racial inequity; $t = -0.387$, $p = .701$), nor the strategy dimension (i.e., the tools practitioners use to address racial inequity; $t = -2.568$, $p = .014$). In contrast, change in the orientation dimension trended ($p < .008$) toward the desired direction of equity-framing. The Benjamini-Hochberg procedure confirmed significant change in the orientation dimension ($t = -2.795$, $p < .008$, $d = 0.7$) as a result of the intervention, and the effect size was medium. Table 6 illustrates findings within each dimension.

Table 6 Results of Change Related to the Dimensions

Participant Mean +/- Standard Dev at Pre-Test, Post-Test and Significance of Change Across Dimensions

Dimension	Pre-Test Result		Post-Test Result		<i>t</i> (42)	<i>p</i>	Cohen's <i>d</i> with correction factor
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Discourse	2.810	0.548	2.845	0.478	-0.387	.701	0.7
Orientation	2.000	1.012	2.595	0.798	-2.795	<.008**	
Strategy	2.295	0.906	2.524	0.802	-2.568	.014	

Note. Items were forced choice where 1=diversity, 2=deficit, 3=equity.

*significance using Bonferroni's correction, $p < .001$, Cohen's $d > .30$. **significance using Benjamini-Hochberg procedure, $p < .008$, Cohen's $d > .30$.

4.3.1 Analysis of Change Related to the Orientation Dimension

Within the orientation dimension, results attest to both a positive effect of the intervention and trends in participant beliefs toward an equity-minded orientation, specifically in participant awareness of cultural stereotypes and their beliefs that policies contribute to equity in outcomes. In Tables 3-5, survey items were organized by cognitive frames; now, the analysis of the survey items is arranged in Table 7 by dimensions.

Table 7 Results of Change Within Dimension

<i>Results of Change Within Dimension</i>		Pre-Test Result		Post-Test Result				Cohen's <i>d</i> with correction factor
Question Content		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>Change</i>		
<i>Orientation</i>								
I believe academic policies can be revised to promote Black student success		55.86	31.28	74.09	24.57	18.23	**	0.70
Reviewing and revising curriculum can improve Black student outcomes		52.80	31.88	69.89	29.39	17.09	*	0.60
We should celebrate the diversity we have		28.58	25.20	43.18	28.77	14.60	*	
I believe institutional policies negatively impact racial equity		50.88	28.09	63.02	29.32	12.15	**	0.40
I believe Black students have the same opportunities to be successful		46.42	27.39	34.56	29.19	-11.87	**	0.40
Black students experience culture shock because they come from more diverse environments		74.75	22.15	65.25	27.32	-9.50	**	0.40
I believe culturally responsive advising strategies positively influence Black student success		72.80	21.94	81.13	21.16	8.33	**	0.40
<i>Strategies</i>								
Race-neutral approaches to developing HIPs		42.24	34.43	27.12	29.20	-15.12	**	0.50
Assess Black student outcomes for HIPs		65.91	29.31	82.28	22.19	16.37	*	0.70
I design my program or course to include students' cultural backgrounds		48.77	28.27	61.23	28.22	12.46	**	0.50
<i>Discourse</i>								
Focus groups with Black students will help our understanding of their success		36.76	33.98	63.97	26.95	27.21	*	0.90
Data will help us see where Black students are struggling		50.79	30.79	71.88	23.71	21.09	*	0.80
I cannot impact Black student success if they do not engage in successful classroom behavior		43.26	27.03	26.62	24.18	-16.65	**	0.70

Black students must exhibit classroom behavior that promotes success	38.31	27.95	26.44	23.52	-11.86	**	0.50
--	-------	-------	-------	-------	--------	----	------

*significance using Bonferroni's correction, $p < .001$, Cohen's $d > .30$. **significance using Benjamini-Hochberg procedure, $p < .008$, Cohen's $d > .30$

Practitioners demonstrated a shift in the desired direction in their orientation toward the role of academic policies in achieving racial equity. Specifically, practitioners were more aligned after the intervention with the idea that “*academic policies can be revised to promote Black student success,*” ($t = -3.353, p = .002, d = 0.7$). Significance for this difference was found using only the Benjamini-Hochberg procedure, though the effect size was medium. A significant change in mean, using the Bonferroni’s correction, was identified for “*revising curriculum can improve Black student success,*” ($t = -3.692, p < .001, d = 0.6$). The effect size was medium, and these findings support the claim that the intervention resulted in change toward equity-mindedness in practitioners’ views that academic policy impacts racial equity in student outcomes. Although the evidence is less strong, participant orientation toward institutional policy shifted in the desired direction as well. Change in means for the item “*institutional policies negatively impact racial equity*” ($t = -3.033, p = .004, d = 0.4$) was statistically significant using the Benjamini-Hochberg procedure, though the effect size was small. Finally, statistically significant change in participants’ orientation related to cultural stereotypes ($t = 3.012, p = .004, d = .4$) and inclusive practice ($t = -3.140, p = .003, d = .4$) were found using only the Benjamini-Hochberg procedure, and the effect size for each was small. Thus, I cannot confidently rule out the possibility of Type I errors for these items.

Just as I asked participants to use their own words to explain racial inequity in an open-ended question on the pre-test, I invited participants to express how their views on racial inequity in student outcomes changed following the intervention. Participant responses, summarized in Table 8, affirm the statistical findings that participant orientation trended away from diversity and deficit framing and toward equity-mindedness.

Table 8 Results for Participant Descriptions of Change in Orientation Following the Intervention

Results for Participant Descriptions of Change in Orientation Following the Intervention

Category	Example quote(s)
Shift from deficit frame (m=9)	"Previously thought there was lack of motivation or unpreparedness"
Shift from color-evasive approach (m =7)	"Lack of student success is not the student's fault" "I realize that Westminster didn't focus on Black students and their needs."
Shift toward equity-mindedness (m=5)	"My eyes are more open to challenges and barriers (institutional and perceived) that may impact a Black student's sense of belonging and ability to succeed"
Reliance on deficit frame (m=5)	"I still believe that black students who are at risk academically are not prepared for college life and we need to identify and mitigate early"
Practitioner Influence (m=3)	"I'm more aware of the influence I have as a faculty member"
Institutional influence (m=2)	"Concerns about how Black student athletes are mentored and connected with outside athletics"

Note. m=number of mentions; Trending toward equity frame in boldface.

Thirty-one comments were mapped to the orientation dimension and 26 established the impact of the intervention on the development of equity-mindedness. Participants expressed belief in the need to move away from a focus on deficits (nine mentions) and a need to engage race consciousness (seven mentions) when thinking about student success. One participant wrote, "I've seen how access that is 'equal' to students of color still doesn't address all of the possible barriers to their success." Another participant offered, "been trying to look beyond academic preparedness and see other factors in a student's success." Participant responses convey they were able to recognize deficit-based assumptions as a result of the intervention and began to understand the need to challenge their own hunches in more intentional ways.

Moreover, participants commented on their ability to recognize the role of practitioners and institutional policies in achieving racial equity. In three mentions, participants shared a new-found awareness of practitioners' responsibility for improving racial equity in student success

(e.g., “I’m more aware of the influence I have as a faculty member.”). Likewise, one participant shared their consciousness that practitioner use of language and mindset matter. In two mentions, participants noted their shift toward understanding racial inequity at a systems level, such as, “My eyes are more open to challenges and barriers (institutional) that may impact a Black student’s sense of belonging and ability to succeed.” Participants reported that the intervention impelled them to see the systemic influences that perpetuate racial inequity in student success and gave rise to participants’ intention to challenge their own practices.

Participant responses also revealed ways the intervention failed to move participants toward equity-mindedness. Of interest, five participant remarks aligned with the deficit frame by focusing their explanations on what students lack as well as color-evasive approaches to address the gap. For example, one participant noted their orientation did not change following the intervention. “I still believe that black students who are at risk academically are not prepared for college life and we need to identify and mitigate early.” Another respondent wrote about how their beliefs changed, but continued to rely on cultural stereotypes. “There are underlying social causes that prevent success.”

4.3.2 Analysis of Change Related to the Strategies Dimension

While *t*-tests conducted on all items across the strategies dimension did not indicate significant change, the previous sections demonstrate that *t*-tests applied to individual survey items within the strategies dimension demonstrated that practitioner beliefs did move in the desired direction following the intervention. Likewise, responses to an open-ended question on the post-test speak to how the intervention impacted strategies employed by individual practitioners.

Participants were provided the opportunity to share comments about how they would change their practice following the intervention. Participant responses are illustrated in Table 9.

Table 9 Results for Participant Descriptions of Change in Strategies Following the Intervention

<i>Results for Participant Descriptions of Change in Strategies Following the Intervention</i>	
Category	Example quote(s)
Shift from color-evasive practice (m=21)	"Interventions for majority students may not be effective for minority students" "Invite those discussions (culture sharing) in private/office hours" "Implement hiring student workers with a larger emphasis on DEI"
Equity-minded data analysis (m=17)	"Actually looking at the data to see where we are failing so that we can improve" "Ask more of the students themselves as to their experience and how it can be immediately improved to help them keep striving and thriving" "Mindful approach to identifying racial inequities, questioning assumptions, identifying practices that may not be working"
Shift toward equity-mindedness (m=10)	"Come to realize that faculty may have a huge impact on retention" "Shifted my thinking to using more data to measure equity and explain reasons for inequity of outcomes"
Diversity framed approach (m=9)	"It all comes down to early intervention and finding the academic strengths and interests of the students at risk, whether they are black or white"
Awareness of frames (m=8)	"Awareness of the negative influence of the deficit framework especially in the context of how we talk about helping students"
Take action (m=5)	"I want to be part of the solution NOT part of the problem"
Change in practice (m=5)	"Make sure that each Black student is personally invited to participate in high impact practices"
Shift from deficit frame (m=4)	"Recognizing assets and strengths of the individual as opposed to focusing on deficits"
Policy change (m=3)	"Revisit my departments processes through a fresh eye so to try to better understand the barriers that exist in these processes"
Cultural curiosity (m=2)	"May be more open to ask black people about their culture and their perspective of equity and inclusion"

Note. m=number of mentions; Attributes of equity frame in boldface.

On the one hand, participants noted their intentions to use strategies aligned with the diversity frame. Nine comments expressed diversity-based strategies such as “talking as a team to make their program more welcoming to all students,” or, “building individual relationships with students.” While individual relationships with students can be approached from a position of equity, participants often minimized the role of race in their comments related to individual relationships. For example, one participant wrote they “intend to listen to all students better, to gather a better understanding of them all.” I interpreted “all students” as a color-evasive strategy, thereby mapping it as a diversity-framed approach.

On the other hand, 75 out of 84 mentions were aligned with equity-mindedness. Participants wrote about the need to shift toward racially-conscious approaches (21 mentions), an important tenant of the equity frame. For instance, participants predicted they would “dedicate more in-class time to cultural sharing,” or, “invite those discussions [culture sharing] in private/office hours.” Next, participants wrote about the use of disaggregated data (17 mentions), noting that they would “actually look at the data to see where we are failing so that we can improve.” Also, participants offered 10 mentions that spoke to a shift toward equity-mindedness such as “come to realize that faculty may have a huge impact on retention.” Then, participants postulated they would accept responsibility for racial equity through taking action (five mentions), changing practice (5 mentions), by examining policies (3 mentions), and becoming curious about culture (2 mentions). An equity-minded practitioner exhibits four attributes: being color-conscious in an affirmative sense, using disaggregated data to examine racial inequity, assuming personal responsibility for rectifying racial inequity, and addressing policy and practice that reify racial inequity (Bensimon & Malcom, 2012; Center for Urban Education, 2020b, 2020d). Taken together, the results of individual survey items within the strategies dimension as well as

participant comments suggest the intervention had an impact on participants' cognitive frames, though the impact on the strategies dimension was not statistically significant.

4.4 Conclusion on the Effectiveness of the Intervention

The results indicate that participants entered the study rooted in the diversity and deficit cognitive frames, which varies from how they assessed themselves. Results from the survey could not be used to analyze whether the intervention had an impact on overall diversity, deficit, and equity frames; however, the results shed light on trends and significant change within particular attributes of each frame. Within the diversity frame, participant beliefs about color-evasive practice trended away from the frame. Likewise, participant views trended away from deficit-framing related to cultural stereotypes and traditional student success behaviors. Participants' views on the role of practices and policies in achieving racial equity for student success also trended toward equity-mindedness as a result of the intervention. Furthermore, the intervention had a statistically significant impact on practitioners' beliefs about how academic policy might change to improve Black student success and the value of equity-minded data analysis. While much of the data point to change in the desired direction, the intervention yielded statistically significant change in the way practitioners believe diversity should be celebrated, moving closer to a diversity-based view. Pertaining to change within the dimensions, data indicated that participant beliefs trended toward significant change within the orientation dimension, but not in the discourse or strategies. In the next chapter, I will make meaning of these findings.

5.0 Discussion

This study explored the extent to which the intervention, a set of two three-hour workshops, could build equity-minded capacity among practitioners at Westminster College. To build equity-minded capacity, the workshops were designed to challenge beliefs, assumptions, and practices that reify racial inequity in student success. The methodological approach to the intervention involved both improvement science and organizational learning theory. The frameworks were brought together to build an intervention that addressed a driver of racial inequity in student success, namely beliefs of practitioners. Improvement science situated the investigation of my problem of practice in scholarly literature, while organizational learning stimulated practitioner reflection which placed the problem close to their personal practice.

Historically, racial differences in student outcomes at Westminster College have been attributed to student deficiencies as well as student behavior. Rooted in diversity- and deficit-thinking, improvement efforts have been race-neutral and focused on increasing support so that Black students' behavior might change. Bensimon (2007) criticized the addition of support services as a means of improving retention, especially for minoritized students, because the effort is rooted in a paradigm that is incomplete, at best, and harmful, at worst. The consequences of using an approach that asks Black students to participate in structures built for all students, but that do not affirm their cultural identities are a persistent gap in outcomes. More equitable and effective strategies affirm students' cultural identities, rely on data to understand where gaps are most likely to occur, and prompt changes in racialized policy and practice that are contributing to gaps in outcomes. However, practitioners need to develop the equity-minded beliefs and skills necessary for approaching retention work in this manner.

Fifty practitioners participated in the intervention, 46 of whom also completed pre- and post-assessments on beliefs, assumptions, and practices associated with racial equity in student success and operationalized through the three cognitive frames, diversity, deficit, and equity. The chapter begins by addressing the efficacy of double-loop learning as an intervention that builds capacity for equity-mindedness and offers conclusions based on the findings. Then, the implications for practice, first broadly and then, more specifically, at Westminster College are discussed.

