

**An Exploration of Superintendent Perceptions and District Initiatives
Related to Minority Student Success in Southwest Pennsylvania**

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An Exploration of Superintendent Perceptions and District Initiatives Related to Minority Student Success in Southwest Pennsylvania

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This dissertation was designed to explore superintendents' perceptions of changing learner profile and district initiatives related to minority student success in southwest Pennsylvania. It includes a comprehensive review of literature related to the nature and causes of the racial achievement gap, federal and state reforms, the impact of district and school leadership to eliminate it and superintendents' perceptions about it. A focus was identified from the literature that informed the design of the study examining demographic changes in minority student enrollment over the past decade in K – 12 public schools in the Pittsburgh area workforce development region. Survey and interview data were collected from K-12, public school superintendents that explored superintendent perceptions regarding changing minority student demographics, initiatives and/or practices being implemented to increase minority students' outcomes as well as, successes, challenges and lessons learned to assure minority success.

Superintendents are faced with many challenges, from managing the political landscape, adjusting to new school reform mandates, juggling dwindling resources and influencing principals' and teachers' beliefs and expectations for instruction benefitting all students. Over the past 10 years, minority student representation has changed within and between school districts in southwest Pennsylvania. The racial achievement gap is no longer isolated to city school districts. Suburban, town and rural superintendents are now working to meet federal mandates to eliminate the racial achievement gap between minority and majority students.

Results from this study indicate that overall student enrollment declined over the past decade, while minority student enrollment and students qualifying for free or reduced lunch increased in southwest Pennsylvania. Majority and minority students experienced decreases in overall proficiency in math and reading Pennsylvania State System Assessment scores where Minority students experienced bigger decreases in math and reading compared to majority students.

Overall, superintendents feel when principals and teachers believe all students can achieve at high levels, collaborative goal setting occurs with central office and school teams and regular progress monitoring of goals is implemented and, teachers are embraced as a critical element in student success and empowered to plan and lead professional development, minority students are more likely to succeed.

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1.0 Introduction

K – 12 public school superintendents are faced with many challenges beyond the politics of their Board of Directors and finances. Some of these challenges include influencing principal and teacher beliefs and expectations that all students, specifically, minority students can achieve at the same level as majority students, the delivery and planning for rigorous and culturally relevant instruction and, partnering with parents and the community to support students and families both in and outside of school. District leaders must be creative and innovative in order to combine management of the district and services provided to students, with providing instructional leadership and professional development for principals, teachers and staff to develop and maintain a culture within the district to support all students to be college, career and life ready.

1.1 Statement of problem

K – 12 public school superintendents in the Pittsburgh area workforce development region (<https://www.alleghenyconference.org>) are responsible for preparing all students to be college, career and life ready, and prepared to enter the workforce development region. Superintendents are faced with many challenges from managing the political landscape, adjusting to new school reform mandates, juggling dwindling resources and, influencing principals' and teachers' beliefs and expectations, and ensuring that instruction supports all students, specifically minority students.

Over the past 10 years, minority student representation has changed across school districts in southwest Pennsylvania; the racial achievement gap is no longer isolated to city school districts.

Suburban, town and rural superintendents are now working to meet federal mandates to eliminate the racial achievement gap between minority and majority students. The literature and data reveal that the gap in academic achievement between minority and majority students has many contributing factors and remains constant within the Pittsburgh area workforce development region. Superintendents, regardless of location (city, suburban, town or rural), must plan and implement with fidelity, initiatives and practices to increase outcomes for minority students as compared to majority students to assure that all students under their care are college, career and life ready, and prepared to enter the Pittsburgh area workforce development region.

1.2 Purpose

The purpose of this study was to identify current student demographic trends over the past decade in the Pittsburgh area workforce development region that spans 10 counties, 125 public school districts and seven intermediate units. The study explored K – 12 public school superintendents’ perceptions regarding changing minority student demographics over the past decade and initiatives and/or practices they are implementing to increase minority students’ outcomes assuring that minority students are college, career and life ready, prepared to enter the workforce development region. The study also identified implemented initiatives and/or practices, as well as their successes, challenges and lessons learned. The analysis of datasets, reports and survey results from the respondents included comparisons of all 125 superintendents in the Pittsburgh area workforce development region with the members of the University of Pittsburgh, School of Education’s 105 members of the Tri-State Area Study Council and/or 58 members of the Forum of Western Pennsylvania School Superintendents. Additionally, subgroup comparisons

were conducted in six primary categories describing the districts that included: Intermediate Unit, location, size of district, enrollment by percentage minority, percentage free or reduced lunch and percent minority student achievement.

1.2.1 Six primary categories

The analysis of federal, state and local datasets and reports were characterized by six primary categories to describe each school district. The categories are:

1. Intermediate Units (IU); IU's are regional service, instructional and operational providers to public, parochial, private and charter schools.
2. Location; the specific area in southwestern Pennsylvania where the school is classified as city suburban, town or rural.
3. Size of district; how many students are enrolled in the school district.
4. Enrollment by percentage minority: for the purpose of this study, White students are considered majority students. Percent minority refers to percentage of non-White students in the district.
5. Enrollment by percentage free or reduced lunch; the percentage of students of the total district enrollment that qualifies for the Federal Free/Reduced Lunch Program.
6. Minority student achievement; the percentage of minority students at the district level proficient or advanced in reading and math on the Pennsylvania System of School Assessment.

1.3 Research questions

This exploratory study reviewed and analyzed federal, state and regional datasets and reports to identify demographic trends of minority students over the past decade in the Pittsburgh area workforce development region. This study also obtained information from K-12 public school superintendents regarding their perceptions of changing demographic trends of minority students, actions taken to increase academic outcomes for minority students and, the success, challenges and lessons learned from such actions.

The following research questions guided data collection and analysis:

1. What are the demographic and academic success indicators for minority populations in southwest Pennsylvania across the last decade?
2. How do school superintendents perceive demographic and academic changes and needs for minority populations in their districts?
3. What actions have regional districts taken to address academic success of minority students in their districts? What have been notable successes and lessons learned?

1.4 Significance of the study

In my novice years as an elementary school principal in an urban school district, I repeatedly felt defeated and frustrated when the Pennsylvania System of School Assessment (PSSA) math, reading and science scores were released. Regardless of the effort, intention and resources dedicated to increasing achievement for all students, the assessment results consistently showed suppressed proficiency among racial minority students. Year after year, African-

American students were significantly outperformed by White students. As the overall school community reflected on and analyzed the PSSA data, it was common to provide excuses for lack of African-American student achievement that focused on the students, their families, parents, and their communities; rarely on ourselves, the school district or society.

As a more experienced principal, my focus shifted away from allowing excuses and blaming students, families and communities for a lack of African-American student achievement compared to White students. Using a root cause analysis approach, the school's leadership team, teachers and I attempted to identify causes for lack of African-American student achievement and tangible next steps to create a school environment where all students could achieve at the same level. With an underlying premise that all children want to be successful and can learn at high levels, we focused on higher expectations for students, relationship building and rigorous instruction at every student's functional level. These efforts helped to significantly increase achievement for African-American students. Although progress was being made, the racial achievement gap still existed between African-American and White students in my school. As a principal, I wondered what it would take to eliminate the predictability of student performance by race.

Currently, as a senior central office staff member in a city school district, I continue to be frustrated with the persistent racial achievement gap. My review of literature on the racial achievement gap pointed to factors contributing to and reform efforts designed to eliminate this gap. This study conducts an exploration of the current state of enrollment trends and achievement for minority students in southwest Pennsylvania, as well as superintendents' perceptions of demographic shifts, practices and initiatives they have attempted, and a review of challenges, successes, and lessons learned.

This study can provide important information to K – 12 public school districts that reside within the Pittsburgh area workforce development region of the most successful initiatives and practices being implemented to support the overall success of minority students. This information may prove useful to K-12 public school superintendents within the Pittsburgh area workforce development region, and perhaps beyond.

1.5 Background of the problem

The academic achievement gap between minority and majority students in the United States is not a recent phenomenon. It has been more than 60 years since *Brown v. The Board of Education*, and urban, suburban and rural schools across the United States continue to not meet the needs of minority students. Since *Brown*, educators, politicians, and researchers have developed various explanations for the racial achievement gap in the United States that include discrimination and racism (Seaton, 2010), socio-economic status (Duncan, Magnuson, 2005), environmental reasons (Nisbett, 2011), genetically determined (Herrnstein, Murray, 1994) and access to the same opportunities that majority students experience (Milner, 2012). Regardless of the explanation, the racial achievement gap continues to occur in urban, suburban and rural classrooms across southwestern Pennsylvania.

Since the onset of No Child Left Behind (Skinner, 2010) and now, Every Student Succeeds Act (2015), K-12 public school district superintendents have been charged with increasing the performance of all students; to be demonstrated on a yearly, standards-based, state assessment. If this requirement is not met, schools, as well as districts will face stiff consequences when student

outcomes at the school and district level do not increase and it will be more challenging for students to compete for post-secondary opportunities.

While K-12 public schooling has not changed much in the past 60 years, the way superintendents lead, has had to shift with the increasing academic expectations and requirements placed on all students. Notwithstanding shrinking budgets and limited resources, ESSA still stipulates that all students will be proficient in reading, math and science (2015). District leaders must be creative and innovative in order to combine management of the district and services provided with providing instructional leadership and professional development to develop and maintain a culture within the district to support all students to be college, career and life ready.

Currently, superintendents are faced with many challenges beyond the politics of their Board of Directors and district finances. Some of these challenges include influencing principal and teacher beliefs and expectations that all students, specifically, minority students, can achieve at the same level as majority students, as well as the delivery and planning for rigorous and culturally relevant instruction and, partnering with parents and the community to support students and families both in and outside of school.

It has been almost a century since the racial achievement gap between African-American and White students was first identified and quantified by the United States Army when it began to use large scale mental testing to assess recruits (Paige, 2010). Starting with *Brown v. Topeka Board of Education (1954)*, local, state, and federal governments attempted to address minority students' unequal access to the educational opportunity that has been afforded to majority students through various commissions and reforms. The 1954 decision of *Brown vs. Board of Education* was meant to settle, once and for all, differences in access to educational opportunity and presumably, the resulting differences in academic achievement (Love, 2004). Between 1990 and

2006, local, state, and federal governments spent approximately 5.6 trillion dollars (Cerf, 2012) on various educational reform initiatives to improve education not only for all students, but especially for low income, minority children. However, the racial achievement gap continues to occur in the same way in urban, suburban and rural classrooms across the United States. Majority students significantly outperform minority students in reading and math from preschool through twelfth grade. School reform efforts intended to benefit minority students remain unfulfilled. There remains low academic rigor and teacher expectations for minority students, along with a disproportionate dropout rate, over identification in special education and higher absenteeism for minority students.

1.5.1 Study conditions

A review of the literature related to racial achievement indicated that there are many causes for the racial achievement gap that contribute to varied outcomes impacting minority students. Some of the varied outcomes include academic achievement level, graduation rate, school discipline, overrepresentation in special education and incarceration rate. For the purpose of this study, I focused on factors and actions that specifically correlated to the academic achievement of minority students. Although equally important, this study did not present literature or explore the causes and actions that are directly connected to student discipline such as positive behavior intervention and support plans, restorative practices or the impact of out of school suspension on minority students leading to school dropout and incarceration.

The racial achievement gap is defined as disparity in academic performance between racial groups of students; majority being White and, minority referring to Black, Brown, African-American, Latino, Hispanic, Native-American, Alaskan Native and Bi-racial. For the purpose of

this study and with the exception of specific citations, all references to White students were referenced as majority students, and all references to Black, Brown, African-American, Latino, Hispanic, Native-American, Alaskan Native and Bi-racial students were referenced as minority students.

1.6 Summary

K – 12, public school superintendents are faced with many challenges beyond politics of their Board of Directors and finances. Some of these challenges include influencing principal and teacher beliefs and expectations that all students, specifically, minority students, can achieve at the same level as majority students, the delivery and planning for rigorous and culturally relevant instruction and, partnering with parents and the community to support students and families both in and outside of school.

Over the past 10 years, minority student representation has changed within and between school districts in southwestern Pennsylvania; the racial achievement gap is no longer isolated to urban school districts. Suburban and rural superintendents and executive directors in like roles are also now working to meet federal mandates to eliminate the racial achievement gap between minority and majority students. Superintendents, regardless of location (city, suburban, town and rural), must plan and implement with fidelity, initiatives and practices to increase outcomes for minority students as compared to majority students to assure that all students under their care are college, career and life ready, prepared to enter the Pittsburgh area workforce development region.

The study provides important information about school districts that are located within the Pittsburgh area workforce development region about the most successful initiatives and practices

being implemented by K-12 public school districts in the region to support the overall success of minority students, why they were successful, and lessons learned.

Chapter two presents a review of literature that begins with an examination of the nature of the racial achievement gap in K-12 public schools. The racial achievement gap was defined and the causes of the racial achievement gap that are identified in the literature were presented. Federal and state reform efforts were reviewed, and the impact of district and school leadership and school culture were discussed. Additionally, literature was presented that examined superintendents' perceptions about the racial achievement gap.

Chapter three offers a description of the study to utilize and analyze two datasets that included a review of federal, state and local databases and reports and, survey and interview data collected from K-12, public school superintendents. The study explored demographic changes in minority student enrollment over the past decade in K – 12 public schools in the Pittsburgh area workforce development region, superintendent perceptions regarding changing minority student demographics, initiatives and/or practices being implemented to increase minority students' outcomes and, successes, challenges and lessons learned.

Chapter 4 presents the findings of the data analysis of the changing demographics of learner profile and student achievement of the 125 K – 12 public schools in the Pittsburgh area workforce development region and superintendents' perceptions of changing minority student demographics. It also identifies successful initiatives and/or practices to assure minority student successes, as well as challenges and lessons learned by the respondents, and provides findings from the guided interviews.

Chapter 5 offers additional analysis and discussion regarding the findings, limitations and strengths of the study, recommendations for future practice, as well as implications for further study focusing on minority student success in the Pittsburgh area workforce development region.

2.0 Review of literature

2.1 The nature of the racial achievement gap in K – 12 public schools

In the following subsections, literature will be reviewed to examine the nature of the racial achievement gap between minority and majority students that includes: Causes and factors of the racial achievement gap in K-12 public school classrooms, the role of the superintendent and principal leadership practices and its impact on the racial achievement gap and, federal and state school reform efforts designed to increase achievement for minority students in suburban, urban and rural classrooms.