5.1 Overview of Effectiveness of the Training Intervention

Equity-minded practitioners display a set of attributes: recognition that race should be acknowledged, included, and affirmed; awareness of racial patterns in student success; attention to the consequences of students' racialized experiences; and acceptance that personal practice and institutional policy impact racial equity (Bensimon, 2005; Bensimon & Malcom, 2012; Center for Urban Education, 2020b, 2020d). The study began with the assumption that practitioners at Westminster College needed new tools to build their capacity for equity-mindedness if the College is to achieve racial equity in retention. Data collected in this study confirmed that the new funds of knowledge offered in the intervention challenged participants' orientation (thinking) about Black student success. The data demonstrated significant changes in participants' orientation between the pre- and post-test. Explicitly, significant change in practitioner orientation related to color-evasiveness, the dominant paradigm for student success, cultural stereotypes, and the role of policy and practitioners suggest that the intervention was effective. Change in these areas are consistent with attributes of equity-minded practitioners as shown in Table 10.

Table 10 Connections of Findings to Attributes of Equity-minded Practitioners

<i>Connections of Findings to Attributes of Equity-minded Practitioners</i>	
Significant Change	Attributes of Equity-minded Practitioners
Recognize harm in color-evasive practice	Recognition that race should be acknowledged, included, and affirmed
Recognize use of cultural stereotypes	Awareness of racial patterns in student success
Understand limits of the dominant paradigm for student success	Attention to consequences of students' racialized experiences
Value role of practitioners and policies	Acceptance that personal practice and institutional policy impact racial equity
<i>Resonance of equity-minded data analysis</i>	

Note. Attributes defined by Bensimon, 2005; Bensimon & Malcom, 2012; Center for Urban Education, 2020

Participants began to understand the harm of color-evasive practice as well of the value of culturally-responsive practice which aligns with the attribute that equity-minded practitioners recognize race should be acknowledged, included, and affirmed. Second, participants demonstrated movement toward equity-mindedness, specifically attentiveness to consequences of students' racialized experiences, as they recognized their use of cultural stereotypes and the dominant paradigm for student success. Next, practitioners began to grasp the role of practitioners and policies in racial equity which is another quality of an equity-minded practitioner. Finally, equity-minded data analysis tools resonated with participants who learned of the racial patterns in student success. As such, participants' orientation toward racial equity in student success moved toward equity-mindedness as a function of the intervention.

The intervention helped practitioners recognize deficit-based discourse as well as equity-framed strategies for measuring racial inequity. What did not change, however, was participants' overall discourse (i.e. how they talk about student success) and strategies (i.e., how they think about student success). Change across discourse and strategies dimensions was not statistically significant. That the intervention would be most effective in challenging the way practitioners think about racial equity in their work is not unexpected, given the brevity and design of the

workshops. Double-loop learning was employed in this study precisely because it aims to shift the way practitioners think about problems (Argyris, 1991; Bauman, 2005), yet changes in thinking precede the development of language and strategy for equity, which ultimately feed practice.

While the findings signaled that changes related to discourse and strategies were not statistically significant generally, change in participants' language and strategies was significant in very particular ways. Within the discourse dimension, for example, there was significant change in participant explanations for racial inequity in retention as well as the way participants' referenced students' academic behavior. The effect size for change in these particular areas of discourse was large indicating that the intervention had a powerful impact on participants' language. These findings indicate that the intervention was most effective in helping participants find new language to describe variation in student success outcomes.

Likewise, participants exhibited change within the strategies dimension as evidenced by statistically significant change in three specific strategy areas. First, significant change was illustrated in the way practitioners' viewed equity-minded approaches for high impact practices and the inclusion of students' cultural backgrounds in course development. Further, the thematic analysis of open-ended responses pointed to generative reflection that may yield more effective strategies. When asked about how the intervention would impact participants' strategy development, they discussed using data and critical inquiry, revising policies, intentionally inviting Black student participation in high impact practices, and strengthening culturally inclusive pedagogy. Through participation in this study, it appears participants' orientation about the problem of racial inequity in student success shifted, and the data show signs of movement across the discourse and strategies dimension. However, continued support for equity work is necessary for participants' orientation to be more fully integrated into their discourse and strategies.

5.2 How Participants' Orientation Changed

5.2.1 Dismantling Diversity-Thinking

The intervention helped participants recognize that color-evasive practices hinder racial equity, while inclusive practices promote racial equity. After the intervention, participants generally seemed to understand that designing their strategies without regard for race was likely contributing to racial inequity as shown by significant change in participants' beliefs about serving "all students." Furthermore, participants reported in the open-ended responses that the intervention made visible the consequences of one-size-fits-all approaches. Participants discussed that race-neutrality worked in opposition to what they wanted to achieve and reflected on how this might change their practice. Characteristics of color-evasive practice in education are strategies designed without consideration of race and to benefit all students; in contrast, equity-minded practitioners intentionally create practices where race is honored and valued (Bensimon, 2005; Bonilla-Silva, 2015; Center for Urban Education, 2020d; Pollock, 2004). There was evidence in this study that participants moved toward equity-minded thinking and away from color-evasive practice as a result of the intervention. The data showed participants' thinking about strategies for effective and inclusive practice changed significantly with regard to intentional program design which includes cultural identities. Participants' responses on the open-ended questions reinforced this finding as the responses elicited reflection on how the intervention changed beliefs toward an understanding that color-conscious approaches to teaching and mentoring foster more equitable learning. To the extent that the data showed changes in participants' thinking around the consequences of color-evasiveness and the benefits of inclusive strategies, it appears the intervention strengthened participants' awareness of racial identity, an essential quality of an equity-minded practitioner.

That said, the intervention did not seem to be able to help practitioners make the connection between campus-wide diversity celebrations and the alienation experienced by students who make the campus diverse (Bensimon, 2005; Bensimon & Malcom, 2012). The data showed practitioners' belief that diversity is an important institutional characteristic worthy of celebration, in and of itself, was reinforced. An attribute of diversity-minded individuals is that they believe demographic diversity yields cultural sharing and learning for all students, but a criticism is that individuals operating from the diversity frame fail to see the racialized experiences of individuals who make the campus diverse (Bensimon, 2005). This diversity-framed idea is problematic because cultural celebrations are often supplemental to existing practices, overlook student outcomes, and can be experienced by minoritized students as shallow, performative gestures (Ahmed, 2012; Bensimon, 2015; Iverson, 2007).

To be clear, I am not suggesting diversity programs, and likewise cultural centers and student organizations, do not have value. On the contrary, campus-wide diversity celebrations, programs, and initiatives are essential to the development of sense of belonging and cultural validation which, in turn, support racial equity in student success (Harper & Quaye, 2007; Hurtado et al., 1998; Museus, 2014; Patton, 2006). Rather, to be equity-minded, cultural celebrations should be part of a more comprehensive strategy that is intentionally attentive to cultural backgrounds of students and designed to meet students' cultural norms and needs (Museus et al., 2020).

Change in at least one diversity item moved away from the desired direction and many of the diversity-framed items had high means on both the pre- and post-test indicating participants had a strong association with the diversity frame. In the results section, I referred to this phenomenon as the "stickiness" of the diversity frame. The propensity to return to the discourse and orientation of the diversity frame is rooted in the hegemonic ways whiteness shows up in

systems, policies, and structures (Annamma et al., 2017; Bonilla-Silva, 2015, 2017). The social and political response following the Civil Rights era resulted in new ways of talking about race in coded and covert ways (Bonilla-Silva, 2015). The new raceless discourse found its way into education and higher education, in research, and in practitioners' training (Annamma et al., 2017; Bensimon, 2007; Harper, 2012; Pollock, 2004). Just as racial equity in student success is reified by the dominant systems that support student success, practitioners are formed by those same systems and must spend energy and effort going against the grain in order to change themselves. Although the findings related to participants' changing beliefs about color-evasiveness are promising, further work is required so that participants' views continue to move away from the diversity frame.

5.2.2 Dismantling Deficit-Thinking

Prior to the intervention, participants used deficit-framed language to explain racial inequity in retention at Westminster College, primarily relying on the dominant paradigm for student success or employing cultural stereotypes. Again, the dominant paradigm is the shared idea that student success is associated with student effort and behavior, such as motivation and engagement (Bensimon, 2007). The analysis showed that the intervention effectively challenged practitioner thinking around student behavior for success. Participants initially believed Black students were less academically motivated than their peers, a view that was effectively challenged through the intervention. Change in participants' beliefs about successful classroom behavior (e.g., participation in class discussion, regular attendance, and academic effort) was significant, indicating that the intervention resulted in practitioners becoming less likely to view these behaviors as responsible for lower rates of retention. The effect size was medium and large,

strengthening the finding that the intervention was effective at helping practitioners recognize classroom behaviors inadequately explain the equity gap.

Consistent with the findings for the diversity frame, however, findings from this study indicate the intervention may not have impacted participants' thinking about the possibility of students' racialized experiences influencing their motivation. Even though no significant change was found, participants wrestled with the idea that behavior described as unengaged is often a mask for deeper issues. During a workshop discussion, participants' non-verbal reactions demonstrated concern as they considered the harm they may have caused by blaming Black students' failure on lack of motivation and engagement. When practitioners blame difference in outcomes on poor motivation, they absolve themselves of responsibility because they view the problem as unsolvable (Bensimon, 2005). Yet, belief that motivation is a student problem affects the way practitioners interact with Black students, often diverting their attention to those who portray desired levels of motivation (DeAngelo et al., 2021; Hurtado et al., 2012; Patton, 2016). Black students are more likely to experience alienation and psychological stress as a result of practitioners' deficit-based determination that some students are worth the investment in helping them achieve their potential (DeAngelo et al., 2021; Steel, 1997). Therefore, the angst expressed by participants in this study is well-founded and demonstrative of the dissonance created as a result of the intervention.

Learning about the characteristics of the deficit frame as well as cultural racism, a color-evasive frame necessarily complicated participant thinking about the equity gap in student success. Before participating in the workshop, participants also believed that Black students were, by definition, less academically prepared than their peers, a culturally racist idea and one associated with deficit-thinking (Bensimon, 2005; Bensimon & Harris, 2012; Bonilla-Silva, 2015; McNair et

al., 2020b; Pollock, 2004). While change in participant beliefs about cultural stereotypes was not statistically significant, practitioners offered comments on the open-ended portion of the survey that confirmed they recognized their assumptions stemmed from cultural stereotypes. Collectively, participants noted their previous reliance on deficit-thinking, especially tacit assumptions that all Black students were underprepared. That said, participants grappled with how to reconcile their broad application of the assumption that Black students lack preparation with the fact that some students do arrive less prepared than others. Exposure to the frames may have nudged participants' thinking about the dominant paradigm for student success as well as deficit-thinking, but they will need additional support to resolve their thinking as equity-minded.

5.2.3 Toward Equity-mindedness

Equity-minded practitioners turn their attention to institutional and individual practices; they recognize racial patterns in student success critique structures that impede and enact new procedures that foster racial equity (Bensimon, 2012; DeAngelo et al., 2021; Kinzie, 2012; McNair et al., 2020b). To help practitioners recognize racial patterns, the second workshop included an introduction to equity data tools developed by the Center for Urban Education (2020b), including disaggregated data, equity measures, and inquiry tools. Having been exposed to these equity materials, participants' thinking about how to make sense of differences in student success changed. Transformation in participant thinking about disaggregated data and equity-minded critical inquiry was significant and the effect size large giving power to the finding that the intervention effectively pointed practitioners to equity data tools that will strengthen their strategies. Further, engaging in equity-minded data analysis was a prevalent theme in the strategies espoused by participants after the intervention. Specifically, participants claimed they would

utilize disaggregated data and would center student feedback to better understand problems of racial inequity. Participants also mentioned they would engage equity measures and the equity-minded data analysis worksheet rather than relying on hunches and assumptions about why inequity exists. Together, these findings reflect the impact the intervention had on practitioner ability to see racial inequity in student success and intentionally adjust their sensemaking in an equity-minded manner.

Equity-minded practitioners are more likely to question and critique institutional structures (DeAngelo et al., 2021). The study demonstrated that participants' thinking about academic systems changed following the intervention. The intervention had a significant effect on how practitioners viewed academic policies and curriculum. When asked how the intervention would impact their strategies, affirming the statistical findings, participants predicted revisiting departmental policies, intentionally seeking Black student involvement in engagement opportunities, and tending to cultural identities in their work.

Likewise, this study found that the intervention shifted practitioners' thinking about the benefits of designing their practice in ways that include and affirm students' cultural identities. Data showed significant change in the way practitioners think about course or program design. In a recent study, DeAngelo et al. (2021) found that equity-minded practitioners are more likely to adopt strategies that provide mentoring and support as well as to establish meaningful networks that help students of color achieve their goals. Similar strategies were imagined by participants in this study as they shared how the intervention changed their thinking. When asked about new strategies, participants said they would engage strength-based approaches and center students' experiences. While practitioners recognized a need to change practice, they expressed a lack of confidence in their ability to do so. Affirming participants' sentiments that they need additional

support, the change in means across the strategies items was not significant. This finding suggests that the intervention may not have adequately prepared participants to fully apply their learning.

5.2.4 A Caring Equity Stance

Before the implications of this study are addressed, it is important to engage a discussion related to individual relationships between students and practitioners. Practitioners at Westminster College, especially faculty, are hailed for the meaningful mentoring relationships they form with students. Before the workshops, practitioners reported that building individual relationships with all students was their primary strategy for addressing concerns about retention. Implicit in this strategy is the understanding that connections with practitioners matter in the lives of students, a concept that has been well-established in the literature (Bensimon, 2007; DeAngelo et al., 2021; Kuh et al., 2006; McNair et al., 2020a). The Center for Urban Education (CUE; 2020d) developed an equity activity that speaks to the inherent dangers of focusing heavily on individual relationships. Rather than being situated in a cognitive frame, CUE described the stance as being oriented in care. In the activity, practitioners are asked to reflect on the possibility that the care stance prioritizes students' psycho-social development at the expense of their academic development. Furthermore, a highly individualized approach is likely to lead to practitioner burn out without yielding racially equitable outcomes.

DeAngelo et al. (2020) found that the cognitive frame that practitioners bring to mentoring relationships impacts student outcomes. Practitioners who operate from a diversity frame are likely to approach relationship building by dismissing students' racialized experiences and referring students of color to other offices for support. Because practitioners act from unexamined cultural stereotypes, deficit-minded individuals are likely to become frustrated in their relationships with

Black students, diminishing students' potential. On the other hand, equity-minded practitioners can forge supportive and productive individual relationships. Westminster College practitioners should consider how they bring themselves into mentoring relationships as well as which students are missing the benefit of equity-minded mentoring.

5.2.5 Summary

Overall, the intervention moved the needle in practitioners' orientation, and much of the change points to skill development for equity-mindedness. Perhaps a shift in orientation is foundational to any shift in the way practitioners will approach daily practice or engage conversation around racial equity in student success. On the one hand, the intervention used in this study may not have impacted the overall discourse of practitioners around student success, nor their strategies more generally. On the other hand, there is evidence that seeds were planted that, with additional support, can strengthen equity-mindedness of practitioners across all three dimensions. Improvement science is a methodology that recognizes the need for iterative and incremental efforts to effect change within a system. This study sheds light on the very specific ways a workshop intervention can build capacity among practitioners. That said, additional interventions are necessary to build upon the progress made in this study.

5.3 Immediate Impact of the Intervention at Westminster College

While the study clearly established the effectiveness of the intervention on changing participants' orientation, I have observed equity-minded strategies and discourse among

participants since the intervention. First, the results of this study established that interacting with disaggregated institutional and departmental data resonated with participants such that they believe disaggregated data are important to improving equity in student success. A strategic goal in the college's Diversity, Equity, and Inclusion Action Plan, which was created concurrent with this study, is to "utilize disaggregated demographic data to identify difference in outcomes and to provide a baseline from which to improve student advising, services, and support" (Westminster College, n.d.c). Participants are showing evidence of applying equity-minded strategies learned during the intervention as they contribute to the action plan by revising data management policies to improve the collection of data, which will enable disaggregated reporting.

Another example of how the intervention is showing up is the equity-minded manner in which faculty have contributed to the Diversity, Equity, and Inclusion Action Plan. Employing equity-minded strategies, faculty established a standing committee that will focus on developing more equitable academic policies and improving pedagogical practices for equity. The faculty development officer hosted a discussion on dismantling Whiteness in the classroom. It is clear that practitioners are extending their learning from the intervention into the strategies they are creating in other spaces at the institution.

There are signs that practitioners' discourse is evolving as a result of the study, too. The study indicated that the intervention helped practitioners see their use of deficit-thinking, especially related to retention and academic engagement. Since the intervention, participants who are CARE Team members were less likely to use deficit-based language as they talked about their work with Black students who were referred for assistance. Even when participants engaged deficit language in their explanations of a Black student's struggle, I witnessed them recognizing their

use and reframing their presentation. This hopeful change in practitioner language points to a more equity-minded discourse on Black student success.

Finally, the impact of the intervention has stretched to institutional governance. Recently, I facilitated a workshop with the College's trustees, at the invitation of the chair of the board of trustees, which drew upon the intervention and informed their oversight of institutional policy. While the trustees are careful not to intervene in day-to-day activity, their visible support of equity work from a governance perspective is powerful.

5.4 Implications for Equity-minded Training Interventions

Double-loop learning informed the instructional design of the intervention in this study, which effectively changed practitioner orientation. The change in thinking demonstrated by participants in this study was consistent with the attributes of equity-minded professionals as defined by Bensimon (2005) and the Center for Urban Education (2020d), but the change may not have extended to participants' discourse or strategies. Previous studies have found that double-loop learning has the capacity to produce sustained change in practitioner beliefs and it appears this intervention has the potential to do the same. For the change to have a systemic impact, however, practitioners' beliefs need to become their theories-in-use or reflexive practice (Argyris & Schon, 1997; Baldwin et al., 2011; Center for Urban Education, 2020a; Dowd & Leira, 2018). While there is evidence that the intervention planted seeds that may evolve into equity-minded strategies over time, the lack of evidence that the intervention altered participants' behavior (strategies) signifies that systemic change is not likely to occur from this first iteration. One reason the intervention may not have impacted participants' words and actions is that the timeframe of

the intervention was highly concentrated. The cognitive load of the workshops was heavy, leaving insufficient time for participants to process and reflect. In a similar study, Sikora (2017) found that the intervention delivered over an academic year and in small teams improved practitioners' equity-minded discourse and action. Improvement science is an iterative process that employs a plan-do-study-act (PDSA) cycle to change systems (Hinnant-Crawford, 2020; Perry et al., 2020). Considerations for the next iteration might include expanding the duration of the intervention such that participants have ample time to learn from one another, to reflect, and to integrate their changed beliefs into action. Subsequent iterations that are adapted accordingly may determine if the intervention can achieve more sustainable and systemic change.

Effectiveness of these future iterations can be evaluated using measures associated with improvement science, including driver and process measures. Driver measures help determine if the intervention is moving participants' capacity in the desired direction (Hinnant-Crawford, 2020; Perry et al., 2020). In this study, the equity-minded capacity of practitioners was identified as the driver for improvement in racial equity in student success. Consistent with this study, measuring equity-minded capacity for future iterations can be achieved by employing the pre- post-test. The pre-post-assessment in this study can be used to establish participants' prevailing frame prior to the next PDSA cycle and paired sample *t*-tests can be used to determine if future iterations help practitioners deepen their use of the equity frame. Process measures occur with more regularity and allow for quick assessment and pivoting as the intervention is implemented (Hinnant-Crawford, 2020; Perry et al., 2020). Observation protocols adapted from The Center for Urban Education (2020d) and Sikora (2017) may be useful tools for facilitators to frequently evaluate participant progress. The observation tools may employ a rubric that includes descriptions of discourse, orientation, and strategies for each of the cognitive frames. The observer would make

notes during each interaction defined in future iterations and the analysis would be designed to describe changes in each dimension over time. Additionally, the researcher may observe practitioners struggling with a particular concept or idea and may provide supplemental instruction or material in order to reinforce and enhance participant learning.

5.4.1 Training Components for Movement Across the Frames

Upon reflection of the training content, two components appeared to have been important to fostering participant movement across the frames: the central frames of color-evasive racism (Bonilla-Silva, 2017) and the equity data tools created by the Center for Urban Education (2020b). While this was not included in the analysis, my observation as the workshop facilitator was that participants experienced discomfort when taking up the color-evasive frames, though they did not resist the frames. The first workshop concluded with an activity where participants drew connections between the cognitive frames, color-evasive frame, and microaggressions. In the closing discussion, participants shared thoughts and reflections about how this exercise helped them understand their own contributions or feel more empowered to improve experiences for Black students on campus. Additionally, participants engaged the equity data tools through the use of case studies which were created to include data related to their job function. It is not surprising that the most powerful change in the data was related to equity-minded data analysis as the discussion that followed small group work with the case studies could be characterized as enthusiastic and energized indicating that participants found value in the equity data tools.

5.4.2 Expanding the Impact Through Equity Teams

In order for change to occur throughout an institution, the Center for Urban Education (2020c) recommends the use of racial equity teams whose members collectively learn about and develop strategies to improve student success outcomes. Racial equity teams learn best through participatory action inquiry, which requires working cooperatively to identify equity gaps, engage equity-minded inquiry, develop, implement, and assess changes in practice (Center for Urban Education, 2020c). All faculty and administrative professionals at Westminster were invited to participate in this study, resulting in a participant group with varied interactions and experience. As such, there was large variance in the survey data, which may be reflective of how participants interface with students. Unlike recruitment of participants for this study, racial equity teams should be intentionally created and should be relatively small. Members of the team should be selected for their skills and ability to drive change throughout the institution. Subsequent iterations might be conducted with equity teams and allow for action inquiry to supplement the effectiveness of the organizational learning framework. Similarly, driver measures could be administered using the pre- post-test, and process measures could include observations or surveys such that agendas for team meetings can be adjusted to strengthen learning for equity-mindedness.

5.4.3 Measuring Change in Practitioners

In her place of practice, Sikora (2017) conducted a related intervention grounded in Bensimon's cognitive frames (2005). Case study analysis was employed to analyze the equity-minded behaviors of participants and Sikora (2017) advised that further study might employ pre-post-test analysis to more substantially measure change in practitioners. In this study, an

assessment instrument was developed that revealed change in specific components of equity-mindedness, change in cognitive frame, and change across dimensions. This instrument could be modified for further study as well as to evaluate the development of individual practitioners over time.

The design of the survey was particularly useful in capturing the contradictions in the way practitioners viewed their use of frames with how they actually engaged the frames. Self-report of participants' use of frames prior to the intervention was captured in a Likert-type question and the results indicated participants claimed to operate mostly from the diversity and equity frames. A second measure of pre-intervention frame use, the frequency of participants' responses to pre-test survey items by frame, layered the analysis by demonstrating that participants were more likely to select diversity response, but not likely to select equity responses. Analysis of the open-ended responses rounded out the understanding of primary frame use prior to the intervention suggesting that participants talk about student success primarily in deficit-framed ways. The implication here is that the use of multiple measures is important to developing a full understanding of the ways the frames show up in practice.

There are some limitations to the assessment instrument that should be noted, however. First, the cognitive load associated with completing the survey was significant, both because of the question content and the selected scale. In some cases, participants had to imagine themselves in a role other than their own. Complicating this, participants used a sliding scale to evaluate how their thinking aligned with the survey item on a scale of 0-100, which was problematic because participants had to making meaning of both the question and the scale in order to provide a response. Second, participants may have had difficulty identifying with all the questions. A "not applicable" option was not provided, which resulted in a high level of non-response presumably

because participants may not have had experience that informed how they responded to questions. Modifications to consider in a future study include simplifying and reducing the number of questions, selecting a more traditional Likert-type scale, and providing a “not applicable” option. Given appropriate consideration for the institutional context, the pre- post-test instrument may advance the research.

The findings from this study that speak to the impact of the intervention have numerous implications for practice. First, the primary purpose of the study was to build capacity for equity-mindedness among practitioners. The intervention was effective at changing practitioners’ beliefs about race-neutral practices, the onus of responsibility for Black student success, and the role of data in improving practice, ideals that are consistent with Bensimon’s (2005) definition of equity-mindedness. The results of this study suggest that similar interventions employed at institutions of higher education may generate competencies for equity-mindedness and, by extension, positively impact efforts to improve racial equity in student success. That said, consideration should be given to facilitating the intervention with intentionally constructed equity teams and over an extended time, such that it impacts participant discourse and strategies in sustainable ways.

Another important consideration is the positionality of the facilitator because both trust and positionality will impact the work. Over 16 years and four different professional roles, I have fostered strong working relationships with faculty and staff at my place of practice. As the facilitator, I brought a great deal of trust and respect extended as a result of prior collaboration and interaction. Furthermore, my position on the executive leadership team gave credibility and import to the study. In improvement science, a problem of practice must be important to the work of the organization (Mintrop, 2018). Having the support and participation of Westminster’s president and other leadership team members signaled that racial equity work is a priority for the institution.

While institutional leaders may have supported this study prior to my being appointed to the executive team, my access to executive leadership helped to advance the work.

5.5 Implications for Practice at Westminster College and Next Steps

At the conclusion of the intervention, participants eagerly asked what was next. The implication of this study is that additional work is required to further the development of equity-minded practitioners and to remedy the racial gap in student success. Knowing that the intervention was only the initial PDSA cycle, the learnings from the study should be used to inform the next iteration. One possibility for the second PDSA cycle is a collective study program designed to deepen the equity-minded capacity of practitioners in smaller equity teams. Bensimon & Malcom (2012) and the Center for Urban Education (2020c) both purport that racial equity work is best done in teams. The suggested intervention may be designed such that a purposefully constructed equity team engages a specific equity problem through participatory action inquiry. The researcher in this second iteration may serve as facilitator and observer. The intervention might begin with a one-day onboarding and orientation retreat with the purpose of providing an overview of the cognitive and color-evasive frames as well as the equity data tools. For returning participants, the retreat would serve to reinforce their learning, while new participants would have the benefit of learning the material with experienced practitioners. By the end of this retreat, participants may be asked to identify an equity problem to focus on throughout the intervention.

Collective study, in the form of monthly meetings over the academic year, may be designed such that participants actively engage critical inquiry and equity-minded data analysis to understand the root causes of the problem identified by the equity team at the retreat. Equipped

with an equity-minded understanding, the team may use collective study to investigate promising practices, models, or frameworks and to develop a potential solution to their equity problem. The role of the facilitator in collective study may be to provide a supportive environment where practitioners can be challenged when they engage in diversity or deficit thinking. However, as a collective, the team should determine their direction and make decisions about additional learning for equity.

In order to keep the equity team focused and forward-moving, the facilitator should rely on the activities, tools, and guidance offered by the Center for Urban Education (2020b, c, d). First, the participatory action inquiry cycle involves identification of a specific equity gap, use of the equity-minded inquiry strategies described in Appendix C-E, reflection on practice, execute change in practice, and assess the change. Second, team member roles should be clearly defined such that teams have a clear leader, institutional researcher, faculty and staff members, and boundary spanners (Center for Urban Education, 2020c). Third, observation protocols can be used for the facilitator to assess and reset the direction of the team following each meeting.

To measure the effect of the revised intervention, the pre-post-assessment may be adapted from this study. Additionally, the researcher may use observation protocols defined earlier in this section to assess the equity-mindedness of practitioners and to determine if small changes are necessary between collective study sessions. The implication for future practice at Westminster College is that the intentional and supported work of the equity teams will result in more racially-equitable student success.

5.6 Conclusion

No longer can higher education leaders rely on reflexive practice that has been informed by incomplete or harmful paradigms. Unless old paradigms are critiqued and practices altered using new funds of knowledge, racial equity gaps will continue to plague higher education in the United States. Paul Batalden, a scholar on leadership and improvement in healthcare, is attributed as saying, “Every system is perfectly designed to get the results it gets” (IHI Multimedia Team, 2015). If higher education has been designed to produce racial inequity and if the aim is to reverse this outcome, we must critically examine policies and practices. This is true of institutional structures, but it also true for our own personal practice. Becoming equity-minded is imperative for practitioners who are focused on advancing student success in equitable ways. Otherwise, practitioners are likely to inflict more harm than good.

This study affirms that equity-mindedness can be developed through double-loop learning, yet it reminds us that equity work requires far more than one intervention. Becoming equity-minded requires a lifelong commitment to learning about self and others, to critical inquiry, and to accepting personal responsibility. More importantly, in order to reap the systemic and sustainable outcomes of organizational learning, institutions need to develop and sustain structures that support, value, and reward equity-mindedness.

Appendix A. Activity #1 Equity Stance

EQUITY STANCES A

STANCE A: EQUALITY OF INITIAL OPPORTUNITY

Colleges should guarantee that each student has the same chance to avail of, or compete for, a particular opportunity.

STANCE B: EQUALIZATION OF OPPORTUNITY

Colleges should guarantee that each student deserves an academic program that allows her/him/them “to demonstrate performance that meets or exceeds a common high level within a reasonable length of time.”