2.1.1 Racial achievement gap definition

The academic achievement gap between minority and majority students is not a recent phenomenon. Almost a century has passed since the problem was first identified and quantified by the United States Army when it began to use large scale mental testing to assess recruits (Paige, 2010). The racial achievement gap refers to the disparity in academic performance between racial groups of students in regard to grades, student discipline, standardized test scores, course selection, college completion rates, dropout rates and other academic indicators (Education Week, 7/2011). Starting with *Brown v. Topeka Board of Education (1954)*, our local, state, and federal governments have attempted to address African American students' unequal access to educational opportunity that has been afforded to White students through various commissions and reforms. The 1954 decision of *Brown vs. Board of Education* decision was meant to settle, once and for all,

differences in access to educational opportunity and presumably, the resulting differences in academic achievement (Love, 2004). Between 1990 and 2006, local, state, and federal governments spent approximately 5.6 trillion dollars (Cerf, 2012) on various educational reform initiatives to improve education not only for all students, but especially for low income, non-White children. However, the racial achievement gap persists; African-American students have far less access to great teachers and schools, are in segregated classrooms, experience a disproportionate rate of poverty, high unemployment and underemployment, a disproportionate rate of prison terms, and a lower life expectancy.

For the past 60 plus years since *Brown*, educators, politicians, and researchers have developed various explanations of the racial achievement gap in the United States that include discrimination and racism (Seaton, 2010), socio-economic status (Duncan, Magnuson, 2005), environmental reasons (Nisbett, 2011) and genetically determined (Herrnstein, Murray, 1994). Regardless of the explanation, the racial achievement gap occurs in the same manner in suburban, urban and rural classrooms across the United States. Majority students significantly outperform minority students in reading and math from preschool through twelfth grade. Minority students experience unrealized school reform efforts, low academic rigor and teacher expectations, disproportionate rate of student discipline, disproportionate dropout rate, over identification in special education and higher absenteeism.

2.1.2 Causes of the achievement gap: Racial discrimination and racial identity

Explanations for the causes of the racial achievement gap vary. Seaton (2010) believes that there are two factors to consider when addressing the achievement gap between African-American students and their European-American counterparts: racial discrimination and racial identity, and

the relationship between the two constructs. Racial discrimination consists of dominant group members' actions, which are systematic and result in differential and negative effects on subordinate racial/ethnic groups (Williams et al. 2003; Seaton, 2010). Racial identity is defined as the significance and meaning that individuals ascribe to be a member of their racial group (Sellers, Smith, Shelton, Rowley & Chavous, 1998). Depending on one's experiences, their racial identity can be a source of pride and convictions or source of low esteem and uncertainty. When racial discrimination happens in the school environment, a "safe" environment, from an adult or peer of the dominant group, students in the subordinate group tend to be less engaged with diminished academic outcomes.

Some studies have found that when students hold strong identities as African Americans, their academic achievement suffers, and their academic identification decreases (Fordham and Ogbu 1986). African-American students' positive racial identity serves as a protective shield against discriminatory actions and practices of teachers and peers. The cost may be academic achievement, but the benefit is self-preservation of the student's racial self. Other researchers have found that the role of racial identity becomes especially important in the context of racial discrimination and is a protective factor for academic achievement among minority youth (Seaton, 2010). Specifically, African-American adolescents who perceived high levels of racial discrimination but had a strong connection to their racial group were performing as well as youth who perceived little to no racial discrimination (Eccles, Peck, Wong, 2006). African-American students with positive racial identity can buffer damaging experiences that serve to diminish others that lack the same positive racial identity.

Racial discrimination happens in intentional and unintentional ways that have an impact on day-to-day experiences of African-American students in urban classrooms. Lisa Delpit (1995,

2006) states that “Good liberal intentions” are not enough to increase academic achievement of African-American students in urban classrooms and comments on a study that was conducted by Massy, Scott and Dornbusch (1975): *Racism without Racists: Institutional Racism in Urban Schools*. Massey, et al found that with all intentions of teachers “being nice,” they had stopped teaching black children (Delpit, 1995, 2006) and stated, “We have shown that oppression can rise out of warmth, friendliness, and concern. Paternalism and a lack of challenging standards are creating a distorted system of evaluation in schools.” The unintended, discriminatory impact of educators “thinking” that by being nice, warm and friendly to African-American students and not challenging them academically with rich content and opportunities to think and struggle is that it directly contributes to lower achievement.

Perceptions of racial discrimination have been negatively linked to academic achievement among African-American adolescents (Seaton, 2010). In the urban classroom, African-American students perceive that they are called to answer questions or encouraged to participate by their teachers far less than their White counterparts, are asked lower level questions, are allowed to opt out of instruction, have less access to highly qualified and veteran teachers, and are redirected and disciplined more than White students (Fenton, Fisher, Wallace, 2000). When minority students are treated differently from majority, or perceive such treatment, less academic engagement and more disruptive behavior results from minority students. Ironically, minority students are blamed for their reactive behavior, which reinforces low achievement and engagement and higher incidences of discipline.

To compound African-American students’ internalization of discrimination or stereotype threat, that of being at risk of confirming, as a self-characteristic, a negative stereotype about one’s group amplifies African-American students’ perception of discrimination in classroom settings

(Aronson, Steele, 1995). When stereotype is applicable, one is at risk of confirming it as a self-characterization. Aronson and Steele (1995) conclude that when stereotype is involved in something as important as intellectual ability, the threat can be disruptive enough to impair achievement. If the stereotype is, “African-American students are not as smart as White students,” and this is reinforced by the teachers’ behavior of allowing African-American students to only answer low-level questions, excuse them from homework, opt out of instruction, whether intentional or not, reinforces the stereotype threat when White students are answering multi-step questions, never being excused from homework, and always being called to task.

The role of racial identity becomes especially important in the context of racial discrimination (Seaton 2010), where racial identity has been examined as a protective factor for academic achievement. Seaton (2010) states that African American students with positive identities are more academically engaged and successful. African-American students that have positive racial identities do not self-identify with stereotype threats; they have a stronger connection to their own racial identity and are less likely to be negatively impacted by discrimination in the classroom.

2.1.3 Causes of the achievement gap: Environmental factors

Another explanation for the racial achievement gap in urban schools is that it is caused by environmental factors. The environmental explanation includes descriptors such as culture, family, parenting, and number of parents in home, the level of the parents’ education, neighborhood, and prenatal care. Culture is broadly defined as the skills, knowledge, habits, and behaviors that parents, caretakers, and peers teach students (Farkas, 2004). Communities in urban areas have cultures that vary greatly by class and race experiencing residential segregation and

isolation. Farkas (2004) posits that the skills, knowledge and behavior of parents, coupled with neighborhood and community, help determine the level of school preparedness for kindergarten students. According to Farkas (2004), the racial achievement gap starts way before the first day of school (2004). Children growing up in single parent homes, in low-income neighborhoods with a high crime rate are not as prepared for the first day of school compared to the child with two parents, growing up in a middle to high income neighborhood with very little crime. David Armor (2006) states, “We are just about certain that the causes of the achievement gap lie within the family. There is a lot of evidence on this, but the most compelling evidence comes from the simple fact that the black-white gap in cognitive skills is large as early as we can measure it, which is about age 3.” Up to the age of five or so, a child's world is dominated by parents, the home environment, and siblings, if any (Armor, 2006).

Armor (2006) identified 10 family risk factors that impact a child's cognitive skills at age five. They include and are in rank of correlation to cognitive skill:

1. Parent IQ
2. Cognitive stimulation/instruction (usually by parents but could be others)
3. Emotional support/nurturance
4. Parents' educational attainment
5. Family income and poverty status
6. Family structure: marital status, number of parents
7. Mother's age when child born
8. Number of siblings
9. Child's nutrition (including breastfeeding)
10. Child's birth weight (p. 42)

Although, parent's IQ is ranked first, Armor does not infer a genetic connection, rather that the IQ of the parent helps to determine the level of intellectual interaction that occurs with the child. Seven out of ten risk factors include: child's nutrition (breastfeeding), age of mother, number of siblings, birth weight, income, parents education level, and number of parents. African-American children are disadvantaged as compared to White children by a ratio of 2:1 (CNSLY,

1996; Armor, 2006). Armor found that in all 10 risk factors, White children were more advantaged than African-American children in the cognitive skills development by age 5. For Armor, the cause of the racial achievement gap in urban classrooms is not because of the schools, discrimination or genetics; it rests in the environmental influence of the family.

Richard Nesbitt (2011) also states that the achievement gap is caused by environmental differences between African-Americans and Whites stemming from family, neighborhood, and school socialization factors that are present even for middle-class African-Americans, and it is these environmental factors that influence a child's intelligence quotient (IQ). Student's IQs, an indicator of possible achievement, historically led to conversations comparing "nature vs. nurture" or "genetics vs. environment" or, as Nesbitt poses it, "heredity vs. environment." According to Nesbitt (2011), IQ is influenced by and can improve based on environmental inputs. If the African-American deficit in IQ is due entirely to the environment, then African-American children raised in White environments ought to have higher IQs than those raised in African-American environments (Nesbit, 2011).

Elsie Moore looked at African-American and Bi-Racial children adopted by middle-class families, African-American or White, and found no difference in IQ between the African-American and Bi-Racial children (Moore, 1986). However, Moore's study did find a significant difference, thirteen points, between the IQs of African-American and Bi-Racial children raised by whites and those raised by African-Americans. Nesbitt concludes that, "clearly, something about family environment or the neighborhood and school environments associated with race, has a marked impact on IQ" (Nesbitt, 2011).

2.1.4 Causes of the achievement gap: Socio-economic factors

A third explanation that researchers cite as a reason for the racial achievement gap in urban schools that is intertwined with the environmental explanation is low socio-economic status (Duncan & Magnuson, 2005). Socioeconomic status refers generally to one's relative standing in regard to income, level of education, employment, health, and access to resources (U.S. Social Security Office of Policy Research and Analysis. n.d.; Beilke, Burney, 2008). For the supporters of this explanation, socioeconomic disparities are the foundation of the racial achievement gap and are caused by the long history of economic disparity between the African-American and White community (Paige & Witty, 2010). This “liberal interpretation” suggests that the socio-economic reason of the achievement gap is a result of economic disparity dating back to the time of slavery and other forms of oppression that African-Americans have suffered (Singham, 1998). Supporters of this view believe that the African-American community is far behind the White community in income and wealth, and that the educational disparities are caused by the economic disparities (Singham, 1998)

Duncan and Magnuson (2005) note that life is very different for poor vs. non-poor families. According the 1998 ECLS-K (Early Childhood Longitudinal Study), poor children were considerably disadvantaged compared to non-poor children when considering all of the following hardships: mother dropout; single parent; no or low prestige job; low quality neighborhood; three or more siblings; residential instability; spanking; few children's books; low birth weight; teen mother; and mother depressed (p.38.). For the family with high income and support at home, there is a high value on education, prenatal care, preschool programs, exposure to books and expanded vocabulary, and extracurricular activities and experiences are commonplace, which allows for a higher level of school readiness and achievement. Low-income families struggling to

make ends meet have less opportunity for extracurricular activities and experiences because of affordability and time.

Developmental psychologists Betty Hart and Todd Risley studied 42 families as the child in the family grew from one to three years old. The families ranged across three economic levels: professionals, middle- and working-class, and low-income, and were both black and white (Hart & Risely 1995). The researchers recorded every word spoken between parent and child and found significant differences across the three groups in the amount of verbal interaction and the number of different words parents used. By the age of three, the professional parents had spoken 35 million words to their children, the middle and working-class parents, 20 million words and the lower-class parents had spoken only 10 million words to their children (Hart & Risely, 1995). As a result, children from the three different economic levels begin school with different levels of “school-readiness”, children learn to understand the world and to interact with others using the linguistic tools characteristic of their class levels (Farkas, 2004). In urban classrooms, African-American families typically belong to the 10-million-word group showing up to kindergarten extremely behind students in the 35-million-word group, who are usually White, all before the first day of school. By age 3, a low-income child has an observed cumulative vocabulary of 500 words compared to 1100 observed cumulative vocabulary words of a child from a professional family (Hart & Risley, 1995). The interconnectedness of family income and vocabulary acquisition in the Hart and Risley study relates directly to school readiness and predicted student achievement. A child with a working vocabulary of 500 words at age 3 will be less ready for kindergarten and likely will not achieve at the same level as one with 1,100 words.

Linton and Singleton (2006) believe that the racial achievement gap exists and persists because fundamentally, schools are not designed to educate students of color and educators

continue to lack the will, skill, knowledge and capacity to affirm racial diversity. Consequently, test scores, retention rates, graduation rates, student discipline, special education representation, prison pipeline, income and life expectancy for African-American Children are influenced by the achievement gap. Braun and Chapman (2010) state that concerns regarding the magnitude and persistence of the achievement gap have economic, moral and political dimensions. This is evident when graduation rates for White students graduating in 2012 was 85% and 68% for African American Students (NCES, 2013) making it very difficult for African-American students to compete with White students in a US market, let alone a global market.

2.1.5 Minority student enrollment trends

Minority populations have been increasing across the United States since the turn of the century (Bryant et al. 2017) creating shifts in enrollment trends in K-12 public schools regarding White, African-American and Latino/Hispanic students. In an analysis of data from the Department of Education, Office of Civil Rights and Civil Right Data Collection, Bryant et al (2017) reported demographic shifts in student enrollment from 2000 to 2011 that included a decrease in White student enrollment from 70% to 59%, an increase of Latino/Hispanic, Latin-X enrollment from 9% to 15% and African-American student enrollment remaining steady at 14%. The shifting enrollment trends of White, African-American and Latino/Hispanic students from 2000 to 2011 continued from 2011 – 2018. The percentage of White students enrolled in K – 12 public schools decreased from 59% to 47.5 %, Latino/Hispanic students increased from 15% to 27.5% and African-American students remained at 15% (NCES, 2018).

The student enrollment trends over the past two decades, represents a 42.3% minority student shift, with a 19% increase of African-American and Latino/Hispanic students compared to

22.5% decrease of White students. The reported enrollment trends are impacting more than urban school districts as minority trends are becoming more dispersed with increasing concentrations in many historically White, rural and suburban communities across the nation (Orfield and Frankenberg 2014; Bryant et al. 2017).

The increase of minority students in K-12 public schools has implications for how district leaders confront the racial achievement gap, as predominantly White teachers are in the Nations' K – 12, public school classrooms. In 2011-2012, the teaching profession was comprised of teachers that were 82.6% White, 6.8% African-American, and 7.8% Hispanic (NCES, 2018). In 2015-2016, the number of White teachers increased to 88%, African-American teachers decreased to 3.6% and Latino/Hispanic teachers also decreased to 5.2% (NCES, 2018). With student enrollment trends increasing for minority students, and the number of minority teachers shrinking, there is an increased possibility that overall teacher expectations for minority student achievement is negatively impacted as teacher perceptions of minority students may operate intentionally or unintentionally, through hidden, brief, and commonplace daily verbal and behavioral indignities that communicate hostile, derogatory, or negative racial slights and insults toward people of color. Also known as micro-aggressions, perpetrators are often unaware that they engage in such communications when they interact with racial/ethnic minorities (Sue, et al, 2007). It impacts student learning in divisive ways that create mentally and emotionally stressful environments (Sue et al. 2008; Torres et al. 2010; Bryant et al. 2017).

2.2 District and school leadership culture

The role of the superintendent and principal are discussed in terms of leadership practices, perceptions and qualities, traits and their impact on the racial achievement gap. Additionally, the relationship between school culture and the racial achievement gap is examined.

2.2.1 District leader

Expectations for K -12 public school superintendents have evolved as the mandates for proficiency of all students through the use of standardized tests has become the measure of student success. Our education system was never designed to deliver the kind of results we now need to equip students for today's world, and tomorrow's (Kegan, Wagner, et al, 2006). Superintendents must combine management of district and schools with providing instructional leadership and professional development to develop and maintain a culture within the district that supports all students to be college, career and life ready to be able to fill the growing demand for an ever-changing workforce. Superintendents are key negotiators and implementers of policy and serve as crucial linkages between policy and action (Hallinger & Heck, 1998; Sherman 2008). Contemporary superintendent guidelines of The American Association of School Administrators (Department of Education, 2000) maintain that superintendents must serve their districts in curriculum planning and development and, in instructional management.

Ron Sofo (2008), a superintendent from a K – 12 public school districts in southwestern Pennsylvania describes challenges that his school district faced, similar to others across the United States in engaging all students in rigorous and relevant academic work based on twenty-first-century expectations and skills. Prior to school reform efforts over the past three decades, school

systems were designed for a few elite students to go on to higher education with most other students being prepared to support low skill jobs (Sofa, 2008). A major challenge today is that all students are college, career and life ready. According to Sofa (2008), leveraging a bottom up approach of teachers and principals who hold the key to classroom and school-level innovations will best position all students successfully for the twenty first century skills and knowledge.

In *Change Leadership*, Wagner and Kegan (2006) situated current reform efforts as a result of the release in 1983 of a US Government Commissioned Report, *A Nation At Risk*, proclaiming a crisis in American public education and that American economic security was threatened by a low-skill labor force and no longer competitive in a global market. In 1983, this report was a call to action warning that the rest of the world was passing up the United States of America. Secretary of Education, Terrell Bell (1983), stated that the educational foundations of our society are being eroded by a rising tide of mediocrity that threatens the very future of our nation and people. The American Public Education system was failing to prepare its students to compete in a global market where all jobs require highly educated and skilled workers, stressing the importance of ensuring that all students have access to quality schools, rigorous academic programs, high academic standards and that the effort to foster excellence in schools not be at the expense of “our diverse populations.”

In a study conducted by Skrla and Scheurich (2001), *Displacing Deficit Thinking in School District Leadership*, they present that deficit thinking among superintendents is deeply embedded in educational thought and practice and that it pervades schools that serve children from low-income homes and children of color. Superintendents serving in school districts that are populated by children of color, whether conscious or not, have explanations of and expectations for what is possible educationally for all students in their districts that is shaped by the educational discourse

that minority students will not succeed in school (Skrla & Scheurich, 2001).

To address the racial achievement gap between minority and majority students, superintendents must be able to create a shared vision with staff, have improved communication and be able to develop a collaborative decision-making processes (Leithwood & Montgomery, 1986; Duke, 1987; Smith & Andrews, 1989; Leithwood, 1992). Superintendents deliberately work to build relationships with and between staff members, students, parents and community members creating more collaborative processes. Stronger relationships with staff, students, parents and community members allow for capacity development within the district.

As superintendents work for more equitable school environments for all students, racial equity and implicit bias are becoming more common professional development topics at the district and school level. Roberto Padilla, Superintendent of Newburgh Enlarged City School District in New York (2019), regularly has equity-focused, solutions-driven conversations to offset the inequities that have long existed. With leading for equity as a focus, Padilla (2019) identifies the following leadership strategies to create equitable access to learning for all students that include:

- Build social capital
- Activate agency
- Create safe and healing spaces for courageous conversations
- Lean into your fears and take risks
- Listen to all stakeholders
- Identify access points and drivers
- Stop the leadership churn

Marzano and Waters (2006) report that district superintendent leadership matters with a significant relationship between district responsibilities and student outcomes. In a study

conducted by Marzano and Waters (2006) to examine the effect of superintendent leadership on student achievement, they identified five district-level responsibilities strongly correlated to student achievement that include: collaborative goal setting, non-negotiable goals for achievement and instruction, board member alignment with and support of district goals, monitoring achievement and instruction goals and the use of resources to support the goals for instruction and achievement.

Jantzi & Leithwood (2000), discuss that transformational leadership aims to foster capacity development and for higher levels of personal commitment to organizational goals on the part of a leaders' colleagues. It is a style of leadership in which the leader has strong values and encourages change with the organization by motivating their staff (Leithwood, 1992). In turn, stronger relationships aligned with professional development provide a useful link between the development of social trust in a district or school and the degree to which a district or school can build collective capacity, leading to improvements in student achievement (Leithwood & Mascall, 2008).

2.2.2 School leader

The role of the school leader is complex (Crum & Sherman, 2008; Parkes & Thomas, 2007) and the focus on principals as leaders for teaching and learning with the schools and their responsibility for increased student achievement has risen with recent reform efforts (Crum & Sherman, 2008; Fink & Resnik, 2001; McAdams, 1998). For approximately the past 20 years, the role of the school leader has been described many ways by scholars. Robert Evans (1996) describes the role of the school leader as managing versus leading, venerating the former at the expense of the latter.

Leadership is the exercise of high-level conceptual skills and decisiveness. It is envisioning mission, developing strategy, inspiring people and changing culture. Management, on the other hand, is making sure the bells ring on time. Managers, it is said, do things right and leaders do the right thing (Evans, 1996).

Balancing managerial tasks with leadership proves to be challenging for school leaders in schools today and efforts to exert leadership in schools are usually cut short, as managerial items often arise and get in the way (Ibid, p. 148). Managerial tasks such as school arrival and dismissal, class coverage, lunch duty, student discipline, staff accountability, addressing parent complaints and completing administrative tasks, to mention but a few, are common and cannot be left unattended. Shrinking school budgets and limited resources mean that today's principals have less staff to share the managerial responsibilities. For day-to-day operations to occur smoothly and without interruption, managerial tasks cannot be ignored.

Prater and Valentine (2011) identify that in the late 1980's and early 1990's, researchers began to identify factors of principal instructional leadership moving beyond managerial tasks. It was evident that high achieving schools have principals who boldly lead the academic program, set goals, examine curriculum, evaluate teachers and assess results (Prater & Valentine, 2011; Lashway, 1995). Blasé and Blasé (1999) defined instructional leadership as a blend of several tasks such as supervision of classroom instruction, staff development, and curriculum development (Blasé & Blasé, 1999). Principals that directed focus towards classroom instruction, curriculum and evaluation began to expand the school leader's role beyond day-to-day operations and student discipline. Much more time was being scheduled and spent in the classroom to formally and informally observe teacher practice and student learning. Instructional leadership can be viewed as a series of behaviors designed to affect classroom instruction directly through, for example, supervision, coaching, staff development, modeling, and other such means of influencing teachers'

thinking and practice (Leithwood, 1994). What was being taught, how it was being taught and who was learning, or not, became more visible to and addressable by the principal.

The school leader as an instructional leader also comes with limitations. Leithwood (1992) argues that the term instructional leader, focuses administrators' attention on first-order changes improving the technical, instructional activities of the school through close monitoring of teachers and students and classroom work. The term relegates the school leader to a very specified set of tasks, like that of a manager. Additionally, the relationship between the school leader and teacher in this type of relationship is top-down in nature. The school leader reinforces the superior/subordinate relationship serving as the expert and giving opinions and recommendations for next steps.

Michael Fullan's (2014), *The Principal*, Three Keys to Maximizing Impact, describes the newer role of the principal, as one building collaborative cultures, learning communities and capacity. In *Leverage Leadership* (2012), Bambrick-Santoyo describes that exceptional school leaders succeed because of how they use their time: what they do, and how and when they do it. Just like every student wants to be successful, similarly, every school leader wants to be effective. Depending on school size, level, location, and student demographics and resource allocation, the ability to fit Fullan's "new principal role" and grow into Bambrick-Santoyo's "exceptional school leader" may prove more difficult for school leaders serving in urban, high minority, low-income, high student mobility schools.

Although it is invisible, school culture that is transformational and supported by the principal, in nature is more likely to produce results that will reduce the racial achievement gap. Leithwood (2005) states that in building a successful and collaborative school culture, principals create structures to encourage participation in decision making and build productive relationships

with parents and the wider community. Sanzo, Sherman and Clayton (2011) also discuss that successful principals provide meaningful professional development for their faculty and stress the importance of faculty sharing as a part of the professional development process. School leaders that are deliberate with time management and collaborative decision-making focused on student learning and teacher professional development are positioned to influence the school culture that is student centered.

2.3 School reform efforts

Education policy and legislation between 1965 and 2018 and their impact on the racial achievement gap is explored.

2.3.1 Legislation and reforms

With the 1954 decision of *Brown vs. Board of Education*, although a landmark decision to desegregate public schools, the enforcement of that decision at the State level was very slow. Barbara Sizemore reflected that the Civil Rights Movement (1963-1965) wanted the enforcement of the Supreme Court's decision of *Brown v. Board of Education*... 10 years had passed since the decision and the Chicago Public Schools were more segregated than ever (Sizemore, 2008). African-American students in the Chicago school system learned that the Supreme Court could not enforce access to better resources and better schools as district leaders continued to perpetuate institutional racism.

Chicago was not alone in refusing to desegregate schools based on the *Brown v. Board*

decision. Other school districts, such as Pittsburgh Public Schools, did not desegregate until 1982 (Sizemore, 2008). African-American students in urban schools across the United States continued to have unequal resources and access to the best schools, teachers, and courses. Court decisions made at the federal and state level seemed to have little impact at the District level as school boards did not demonstrate the willingness to combat discrimination and racism.

The Supreme Court's decision, *Brown v. Board of Education*, alone was not enough to challenge the status quo for minority students within the public education system. It would take an act of Congress and a significant amount of funding to attempt to level the playing field between minority and majority students. The racial achievement gap between White and African-American schoolchildren was the primary impetus behind much of the social policy devoted to desegregating schools in the second half of the past century (Sterns, 2002.) In 1965, the Elementary and Secondary Education Act (ESEA), was ratified by the 89th Congress to address our country's social problems. It doubled the amount of federal funding provided to school districts (Osborne, 1965). This Act had Five provisions: Title I provides for funding for low income students; Title II provides funding for libraries; Title III provides grants for supplementary education centers; Title IV provides grants for educational research; and Title V provides grants to states to improve services to local districts.

Coupled with the momentum of *Brown*, The Elementary and Secondary Education Act (ESEA) of 1965, for the first time, provided federal aid to schools with a high percentage of poor children. Title I of this law, was the federal aid program to elementary and secondary schools intended to improve academic achievement of low-performing students, particularly low-income students. School districts that served low-income and/or minority students were not only being told that desegregation and equal access was the law of the land, they were also receiving

additional funding to increase resources and support to increase their academic achievement to be equal to that of the majority students.

The Civil Rights Era of the mid 1960's saw additional federal legislation that bolstered the ESEA of 1965. The 1964 Civil Rights Act, 1965 Voting Rights Act, and the 1965 Head Start Program, were designed to equalize opportunity for all Americans but arguably, stated Paige and Witty (2010), mostly benefited African-Americans. In the mid 1960's, change and reform happened simultaneously beyond the classroom. The federal laws that were passed empowered those that had been historically disenfranchised making real the possibility to reduce poverty and allow all Americans, regardless of race to have the same opportunities.

The reauthorization of the Elementary and Secondary Education Act (ESEA), Improving America's Schools Act of 1993 was intended to further extend the funding and intention of ESEA, 1965 with a very different Chapter 1 program (formerly known as Title 1). ESEA, 1965, fell short of high standards that mark the reauthorized act. When Title 1 started, the education system employed its traditional methods of instruction and continued to hold low expectations for poor children; the system did not change, expectations did not rise, and children did not learn much better than before (Lewis, 1993). A significant increase in funding alone, was not enough to increase the academic performance of poor and minority students. Many more variables such as teacher attitudes and beliefs, teacher expectations, and environmental and socioeconomic factors outweigh the benefits of additional funding.

Chapter 1 under ESEA (1993) relied on the emphases of Goals 2000: Educate America Act, legislation that formalized the National goals and new assessment systems as a way of setting high standards for all students and deciding whether they have actually reached those standards. Goals 2000 also focused on retraining teachers, all teachers, not just the teachers of math and

science as in ESEA, 1965. Under the 1993 proposals, new knowledge about how to change instructional practices so that all children will learn at high levels became the base for new institutional structures (Lewis, 1993).

The Reauthorization of the Elementary and Secondary Education Reform Act of 1965 became reauthorized as the No Child Left Behind (NCLB) Act of 2001. NCLB authorized all aspects of the Elementary and Secondary Education programs through 2008 (Skinner, 2010). NCLB intended to eliminate the racial achievement gap, having all (100%) public school students proficient in reading and math by 2014 and holding school districts and schools accountable for it. Accountability became the cornerstone of *NCLB*, which was signed into law by President Bush in January 2002 (Feuerstein, 2013) and required schools to report achievement results separately for various economic, ethnic, language, and disability sub-groups. Schools must not only identify any achievement gaps among these different student subgroups, they must take specific steps to close them (Guskey, 2005).