STANCE C: CARE

College should foster:

- Awareness of the communities from which students come, and concern for their overall welfare;
- Education as a relational practice; and
- The creation of non-discriminatory and non-oppressive educational settings that validate students’ cultural experiences, convey their value to the campus community, and cultivate their personal and social development.

STANCE D: EQUITY-MINDEDNESS

Colleges should:

- Use evidence (disaggregated outcomes data and/or inquiry findings);
- Attend to whether or not students from historically underrepresented racial/ethnic groups are participating, feeling welcome, and succeeding;
- Focus on changing institutional policies, practices, and mindsets, not just those of students;
- Recognize and counteract structural racism; and
- Take action to eliminate inequities in outcomes

EQUITY STANCES B

STANCE A: EQUALITY OF INITIAL OPPORTUNITY

Colleges should guarantee that each student has the same chance to avail of, or compete for, a particular opportunity.

EXAMPLES IN PRACTICE: Student grades or assessment scores are used as gatekeepers for access to certain academic programs or courses

TOUGH QUESTIONS FOR THOSE WHO TAKE THIS STANCE:

- Doesn't this approach to equity help preserve the status quo, with some students being denied access to academic programs or courses in which they might perform well, based on their past performance and/or someone else's estimation of their future performance?
- Shouldn't access to academic programs and courses be open to all students who have a genuine interest in them, regardless of their past performance?

STANCE B: EQUALIZATION OF OPPORTUNITY

Colleges should guarantee that each student deserves an academic program that allows her/him/them "to demonstrate performance that meets or exceeds a common high level within a reasonable length of time."

EXAMPLES IN PRACTICE: College practices and resources are heavily weighted in favor of providing different and more programs and support lower-performing students.

TOUGH QUESTIONS FOR THOSE WHO TAKE THIS STANCE:

- Doesn't heavily weighting practices and resources in favor of lower-performing students create an attitude of dependency within those students?
- Shouldn't practice and resource allocation be evenly weighted on what each and every student needs, rather than just on what each lower-performing student needs?
- Shouldn't students have access to these programs for an unlimited length of time?

STANCE C: CARE

College should foster:

- Awareness of the communities from which students come, and concern for their overall welfare;
- Education as a relational practice; and
- The creation of non-discriminatory and non-oppressive educational settings that validate students' cultural experiences, convey their value to the campus community, and cultivate their personal and social development.

EXAMPLES IN PRACTICE: Campus spaces physically reflect the culture and heritage of students of color. Practitioners proactively reach out to students of color and affirm their belonging on campus.

TOUGH QUESTIONS FOR THOSE WHO TAKE THIS STANCE:

- Doesn't this approach to equity focus too much on students' psycho-social development, and less on their academic performance and outcomes?
- Doesn't this approach to equity overtax college practitioners, potentially leading to burnout?

STANCE D: EQUITY-MINDEDNESS

Colleges should:

- Use evidence (disaggregated outcomes data and/or inquiry findings);
- Attend to whether or not students from historically underrepresented racial/ethnic groups are participating, feeling welcome, and succeeding;
- Focus on changing institutional policies, practices, and mindsets, not just those of students;
- Recognize and counteract structural racism; and
- Take action to eliminate inequities in outcomes

EXAMPLES IN PRACTICE: Colleges use data disaggregated by race and ethnicity to identify equity gaps and policies/practices that may be contributing to those gaps. Based on this evidence, colleges change their policies/practices and monitor the impact of these changes on closing racial/ethnic equity gaps.

TOUGH QUESTIONS FOR THOSE WHO TAKE THIS STANCE:

- Doesn't this approach to equity require colleges to remediate racial/ethnic inequities that stem from broader societal conditions?
- Does this approach to equity exclude white and most Asian students in favor of Black and Latinx students?

(Center for Urban Education, 2020d)

Appendix B. Activity #2 Tying It All Together

MICROAGGRESSION	REMARK/BEHAVIOR	MESSAGE	COGNITIVE FRAME	COLORBLIND FRAME
Ascription of Intelligence Assigning intelligence to a person of color on the basis of their race.	"You are a credit to your race." "You are so articulate."	People of color are generally not as intelligent as whites. It is unusual for someone of your race to be intelligent.		
Color-evasiveness Statements that indicate a white person doesn't want to acknowledge race.	"When I look at you, I don't see color." "America is a melting pot." "There is only one race, the human race."	People of color are not racial/cultural beings. People of color do not have experiences that are racialized. People of color must assimilate/acculturate to the dominant culture.		
Criminality or Assumption of Criminal Status Presuming that a person of color is dangerous, a criminal, or deviant on the basis of their race.	A white man or woman clutching their purse or checking their wallet as a Black person approaches or passes. A store owner/manager/clerk following a person of color around the store.	You are a criminal. You are going to steal. You are poor. You do not belong. You are dangerous.		
Denial of Individual Racism A statement made when whites deny their racial biases.	"I'm not racist. I have Black friends." "As a woman, I know what you go through as a racial minority."	I am immune to racism because I have friends of color. Your racial oppression is no different than my gender oppression. I can't be a racist. I'm like you.		
Environmental Microaggressions Macro-level microaggressions that are apparent on a systemic and environmental level.	Colleges and universities with buildings that are all names after white men. Television shows and movies that feature (almost) all white people, with no representation of people of color. Overcrowding and/or underfunding of public schools in communities of color.	People of color don't belong. People of color won't succeed here. People of color are outsiders. People of color don't exist. People of color are not valued as learners.		
Myth of Meritocracy Statements that assert that race does not play a role in life successes.	"I believe the most qualified person should get the job." "Everyone can succeed in this society, if they work hard enough."	People of color are given unfair benefits because of their race. People of color are lazy and/or incompetent and need to work harder.		

MICROAGGRESSION	REMARK/BEHAVIOR	MESSAGE	COGNITIVE FRAME	COLORBLIND FRAME
Pathologizing Cultural Values/Communication Styles The notion that values and communication styles of the dominant/white culture are ideal.	Asking a Black person: "Why to you have to be so loud/animated? Just calm down." Dismissing an individual who brings up race/culture in a work/school setting.	People of color must assimilate/acclurate to the dominant culture People of color need to leave their cultural baggage out of the classroom/workplace.		
Second-class Citizen When a white person is given preferential treatment over a person of color.	Person of color is mistaken for a service worker. A taxi driver passes a person of color to pick up a white passenger.	People of color are servants to whites. They can't possibly occupy high-status positions. People of color are likely to cause trouble and/or travel to a dangerous neighborhood.		

Figure 3 Microaggression Worksheet

(Center for Urban Education, 2020d)

Appendix C. Activity #3 Identifying Vital Signs

GOAL	FOCAL POLICY/PRACTICE
------	-----------------------

INDICATOR	TYPE OF DATA	WHO	WHEN

Figure 4 Vital Signs Worksheet

(Center for Urban Education, 2020d)

Appendix D. Activity #4 Calculating Equity

EXAMPLE: Equity Index for Black Student Retention in BA140 in Fall 2020.

X students enrolled in BA140

X students completed BA140

X Black students enrolled in BA140

X Black students completed BA140

$$\text{Equity Index of Disaggregated Subgroup for the Outcome of Interest} = \frac{\text{Disaggregated Subgroup with the Outcome} / \text{All Students with the Outcome}}{\text{Disaggregated Subgroup in the Reference Group} / \text{All Students in the Reference Group}}$$

Figure 5 Equity Index Formula

With an equity index score of _____, Black student retention in BAXXX is _____.

How would you use EI in your department? For your own practice? How might EI be used with the Vital Signs you previously identified?

$$\text{Percentage Point Gap (+/-)} = \text{Outcome Attainment Rate for Disaggregated Subgroup} - \text{Outcome Attainment Rate for Reference Group (RG)}$$

Figure 6 Percentage Point Gap Formula

With a gap of _____ percentage points relative to all students, Black students experience _____ in participation in URAC at Westminster College.

PPG (decimal) x # of students in group = # of students needed to close gap

If an additional _____ Black students participated in URAC in Spring 2022, there would be no equity gap with all students.

How would you use PPG in your department? For your own practice? How might PPG be used with the Vital Signs you previously identified?

(Center for Urban Education, 2020b)

Appendix E. Activity #5 Equity-minded Data Analysis

Refer back to the case study you received. Below are steps you can take to conduct an equity-minded data analysis. Your case only provides data for Black students and all students. In a real life example, you are likely you have a table of data disaggregated by race and ethnicity or other underrepresented population. In this case, you would calculate EI and PPG to determine which group is experiencing inequity in outcomes and you would use this data to determine your focus group.

STEP 1: Calculate the PPG.

STEP 2: Determine the number of students needed to achieve equity in outcomes.

STEP 3: Write your hunches for why this equity gap exists.

STEP 4: Write questions that would help you better understand how policies and practices in your classroom, department division, campus, etc. may be a factor in this gap. These are equity-minded questions. See next page for examples of equity-minded questions.

EQUITY-MINDED QUESTIONS ABOUT APPLE COLLEGE'S ADMISSIONS NORMS, POLICIES, AND PRACTICES	
CLARIFY AND UNPACK PROCESSES AND STRUCTURES	<ul style="list-style-type: none"> What are the different application components that prospective applicants must submit?
DATA THAT'S CLOSE(R) TO PRACTICE	<ul style="list-style-type: none"> What application components are Black, Latinx, Native American, and Pacific Islander students missing?
IDENTIFY INSTITUTIONAL ACTORS AND THEIR ROLES	<ul style="list-style-type: none"> Do faculty and/or staff reach out to students when application components are missing?
UNDERSTAND EXISTING DATA PRACTICES	<ul style="list-style-type: none"> Do the faculty and/or staff involved in the admission process regularly see data on application completion by race and ethnicity?
UNDERSTAND WHY SOME STUDENT GROUPS ARE BETTER SERVED BY A POLICY, PRACTICE, OR STRUCTURE	<ul style="list-style-type: none"> What institutional factors might contribute to Asian American and white students having a high application completion rate?
UNPACK INSTITUTIONAL VALUES AND BELIEFS	<ul style="list-style-type: none"> Admissions criteria reflect an institution's values. What are Apple College's admission criteria for selecting who is admitted? What weight is each criterion given when making the final admission decision?

Figure 7 Equity-minded Questions

STEP 5: Note practitioners, policies, programs, and practices that may have a connection to the focal equity gap.

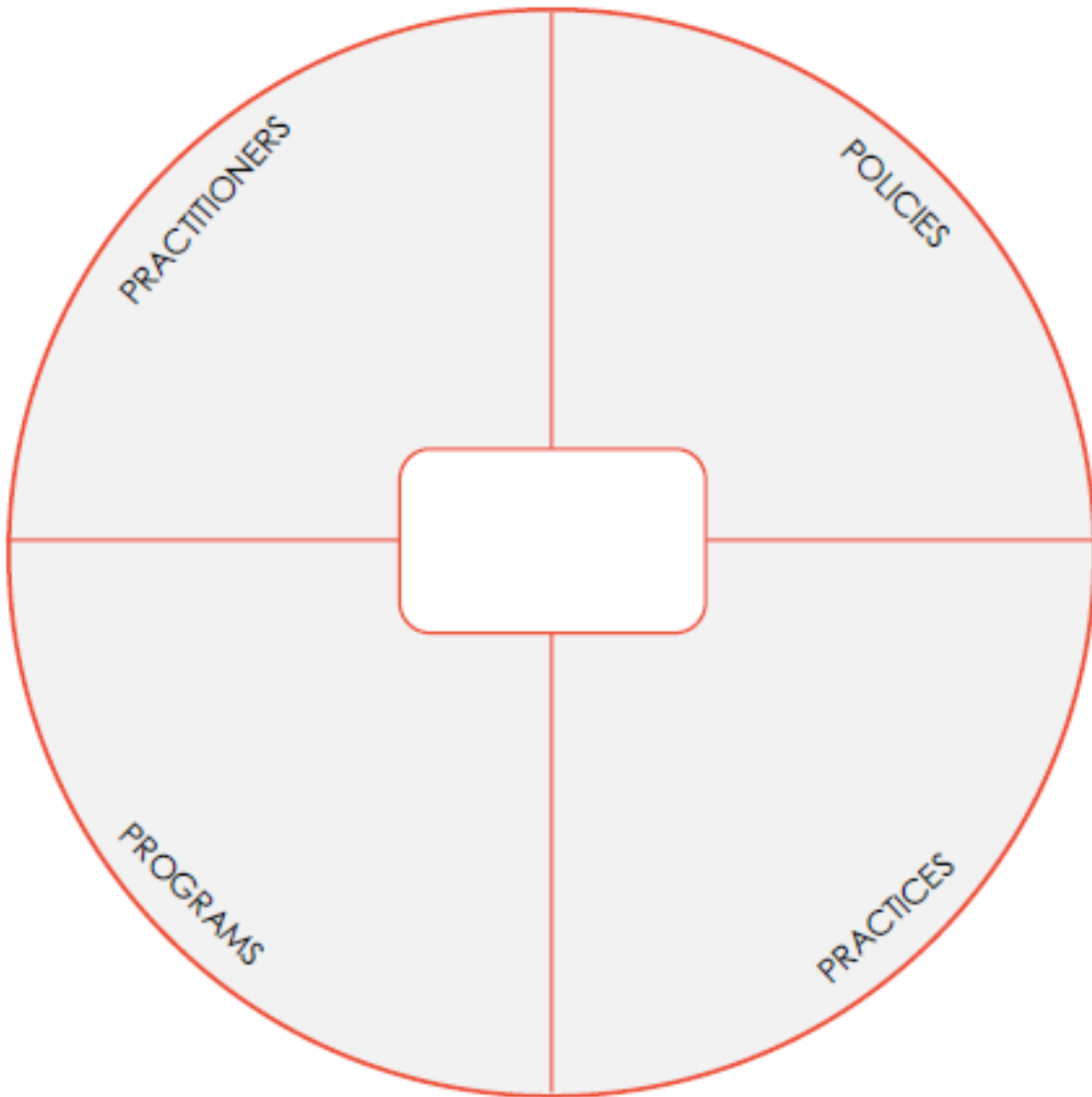


Figure 8 Practitioners, Policies, Practices, Programs

STEP 6: Additional data questions: what else do you need to know or clarify?

STEP 7: Consider each practitioner, policy, program, and practice you wrote down in the gray circle. Select one practitioner you'd like to speak with about the equity gap, and one policy, one program, and one practice you'd like to conduct further inquiry into. Also, review the equity-minded questions you wrote and select one you'd like to explore further. These will constitute the "focal effort" for the equity gaps you seek to close.