No Child Left Behind (2002) education policies and reforms focused on setting high academic standards for all students and subgroups, retraining teachers, creating and identifying a set of national standards, setting national goals, and developing an assessment system to measure progress. Additionally, NCLB went so far as to list among its chief goals holding states accountable for “closing the achievement gap between high- and low-performing children, especially the achievement gap between minority and nonminority students (Flavin and Hartney, 2014). Schools and districts that met annual achievement targets in each subgroup, were identified as making Adequate Yearly Progress. If one subgroup within a school did not reach the identified target, the school was identified at School Improvement or being in Corrective Action. Schools and districts were punished or rewarded based on school identification ranging from receiving

additional funding to the principal and teaching staff being replaced. Under NCLB, end of the year, standardized assessments determined if a school or district was successful or not. Although, more students were proficient in reading and math than in any other time and more students were graduating from high school, (Bruan & Chaptman, 2010) as 2014 loomed closer, it was clear that the major goal of NCLB, all students proficient in reading and math by 2014, would not be realized.

Similar earlier reform efforts, the reauthorization of Elementary and Secondary Education Reform Act in 2010 continued to focus attention on preparing US students to be more competitive in a global economy, increasing the achievement of all students and eliminating the achievement gap between various subgroups. The ESEA 2010 framework included four main areas:

1. Improving teacher and principal effectiveness to ensure that every classroom has a great teacher and every school has a great leader;
2. Providing information to families to help them evaluate and improve their children's schools, and to educators to help them improve their students' learning;
3. Implementing college- and career-ready standards and developing improved assessments aligned with those standards;
4. Improving student learning and achievement in America's lowest-performing schools by providing intensive support and effective interventions (US Dept. of Ed, 2010).

The mandate to have 100% of students to be proficient in reading and math by 2014 remained, however, a greater emphasis was placed on professional development of teachers and principals, partnering with families and communities, identifying and implementing national academic standards and providing additional support to low performing schools. It was President Obama's hope that this framework would lead to every student being college and career ready and be leaders in a global economy.

The latest federal legislation, Every Student Succeeds Act (ESSA) was signed into law December 10, 2015. ESSA is the reauthorized Elementary and Secondary Education Act of 1965

and replaced No Child Left Behind (2002). ESSA represents a major shift from the increased federal authority of NCLB and state waivers issued by the Department of Education to increased flexibility to states and school districts (NAASP,). Primary differences with NCLB include the elimination of:

- Adequate Yearly Progress (AYP) and Highly Qualified Teacher (HQT)
- Teacher/principal evaluation systems linked to student standardized test results
- Prescribed interventions for specific schools
- School improvement Grant
- Makes funds more flexible between Title II and IV and
- Reduces the authority of the Secretary of Education

Many of the NCLB requirements remain in effect for ESSA such as reporting state testing results for student subgroups, continuing to have a 95% state test participation rate, identifying the lowest performing schools and approving locally developed improvement plans. New to ESSA is the requirement for every major state-level decision requiring that states to follow meaningful consultation with a variety of stakeholders that include: school districts from suburban, urban and rural areas, school districts that are identified as comprehensive support and improvement plan, principals, teachers and parents and, organizations or partners that are connected to related strategies, programs, and activities being conducted in the state. Although, President Obama signed the ESSA legislation into law in December 2015, it took several years for full implementation to occur and was delayed until the 2018-2019 school year.

2.4 Conclusion

The nature of the racial achievement gap between minority and majority students in K – 12 public schools in the United States is a phenomenon that educators and lawmakers have

unsuccessfully tried to address for more than 60 years. Causes and factors of the racial achievement gap in K-12 public school classrooms have been widely researched as there are many studies that explore and seek to explain why the racial achievement gap exists. Some of the most commonly reported causes and factors include discrimination, racism and racial identity (Seaton, 2010), socio-economic status (Duncan, Magnuson, 2005), environmental reasons (Nisbett, 2011), genetically predetermined (Herrnstein, Murray, 1994) and access to the same opportunities that majority students experience (Milner, 2012).

Over the past two decades, there has been a significant demographic shift in student enrollment trends in the United States. In 2018, the National Council for Education Statistics reported that overall White student enrollment in the Nation's K-12 public schools was 47.5%, a 22.5% decrease from 2000. Latino/Hispanic student enrollment increased from 9% in 2000 to 27.5% in 2018, an 18.5% increase and, African-American student enrollment remained virtually unchanged from 2000 to 2018.

As the number of minority students is increasing in the United States, the number of minority teachers is decreasing with White teachers making up 88% (NCES, 2018) of the teacher force in the United States. There is an increased possibility that overall teacher expectations for minority student achievement could be negatively impacted as teacher perceptions of minority students may operate through hidden, brief, and commonplace micro-aggressions. These daily verbal and behavioral indignities communicate hostile, derogatory, or negative racial slights and insults that impact student learning (Sue et al. 2008; Torres et al. 2010; Bryant et al. 2017).

The role of the superintendent and principal have evolved over the past two decades as the mandates for proficiency of all students through the use of standardized tests has become the measure of student success. Both superintendents and principals have had to shift from managers

of the district and school to managers, instructional leaders and developers of positive district and school culture that supports the achievement of all students.

School reform legislation mandates the way K – 12 public schools work to ensure that all students are college, career and life ready. In spite of reform efforts and legislation designed to increase achievement for minority students in suburban, urban and rural classrooms dating back to 1965, a significant achievement gap still exists in K - 12 public schools between minority and majority students. The Elementary and Secondary Education Act, first ratified in 1965, has served as the primary education law for K – 12 Public schools in the United States. ESEA (1965) provided federal aid to schools with a high percentage of poor children. Title I of the law, was the federal aid program to elementary and secondary schools intended to improve academic achievement of low-income students.

The Elementary and Secondary Education Act of 1965 has been reauthorized several times over the past five decades. The Improving America's Schools Act of 1993 extended the funding and intention of the original law. It included legislation that formalized the National goals and new assessment systems as a way of setting high standards for all students and deciding whether they have actually reached those standards.

In 2001 and again in 2010, ESEA was reauthorized as No Child Left Behind (NCLB). NCLB authorized all aspects of the Elementary and Secondary Education programs through 2008 (Skinner, 2010) and intended to eliminate the racial achievement gap, having all (100%) public school students proficient in reading and math by 2014 and hold school districts and schools accountable for it. The 2001 reauthorized ESEA, also focused on setting high academic standards for all students and subgroups, retraining teachers, creating and identifying a set of national standards, setting national goals, and developing an assessment system to measure progress.

The most recent reauthorization of the ESEA, Every Student Succeeds Act of 2015, represented a major shift from the increased federal authority of the Department of Education, to increased flexibility to states and school districts (NAASP, 2018). Key differences include the elimination of Adequate Yearly Progress (AYP), the elimination of connecting teacher and principal evaluations to student standardized test results and that major state-level decision are to be made in meaningful consultation with key stakeholders.

3.0 Methods

3.1 Description of the study

K – 12, Public school superintendents in southwest Pennsylvania struggle to meet the needs of all students. They are faced with increasing state and federal oversight, shrinking budgets with increasing costs, limited resources, shifting student demographics and increased expectations and requirements for student outcomes that include all students. The reauthorization of the Elementary and Secondary Education Act (2010) and later, Every Student Succeeds Act (2015), stipulates that all students will be proficient in reading, math and science. Today, K-12, public school superintendents must combine management of schools and the district with providing instructional leadership and professional development to develop and maintain a culture within the district that supports all students to be college, career and life ready to be able to fill the growing demand for an ever-changing workforce in southwest Pennsylvania.

This study explored superintendents' perceptions related to changing learner-profile demographics and academic achievement levels, with specific emphasis on assuring minority student success. By collecting superintendents' perspectives on how to prepare minority students to be college, career and life ready in southwest Pennsylvania, this study was able to provide an important snapshot of their perspectives. The study provided for a deeper understanding based on superintendents' perspectives on how minority student needs are being addressed in city, suburban, town and rural districts that range from high to low income, and the impact on the Pittsburgh area workforce development region.

The study was situated in the concepts from relevant literature and focused on five major areas; district demographics, minority student success, initiatives and practices and, successes and challenges. The study used and analyzed two major datasets that included a review of federal, state and local databases and reports, plus survey and interview data collected from K -12, public school superintendents in 125 school districts whose districts are located within the Pittsburgh area workforce development region (<https://www.alleghenyconference.org>) consisting of 10 counties surrounding the Pittsburgh area that include Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, Indiana, Lawrence, Washington and Westmoreland.

A demographic data analysis of the respondents' school districts was conducted to identify key metrics and trends to describe current and past minority student demographics and minority student achievement. The datasets and reports from federal, state and regional sources were explored to provide a summary of demographic and academic metrics for minority students.

Additionally, a subset of the 125 school districts within the Pittsburgh area workforce development region included a group of superintendents that are members of the University of Pittsburgh, School of Education's, 105-member Tri-State Area School Study Council and/or the 58-member Western Pennsylvania Forum for School Superintendents. Members of the Tri-State Area School Study Council and/or the 58-member Western Pennsylvania Forum for School Superintendents were used as a comparative subgroup to identify differences on key variables, if they existed. The study explored if there is a difference between superintendent perceptions about minority student success and actions taken to increase outcomes for all students that participate and superintendents that do not participate in these regional professional development opportunities.

The survey collected data regarding superintendents' perceptions on changing minority student demographics, initiatives and practices that are designed to increase outcomes for minority students to assure minority students are college, career and life ready in their district. Based on the identified initiatives and practices, the survey also identified successes, challenges and lessons learned.

The survey was divided into six key areas: background information; perceptions of minority student enrollment; factors that influence minority student success; actions to support minority students; success, challenges and lessons learned, and; contact information. Specifically, the survey gathered information identifying initiatives and practices that superintendents are implementing to meet the needs of minority students to ensure that they achieve at the same rate as majority students and consider successes and challenges they encounter. Additionally, follow-up interviews were conducted with respondents who agreed to provide additional contextual information pertaining to motivations, thinking processes and implementation complexities involved in addressing minority student needs. The study summarized the findings and identified areas of leverage that superintendents across the region may use to support minority student success.

3.2 Research questions

The study reviewed and analyzed federal, state and local datasets and reports to identify demographic and academic trends of minority students over the past decade in the Pittsburgh area workforce development region. The study also obtained information from K-12, public school superintendents regarding their perceptions on changing demographic trends of minority students,

actions taken to increase academic outcomes for minority students and, the success, challenges and lessons learned from such actions. The research questions included:

1. What are the demographic and academic success indicators for minority populations in southwest Pennsylvania across the last decade?
2. How do school superintendents perceive demographic and academic changes and needs for minority populations in their districts?
3. What actions have regional districts taken to address academic success of minority students in their districts? What have been notable successes and lessons learned (see Figure 1).

Question	Method	Evidence
1. What are the demographic and academic success indicators for minority populations in southwest Pennsylvania across the last decade?	Regional demographic data analysis Exploratory analysis of demographic grouping characteristics	Key metrics and trends that describe current and past status of student demographics Key metrics and trends that describe current and past status of student achievement
2. How do school superintendents perceive demographic and academic changes and needs for minority populations in their districts?	Survey Interview	Superintendent perceptions on demographic data collected in RQ 1. Superintendent perceptions of the needs relating to the minority student success in educational experience compared majority students.
3. What actions have regional districts taken to address academic success of minority students in their districts? What have been notable success and lesson learned?	Survey Interview	Superintendent reports about actions taken to address to address minority student success. Superintendent reports of success and lessons learned from actions, initiatives and/or practices to increase minority student success.

Figure 1. Evidence and method

3.3 Study rationale

The Pittsburgh area workforce development region spans 10 counties in southwestern Pennsylvania (<https://www.alleghenyconference.org>) that include 125 city, suburban, town or rural school districts. In the Commonwealth of Pennsylvania, the racial achievement gap between minority students and majority students on the 2018 Pennsylvania System State Assessment (PSSA) was 17% for both English Language Arts and Mathematics (Pennsylvania Department of Education, 2018). Although, demographics by race vary greatly across K – 12, public school districts in the Pittsburgh area workforce development region, lower achievement of minority students compared to majority students, was consistent across all 125 school districts.

Superintendents are faced with many challenges from managing the political landscape, adjusting to new school reform mandates, juggling dwindling resources, influencing principals' and teachers' beliefs and expectations for instruction that supports all students, specifically minority students. Over the past 10 years, minority student representation has changed within and between school districts in southwest Pennsylvania. The racial achievement gap is no longer isolated to city school districts. Suburban, town and rural superintendents are now working to meet federal mandates to eliminate the racial achievement gap between minority and majority students.

The review of literature in the previous chapter indicated that the lack of academic achievement between minority and majority has many contributing factors and remains constant within the Pittsburgh area workforce development region. Superintendents, regardless of location (city, suburban, town or rural), must plan and implement with fidelity, initiatives and practices to increase outcomes for minority students as compared to majority students to assure that all students under their care are college, career and life ready, prepared to enter the Pittsburgh area workforce development region.

3.4 Conceptual framework

Every student regardless of race, ethnicity, religion, sexual orientation, gender identity, citizenship or disability, deserves to have the academic preparing and sustaining opportunities that are afforded to majority students. As a K-12 public school educator, I am ethically and morally obligated to ensure that all students who are within my scope of responsibility are college, career and life ready, and prepared to enter the Pittsburgh area workforce development region. Based on my 28 years as an urban educator, every student is equally important. They count. However, all students are not starting their academic careers on equal footing and do not have access to the same opportunities that majority students experience (Milner, 2012).

In order for minority students to catch up academically with majority students, access to opportunity for minority and majority students must be equitable. Minority students who have not had access to the same academic preparing and sustaining opportunities as majority students must be given a chance to catch up and be provided with access to additional and different academic preparing and sustaining opportunities. My experience has confirmed that all students, regardless of minority or majority label, want to succeed; they want to be college, career and life ready.

The literature discussing the racial achievement gap between minority and majority students in the previous chapter described the racial achievement gap in terms of causes contributing to it, federal and state legislative efforts to eliminate it and the impact of district and school leadership on it.

Some of the most commonly reported causes contributing to the racial achievement gap in the literature include discrimination, racism and racial identity (Seaton, 2010), socio-economic status (Duncan, Magnuson, 2005), environmental reasons that include parenting, number of parents, the neighborhood, community (Nisbett, 2011), genetically predetermined (Herrnstein,

Murray, 1994) and access to the same opportunities that majority students experience (Milner, 2012). To provide equitable access to opportunity for minority students, superintendents and school leaders have to identify academic preparing and sustaining strategies to help minority students academically catch up to majority students.