PRACTITIONER:

POLICY

PRACTICE

EQUITY-MINDED QUESTION

STEP 8: Consider which tool you might use to better understand the racial equity gap you identified – document review, syllabus review, web scan, observation, focus group, empathy interviews.

(Center for Urban Education, 2020b)

Appendix F. Introduction of Study from President Richardson

The founding fathers of Westminster College were explicit in their language about who would be served by the institution. “No person will be refused admission on account of Color, Caste, or Sex. ... We will sacredly respect the rights of conscience, and whilst we will honestly endeavor to inculcate the pure principles of Christianity, every student of different religious sentiments shall enjoy full liberty of conscience as to place and mode of public worship.” (Gamble *The Westminster Story 1852-2002*, p. 17). In 1852, the notion of opening admission to women and persons of color was revolutionary and this history shapes who we are as an institution today. As we know, however, access to the institution does not guarantee student success. The College’s mission calls us to something beyond our identity as an open community. “Westminster’s quest for excellence is a recognition that stewardship of life mandates the maximum possible development of each person’s capabilities.” Our mission-driven aim should be to ensure that all students are able to thrive and succeed and to build pathways toward success when this does not occur.

We have recognized the importance of this work as is evident in Goal 1 of the College’s Strategic Plan: Recruit and Retain Students. More recently, we have begun to understand the difference in retention for our Black students. In response to this awareness, a Diversity, Equity, and Inclusion Action Plan was developed and the College joined the Liberal Arts Colleges Racial Equity Leadership Alliance. Today, I would like to introduce an important opportunity for you to build capacity for this work.

As you know, Gina Vance is a doctoral candidate at the University of Pittsburgh. Her dissertation topic centers on equity work related to student success outcomes, such as retention and recruitment. She has developed an improvement intervention aimed at building equity-minded capacity of faculty and staff. Soon, you will receive an email invitation from Gina to participate in the intervention. I strongly encourage you to consider participation. This work is important to our students and our success as an institution.

Thank you for your ongoing commitment to diversity, equity, and inclusion.

Appendix G. Participant Invitation

Greetings! I am writing to invite your participation in a study for which I am the Principal Investigator.

As you may know, I am a doctoral candidate at the University of Pittsburgh. For my research, I designed a training intervention, intended to support practitioners at Westminster College who are seeking to improve their own efforts related to student success outcomes for Black students. The purpose of this study is to help student-facing personnel at Westminster College develop practices that foster student success for Black students. If effective, this intervention has the capacity to improve Black student success, especially retention.

This intervention will involve completing a series of two in-person training workshops, each no more than three hours in duration. Over the course of the program, you will be asked to complete a pre- and post-assessment and engage in learning activities.

Participants may experience discomfort with the content of the workshops as you will be encouraged to critically examine your personal beliefs and practices. This work, like all diversity, equity, and inclusion work requires vulnerability. Doing so in a workspace when the researcher is a senior leader on campus makes this more challenging. **The benefits include participation in a supportive setting, gaining knowledge of evidence-based practices that support Black students, and improvements in your own practice that will help you become more confident in working with Black students.** A unique identifier will be used for the pre- and post-assessments. The purpose of the unique identifier is to follow change and growth in participants, while providing a level of anonymity.

This study is confidential. Confidential means that instruments used in the study may include some information about you, including your name and role at the institution. This information will be stored in such a manner that does connect your identity and your responses. The findings will be reported in aggregate and cannot be associated with you individually. Access to stored information is limited to the research team and will be saved in a secure online platform. **Your confidentiality will be kept to the degree permitted by the technology being used. We cannot guarantee against interception of data sent via the internet by third parties.**

Participation in this study is voluntary. Participants will not be compensated. You may choose not to participate or withdraw at any time without penalty. In addition, you may choose not to answer survey questions if you are not comfortable.

You can also reach out to me at (724) 946-7114 or vancegm@westminster.edu with any questions. If you are willing and able to participate, please confirm your interest by emailing me within two weeks of receipt of this email.

I very much understand the value of your time and sincerely appreciate your support and effort

in making this study possible.

Appendix H. Consent to Participate in a Research Study

Thank you for volunteering to participate in a research study titled *Becoming Equity-Minded: An Organizational Learning Approach to Improving Black Student Success*. I will describe this study to you and answer any of your questions. This study is being led by Gina Vance, EdD student at the University of Pittsburgh. The Faculty Advisor for this study is Linda DeAngelo, School of Education University of Pittsburgh.

The purpose of this study is to help student-facing personnel at Westminster College develop practices that foster student success for Black students. The study is being conducted because Black students are retained at lower rates than their peers and increasing retention is an institutional priority. The study involves training, reflection, and the use of equity data tools such that participants can develop skills that help Black students be successful.

As part of the study, I will ask you to participate in two training workshops which will last approximately three-hours each. During these workshops, I will present information and engage participants in reflective exercises and activities. You will be asked to participate in a pre-post test assessment. The pre-test will be administered prior to the first workshop and the post-test immediately following the second workshop.

Participants may experience discomfort with the content of the workshops as we will explore personal frames and practices that perpetuate racial inequity. The benefits include participation in a supportive setting, evidence about practices that support Black students, and improvements in participants' practice that will help them gain confidence in working with Black students. However, you may receive no direct benefit from participating in this study. Participants will not be compensated for this study.

Responses on the pre-post-test will be used as data in the study. This study is confidential. Confidential means that instruments used in the study may include some information about you, such as your email or IP address. This information will be stored in such a manner that does not connect your identity and your responses. The findings will be reported in aggregate and cannot be associated with you individually. Access to stored information is limited to the research team and will be saved in a secure online platform.

Your confidentiality will be kept to the degree permitted by the technology being used. We cannot guarantee against interception of data sent via the internet by third parties.

Participation in this study is voluntary. You may choose not to participate or withdraw at any time without penalty. In addition, you may choose not to answer survey questions or journal prompts if you are not comfortable.

Please contact me at vancegm@westminster.edu or (724) 946-7114 with questions about this study or your participation.

Statement of Consent

The above information has been explained to me and all of my current questions have been answered. I understand that I am encouraged to ask questions, voice concerns or complaints about any aspect of this research study during the course of this study, and that such future questions, concerns or complaints will be answered by a qualified individual or by the investigator(s) listed on the first page of this consent document at the telephone number(s) given. By signing this form, I agree to participate in this research study. A copy of this consent form will be given to me.

I have read the above information, and have received answers to any questions I asked. I consent to take part in the study.

Your Signature _____ Date _____

Your Name (printed) _____

Signature of person obtaining consent _____ Date _____

Printed name of person obtaining consent _____

This consent form will be kept by the researcher for five years beyond the end of the study.

Photographs may be taken of participants during workshops. The purpose of these photographs may include presentations or publications. If you agree to be photographed, please understand:

- Photographs may include your likeness and image;
- You are granting the right for the primary investigator to make, use and publish in whole or in part in media forms now known or developed in the future. This includes the right to edit or duplicate any images;
- You do not have the right to inspect or approve the finished product or printed/published matter that uses the image or versions of the image; and
- You will not receive any financial compensation for commercial and/or non-commercial (as appropriate) uses of the image.

Please sign below if you are willing to be photographed for presentation or publication. You may still participate in this study if you are not willing to be photographed.

_____ I do not want to be photographed

_____ I am willing to be photographed

Signed: _____

Date: _____

Appendix I. Pre-Test Survey Protocol

Note: The survey was created and distributed in Qualtrics®. The look and feel of the survey in the application is different than below. In this example, I organized all the case statements together and the scenarios together for ease of use for the reader. In the Qualtrics® survey, these items were mixed in together.

Thank you for agreeing to participate in the Becoming Equity-Minded workshops. Please take some time to complete this pre-test prior to our first workshop. The questionnaire will ask about your beliefs and attitudes related to the differences in student success between Black students and their peers. It will take approximately 20-25 minutes to complete.

At the end of the survey, you will be assigned a random identifier. Please record this number for use on the post-test following the workshop series.

Please contact me at vancegm@westminster.edu or (724) 946-7114 with questions about this research study or your participation.

Section 1: Open Ended Questions

1. Based on your experience or interaction with Black students at Westminster College, what do you think are the most common causes of lower retention rates for Black students? Please list.
2. Consider your personal approach to diversity, equity, and inclusion. Please share specific examples you use in your daily practice to help Black students succeed.

Section 2: Case Statements & Scenarios

Case Statements

Below is a list of quotes used to describe Black student success at Westminster College. What percentage of time have you said or thought each item in the grouping? [Discourse]

1. “Westminster College offers many support services for students, so students can be successful if they want to.” [Diversity]
2. “I can coach students all I want, but if they are going to choose not to change, not to show up for class, or not follow the rules, they aren’t going to be successful no matter what I do.” [Deficit]
3. “If we look at the data together, we’ll be able to see specifically where students are struggling, and where we can take specific steps to help them succeed.” [Equity]
4. “These students are just not prepared academically to be at Westminster.” [Deficit]
5. “I try not to consider race when I design my syllabus or program, so that everyone can be successful in my class/program.” [Diversity]

6. “We should conduct a focus group with Black students to gain a deeper understanding about why they are not participating in programs/classes.” [Equity]

7. “The student appears to lack motivation. This makes me wonder what has happened since the student arrived at Westminster that might be getting in the way of their success.” [Equity]

8. “We are such a welcoming community. Everyone has the opportunity to find their place here.” [Diversity]

9. “I want all students to be successful, but if students do not attend class, turn in their work, or ask for help, there is little I can do to help them.” [Deficit]

Here are examples of beliefs about Black student success outcomes. On a scale of 1 (little extent) to 100 (large extent), to what extent does each statement in the group align with your own belief about Black student success? [Orientation]

10. Westminster College provides Black students the same opportunity to be successful as any other student. [Diversity]

11. It is difficult to know what to do to improve Black student success because of the low-quality academic backgrounds of Black students. [Deficit]

12. Practitioners can influence Black student success by changing their practice. [Equity]

13. Black students tend to be less academically motivated than other students. [Deficit]

14. Academic policies should be examined and revised to promote student success outcomes for Black students. [Equity]

15. If we implement support services for all students, Black students will be more successful as well. [Diversity]

16. The Academic Success Center is an important tool for improving student success outcomes for Black students. [Deficit]

17. Curriculum should be examined and revised to support student success for Black students. [Equity]

18. Co-curricular programs that support the College’s global learning outcomes will improve student success outcomes for all students. [Diversity]

Here is a list of statements that reflect different viewpoints about how Westminster College should prioritize diversity, equity, and inclusion work at Westminster College. On a scale of 1 (low priority) to 100 (high priority), how would you rank each priority? [Orientation]

19. Increase diverse student and employee populations. [Diversity]
20. Connecting Black students to student support services such that they can be successful. [Deficit]
21. Investigate policies and practices to make changes that help Black students achieve equitable student success outcomes. [Equity]
22. Improve motivation of Black students to engage in their education more effectively. [Deficit]
23. Ensure students are prepared for a diverse workforce. [Diversity]
24. Increase retention of Black students. [Equity]
25. Improve outcomes of Black students related to high impact practices such as undergraduate research, internships, study abroad. [Equity]
26. Recruit Black students who are prepared for college. [Deficit]
27. Ensure all students learn about diversity and inclusion. [Diversity]

Following is a list of beliefs about the Westminster College community. On a scale of 1 (little extent) to 100 (large extent), to what extent does each statement in the group align with your own belief about our community? [Orientation]

28. We are a welcoming community; therefore, diverse students should feel safe and included. [Diversity]
29. Black students often experience culture shock because they come from diverse, urban areas and we are rural and predominantly White. [Deficit]
30. It is likely that institutional policies negatively impact equity in outcomes for Black students. [Equity]
31. We are a diverse community and we should celebrate the diversity we have. [Diversity]
32. Westminster College is known for our strong community; therefore, all students can find a place here if they make an effort. [Deficit]
33. Our founding values and institutional heritage continue to shape our students' experience of the Westminster community, both positively and negatively. [Equity]
34. Westminster College is defined by a strong sense of community which is accessible to all students. [Diversity]

35. Black student athletes are more likely to prioritize sports over academics. They would experience more belonging in our community if they prioritized their studies. [Deficit]

36. Faculty have a responsibility to help students develop a sense of belonging on campus. [Equity]

Consider your personal approach to diversity, equity, and inclusion in your classes and/or programs. On a scale of 1 (little extent) to 100 (large extent), to what extent do the strategies in the group reflect your own personal strategies? [Strategies]

37. I work to ensure my practices are effective for all students. [Diversity]

38. Black students are often underprepared, so I watch for early warning signs of behaviors that impede success. [Deficit]

39. I have identified points of success in my class/program and track student data to ensure students are achieving success equitably. [Equity]

40. I interpret poor class attendance, showing up late, and not turning in assignments as an indicator of low motivation. When I observe this, I submit a CARE alert. [Deficit]

41. I prioritize time and space to get to know my student's cultural backgrounds. [Equity]

42. I wish I had a more diverse enrollment in my program or classroom because all my students would benefit from this diversity. [Diversity]

43. I design program/course elements that encourage students to draw from their cultural backgrounds. [Equity]

44. My program/course learning outcomes prepare students for a diverse workforce. [Diversity]

45. I can see when Black students are struggling, but if they don't reach out to me for help, I can't help them. [Deficit]

Faculty are encouraged to prioritize the ten high impact practices related to student engagement and student success: first year seminars and experiences; common intellectual experiences, learning communities; writing intensive courses; collaborative assignments and projects; undergraduate research; diversity/global learning; service learning; internships; and capstone courses and projects. Westminster College also considers student leadership (e.g. RAs, OLs, SGA, CPC, Titan Guides, SAAC), athletic programs, and student work as high impact practice.