Despite the federal and state school reform efforts that began with the Elementary and Secondary Education Act, 1965 (ESEA), reauthorized in 1993, 2001, 2010 and again in 2015, it has not provided the anticipated results that the federal and state legislation intended. In 2001 and again in 2010, ESEA was reauthorized as No Child Left Behind (NCLB). NCLB authorized all aspects of the Elementary and Secondary Education programs through 2008 (Skinner, 2010) and intended to eliminate the racial achievement gap, having all (100%) public school students proficient in reading and math by 2014 and hold school districts and schools accountable for it. Federal and state legislation continues to fall short in increasing academic outcomes for minority students as a 17% achievement gap for both English Language Arts and Mathematics (Pennsylvania Department of Education, 2018) between minority and majority students still exists in K - 12 public schools in Pennsylvania.

As indicated by the persistence of the racial achievement gap, federal and state legislation alone cannot eliminate the racial achievement gap. Forward thinking and innovative K-12, public school superintendents must inspire and lead staff to help identify initiatives and practices to provide equitable access to academic preparing and sustaining opportunities. Superintendents are the key negotiators and implementers of policy and serve as crucial linkages between policy and action (Hallinger & Heck, 1998; Sherman 2008). Policy and action coupled with strong values, positions opportunity for change to be encouraged by superintendents by motivating their staff (Leithwood, 1992), allowing to form stronger relationships aligned with professional development

to support the development of social trust in a district or school to build collective capacity leading to improvements in student achievement (Leithwood & Mascal, 2008).

By understanding the history and causes that have contributed to the racial achievement gap, superintendents can leverage federal and state education legislation to support innovative initiatives and practices that will allow for equitable access to academic preparing and sustaining opportunities for minority students that will help them to achieve at the same level as majority students, ensuring that they are college, career and life ready.

3.5 Research setting and participants

The study surveyed all K – 12 public school superintendents from the Pittsburgh area workforce development region (<https://www.alleghenyconference.org>). The workforce development region consists of 10 counties surrounding the Pittsburgh area encompassing Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, Indiana, Lawrence, Washington and Westmoreland, seven intermediate units and 125 K – 12, public school districts. Within the 125 K – 12, public school districts are a group of superintendents from school districts that are members of and participate in professional development provided by the University of Pittsburgh, School of Education's, Western Pennsylvania Forum for School Superintendents, and/or, Tri-State Area School Study Council.

The University of Pittsburgh, School of Education has a longstanding history of providing professional development supporting superintendents in southwest Pennsylvania on contemporary issues, leadership and support. For more than a half of century, superintendents from western

Pennsylvania have been taking advantage of the professional development offered by the University of Pittsburgh, School of Education.

The Western Pennsylvania Forum for School Superintendents (Forum) currently has 58 members and is one of the oldest, regional superintendent forums in the United States and has been in existence for approximately 25 years. The Forum serves an important purpose in the personal and professional lives of the region's top school leaders. Members of The Forum include superintendents from public, city, suburban, town and rural districts ranging from high income to low income families, as well as members from charter, private and parochial schools. The focus of the Forum is to provide professional development for superintendents on matters that currently confront K-12 educators that include mindfulness, equity, ethical leadership and public policy advocacy.

Similarly, and an integral part of the University of Pittsburgh's School of Education, is the Tri-State Area School Study Council (Tri-State). Tri-State currently has 105 members and was founded in 1948. Tri-State has since provided comprehensive technical assistance, strategic planning and employment searches to school districts in the western Pennsylvania region. With over 100 members from city, suburban, town and rural school districts, intermediate units, vocational technical schools, charter, private and parochial schools, Tri-State's primary purpose is to assist its members in keeping pace with the current administrative, legal and K -12 instructional issues that school districts and superintendents manage, and problem solve on a daily basis.

3.6 Data collection

The study utilized two major datasets. The first dataset to address Research Question 1, “What are the demographic and academic success indicators for minority populations in southwest Pennsylvania across the last decade?” included the use data reports and documents from the Common Core of Data, National Council of Education Statistics (<https://nces.ed.gov/ccd/>), the Pennsylvania Department of Education (<https://www.education.pa.gov/Data-and-Statistics>), the University of Pittsburgh’s University Center for Social and Urban Research (UCSUR) (<https://ucsur.pitt.edu>), The Kids Count Data Center (<https://datacenter.kidscount.org>) and the Pennsylvania State Data Center (<https://pasdc.hbg.psu.edu>) to identify demographic data to identify key metrics and trends that describe current and past minority student demographics and achievement from the 125 school districts in the Pittsburgh area workforce region.

The second dataset utilized to address Research Question 2, “How do superintendents perceive demographic and academic changes and needs for minority populations in their districts?” and Research Question 3, “What actions have regional districts taken to address academic success of minority students in their districts? What have been notable successes and lessons learned?” included survey and interview responses.

3.6.1 Research question 1

Data Sources for Research Question 1, “What are the demographic and academic success indicators for minority populations in southwest Pennsylvania across the last decade?” included conducting a regional demographic data analysis and an exploratory analysis of demographic grouping characteristics that examined demographic and student success indicators to describe

racial achievement gaps and, trends and needs of the Pittsburgh area workforce development region. Using federal, state and local datasets, a thorough description of the past decade of demographic and academic metrics for minority students was described by six categories that include size of district, intermediate unit, location, free/reduced lunch population, minority student population and minority student achievement on Pennsylvania System of School Assessment in reading and math. Each school district will receive a randomized number to remain anonymous.

Datasets and reports include: the Pennsylvania Department of Education, Division of Data Services, which compiles and analyzes a wide variety of data about attendance, graduation rates, schools and school districts, student progress, transportation and other information (<https://www.education.pa.gov/Data-and-Statistics>); the University of Pittsburgh's, University Center for Social and Urban Research (UCSUR), which was established in 1972 to serve as a resource for researchers and educators interested in the basic and applied social and behavioral sciences. The UCSUR promotes and coordinates interdisciplinary research focused on the social, economic, and health issues most relevant to our society (<https://ucsur.pitt.edu>); the Western Pennsylvania Regional Data Center, which provides technical and legal infrastructure for data sharing to support a growing ecosystem of data providers and data users. It is managed by the University of Pittsburgh's Center for Social and Urban Research and is a partner of the University, Allegheny County and the City of Pittsburgh (<http://www.wprdc.org>); the Common Core of Data, National Council of Education Statistics, is the Department of Education's primary database on public elementary and secondary education in the United States. It is a comprehensive, annual, national database of all public elementary and secondary schools and school districts (<https://nces.ed.gov/ccd/>); the Pennsylvania State Data Center, was established to serve as the Commonwealth's official source of population and socio-economic statistics and also serves as

the state's liaison to the Census Bureau (<https://pasdc.hbg.psu.edu>); and the Allegheny Conference **on Community Development, which** is one of the United States' foremost civic leadership organizations that focuses on improving the economic future and quality of life of the 10-county Pittsburgh region encompassing Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, Indiana, Lawrence, Washington and Westmoreland (<https://www.alleghenyconference.org>).

3.6.2 Research questions 2 and 3

Remaining research questions, Research Question 2, "What are the demographic and academic success indicators for minority populations in southwest Pennsylvania across the last decade?" and Research Question 3, What actions have regional districts taken to address academic success of minority students in their districts? What have been notable successes and lessons learned?" were addressed via a survey instrument and interview. The survey was developed from the concepts derived from the literature and focused on six key areas including: background information; perceptions of minority student enrollment; factors that influence minority student success; actions to support minority students; success, challenges and lessons learned and; contact information.

The survey's conceptual areas aligned with the specific areas for study specified in research questions two and three. The survey was distributed via an electronic survey software (Qualtrics), to 125 K – 12, public school superintendents in the Pittsburgh area workforce development region. The use of a web-based survey allowed for participants to have convenient access through a variety of electronic devices, more interactive or tailored formats, quick troubleshooting, automated data collection, scoring, and reporting; and access to larger samples (Mertens, 2015). The web-based

format and email delivery of the survey allowed superintendents to have access to the instrument at a time most convenient to them and on any web-based device.

The survey collected data in real time to gain an understanding of the realities constructed by superintendents in various contexts across the region. Participants' perceptions are socially constructed, multiple realities exist that are time and context dependent (Mertens, 2015). The survey questions were developed from the review of literature previously cited within this document (See Appendix A). The items specifically addressed the research questions pertaining to the superintendents' perceptions of the changing demographics of students over the past decade, the racial achievement gap, actions taken that assure minority student success and, successes and lessons learned from those efforts.

The survey provided an opportunity to examine the overall results of the respondent's data. In order to obtain additional contextual information about district practices and policies from willing participants, a guided interview was conducted to examine the motivations, thinking processes and implementation complexities involved in addressing minority student needs. The actual interview was a guided conversation with the hope of understanding the context of actions taken by superintendents to assure minority student success and it evolved through the conversation.

Contact was made to superintendents in counties that included Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, Indiana, Lawrence, Washington and Westmoreland via email invitation with a link to the survey (see Appendix B) to participate in a very important survey for the region. The invitation to potential respondents included basic information about the intention and process of the survey and the confidentiality of the collected data. The invitation to superintendents directed them to complete the survey by clicking on the link.

All survey responses are confidential. However, the survey asked potential respondents, if willing, to provide contact information if more information is needed for the study. If the respondent opted in to be contacted, their survey responses will remain confidential unless expressed permission is given to report out on the respondent's data.

The number of respondents was closely monitored to ensure the response rate of identified participants reaches the anticipated 40% response rate. Approximately seven days calendar days after the initial invitation was sent to superintendents, a reminder email was sent to potential respondents that did not that did not click the submit button at the end of the survey. A third email was sent seven days after to superintendents that received the second email and did not click the submit button to ensure the 40% participation rate.

3.6.3 Survey instrument

The survey instrument was divided into six key areas including: background information; perceptions of minority student enrollment; factors that influence minority student success; actions to support minority students; success, challenges and lessons learned and; contact information (See Appendix C). Specifically, the survey gathered information identifying initiatives and practices that superintendents are implementing to meet the needs of minority students to ensure that they achieve at the same rate as majority students and, which of the implemented initiatives and practices showed successes and challenges.

3.6.4 Background information

The first section of the survey asked respondents to provide general information about total years as superintendent in their current district and total years in any district. The section also requested respondents to provide general demographic information describing gender and ethnicity. Respondents noticed, for questions regarding *gender* and *ethnicity*, an option, “Defined otherwise” was included in the Likert Scale to ensure that all respondents were considered respectfully.

3.6.5 Perceptions of minority student enrollment

The Perceptions of the Minority Student Enrollment section of the survey directly connected to RQ 2, “How do school superintendents perceive demographic and academic changes and needs for minority populations in their districts?”. The closed-ended, multiple choice items were designed to elicit perceptions from the respondents on the level of significance of whether or not changing demographic profiles in their districts have impacted enrollment, the district level poverty and achievement. Each item in the section specifically asked the respondents to consider their perceptions of the significance of minority student’s impact on their district by an increase of migrant families, refugee families, families effected by gentrification, families effected by the STEAM industry in the region and families effected by White flight. Respondents used a five item Likert Scale to respond to each item in the section.

3.6.6 Factors that influence minority student success

The Factors That Influence Minority Student Success section directly connected to RQ 2, “How do school superintendents perceive demographic and academic changes and needs for minority populations in their districts?” and RQ 3, “What actions have regional districts taken to address academic success of minority students in their districts? What have been notable successes and lessons learned?”. The closed-ended, multiple choice items were designed to elicit perceptions from the respondents on the level of significance of specific factors and federal school reform efforts referenced in the literature review in Chapter 2. A five-point Likert Scale was utilized for respondents to identify the level of significance of factors such as poverty, environmental influences, discrimination, genetic disposition, beliefs and expectations and, limited access to educational opportunity. For the purpose of the survey item, “poverty” was considered synonymous with “low socioeconomic”.

3.6.7 Actions to support minority student success

The Actions to Support Minority Student Success section directly connected to RQ 3, “What actions have regional districts taken to address academic success of minority students in their districts? What have been notable successes and lessons learned?”. The closed ended, multiple choice items were designed to elicit perceptions from the respondents on the level of importance of potential initiatives and practices referenced in the literature review in Chapter 2. A five-point Likert Scale was employed for respondents to identify the level of importance for each item. This section featured six questions, each with a focus area that was accompanied with specific initiatives or practices. The focus areas included, Actions to Support Minority Student

Success; Beliefs and Expectations; Productive Relationships; Professional Development; Professional Development for Racial Equity and; Accountability.

3.6.8 Successes, challenges and lessons learned

The Successes, Challenges and Lessons Learned sections directly connected to RQ 2, “How do school superintendents perceive demographic and academic changes and needs for minority populations in their districts?” and RQ 3, “What actions have regional districts taken to address academic success of minority students in their districts? What have been notable successes and lessons learned?”. Open-ended items were used and included prompts to obtain fuller descriptions and clarifications of specific superintendent perspectives on which initiatives and/or practices were most successful, why they were successful, challenges they experienced with implementation and lessons learned along the way.

3.6.9 Contact information

The final section of the survey asked respondents if they were willing to provide contact information in case further elaboration is needed on the data that they will be providing. If the respondent was willing to be contacted, the contact information requested from the respondents included Name, District, Email and Phone number, as well as preferred method of contact.

3.6.10 Interview

In order to obtain additional contextual information about district practices and policies from willing participants, a guided interview (See Appendix D) was conducted to examine the motivations, thinking processes and implementation complexities involved in addressing minority students' needs. The actual interview was a guided conversation with the hope of understanding the context of actions taken by superintendents to assure minority student success and evolved through the conversation.

The *expected* rate of survey responses was 40%, 50 completed surveys out of a possible 125 superintendents. If the response rate had been greater than or equal to 40%, no more than five interviews would have been conducted from respondents who agreed to be interviewed. If the response rate was less than 40%, interviews were to be conducted with all respondents that agreed to be interviewed.

3.6.11 Pilot study

The pilot survey was conducted with 18 current members of the Tri-State Area School Study Council and/or the Western Pennsylvania Forum for School Superintendents whose districts are outside the 10-county Pittsburgh area workforce development region. There are nine members from the Tri-State Area School Study Council and nine from the Western Pennsylvania Forum for School Superintendents that are beyond the boundaries of workforce development region. The instrument was distributed to superintendents via electronic survey software (Qualtrics). The Web-based format and email delivery of the survey allowed for superintendents to have access to the instrument at a time that was most convenient to them and on any web-based device. Response

rate of identified participants was expected to be 40% and was closely monitored. Non-respondents were sent two email reminders to attain the expected 40% participation rate.

The pilot survey's response rate was 22%, significantly lower than expected. After the first email invitation was sent to the 18 potential participants, two additional emails were sent to non-respondents; the first, 10 days after the initial email and the second, seven days after the second email to non-respondents. In spite of an introductory and supportive email being sent to the nine Tri-State Area School Study Council members and the nine members from the Western Pennsylvania Forum for School Superintendents that are beyond the boundaries of workforce development region, the response rate was much lower than anticipated with only four respondents out of a possible eighteen completing the pilot survey.

3.6.12 Response rate options

The pilot study provided additional insight to assist with the study's research design, as well as possible rate of participation. Additional modifications to the approach of the study were needed based on the feedback provided by the respondents and the low participation rate.

For the study, a response rate of at least 40% was expected to best analyze and interpret the respondent's data. However, from the pilot survey's low response rate, 22%, and the fact that sharing personal perspectives on minority student progress presents nuanced and sensitive issues for superintendents in the Pittsburgh area workforce region, they may be reluctant to participate in the survey. The survey can still yield important information and so it was administered. However, since the response rate was below 40%, follow up interviews were conducted with all superintendents willing to discuss successes, challenges and lessons learned from their survey responses (see Figure 2).

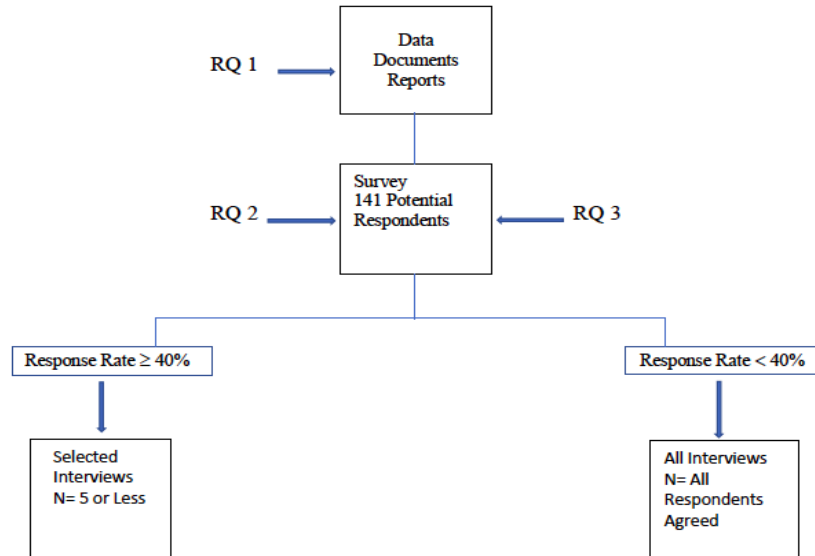


Figure 2. Data collection flow chart

The survey and guided interview data described superintendents’ perceptions, success, challenges and lessons learned in attempts to assure that minority students are college, career and life ready, and prepared to enter the Pittsburgh area workforce developmental region. This study can then add to more engaged conversations related to regional collaboration to build a more academically successful population to support the region’s workforce.

3.7 Data analysis

As a result of the review of datasets and reports from federal, state and local sources, survey responses and interviews, key metrics and trends were identified describing current and past status of student demographics and achievement of the respondents’ districts (see Figure 3).

Question	Method	Evidence	Analysis and Interpretation
1. What are the demographic and academic success indicators for minority populations in South West Pennsylvania across the last decade?	Regional demographic data analysis Exploratory analysis of demographic grouping characteristics	Key metrics and trends that describe current and past status of student demographics Key metrics and trends that describe current and past status of student achievement	Explore data sets and reports from federal, state and regional sources to provide a thorough description of demographic and academic metrics for minority students using six categories: size; intermediate unit; location; percent free/reduced lunch; percent minority student population and minority student achievement.
2. How do school superintendents perceive demographic and academic changes and needs for minority populations in their districts?	Survey Interview	Superintendent perceptions on demographic data collected in RQ 1. Superintendent perceptions of the needs relating to the minority student success in educational experience compared majority students.	Closed-ended survey data will be collated, coded and analyzed to produce basic descriptive statistics and frequency distributions. Open ended items will be coded: deductive coding (representing themes from the reviewed literature) and inductive coding of emergent themes.
3. What actions have regional districts taken to address academic success of minority students in their districts? What have been notable success and lessons learned?	Survey Interview	Superintendent reports about actions taken to address to address minority student success. Superintendent reports of success and lessons learned from actions, initiatives and/or practices to increase minority student success.	Secondary coding will identify categories from the concepts and themes. Data will be disaggregated by basic demographic and achievement categories (size; intermediate unit; location; percent free/reduced lunch; percent minority student population and minority student achievement) as well as emergent areas identified through Research Question 1, analysis.

Figure 3. Evidence, method, analysis and interpretation

The data were compared between two groups; all superintendents and, superintendents that are members of the University of Pittsburgh, School of Education’s Tri-State Area School Study Council and/or the University of Pittsburgh, School of Education’s, Western Pennsylvania Forum

for School Superintendents. The data were grouped into six primary categories including: Intermediate Unit, location (city, suburban, town or rural), size of district, percentage of free/reduced students, enrollment percentage of minority students, and minority student achievement. Closed-ended survey items gathered data via Likert-like scales. The data were collated, coded and analyzed to produce basic descriptive statistics and frequency distributions.

Open-ended items included prompts to obtain fuller description and clarification of specific superintendent perspectives and was analyzed through deductive coding, representing themes from the reviewed literature that correlates to respondent's data. Follow up interviews with volunteer respondents allowed for additional information that provided context regarding historical information for specific variables within the respondent's district.

Additionally, superintendents' perspectives were analyzed through inductive coding of emergent themes as a result of the analysis of respondent's data. Secondary coding identified categories from the concepts and themes. Data were disaggregated by basic demographic categories (Intermediate Unit, size, location, district wealth/resources, minority population and minority achievement) as well as emergent areas identified through analysis and interpretation. The study can now serve as a starting point for more engaged conversations related to regional collaboration to build a more academically successful population to support the region's workforce.

3.7.1 Reports and documentation

A review of federal, state and local databases and reports was conducted from the Common Core of Data, National Council of Education Statistics, the Pennsylvania Department of Education, the University of Pittsburgh's, University Center for Social and Urban Research (UCSUR) and the

Pennsylvania State Data Center. A demographic data analysis of the respondents' school districts was conducted to provide a thorough description and summary in six categories to identify key metrics and trends that described current and past minority student demographics and achievement.

3.7.2 Intermediate units

The first category consisted of seven Intermediate Units that are included in the Pittsburgh area workforce development region. Intermediate Units provide regional services, instructional and operational support to public, parochial, private and charter schools that are within their catchment area. The seven intermediate units are identified by a number and name and, cover 10 counties. The Pittsburgh Public School District serves as its own intermediate unit and Mt. Oliver Intermediate Unit provides support to private and charter schools that are located within the geographic boundaries of Pittsburgh Public Schools (see below):

Intermediate Unit (IU) Name	County(s)
IU 1, Intermediate Unit 1	Fayette, Greene and Washington
IU 2, Pittsburgh Public Schools, Mt. Oliver	Allegheny
IU 3, Allegheny Intermediate Unit	Allegheny
IU 4, Midwestern IU	Butler and Lawrence
IU 7, Westmoreland IU	Westmoreland
IU 27, Beaver Valley IU	Beaver
IU 28, Arin IU	Armstrong and Indiana

3.7.3 Size of district

The 125 K - 12, public school districts in the Pittsburgh area workforce development region vary in size as identified by total number of student enrollment. Size of District referred to the total student enrollment that was identified for the 2018-2019 school year. Within this category, there will be three subcategories; small, medium and large. For the purpose of this study, small district size were districts that had a total enrollment that is 2000 students or less; medium districts, 2001 - 10,000 students and; large districts, 10,001 students or higher.

3.7.4 Location

The 10 counties that are part of the Pittsburgh area workforce development region include geographical areas that are described using the National Council of Education Statistics (NCES) Locale Framework of four basic types: City, Suburban, Town or Rural (https://nces.ed.gov/programs/edge/docs/locale_classifications.pdf). The four-tiered system utilized by NCES defines City as an urbanized area that is inside a principal city and has at least a population of 100,000 or more. Suburban is defined as an area that sits outside a principal and inside an urbanized area. Town is a territory inside of an urban cluster that is 10 miles or more from an urbanized area. And, Rural is defined as less than or equal to five miles or more from an urbanized area and less than two and a half miles or more from an urban cluster.

3.7.5 Enrollment percentage minority students

Percentage of minority students referred to the total percentage of non-majority students in the district for the 2018 – 2019 school year. Minority students included African-American, Hispanic, Bi-racial, Native American, Native Alaskan, Asian and African.

3.7.6 Enrollment percentage of free/reduced lunch students

Enrollment percentage of free or reduced lunch students referred to the percentage of students of the total district enrollment that qualified for the Federal Free or Reduced Lunch Program. For a student to qualify for the National Free Lunch Program (USDA, 2017), students and/or parents/guardians have to meet certain criteria that may include households that meet the income eligibility guidelines; homeless, foster, migrant or runaway children; children participating in the Head Start Program and; households receiving Supplemental Nutrition Assistance Program (SNAP).

3.7.7 Majority student achievement

Majority student achievement referred to the percent of majority students proficient or advanced on the Pennsylvania System of School Assessment (PSSA). The PSSA is the annual standards-based, criterion-referenced assessment which provides students, parents, educators and citizens with an understanding of student and school performance related to the attainment of proficiency of the academic standards (<https://www.education.pa.gov/K12/Assessment%20and>

[%20Accountability/PSSA/Pages/default.aspx](https://www.education.pa.gov/K-12/Assessment%20and%20Accountability/PSSA/Pages/default.aspx)). Every student in grades three and eight are assessed in reading and math.

3.7.8 Minority student achievement

Minority student achievement referred to the percent of minority students proficient or advanced on the Pennsylvania System of School Assessment (PSSA). The PSSA is the annual standards-based, criterion-referenced assessment which provides students, parents, educators and citizens with an understanding of student and school performance related to the attainment of proficiency of the academic standards (<https://www.education.pa.gov/K-12/Assessment%20and%20Accountability/PSSA/Pages/default.aspx>). Every student in grades three and eight are assessed in reading and math.

3.7.9 Survey and guided interview

A descriptive analysis was conducted for survey items. The data from the demographic section of the survey was used to describe the respondents. The Background Information; Minority Student Enrollment; Factors that Influence Minority Student Success; and Actions Taken to Support Minority Student Success sections of the survey was coded and described by using tables and narratives to outline perceptions of the respondents. Closed-ended survey items gathered data via Likert-like scales. Data were collated, coded and analyzed to produce basic descriptive statistics and frequency distributions. Open-ended items and the guided interview included prompts to obtain fuller description and clarification of specific superintendent perspectives and

were analyzed through deductive coding (representing themes from the reviewed literature) and inductive coding from emergent themes.

The analysis of the survey was divided into two groups; all superintendents of the Pittsburgh area workforce development region and superintendents that are members of the University of Pittsburgh, School of Education's Tri-State Area School Study Council and/or the Western Pennsylvania Forum for School Superintendents. The data were further grouped into six primary categories including: Intermediate Unit, location (city, suburban, town and rural), size (small, medium and large) of district, enrollment by percentage of minority students, percentage of free/reduced students and minority student achievement to conduct subgroup analysis.

The analysis of closed-ended survey items included a total of 15 questions that do not include questions asking for contact information. The data from closed-ended items was collated, coded and analyzed to produce basic descriptive statistics and frequency distributions.

The analysis for open-ended survey items included a total of three questions plus guided interviews with respondents who agreed to be interviewed. The data from open ended items and guided interviews was coded and included both deductive coding (representing themes from the reviewed literature) and inductive coding of emergent themes.

Secondary coding identified categories from the concepts and themes. Data was disaggregated by basic demographic categories (Intermediate Unit, size, location, free/reduced lunch, minority student population and minority student achievement) as well as emergent areas identified through Research Question 1, analysis.

It was anticipated that specific patterns and trends would emerge from the coding of the collected data. Comparisons, frequency distributions, disaggregation and Chi Square were conducted to consider patterns and differences among groups. Specific notes were kept to

categorize and organize patterns and themes that emerged from the data that allowed for further analysis. Once coding, comparisons and frequency distribution, disaggregation and chi square were completed and emerging patterns and trends were identified, the data as a whole was interpreted.

The survey and guided interview data described superintendents' perceptions, successes, challenges and lessons learned in attempts to assure that minority students are college, career and life ready, and prepared to enter the Pittsburgh area workforce developmental region. This study can now add to more engaged conversations related to regional collaboration to build a more academically successful population to support the region's workforce.

3.8 Researcher perspective and professional knowledge

Currently, I am the Chief of School Performance in a public, K – 12, school district within the Pittsburgh area workforce development region. My responsibilities include support and supervision of assistant superintendents, support and supervision of the Special Education Department and Student Support Services Department. I work directly with the superintendent and report directly to both the deputy superintendent and superintendent. My responsibilities also include membership on the Superintendent's Executive Cabinet and ownership of specific initiatives of the strategic plan. I believe that my eight years as a central office administrator was advantageous in understanding and analyzing the collected data.

The school district in which I am employed is one of the school districts that was included in the survey and will remain anonymous within the study. The successful actions taken to assure minority student success and the lessons learned along the way will provide useful information to

the study and to the Pittsburgh area workforce development region. It is my goal and hope that the study will provide needed and useful information to the field on successful efforts to assure that minority and majority students are achieving at the same rate and that they are college, career and life ready, and prepared to enter the Pittsburgh area workforce development region.

3.9 Methodological assumptions and limitations

The study design relied on methodological assumptions that were consistent with qualitative researchers studying things in their natural settings, attempting to make sense of or interpret phenomena in terms of the meanings people bring to them (Mertens, 2015). It was assumed that the email delivery process through the Qualtrics system was functioning properly and that all invitations with the survey link was sent to all K – 12, public school superintendents that are part of Pittsburgh area workforce development region. It was assumed that all respondents would provide honest and specific information related to the survey items based on assurances of confidentiality and security of data. It was also assumed that some listed potential participants may no longer be employed in the identified school district or intermediate unit. Attempts were made to identify the appropriate participant in the school district and resend the survey to ensure that as many participants in the Pittsburgh area workforce region are able to complete the survey. The study's primary design limitation was that a purposive sampling method (Mertens, 2015) was used to identify participants that work for K – 12, public school districts within the Pittsburgh area workforce development region. Based on the results of the pilot survey, a 22% response rate, it was unlikely that 40% of the potential 125 participants would respond to the survey invitation. As this occurred, additional guided interviews were conducted with agreeing respondents. The results

of the study may not be applicable and reliable to inform public, K – 12 school districts within the Pittsburgh area workforce development region of successful initiatives and practices that are taking place to assure minority student success if enough superintendents do not agree to be interviewed. A secondary limitation was the potential unconscious bias that I brought to the study. I have been studying the topic of study for more than two decades and have participated in other surveys and professional development directly connected to the topic of study.