On a scale of 1 (little extent) to 100 (large extent), to what extent do the examples in the group reflect personal strategies that you think would be successful at Westminster College? [Strategies]

46. Extend an invitation to participate in a high impact practice to all students in my class or program [Diversity]

47. Extend an invitation to a Black student to participate in a high impact activity [Equity]
 48. Refer a student to CARE based on a perceived gap in skill, behavior, or motivation [Deficit]
 49. Design a high impact practice such that students could examine their cultural backgrounds and identities [Equity]
 50. Consider Black students' financial circumstances before encouraging their participation in a high impact activity [Deficit]
 51. Partner with coaches or the Faculty Athletic Representative to encourage participation in high impact activities among all student athletes [Diversity]
 52. Implement high impact practices taking care not to consider race so all students have the opportunity to participate [Diversity]
 53. Assess Black student outcomes related to a high impact activity [Equity]
 54. Contact a coach when a Black student demonstrates difficulty related to a high impact activity [Deficit]
- Here is a list of programs, activities, and strategies designed to support students. On a scale of 1 (little extent) to 100 (large extent), to what extent do you think each item in the group influences Black student success? [Orientation]
55. Cultural celebrations, such as diversity week, international holiday festival, Black history month programming. [Diversity]
 56. Support services such as tutoring, academic support, and wellness coaching. [Deficit]
 57. Advising strategies that position the cultural identities of students as strengths. [Equity]
 58. Faculty Athletic Representative (FAR) sponsored efforts to connect student athletes to academic support. [Deficit]
 59. Programs and support offered through the Office of Diversity and Inclusion. [Diversity]
 60. Alumni mentorship. [Equity]
 61. CARE team efforts to connect students to campus support resources. [Deficit]
 62. Programs offered and friendships garnered through Black Student Union (BSU). [Diversity]
 63. One-on-one relationships with faculty. [Equity]

Scenarios

64. Imagine that you are a coach of a team with strong representation of Black students. Your experience has been that this group of students will have low retention rates and will be more likely to be referred to CARE for academic assistance. Which response most accurately reflects your conversation with other coaches? [Discourse]

- a. “We need to hold weekly study sessions and require attendance for these players to keep them on track. They need the extra time from us to keep up and be held accountable for getting their work turned in.” [Deficit] (2)
- b. “We need to instill in the whole team that they are a Division III student athlete and we expect all athletes to be committed students.” [Diversity] (1)
- c. “There are successful Black student athletes who can mentor our newer athletes and that social connection is important. We should contact the Office of Diversity and Inclusion to talk about a partnership. Maybe we create a peer mentor program for incoming student athletes who are Black. ODI can facilitate training and social events for mentors and mentees prior to the start of the academic year.” [Equity] (3)

65. Imagine that you are an admission counselor who coordinated a visit day. When you arrive at the event, you notice there is only one student of color of the 100 students attending the event. Following the event, your team holds a debrief meeting. Which of the responses below most likely reflect your response? [Orientation]

- a. You recommend that we add the Assistant Director of Diversity and Inclusion to the event agenda and include the Office of Diversity and Inclusion on the tour. [Diversity] (1)
- b. Because most of our students of color are athletes and many come from out of state, you don’t worry about representation at Visit Day and trust other events are more likely to yield diversity. [Deficit] (2)
- c. You recommend to the team a review of the data in order to compare the percentage of students of color at each stage of the admission funnel. [Equity] (3)

66. Imagine that you are responsible for selecting orientation leaders and have developed a robust recruitment and selection plan. At the end of your process, you notice that only 2 of 60 students selected are students of color. You meet with your supervisor to discuss this observation and implement one of the below strategies. Which is the strategy you are most likely to select? [Strategies]

- a. You review the applicant pool to determine how many students of color expressed interest in the position, how many applied, and how they performed in the selection process. [Equity] (3)
- b. You determine the recruitment approach was multi-faceted, extensive, and well advertised. All students had the opportunity to apply and the selection criteria were equally applied to all candidates. You determine the best approach is to add a visit to the BSU to encourage students in the organization to apply next year. [Diversity] (1)
- c. You review the applications and see that the few students of color had no other leadership experiences and scored low. They are rising juniors and seniors and you determine that

they just don't have the experience of the students who were selected. Simply put, students of color were not as qualified. [Deficit] (2)

67. Imagine that you've taught a first-year program course for many years. Recently, you've noticed that Black students are more likely to have lower grades, have poor class attendance, or not submit assignments. Many of your Black students are student athletes. As you prepare for this same class this year, you consider different strategies for improving this situation. Which strategy are you most likely to implement? [Strategies]

- a. You review your syllabus considering the materials, readings, and assignments. You make sure to include readings from diverse authors and co-curricular assignments to encourage students to attend cultural events on campus. [Diversity] (1)
- b. You partner with other faculty who teach first-year courses to conduct a focus group of former students of color to learn more about their experiences in first-year classrooms. Collectively, you review the data and determine specific practices that can be implemented for improvement. [Equity] (3)
- c. You commit to submitting early alerts to the CARE team at the first sign of at-risk behaviors. After each class, you submit alerts for students who missed class, submitted late assignments or no assignment at all. You report their lack of motivation to CARE so the student can be helped. [Deficit] (2)

68. Imagine that you have a strong reputation for fostering undergraduate research and want to strengthen success in undergraduate research among students of color. In the last two years, faculty have begun to talk more about diversity, equity, and inclusion which has made you aware that the level of research conducted by students of color does not match that of your top students who are predominantly White. You meet with Drinko Center staff to strategize ways to foster improvement. Which strategy are you most likely to implement? [Strategies]

- a. Brainstorm reasons students of color might not perform as well in a research setting. You conclude that students of color required two years of college courses to settle in academically. Your top students arrived at college eager and better prepared. Students of color were more likely to change majors and have a history of lower grades in their first two years. You and your colleagues determine it would be most effective to offer students of color additional research support through the Academic Success Center and propose the addition of staff to focus on research preparation. [Deficit] (2)
- b. As you and your colleagues consider the issue, you recognize there are white students who don't perform strongly in undergraduate research as well. You determine that strategies should focus on all students who are interested in help with research skills. You propose a co-curricular program to introduce new students to undergraduate research opportunities and ask Inquiry and WST 101 instructors to promote attendance at the workshop. [Diversity] (1)
- c. You and your colleagues intend to survey students of color across the class cohorts to understand their views about, experiences with, and confidence in their ability to conduct undergraduate research. [Equity] (3)

69. Imagine that you are a School/Department Chair and recently discovered that Westminster College has never graduated a student of color from at least one major in your school/department. You've set a goal to increase the recruitment of students of color to that major such that Black students are proportionately represented. Which response most accurately reflects your discussion with colleagues? [Discourse]

- a. "I've reviewed the national data for graduation of students of color in the identified major. Rates nationally are much lower than your goal. I am concerned that forces outside our control may serve as barriers toward reaching your goal." [Deficit] (2)
- b. "I've reviewed institutional data for recruitment, enrollment, and graduation rates for the identified major. Numbers are low at all levels of the pipeline. The literature suggests that few students of color express interest in the major while in high school. I'd like to propose partnering with high schools from which we draw students of color to develop pipeline partnerships and interest in the major." [Equity] (3)
- c. "I will work with Marketing to update our recruitment materials and website ensuring images depict diversity on campus. If Admissions sends our new materials to all candidates in the admission funnel we might meet our goal." [Diversity] (1)

70. Imagine that you coordinate the Professional Networking Symposium (PNS). Following this year's event, you noticed that Black students were well represented as attendees of the event; however, few landed internships or connected with alumni mentors as a result of the program. You meet with your supervisor to discuss this finding. Which strategy are you most likely to pursue? [Strategies]

- a. Ask alumni who presented at the PNS what they valued in students who were offered internships or continued mentoring. Build a preparatory workshop for the next PNS to develop the desired skills and attributes. [Diversity] (1)
- b. Rely on what you've heard from others on campus - many Black students are underprepared and tend to congregate in a few majors. You conclude that Black students may not exhibit the skills and attributes employers are seeking or Black students didn't get offers because they are enrolled in majors with large enrollments. [Deficit] (2)
- c. You review the post-event assessment and disaggregate by race looking for differences in the way Black students report their experience with the PNS. You note trends looking for specific points of the program that may be adjusted to improve the experience of Black students. [Equity] (3)

71. Imagine that you are responsible for student conduct. At the end of the academic year, you review your conduct data and discover students of color are named in incident reports at disproportionate rates. Most of the incident reports involving students of color are coming from Eichenauer Hall. You meet with the Residence Life staff to understand the problem. Which of these examples most accurately reflects your approach? [Strategies]

- a. Meet individually with the students of color involved in the reports to hear their lived experience. Pay close attention to messages about sense of belonging, experience with microaggressions, and need for cultural validation. Use the summative data to provide

feedback and performance improvement goals for the RAs most closely involved with the incidents. [Equity] (3)

- b. Conduct a workshop for all RAs about social identity and how to create inclusive communities. The workshop will also address stereotypes and implicit bias training. [Diversity] (1)
- c. Review the incident reports for themes in behaviors. Develop an educational program and floor signage aimed at decreasing the occurrence of the problematic behavior. [Deficit] (2)

Background Questions

72. My gender identity is:

Man, Woman, TransMan, TransWoman, Gender queer/Gender non-conforming, Prefer Not to Say

73. How would you describe your race/ethnicity (check all that apply)?

American Indian or Alaskan Native; Asian or Asian American, Black or African American; Hispanic, Latinx, or Spanish origin; Middle Eastern or North African; Native Hawaiian or Other Pacific Islander; White

74. Which division do you report to:

Student Affairs; Academic Affairs; Faculty; Other Administrative Division (e.g. admission, athletics, business affairs, faith and spirituality, financial aid, information technology services, institutional advancement, marketing and communication, physical plant)

Appendix J. Post-Test Survey Protocol

Note: The survey was created and distributed in Qualtrics®. The look and feel of the survey in the application is different than below. In this example, I organized all the case statements together and the scenarios together for ease of use for the reader. In the Qualtrics® survey, these items were mixed in together.

Thank you for your participation in the training intervention. You may recall completing a pre-test prior to the workshops. Please take approximately 15 minutes to complete this post-test.

Responses on the pre-post-test will be used as data in the study. This study is confidential. Confidential means that instruments used in the study may include some information about you, such as your email or IP address. This information will be stored in such a manner that does connect your identity and your responses. The findings will be reported in aggregate and cannot be associated with you individually. Access to stored information is limited to the research team and will be saved in a secure online platform.

Please contact me at vancegm@westminster.edu or (724) 946-7114 with questions about this research study or your participation.

Section 1: Cases Statements & Scenarios

Case Statements

Below is a list of quotes used to describe Black student success at Westminster College. Based on your learning and reflection from the workshops, what percentage of time do you anticipate you will say or think each item in the group? [Discourse]

1. “Westminster College offers many support services for students, so students can be successful if they want to.” [Diversity]
2. “I can coach students all I want, but if they are going to choose not to change, not to show up for class, or not follow the rules, they aren’t going to be successful no matter what I do.” [Deficit]
3. “If we look at the data together, we’ll be able to see specifically where students are struggling, and where we can take specific steps to help them succeed.” [Equity]
4. “These students are just not prepared academically to be at Westminster.” [Deficit]
5. “I try not to consider race when I design my syllabus or program, so that everyone can be successful in my class/program.” [Diversity]

6. “We should conduct a focus group with Black students to gain a deeper understanding about why they are not participating in programs/classes.” [Equity]
7. “The student appears to lack motivation. This makes me wonder what has happened since the student arrived at Westminster that might be getting in the way of their success.” [Equity]
8. “We are such a welcoming community. Everyone has the opportunity to find their place here.” [Diversity]
9. “I want all students to be successful, but if students do not attend class, turn in their work, or ask for help, there is little I can do to help them.” [Deficit]

Here are examples of beliefs about Black student success outcomes. On a scale of 1 (little extent) to 100 (large extent), to what extent does each statement in the group align with your own belief about Black student success following the workshop? [Orientation]

10. Westminster College provides Black students the same opportunity to be successful as any other student. [Diversity]
11. It is difficult to know what to do to improve Black student success because of the low-quality academic backgrounds of Black students. [Deficit]
12. Practitioners can influence Black student success by changing their practice. [Equity]
13. Black students tend to be less academically motivated than other students. [Deficit]
14. Academic policies should be examined and revised to promote student success outcomes for Black students. [Equity]
15. If we implement support services for all students, Black students will be more successful as well. [Diversity]
16. The Academic Success Center is an important tool for improving student success outcomes for Black students. [Deficit]
17. Curriculum should be examined and revised to support student success for Black students. [Equity]
18. Co-curricular programs that support the College’s global learning outcomes will improve student success outcomes for all students. [Diversity]

Here is a list of statements that reflect different viewpoints about how Westminster College should prioritize diversity, equity, and inclusion work at Westminster College. On a scale of 1 (low priority) to 100 (high priority), how would you rank each priority following the workshop? [Orientation]

19. Increase diverse student and employee populations. [Diversity]
20. Connecting Black students to student support services such that they can be successful. [Deficit]
21. Investigate policies and practices to make changes that help Black students achieve equitable student success outcomes. [Equity]
22. Improve motivation of Black students to engage in their education more effectively. [Deficit]
23. Ensure students are prepared for a diverse workforce. [Diversity]
24. Increase retention of Black students. [Equity]
25. Improve outcomes of Black students related to high impact practices such as undergraduate research, internships, study abroad. [Equity]
26. Recruit Black students who are prepared for college. [Deficit]
27. Ensure all students learn about diversity and inclusion. [Diversity]

Following is a list of beliefs about the Westminster College community. On a scale of 1 (little extent) to 100 (large extent), to what extent does each statement in the group align with your own belief about our community following the workshop? [Orientation]

28. We are a welcoming community; therefore, diverse students should feel safe and included. [Diversity]
29. Black students often experience culture shock because they come from diverse, urban areas and we are rural and predominantly White. [Deficit]
30. It is likely that institutional policies negatively impact equity in outcomes for Black students. [Equity]
31. We are a diverse community and we should celebrate the diversity we have. [Diversity]
32. Westminster College is known for our strong community; therefore, all students can find a place here if they make an effort. [Deficit]
33. Our founding values and institutional heritage continue to shape our students' experience of the Westminster community, both positively and negatively. [Equity]
34. Westminster College is defined by a strong sense of community which is accessible to all students. [Diversity]

35. Black student athletes are more likely to prioritize sports over academics. They would experience more belonging in our community if they prioritized their studies. [Deficit]
36. Faculty have a responsibility to help students develop a sense of belonging on campus. [Equity]
37. I work to ensure my practices are effective for all students. [Diversity]
38. Black students are often underprepared, so I watch for early warning signs of behaviors that impede success. [Deficit]
39. I have identified points of success in my class/program and track student data to ensure students are achieving success equitably. [Equity]
40. I interpret poor class attendance, showing up late, and not turning in assignments as an indicator of low motivation. When I observe this, I submit a CARE alert. [Deficit]
41. I prioritize time and space to get to know my student's cultural backgrounds. [Equity]
42. I wish I had a more diverse enrollment in my program or classroom because all my students would benefit from this diversity. [Diversity]
43. I design program/course elements that encourage students to draw from their cultural backgrounds. [Equity]
44. My program/course learning outcomes prepare students for a diverse workforce. [Diversity]
45. I can see when Black students are struggling, but if they don't reach out to me for help, I can't help them. [Deficit]

Faculty are encouraged to prioritize the ten high impact practices related to student engagement and student success: first year seminars and experiences; common intellectual experiences, learning communities; writing intensive courses; collaborative assignments and projects; undergraduate research; diversity/global learning; service learning; internships; and capstone courses and projects. Westminster College also considers student leadership (e.g. RAs, OLs, SGA, CPC, Titan Guides, SAAC), athletic programs, and student work as high impact practice.

On a scale of 1 (little extent) to 100 (large extent), to what extent do the examples in the group reflect personal strategies that you think would be successful at Westminster College?
[Strategies]

46. Extend an invitation to participate in a high impact practice to all students in my class or program [Diversity]
47. Extend an invitation to a Black student to participate in a high impact activity [Equity]

- 48. Refer a student to CARE based on a perceived gap in skill, behavior, or motivation [Deficit]
- 49. Design a high impact practice such that students could examine their cultural backgrounds and identities [Equity]
- 50. Consider Black students' financial circumstances before encouraging their participation in a high impact activity [Deficit]
- 51. Partner with coaches or the Faculty Athletic Representative to encourage participation in high impact activities among all student athletes [Diversity]
- 52. Implement high impact practices taking care not to consider race so all students have the opportunity to participate [Diversity]
- 53. Assess Black student outcomes related to a high impact activity [Equity]
- 54. Contact a coach when a Black student demonstrates difficulty related to a high impact activity [Deficit]

Here is a list of programs, activities, and strategies designed to support students. On a scale of 1 (little extent) to 100 (large extent), to what extent do you think each item in the group influences Black student success? [Orientation]

- 55. Cultural celebrations, such as diversity week, international holiday festival, Black history month programming. [Diversity]
- 56. Support services such as tutoring, academic support, and wellness coaching. [Deficit]
- 57. Advising strategies that position the cultural identities of students as strengths. [Equity]
- 58. Faculty Athletic Representative (FAR) sponsored efforts to connect student athletes to academic support. [Deficit]
- 59. Programs and support offered through the Office of Diversity and Inclusion. [Diversity]
- 60. Alumni mentorship. [Equity]
- 61. CARE team efforts to connect students to campus support resources. [Deficit]
- 62. Programs offered and friendships garnered through Black Student Union (BSU). [Diversity]
- 63. One-on-one relationships with faculty. [Equity]

Scenarios

64. Imagine that you are a coach of a team with strong representation of Black students. Your experience has been that this group of students will have low retention rates and will be more likely to be referred to CARE for academic assistance. Based on your learning and reflection from the workshops, which response most accurately reflects your conversation with other coaches? [Discourse]

- a. “We need to hold weekly study sessions and require attendance for these players to keep them on track. They need the extra time from us to keep up and be held accountable for getting their work turned in.” [Deficit] (2)
- b. “We need to instill in the whole team that they are a Division III student athlete and we expect all athletes to be committed students.” [Diversity] (1)
- c. “There are successful Black student athletes who can mentor our newer athletes and that social connection is important. We should contact the Office of Diversity and Inclusion to talk about a partnership. Maybe we create a peer mentor program for incoming student athletes who are Black. ODI can facilitate training and social events for mentors and mentees prior to the start of the academic year.” [Equity] (3)

65. Imagine that you are an admission counselor who coordinated a visit day. When you arrive at the event, you notice there is only one student of color of the 100 students attending the event. Following the event, your team holds a debrief meeting. Based on your learning and reflection from the workshops, which of the responses below most likely reflect your response? [Orientation]

- a. You recommend that we add the Assistant Director of Diversity and Inclusion to the event agenda and include the Office of Diversity and Inclusion on the tour. [Diversity] (1)
- b. Because most of our students of color are athletes and many come from out of state, you don’t worry about representation at Visit Day and trust other events are more likely to yield diversity. [Deficit] (2)
- c. You recommend to the team a review of the data in order to compare the percentage of students of color at each stage of the admission funnel. [Equity] (3)

Consider your personal approach to diversity, equity, and inclusion in your classes and/or programs? On a scale of 1 (little extent) to 100 (large extent), to what extent does each statement in the group align with your own belief about our community following the workshop? [Strategies]

66. Imagine that you are responsible for selecting orientation leaders and have developed a robust recruitment and selection plan. At the end of your process, you notice that only 2 of 60 students selected are students of color. You meet with your supervisor to discuss this observation and implement one of the below strategies. Based on your learning and reflection from the workshop, which is the strategy you are most likely to select? [Strategies]

- a. You review the applicant pool to determine how many students of color expressed interest in the position, how many applied, and how they performed in the selection process. [Equity] (3)

- b. You determine the recruitment approach was multi-faceted, extensive, and well advertised. All students had the opportunity to apply and the selection criteria were equally applied to all candidates. You determine the best approach is to add a visit to the BSU to encourage students in the organization to apply next year. [Diversity] (1)
- c. You review the applications and see that the few students of color had no other leadership experiences and scored low. They are rising juniors and seniors and you determine that they just don't have the experience of the students who were selected. Simply put, students of color were not as qualified. [Deficit] (2)

67. Imagine that you've taught a first-year program course for many years. Recently, you've noticed that Black students are more likely to have lower grades, have poor class attendance, or not submit assignments. Many of your Black students are student athletes. As you prepare for this same class this year, you consider different strategies for improving this situation. Based on your learning and reflection from the workshop, which strategy are you most likely to implement? [Strategies]

- a. You review your syllabus considering the materials, readings, and assignments. You make sure to include readings from diverse authors and co-curricular assignments to encourage students to attend cultural events on campus. [Deficit] (2)
- b. You partner with other faculty who teach first-year courses to conduct a focus group of former students of color to learn more about their experiences in first-year classrooms. Collectively, you review the data and determine specific practices that can be implemented for improvement. [Diversity] (1)
- c. You commit to submitting early alerts to the CARE team at the first sign of at-risk behaviors. After each class, you submit alerts for students who missed class, submitted late assignments or no assignment at all. You report their lack of motivation to CARE so the student can be helped. [Equity] (3)

68. Imagine that you have a strong reputation for fostering undergraduate research and want to strengthen success in undergraduate research among students of color. In the last two years, faculty have begun to talk more about diversity, equity, and inclusion which has made you aware that the level of research conducted by students of color does not match that of your top students who are predominantly White. You meet with Drinko Center staff to strategize ways to foster improvement. Based on your learning and reflection from the workshop, which strategy are you most likely to implement? [Strategies]

- a. Brainstorm reasons students of color might not perform as well in a research setting. You conclude that students of color required two years of college courses to settle in academically. Your top students arrived at college eager and better prepared. Students of color were more likely to change majors and have a history of lower grades in their first two years. You and your colleagues determine it would be most effective to offer students of color additional research support through the Academic Success Center and propose the addition of staff to focus on research preparation. [Deficit] (2)
- b. As you and your colleagues consider the issue, you recognize there are white students who don't perform strongly in undergraduate research as well. You determine that strategies should focus on all students who are interested in help with research skills.

You propose a co-curricular program to introduce new students to undergraduate research opportunities and ask Inquiry and WST 101 instructors to promote attendance at the workshop. [Diversity] (1)

- c. You and your colleagues intend to survey students of color across the class cohorts to understand their views about, experiences with, and confidence in their ability to conduct undergraduate research. [Equity] (3)

69. Imagine that you are a School/Department Chair and recently discovered that Westminster College has never graduated a student of color from at least one major in your school/department. You've set a goal to increase the recruitment of students of color to that major such that Black students are proportionately represented. Based on your learning and reflection from the workshop, which response most accurately reflects your discussion with colleagues? [Discourse]

- a. "I've reviewed the national data for graduation of students of color in the identified major. Rates nationally are much lower than your goal. I am concerned that forces outside our control may serve as barriers toward reaching your goal." [Deficit] (2)
- b. "I've reviewed institutional data for recruitment, enrollment, and graduation rates for the identified major. Numbers are low at all levels of the pipeline. The literature suggests that few students of color express interest in the major while in high school. I'd like to propose partnering with high schools from which we draw students of color to develop pipeline partnerships and interest in the major." [Equity] (3)
- c. "I will work with Marketing to update our recruitment materials and website ensuring images depict diversity on campus. If Admissions sends our new materials to all candidates in the admission funnel we might meet our goal." [Diversity] (1)

70. Imagine that you coordinate the Professional Networking Symposium (PNS). Following this year's event, you noticed that Black students were well represented as attendees of the event; however, few landed internships or connected with alumni mentors as a result of the program. You meet with your supervisor to discuss this finding. Based on your learning and reflection from the workshop, which strategy are you most likely to pursue? [Strategies]

- a. Ask alumni who presented at the PNS what they valued in students who were offered internships or continued mentoring. Build a preparatory workshop for the next PNS to develop the desired skills and attributes. [Diversity] (1)
- b. Rely on what you've heard from others on campus - many Black students are underprepared and tend to congregate in a few majors. You conclude that Black students may not exhibit the skills and attributes employers are seeking or Black students didn't get offers because they are enrolled in majors with large enrollments. [Deficit] (2)
- c. You review the post-event assessment and disaggregate by race looking for differences in the way Black students report their experience with the PNS. You note trends looking for specific points of the program that may be adjusted to improve the experience of Black students. [Equity] (3)

71. Imagine that you are responsible for student conduct. At the end of the academic year, you review your conduct data and discover students of color are named in incident reports at disproportionate rates. Most of the incident reports involving students of color are coming from Eichenauer Hall. You meet with the Residence Life staff to understand the problem. Based on your learning and reflection from the workshop, which of these examples most accurately reflects your approach? [Strategies]

- a. Meet individually with the students of color involved in the reports to hear their lived experience. Pay close attention to messages about sense of belonging, experience with microaggressions, and need for cultural validation. Use the summative data to provide feedback and performance improvement goals for the RAs most closely involved with the incidents. [Equity] (3)
- b. Conduct a workshop for all RAs about social identity and how to create inclusive communities. The workshop will also address stereotypes and implicit bias training. [Diversity] (1)
- c. Review the incident reports for themes in behaviors. Develop an educational program and floor signage aimed at decreasing the occurrence of the problematic behavior. [Deficit] (2)

Section 2: Open-ended Questions

72. Think about the cognitive frames - diversity, deficit, and equity. How often did you exhibit each PRIOR to the training? Never Sometimes About Half the Time Most of time Always

Diversity
Deficit
Equity

73. How has the training changed your thinking about the most common reasons for lower retention rates among Black students? Please list your current explanations and discuss how they've changed.

74. Consider your personal approach to diversity, equity, and inclusion. What strategies from the training do you intend to implement into your practice? Please list.

Bibliography

- Adams, M. (2016). Pedagogical foundations for social justice education. In M. Adams & L. A. Bell (Eds.), *Teaching for diversity and social justice* (3rd ed.). (pp. 2-53). Routledge.
- Ahmed, S. (2012). *On being included: Racism and diversity in institutional life*. Duke University Press.
- Anderson, G. (2020, November 12). Strength in numbers. Inside Higher Ed. <https://www.insidehighered.com/news/2020/11/12/liberal-arts-college-presidents-create-diversity-and-inclusion-alliance>
- Annamma S. A., Jackson, D. D., & Morrison, D. (2017). Conceptualizing color-evasiveness: Using dis/ability critical race theory to expand a color-blind racial ideology in education and society. *Race Ethnicity and Education*, 20(2), 147-162. <https://doi.org/10.1080/13613324.2016.1248837>
- Argyris, C. (1991). Teaching smart people how to learn. *Reflections*, 4(2), 4-15.
- Argyris, C. & Schon, D. A., (1996). *Organizational learning II: Theory, method, and practice*. Addison-Wesley Publishing Company.
- Ashford, S. J., & DeRue, D. S. (2012). Developing as a leader: The power of mindful engagement. *Organizational Dynamics*, 41, 146-154. <https://doi.org/10.1016/j.orgdyn.2012.01.008>
- Baldwin C., Bensimon, E. M., Dowd, A. C., & Kleiman, L. (2011). Measuring student success. *New Directions for Community Colleges*, 2011(53), 75-88.
- Banks, T., & Dohy, J. (2019). Mitigating barriers to persistence: A review of efforts to improve retention and graduation rates for students of color in higher education. *Higher Education Studies*, 9(1), 118-141. <https://doi.org/10.5539/hes.v9n1p118>
- Bauman, G. L. (2005). Promoting organizational learning in higher education to achieve equity in educational outcomes. *New Directions for Higher Education*, 2005(131), 23-35. <http://dx.doi.org.pitt.idm.oclc.org/10.1002/he.184>
- Bensimon, E. M. (2005). Closing the achievement gap in higher education: An organizational learning perspective. *New Directions for Higher Education*, 2005(131), 99-111. <https://doi.org/10.1002/he.190>
- Bensimon, E. M. (2007). The underestimated significance of practitioner knowledge in the scholarship on student success. *Review of Higher Education*, 30(4), 441-469.

- Bensimon, E. M. (2012). The Equity Scorecard: Theory of change. In E. M. Bensimon & L. Malcom (Eds.), *Confronting equity issues on campus: Implementing the equity scorecard in theory and practice* (pp. 17-44). Stylus.
- Bensimon, E. M. & Bishop, R. (2012). Introduction: Why “critical”? The need for new ways of knowing. *Review of Higher Education*, 36(1), 1-7.
- Bensimon, E. M. & Harris III, F. (2012). The mediational means of enacting equity-mindedness among community college practitioners. In E. M. Bensimon & L. Malcom (Eds.), *Confronting equity issues on campus: Implementing the equity scorecard in theory and practice* (pp. 216-246). Stylus.
- Bensimon, E. M. & Malcom, L. (2012). [*Confronting equity issues on campus: Implementing the equity scorecard in theory and practice*. Stylus.](#)
- Blake, L. P., Pena, E. V., Akiyama, D., Braker, E., Maeda, D. K., McDonald, M. A., North, G., Swift, J., Tamada, M., & Yoshino, K. (2012). Faculty learning and reflection from student interviews. In E. M. Bensimon & L. Malcom (Eds.), *Confronting equity issues on campus: Implementing the equity scorecard in theory and practice* (pp. 96-116). Stylus.
- Bloom, J. L., Hutson, B. L., He, Y. (2013). Appreciative advising. In Schreiner L. A., Louis, M. C., & Nelson, D. D. (Eds.), *Thriving in Transitions* (pp. 83-103). University of South Carolina, National Resource Center for the First-Year Experience and Students in Transition.
- Bonilla-Silva, E. (2017). *Racism without racists: Color-blind racism and the persistence of racial inequality in America*. Rowman & Littlefield Publishers.
- Bonilla-Silva, E. (2015). The structure of racism in color-evasive, “post-racial” America. *American Behavioral Scientist*, 59(11), 1358-1376.
- Bryk, A. S., Gomez, L. M., Grunow, A., & LeMahieu, P. G. (2015). Learning to improve. How America’s schools can get better at getting better. Harvard Education Press.
- Bryson, J. M., Patton, M. Q., & Bowman, R. A. (2011). Working with evaluation stakeholders: A rationale, step-wise approach and toolkit. *Evaluation and program planning*, 34(1), 1-12.
- Bustillos, L. T. & Rueda, R. (2012). The math project at Los Angeles City College. In E. M. Bensimon & L. Malcom (Eds.), *Confronting equity issues on campus: Implementing the equity scorecard in theory and practice* (pp. 117-137). Stylus.
- Center for Urban Education. (2020a). *Building Equity Mindedness in Math Faculty: How CUE supported math faculty along a multi-year journey toward equity-mindedness and improved student outcomes for minoritized students*. Rossier School of Education, University of Southern California <https://www.cue-tools.usc.edu/case-study-colorado>
- Center for Urban Education. (2020b). *Equity-minded inquiry series: Data tools*. Rossier School of Education, University of Southern California.