3.10 Conclusions

The purpose of this study was to explore superintendents' perceptions on initiatives/practices leading to minority student success in southwest Pennsylvania. The focus was three-fold: (1) Analyze demographic and academic metrics for minority students in K -12 public schools in the Pittsburgh area workforce development region; (2) Analyze survey and interview data to obtain participants perceptions on initiatives/practices that lead to minority student success and (3) Analyze survey and interview responses to obtain participants perceptions on challenges and lessons learned during the implementation of successful initiatives/practices to assure minority student success. Additionally, part of this exploration was designed to reveal emerging themes from superintendents' perceptions of changing learner profile in their school districts and their efforts to address changing student demographics, as well as to reveal patterns of successful initiatives/practices in the Pittsburgh area workforce development region assuring minority students are college, career and life ready.

4.0 Findings

4.1 Introduction

One purpose of this study was to conduct an exploratory analysis of the current student demographic patterns over the past decade in the Pittsburgh area workforce development region that spans 10 counties and a 125 public school districts. Additionally, the study gathers school superintendents' perceptions regarding changing minority student demographics over the past decade, initiatives and practices they are implementing to increase minority students' outcomes, as well as initiatives' and practices' successes, challenges and lessons learned from their implementation. This study reviewed various data sets, surveyed superintendents and interviewed superintendents that volunteered to provide additional context of their current experiences and lessons learned.

The findings of this study are presented in the following order: First, the demographics of each school district in the sample group are grouped by intermediate unit describing district enrollment, percent of minority student enrollment, percent of students qualifying for free/reduced lunch, percent of majority students proficient on PSSA Reading and Math, percent of minority students proficient on PSSA Reading and Math and the percentage of minority student proficiency on PSSA Reading and Math disaggregated by African-American, Hispanic and Multi-Racial students. Following this, are the findings that are specific to each of the research study questions.

4.2 Demographic information

The Pittsburgh area workforce development region as defined by the Allegheny Conference, consists of 10 counties in southwest Pennsylvania. The counties include Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, Indiana, Lawrence, Washington and Westmoreland. Within the counties are six Intermediate Units, 125 K-12 and public school districts (not including charter schools or technical centers), that are located in city, rural, suburban and town areas (See table 1).

Table 1. Pittsburgh area workforce development region

Intermediate Units	Counties	Number of School Districts
1	Fayette, Greene & Washington	25
2	Pittsburgh Public School District/Mt. Oliver	1
3	Allegheny	42
4	Butler & Lawrence	15
7	Westmoreland	17
27	Beaver	14
28	Armstrong & Indiana	11

The Pennsylvania Department of Education, Division of Data Services, National Council of Education Statistics and the Kids Count Data Center, provided data for the 125 K - 12, public school districts in the Pittsburgh area workforce development region used in this study. Across the region, the largest Intermediate Unit is Allegheny Intermediate Unit 3 which supports 42 public school districts in Allegheny County. The largest school district in the region is the Pittsburgh Public School District which resides in Allegheny County. Due to the size of the district, it serves as its own intermediate unit known as the Pittsburgh-Mt. Oliver Intermediate Unit number 2.

School districts in the region are located in mostly suburban and rural areas, with the exception of Pittsburgh Public which is located in a city.

The smallest of the IU's is Intermediate Unit 28 that includes Armstrong and Indiana Counties representing 11 school districts located in rural, suburban and town locations. Intermediate Unit 1, supports 25 school districts in Fayette, Greene and Washington Counties that are located in rural and suburban areas. Intermediate Unit 7, Westmoreland County, has 17 school districts and Intermediate Unit 4, Butler and Lawrence County has 15 school districts located in rural, suburban and town locations. Intermediate Unit 27, Beaver County has 14 school districts and is the only intermediate unit that has school districts located in all classified location types; city, rural, suburban and town.

4.3 What are the demographic and academic success indicators for minority populations in Southwest Pennsylvania across the last decade?

The Pennsylvania Department of Education, Division of Data Services, National Council of Education Statistics and the Kids Count Data Center, were explored and provided information for the 2009 - 2010, 2013 - 2014 and the 2016 - 2017 school years identifying five areas of demographic and academic metrics that include: size of district, percent minority student enrollment, percent free/reduced lunch, percent majority student achievement in reading and math and percent minority student achievement in reading and math.

4.3.1 Demographic description of K-12 public school districts in the Pittsburgh workforce development region; size of district

K-12 public school districts in the Pittsburgh area workforce development region vary in size from the largest school district, Pittsburgh Public Schools with 22,384 students in 2016-2017 school year to the smallest school district, Midland Borough, with 273 students. Overall, in the 2016-2017 school year, there were 307,018 students that attended K-12 public schools in the Pittsburgh area workforce region. From the 2009-2010 through 2016-2017 school years the region saw an overall decline in student enrollment of approximately 9%, 29,284 students (See Table 2).

Table 2. District enrollment by Intermediate Units

Intermediate Units	2009 - 2010	2013 - 2014	2016 - 2017
1	52,675	50,141	48,045
2	27,945	26,041	22,384
3	121,816	116,742	114,382
4	39,688	37,539	35,882
7	50,514	48,079	46,680
27	23,347	22,146	21,137
28	20,315	19,180	18,408

K-12 public school districts in Intermediate Units 1, 3, 4, 27 and 28 experienced similar enrollment decline of approximately 9%. Intermediate Unit 2 had the largest enrollment decline of approximately 20% and Intermediate Unit 7 experienced the least enrollment decline of approximately 7.6%.

4.3.2 Demographic description of K-12 public school districts in the Pittsburgh workforce development region; percent minority student population

K-12 public school districts in the Pittsburgh area workforce development region vary in the percent of minority student enrollment. Overall, in the 2016-2017 school year, 41,754 students or 13.60% of the students in the region were minority students. From the 2009-2010 through 2016-2017 school years the region saw an overall increase of 7,653 minority students, a 3.46% increase in minority student enrollment (See Table 3).

Table 3. Percent of minority student enrollment by Intermediate Units

Intermediate Units	2009 - 2010	2013 - 2014	2016 - 2017
1	8.1	9.4	10.9
2	65.5	66.9	67.3
3	18.4	25.9	22.9
4	5.9	7.4	9.0
7	7.1	8.9	10.8
27	13.9	13.8	17.3
28	3.4	4.3	6.7

All intermediate units in the Pittsburgh area workforce development region saw increases in minority student enrollment between the 2009-2010 and 2016-2017 school years. The intermediate units with the highest increases include Intermediate Unit 3, with an increase of 4.5%, Intermediate Unit 7 with an increase of 3.7% and Intermediate Unit 27 with an increase of 3.4%. Six school districts within the region have minority student populations at 70% or higher and include, Aliquippa School District, Clairton City School District, Duquesne City School District, Penn Hills School District, Wilkinsburg Borough School District and Woodland Hills School District.

4.3.3 Demographic description of K-12 public school districts in the Pittsburgh workforce development region; percent free/reduced lunch

K-12 public school districts in the Pittsburgh area workforce development region vary in the percent of students that qualify for the free or reduced lunch program. Overall, in the 2016-2017 school year, 138,772 students or 45.2% of the students in the region qualified for free or reduced lunch. From the 2009-2010 through 2016-2017 school years the region saw an overall increase of 20,058 students, a 9.9% increase in students qualifying for free or reduced lunch (See Table 4).

Table 4. Percent of students qualifying for free/reduced lunch by Intermediate Units

Intermediate Units	2009 - 2010	2013 - 2014	2016 - 2017
1	42.6	45.0	52.7
2	71.5	72.5	99.9
3	27.1	30.9	35.6
4	27.3	29.4	35.4
7	30.1	33.7	38.7
27	38.0	42.9	50.2
28	41.8	43.0	50.1
Total	35.3	38.3	45.2

All intermediate units in the Pittsburgh area workforce development region saw increases in the percent of students who qualify for free or reduced lunch between the 2009-2010 and 2016-2017 school years. In the 2016-2017 school year, three intermediate units had percentages above 50%; Intermediate Unit 1, 51.48%, Intermediate Unit 2, 99.9% and Intermediate Unit 27, 52.2%. Three intermediate units in the region had significant increases of 10 percentage points or more of students that qualified for free or reduced lunch between 2009-2010 and 2016-2017. Intermediate Unit 2 had an increase of 28.4%, Intermediate Unit 1 had an increase of 10.1% and Intermediate Unit 27 had an increase of 12.2%.

4.3.4 Demographic description of K-12 public school districts in the Pittsburgh workforce development region; percent majority student proficient/advanced Math and Reading

K-12 public school districts in the Pittsburgh area workforce development region vary in the percent of majority students proficient or advanced on the Pennsylvania System State Assessment (PSSA) in math and reading. Overall, in the 2016-2017 school year, 73,842 students or 56.1% of the majority students in math and 95,829 students or 73.4% of majority students in reading in the region were proficient or advanced on the PSSA. From the 2009-2010 through 2016-2017 school years the region saw an overall decrease in proficiency for majority students in both math and reading of 49,010 students for math, a 27.2% decrease and 18,991 students in reading, a 3.0% decrease in majority student proficiency on the PSSA (See Table 5).

Table 5. Percent of majority students proficient/advanced PSSA Math & Reading by Intermediate Units

Intermediate Units	2009-2010		2013-2014		2016-2017	
	Math	Reading	Math	Reading	Math	Reading
1	74.6	68.2	73.4	67.9	48.8	65.3
2	77.9	73.1	74.8	71.3	49.0	67.1
3	84.1	76.1	83.0	82.3	62.3	78.1
4	81.4	78.2	81.2	79.9	57.3	73.1
7	83.2	81.2	82.9	77.1	57.2	74.2
27	94.2	79.2	77.1	75.2	52.0	71.2
28	88.4	86.6	75.1	73.2	51.3	67.6
Total	83.3	76.4	79.7	77.9	56.1	73.4

In 2009 -2010, all intermediate units had higher math scores than reading scores for majority students. By the 2016 - 2017 school year, all intermediate units had significantly higher reading scores compared to math scores for majority students. Overall, math scores significantly decreased from 2009 – 2010 to 2016 – 2017 by 27.2% for majority students. in five out of six intermediate units in the region with an overall decrease between 25.9% - 37.3%.

4.3.5 Demographic description of K-12 public school districts in the Pittsburgh workforce development region; percent minority student proficient/advanced Math and Reading

The findings reported for minority students in this study include Black, Hispanic and Multi-Racial students that had at least 16 students identified in the subgroup category. In subgroups with 1 – 5 students, The Department of Education does not provide a numerical percent proficient and identifies subgroup performance as *PS* (NCES, 2016). In subgroups with 6 -15 students, the proficiency is reported as range of Greater Than or Equal to 50%, or, Less Than or Equal to 50%. Due to the amount of variability for subgroups with 6-15 students, findings were not recorded for subgroups that had less than 16 students. The Department of Education reports percent proficient as whole numbers for subgroups that have 300 or more students. For subgroups with less than 300 students and to protect student privacy per FERPA, the Department of Education reports percent proficient in percent ranges (See table 6) (NCES, 2016).

Table 6. Number of students reported, reporting ranges

Number of Students Reported in the Cell	Ranges Used for Reporting the Percent Proficient and Percent Participation for that Group
6-15	<50%, ≥50%
16-30	≤20%, 21-39%, 40-59%, 60-79% ≥80%
31-60	<10%, 11-19%, 20-29%, 30-39%, 40-49%, 50-59%, 60-69%, 70-79%, 80-89%, ≥90%
61-300	≤5%, 6-9%, 10-14%, 15-19%, 20-24%, 24-29%, 30-34%, 35-39%, 40-44%, 45-49%, 50-54%, 55-59%, 60-64%, 65-69%, 70-74%, 75-79%, 80-84%, 85-89%, 90-94%, ≥95%
More than 300	≤1%, 2%, 3%, . . . , 98%, ≥99%

For subgroups populations that were above 15 students and less than 300 and where the Department of Education reported percent proficient as a range, a median score of the range was used to identify percent proficient of the subgroup.

K-12 public school districts in the Pittsburgh area workforce development region vary in the number of minority students and the percent of minority students proficient or advanced on the Pennsylvania System State Assessment (PSSA) in math and reading. Overall, in the 2009-2010 school year, 17 school districts within the Pittsburgh workforce development region had less than 5% minority students. By the 2016 – 2017 school year, the total number of school districts in the region with less than 5% minority students decreased by 13 school districts with only four with less than 5% including Allegheny Valley School District, Deer Lakes School District, McGuffey School District and Mount Pleasant Area School District (Kids Count Data Center, 2019).

Overall, in the 2016-2017 school year, 6,177 students or 27.1% of the minority students in math and 10,301 students or 42.4% of majority students in reading in the region were proficient or advanced on the PSSA. From the 2009-2010 through 2016-2017 school years, the region saw an overall decrease in proficiency for minority students in both math and reading of 6461 students for math, a 28.1% decrease and 1,548 students in reading, a 7.9% decrease in minority student proficiency on the PSSA (See Table 7).

Table 7. Percent of minority students proficient/advanced PSSA Math and Reading by Intermediate Units

Intermediate Units	2009-2010		2013-2014		2016-2017	
	Math	Reading	Math	Reading	Math	Reading
1	53.2	52.9	53.2	52.0	36.3	47.1
2	51.7	47.8	50.1	46.4	20.4	37.1
3	54.8	49.6	50.0	47.3	25.3	37.6
4	67.6	61.2	57.2	45.3	31.0	39.3
7	58.1	57.3	55.6	52.3	37.8	51.0
27	59.6	56.1	52.1	53.1	23.7	41.7
28	66.7	69.4	65.6	64.8	43.2	58.1
Total	55.2	50.3	51.7	49.1	27.1	42.4

In 2009 -2010, unlike majority students, one of the six intermediate units had reading scores higher than math scores. Intermediate Unit 28 had higher reading scores than math scores

for minority students. Similar to majority students, by the 2016 - 2017 school year, all intermediate units had significantly higher reading scores compared to math scores for minority students. Math scores significantly decreased from 2009 – 2010 to 2016 – 2017 for minority students with an overall decrease of 28.1% ranging 16.9% in Intermediate Unit 1 to 36.6% in Intermediate Unit 4.