- Center for Urban Education. (2020c). *Guide for composing a campus racial equity team*. Rossier School of Education, University of Southern California.
- Center for Urban Education. (2020d). *Laying the groundwork: Concepts and activities for racial equity work*. Rossier School of Education, University of Southern California.
- Ching, C. D. (2018). Confronting the equity “learning problem” through practitioner inquiry. *Review of Higher Education*, 41(3), 387–421. <https://doi.org/10.1353/rhe.2018.0013>
- Clifton, D. O., & Harter, J. K. (2003). Investing in strengths. In K. S. Cameron, J. E. Dutton, & R. E. Quinn (Eds.), *Positive organizational scholarship* (pp. 111-121). Berrett-Koehler.
- Cooperrider, D. L., & Whitney, D. (2005). Appreciative inquiry: A positive revolution in change. In P. Holman & T. Devane (Eds.), *The change handbook* (pp. 245-263). Berret-Koehler.
- Coppock, A. (2020). *10 things to know about multiple comparisons*. <https://egap.org/resource/10-things-to-know-about-multiple-comparisons/>
- DeAngelo, L., Schuster, M. T., & Lachaud, Q. A. (2021). The faculty role in grooming and gatekeeping students’ of color potential along the professoriate pipeline. *The Review of Higher Education*, 44(4), 493-521. <https://doi.org/10.1353/rhe.2021.0010>
- Dowd, A. C., & Liera, R. (2018). Sustaining organizational change towards racial equity through cycles of inquiry. *Educational Policy Analysis Archives*, 26(65), 1-45. <https://doi.org/10.14507/epaa.26.3274>
- Dyce, J. A., & Williams, U. (Producers). (2014). An introduction to quantitative research. [Video]. Uzma Williams. <https://video.alexanderstreet.com/watch/an-introduction-to-quantitative-research>
- Erlingsson, C. & Brysiewicz, P. (2017). A hands-on guide to doing content analysis. *African Journal of Emergency Medicine*, 7(2017), 93-99. Elsevier B.V. <http://dx.doi.org/10.1016/j.afjem.2017.08.001>
- Felix, E. R. & Fernandez Castro, M. (2018). Planning as strategy for improving Black and Latinx student equity: Lessons from nine California community colleges. *Educational Policy Analysis Archives* 26(56). <http://dx.doi.org/10.14507/epaa.26.3223>
- Gibbs, G. (1988). *Learning by doing: A guide to teaching and learning methods*. Further Education Unit.
- Glen, S. (2022). StatisticsHowTo.com: Statistics for the rest of us. <https://www.statisticshowto.com/>
- Gorski, P. C. (n.d.). Guide for setting ground rules. EdChange. <http://www.edchange.org/multicultural/activities/groundrules>

- Guiffrida, D. (2005). Othermothering as a framework for understanding African American students' definitions of student-centered faculty. *The Journal of Higher Education*, 76(6), 701-723.
- Harper, S. R. (2009) Niggers no more: A critical race counternarrative on Black male student achievement at predominantly White college and universities. *International Journal of Qualitative Studies in Education*, 22(6), 697-712. <https://doi.org/10.1080/09518390903333889>
- Harper, S. R. (2012). Race without racism: How higher education researchers minimize racist institutional norms. *The Review of Higher Education*, 36(1), 9-29.
- Harper, S. R. (2021, March 3). *Fostering and sustaining inclusive classrooms for students of color* [eConvening]. Liberal Arts Colleges Racial Equity Leadership Alliance, University of Southern California.
- Harper, S. R., & Quaye, S. J., (2007). Student organizations for Black identity expression and development among African American male student leaders. *Journal of College Student Development*, 48(2), 127-144.
- Harper, S. R., Smith, E. J., Davis III, C. H. F., (2018). A critical race case analysis of Black undergraduate student success at an urban university. *Urban Education*, 53(1), 3-25. <https://doi.org/10.1177/0042085916668956>
- Henning, G. W., & Roberts, D. (2016). *Student affairs assessment: Theory to practice*. Stylus.
- Hinnant-Crawford, B. N. (2020). *Improvement science in education: A primer*. Myers Education Press.
- Hurtado, S., Milem, J. F., Clayton-Pederson, A. R., & Allen, W. R. (1998). Enhancing campus climates for racial/ethnic diversity: Educational policy and practice. *The Review of Higher Education*, 21(3), 279-302.
- IHI Multimedia Team (2015, August 21). Like magic? ("Every system is perfectly designed..."). *Institute for Healthcare Improvement*. <http://www.ihl.org/communities/blogs/origin-of-every-system-is-perfectly-designed-quote>
- Iverson, S. V. (2007). Camouflaging power and privilege: A critical race analysis of university diversity policies. *Educational Administration Quarterly*, 43(5), 586-611.
- JED Foundation. (2008). Balancing safety and support on campus: A guide for campus teams. *HEMHA Project*. A Higher Education Mental Alliance.
- Johnson, L. (2013). The benefits of a comprehensive retention program for African American students at a predominantly white university. *Interdisciplinary Journal of Teaching and Learning*, 3(1), 38-54. Southern University and A & M College.

- Kinzie, J. (2012). Introduction: A new view of student success. In Schreiner L. A., Louis, M. C., & Nelson, D. D. (Eds.), *Thriving in Transitions* (pp. 65-86). University of South Carolina, National Resource Center for the First-Year Experience and Students in Transition.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice-Hall.
- Kramer, G. L., & Gardner, J. N. (2007). *Fostering student success in the campus community*. Jossey-Bass.
- Kuh, G. D., & Love, P. G. (2000). A cultural perspective on student departure. In J.M. Braxton (Ed.). *Reworking the student departure puzzle* (pp. 196-212). Vanderbilt University Press.
- Lambirth, A. (2006). Challenging the laws of talk: ground rules, social reproduction, and the curriculum. *The Curriculum Journal*, 17(1), 59-71.
<https://doi.org/10.1080/09585170600682608>
- Lerner, G. L., & Brand, B. (2006). *The college ladder: Linking secondary and postsecondary education for success for all students*. American Youth Policy Forum.
- Louis, M. C. & Schreiner, L. A. (2012). Helping students thrive: A strengths development model. In Schreiner L. A., Louis, M. C., & Nelson, D. D. (Eds.), *Thriving in Transitions* (pp. 19-40). University of South Carolina, National Resource Center for the First-Year Experience and Students in Transition.
- McNair, T. B., Albertine, S., Cooper, M. A., McDonald, N., & Major Jr, T. (2020a). *Becoming a student ready college: A new culture of leadership for student success*. Jossey-Bass.
- McNair, T. B., Bensimon, E. M., & Malcom-Piquex, L. (2020b). *From equity talk to equity walk: Expanding practitioner knowledge for racial justice in higher education*. Jossey-Bass.
- Menter, I. J., Elliot, D., Hulme, M., Lewin, J., Lowden, K., & Hall, J.R. (2011). *A guide to practitioner research in education*. SAGE Publications.
- Miller, B. (2020, January 27). *15 advantages and disadvantages of quantitative research*. GreenGarage. <https://greengarageblog.org/15-advantages-and-disadvantages-of-quantitative-research>
- Mintrop, R. (2018). *Design-based school improvement: A practical guide for education leaders*. Harvard Education Press.
- Museus, S. D. (2014). The culturally engaging campus environments (CECE) model: A new theory of college success among racially diverse student populations. In M. B. Paulsen (Ed.), *Higher education: A handbook of theory and research* (pp. 189-227). Springer.
- Museus, S. D., Griffin, K. A., & Quaye, S. J. (2020). Engaging students of color. In S. J. Quaye, S. R. Harper, & S. L. Pendakur (Eds.), *Student engagement in higher education*:

- Theoretical perspectives and practical approaches for diverse populations. (pp. 17-35). Routledge.
- Museus, S. D., Ledesma, M. C., & Parker, T. L. (2015). Racism and racial equity in higher education. Jossey-Bass.
- Museus, S. D., & Quaye, S. J. (2009). Toward an intercultural perspective of racial and ethnic minority college student persistence. *The Review of Higher Education*, 33(1), 67-94.
- National Postsecondary Education Cooperative (2009). Information required to be disclosed under the Higher Education Act of 1965: Suggestions for dissemination. <https://nces.ed.gov/pubs2010/2010831rev.pdf>
- National Student Clearinghouse Research Center. (2020). Digest of education statistics. https://nces.ed.gov/programs/digest/2020menu_tables.asp
- National Student Clearinghouse Research Center. (2021). Persistence and retention: Fall 2019 beginning cohort. <https://nscresearchcenter.org/persistence-retention/>
- On Being (2021). The better conversations guide. <https://onbeing.org/civil-conversations-project/better-conversations-guide/>
- Paredes-Collins, K. (2012). Thriving in students of color on predominantly white campuses: A divergent path? In Schreiner L. A., Louis, M. C., & Nelson, D. D. (Eds.), *Thriving in Transitions* (pp. 65-86). University of South Carolina, National Resource Center for the First-Year Experience and Students in Transition.
- Parker, P. (2108). *The art of gathering: How we meet and why it matters*. Riverhead Books.
- Patton, L. D. (2006). The voice of reason: A qualitative examination of Black student perceptions of their Black culture center. *Journal of College Student Development*, 47(6), 628-646.
- Patton, L. D. (2016). Disrupting postsecondary prose: Toward a critical race theory of higher education. *Urban Education*, 51(3), 315-342.
- Perry, J. A., Zambo, D., & Crow, R. (2020). The improvement science dissertation in practice: A guide for faculty, committee members, and their students. Myers Education Press.
- Pollock, M. (2004). *Colormute: Race talk dilemmas in an American school*. Princeton University Press.
- Rendon, L. I., Jalomo, R. E., & Nora, A. (2000). Theoretical considerations in the study of minority student retention in higher education. In J. M. Braxton (Ed.), *Reworking the student departure puzzle* (pp. 126-156). Vanderbilt University Press.
- Robinson, S. B., & Leonard, K. F. (2019). *Designing quality survey questions*. SAGE Publications.

- Robinson-Armstrong, A., Clemons, A., Fissinger, M., & Saucedo, M. (2012). The diversity scorecard at Loyola Marymount University. In E. M. Bensimon & L. Malcom (Eds.), *Confronting equity issues on campus: Implementing the equity scorecard in theory and practice* (pp. 75-95). Stylus.
- Ruel, E., Wagner III, W. E., & Gillespie, B. J. (2016). *The practice of survey research: Theory and applications*. SAGE Publications.
- Salkind, N. J. (2010). *Statistics for people who hate statistics* (5th ed.). SAGE Publications.
- Schreiner, L. A. (2013). Strengths based advising. In P. Jordan, M. A. Miller, & J. K. Drake (Eds.), *Academic advising approaches: Strategies that teach students to make the most of college* (pp. 105-120). Wiley.
- Selingo, J. J. (2018, September) The new generation of students: How colleges can recruit, teach, and serve Gen Z. *Chronicle of Higher Education*. Retrieved from <https://www.chronicle.com/>
- Shewey, J. (2019, July 10). Tuition dependency and the impacts of declining enrollments. *RCM&D*. <https://www.rcmd.com/resources/blog/tuition-dependency-and-impacts-declining-enrollments>
- Sikora, M. (2017). *Get real: Exploring equity-mindedness at a large, urban, and predominantly white institution*. [Doctoral Dissertation, University of Pittsburgh]. (Unpublished) <http://d-scholarship.pitt.edu/32692/>
- Solórzano, D. G., & Yosso, T. J. (2001). From racial stereotyping and deficit discourse toward a critical race theory in teacher education. *Multicultural Education*, 9(1), 2-8.
- Solórzano, D. G., Ceja, M. & Yosso, T. J. (2000). Critical race theory, racial microaggressions, and campus racial climate: The experiences of African American college students. *The Journal of Negro Education*, 69(1), 60-73.
- Statistics Solutions. (2022). Bonferroni Correction. *Complete Dissertation*. <https://www.statisticssolutions.com/bonferroni-correction/>
- Steele, C. M. (1997). A threat in the air: How stereotypes shape intellectual identity and performance. *American Psychologist*, 52(6), 613-629. <https://doi.org/10.1037/0003-066X.52.6.613>
- Sue, D. W. (2010). *Microaggressions in everyday life: Race, gender, and sexual orientation*. Wiley.
- Suskie, L. (2015). *Five dimensions of quality: A common sense guide to accreditation and accountability*. Jossey-Bass.
- Tatum, B. D. (2017). *Why are all the Black kids sitting together in the cafeteria?: And other conversations about race*. Basic Books.

Tip Top Bio. (2021, February 16). The Bonferroni Correction – Cleary explained [Video]. YouTube. <https://www.youtube.com/watch?v=HLzS5wPqWR0>

United States Census Bureau (n.d.) Quick Facts: Lawrence County, Pennsylvania. <https://www.census.gov/quickfacts/fact/table/lawrencecountypennsylvania/PST045219>

Westminster College (n.d.a). Mission. <https://www.westminster.edu/about/mission.cfm>

Westminster College (n.d.b). Strategic Plan 2018-2027. <https://www.westminster.edu/about/strategic-plan.cfm>

Westminster College (n.d.c). Diversity, Equity, and Inclusion Strategic Action Plan. <https://www.westminster.edu/campus/services/dei.cfm>

Westminster College. (2020a). Census Day Report: Fall 2020.

Westminster College (2021). Census Day Report: Fall 2021.

Westminster College (2020b). Diversity and Equity Campus Climate Survey Summary.