4.3.6 Key metrics and patterns for minority populations K-12 public school districts in the Pittsburgh workforce development region

To report PSSA Math and Reading findings for achievement data for minority students in this study, three sets of data that included African-American, Hispanic and Multi-Racial were disaggregated to obtain percent proficient/advanced for each identified subgroup. Once a total number of proficient/advanced students was identified in each subgroup, the percentage of proficient/advanced was identified for each subgroup, for math and reading for the 2009 – 2010, 2013 – 2014 and 2016 – 2017 school years. For this subsection, racial identifiers such as African-American, Hispanic and Multi-Racial were used.

Overall, in the 2009-2010 school year, 55 out of 125 school districts distributed over the six intermediate units in the Pittsburgh workforce development region had less than a 5% minority student population. In the 2016-2017 school year, the region saw an overall increase of 24 school districts in the region that had more than 5% minority students. In 2016-2017 school year, 31 out of 125 school districts had less than 5% minority students (Kids Count Data Center, 2019).

The increase in minority students from 2009-2010 through 2016-2017 is due to an increase of Hispanic and Multi-Racial students in the region as there was a slight decrease of African-American students. From 2009-2010 to 2016-2017, Hispanic Students increased from 21 school districts in the region to 49 and Multi-Racial students increased from 35 to 79. African-American

students, however, decreased slightly from 84 school districts in 2009-2010 to 76 in 2016-2017 (Kids Count Data Center, 2019).

Overall, in the 2009 - 2010 school year, 55.2% of all minority students were proficient/advanced in math and 50.3% in reading (See Table 7). In 2009-2010, African American students had the lowest percentage of proficient/advanced students in math with 53.1% and Hispanic students had the highest percentage with 72.3% proficient/advanced in math (Table 8).

Table 8. Minority student subgroup scoring proficient/advanced PSSA Math and Reading by Intermediate Units, 2010

Intermediate Units	African American				Hispanic				Multi-Racial			
	Math		Reading		Math		Reading		Math		Reading	
	n=	%	n=	%	n=	%	n=	%	n=	%	n=	%
1	13	52.7	13	47.5	1	74.2	2	85.4	4	62.5	4	76.2
2	1	50.0	1	45.1	1	62.1	1	58.4	1	68.0	1	63.0
3	39	54.1	39	49.3	12	76.1	11	72.9	19	71.1	17	57.4
4	5	65.2	7	61.9	3	77.3	4	64.2	2	53.4	2	68.4
7	11	61.1	12	57.3	2	68.1	2	56.8	6	81.7	6	62.2
27	11	57.1	9	55.2	2	70.0	1	50.0	2	80.1	2	69.5
28	3	65.2	3	60.4	0	0.0	0	0.0	1	69.5	1	69.5
Total	83	53.1	84	49.1	21	72.3	21	67.5	35	71.4	3	64.1

Hispanic students represented in 21 school districts in the region had the highest rate of proficiency in both math and reading on the PSSA with 72.3% in math and 67.5% in reading. African-American students who represented 84 districts in the region had the lowest rate of proficiency for both math and reading on the PSSA with 53.1% in math and 49.1% in reading.

In 2013-2014 school year, the region saw an overall decrease in proficiency for all minority students in math and a slight decrease in the reading PSSA with a 3.5% decrease in math and 1.2 % in reading (See Table 7). In 2013-2014, African-American students continued to have the lowest percentage of proficient/advanced students in math with 48.3% and Hispanic students had the highest percentage with 65.1% proficient/advanced in math (See Table 9).

Table 9. Minority student subgroup scoring proficient/advanced PSSA Math and Reading by Intermediate Units, 2014

Intermediate Units	African American				Hispanic				Multi-Racial			
	Math		Reading		Math		Reading		Math		Reading	
	n=	%	n=	%	n=	%	n=	%	n=	%	n=	%
1	12	49.3	12	48.8	7	70.1	7	66.8	4	55.9	4	67.2
2	38	48.0	38	43.2	14	57.7	14	61.9	25	66.0	27	60.1
3	1	46.1	1	46.4	1	70.5	1	71.2	1	60.2	1	58.3
4	5	54.3	5	53.0	4	57.3	3	58.2	6	67.7	7	69.1
7	12	52.4	11	49.3	5	67.7	4	55.0	9	57.3	8	58.8
27	9	49.7	9	48.3	3	58.9	3	61.1	8	64.1	7	80.1
28	3	70.0	3	67.2	1	68.1	0	0.0	2	28.8	2	50.0
Total	80	48.3	79	46.3	35	65.1	32	65.7	55	61.2	56	62.9

Hispanic students (n=35), significantly outperformed African-American students (n= 80), in math by 16.8% and Multi-Racial students (n=55) by 3.9%. In Reading, Hispanic students also outperformed both African-American students (n=79) and Multi-Racial students (n=56) in the region by 19.4% and 2.8%, respectively. Although, Intermediate Unit 28 had the least amount of minority students with three school districts with 16 or more African-American students, one district with 16 or more Hispanic students and two districts with more than 16 Multi-Racial students, in the 2013 – 2014 school year, African-American students had the second highest percent proficient/advanced with 67.2% compared to all other students within their subgroup in the region in reading.

Overall in the 2016-2017 school year, the region continued its decrease in proficiency for all minority students in both math and reading PSSA scores as compared with the 2013 – 2014 school year with a 24.6% decrease in math and a significantly smaller decrease of 6.7% in reading on the PSSA (See Table 7). In 2016-2017, African-American students continued to have the lowest percentage of proficient/advanced students in math with 21.6%. Hispanic students continued to outperform African-American and Multi-Racial students with the highest percentage in math at 45.5% proficient/advanced (See Table 10). Albeit, all three subgroups experienced a decrease in

percent proficient/advanced on both reading and math when compared to 2013 – 2014. Hispanic students consistently outperform both African-American and Multi-Racial students.

Table 10. Minority student subgroup scoring proficient/advanced PSSA Math and Reading by Intermediate Units, 2017

Intermediate Units	African American				Hispanic				Multi-Racial			
	Math		Reading		Math		Reading		Math		Reading	
	n=	%	n=	%	n=	%	n=	%	n=	%	n=	%
1	7	29.5	11	42.4	9	49.3	6	59.2	14	39.7	14	54.2
2	1	18.9	1	34.1	1	27.9	1	49.1	1	35.5	1	54.1
3	33	21.1	37	36.3	24	51.1	24	70.1	33	45.2	34	58.7
4	5	26.5	5	43.8	3	38.4	3	59.8	5	37.1	5	67.4
7	8	34.4	10	43.1	7	52.1	7	68.1	11	34.4	13	56.7
27	9	19.8	10	37.4	3	59.4	3	51.4	8	31.8	9	56.3
28	2	43.2	2	61.8	2	41.8	2	47.3	4	44.5	4	63.4
Total	65	21.6	76	36.3	49	45.5	46	63.2	76	39.2	79	57.3

All K-12 public school districts in the Pittsburgh area workforce development region increased 3.1% from 2009 – 2010 to 2016 – 2017 in minority student enrollment. The increase of minority students in the region correlates with the increase of 9.9% in students that qualify for free/reduced lunch (See Table 11).

Table 11. Percent minority student enrollment and percent free/reduced lunch by Intermediate Units

Intermediate Units	2009-2010		2013-2014		2016-2017	
	Minority	Free/Red	Minority	Free/Red	Minority	Free/Red
1	8.1	43.5	9.4	45.0	10.9	52.1
2	65.4	71.4	67.9	72.4	67.2	99.9
3	18.4	27.0	26.6	31.4	23.4	36.5
4	6.8	27.2	7.3	29.3	9.0	35.4
7	7.1	31.6	9.7	34.9	11.1	39.7
27	14.8	38.8	16.2	43.9	17.3	50.2
28	3.3	41.7	4.3	43.5	6.7	50.1
Total	16.3	35.3	20.1	38.3	19.4	45.2

Intermediate Units 1, 3, 7 and 27 had the greatest increase of minority student enrollment from ranging from 2.8% to 5.0%. The increase correlates with the same intermediate units that

had the greatest increase of students that qualify for free/reduced lunch ranging from 8.6% to 11.4%.

Of the 125 K - 12 public school districts in the Pittsburgh area workforce development region, 30.0% (38 districts) are members of The University of Pittsburgh's Western Pennsylvania Forum for School Superintendents (Forum) and 65.0% (81 districts) are members The University of Pittsburgh's Tri-State Area School Study Council (Tri-State). In the 2016 – 2017 school year, school districts in the region that were members of Forum outperformed, compared to school districts that were not members in PSSA math and reading between 8.8% and 20.0% for majority, African-American, Hispanic and Multi-Racial students. Similarly, in the same school year, school districts in the region that were members of Tri-State also, slightly outperformed, compared to school districts that were not members in PSSA math and reading between 1.3% and 4.2% for majority, African-American, and Multi-Racial students.

4.3.7 Conclusions

From the 2009-2010 through 2016-2017 school years, the Pittsburgh area workforce development region saw an overall decline in student enrollment of approximately 9%, (29,284 students) with a total enrollment of 307, 018 students in 2016-2017. Although overall student enrollment in the region decreased from 2010 through 2017, the number of minority students in the region increased during this time period from 54,858 in 2010 to 59,753 in 2017, representing a 3.1% increase. In the 2016 – 2017 school year, over, 45% (138,725 students) qualified for free or reduced lunch which represents an overall increase of 9.9% (19,728 students) that qualified for free or reduced lunch when compared to 2009 - 2010.

Overall, in the 2016-2017 school year, 56.1% of the majority students in math and 73.4% in reading were proficient or advanced on the PSSA. In the region, 27.1% of the minority students were proficient/advanced in math and 42.4% in reading on the PSSA. From the 2009-2010 through 2016-2017 school years the region saw an overall decrease in proficiency for both majority and minority students in both math and reading. Majority students had a 27.7% decrease in math and 3.0% decrease in reading and a 28.1% decrease in math and a 7.9% decrease in reading for minority student proficiency on the PSSA.

Of the 125 K - 12 public school districts in the Pittsburgh area workforce development region, 30.0% (38 districts) Forum and 65.0% (81 districts) are members of Tri-State. In the 2016 – 2017 school year, school districts in the region that were members of Forum or Tri-State, outperformed, compared to school districts that were not members in PSSA math and reading between 1.4% and 20.0% for majority, African-American, Hispanic and Multi-Racial students.

4.4 How do school superintendents perceive demographic and academic changes and needs for minority populations?

4.4.1 Low survey response rate

The superintendents of the 125 K – 12, public school districts (not including charter schools) in the Pittsburgh area workforce development region were contacted via email on three separate occasions; June 12, 2019, June 19, 2019 and June 27, 2019 to be participants in this research study. The anticipated response rate of survey was 40% (50 completed surveys) of the possible 125 superintendents. 17.6% (22 respondents) started the survey, however, 14 respondents

completed it; the actual response rate was 11.2%, (14 respondents). It has been demonstrated that short and direct surveys with follow up phone calls yield high response rates, more detailed, online surveys have lower response rates of 10 – 25% (Roach & Sauermann, 2012). The survey for this study was web based with only email follow ups which may have been a reason for the low response rate. The response rate of 11.2% for this study falls within the range described by Roach and Sauermann (2012).

Another reason that may account for the low survey response rate includes the sensitive nature or interest of the topic being researched. In, *The Role of Interest in Survey Participation* study conducted by Groves, Presser and Dipko (2004), found that persons cooperated at higher rates to surveys on topics of interest and/or having an incentive attached such as a monetary incentive. It may be that minority student success is a subject that superintendents in the Pittsburgh area workforce region are not comfortable discussing or has less of an interest to them. Additionally, as noted in Chapter 3, there was no incentive, monetary or otherwise, other than an intrinsic reward for contributing to this research study. It is possible that these two reasons had a negative impact on the response rate.

Additionally, the timing that the survey was distributed was at the end of the school year during the month of June. As a central office administrator, the amount of end of the year activities that include school promotion, commencement ceremonies and end of the year reports can be overwhelming. It is possible the low response rate was due to conflicts with other responsibilities that took precedence over completing a survey.

While the response rate was low, there is a large level of agreement among the 14 respondents. It is possible that the percentages of the individual survey items would be similar with an increased response rate, however, it is possible that respondents represented a more

specific group. No outstanding features were noted that set apart respondents from non-respondents. To offset the low response rate, interviews were conducted with as many of the respondents as possible ($n = 4$) to obtain a more in-depth data source to be able to gather their motivations, thinking processes and implementation complexities involved in addressing minority student needs. Again, the number is quite low, hence, limiting the study toward more generalized conclusions.

4.4.2 Description of the respondents

The superintendents of the 125 K – 12, public school districts (not including charter schools) in the Pittsburgh area workforce development region were contacted via email on three separate occasions; June 12, 2019, June 19, 2019 and June 27, 2019 to be participants in this research study. Of the 125 possible respondents, 11.2 % (14 superintendents) participated in the study in which five out seven intermediate units were represented in the Pittsburgh area workforce development region. All of the questions in the survey were optional for the participants to complete, as a result, some of the number of respondents vary per question. This representation of findings provides statistics that were calculated according to the actual number of respondents per question.

4.4.3 Experience levels, gender and race

In all, 11.2% (14 superintendents) of the potential 125 respondents completed the survey that included $n=7$ female, $n=6$ male and $n=1$ respondent who did not complete the item. Superintendent experience levels ranged from 10 years' experience for two respondents to three

respondents that were in their first year as superintendent. The majority of respondents had less than five years' experience as a superintendent (See table 12).

Table 12. Respondents' years of experience ($n = 14$)

	10	8	7	5	3	1.5	0	NR
<i>n</i>	2	1	2	1	2	1	3	1
%	15.3	8.9	15.3	8.9	15.3	8.9	23.1	8.9

Overall, 93.2% (13 respondents) completed the item to indicate race in which 92.3% (12 respondents) identified as White and 8.9% (1 respondents) identified otherwise and one respondent did not complete the item.

4.4.4 Superintendents' perceptions on changing demographic data

The second research questions asked, "How do school superintendents perceive demographic and academic changes and needs for minority populations in their districts?" For the first part of RQ 2, the respondents were asked three questions to identify their perceptions on potential reasons for changing demographic data within their school districts that focused on the impact of minority student enrollment on the district, the overall percentage of students that qualify for free/reduced lunch and the impact on the racial achievement gap. For each question, respondents were given a list of reasons for changes in demographic data and asked to identify the level of significance ranging from very insignificant to very significant for each reason that included: increase of migrant families; increase of refugee families; gentrification of urban areas; expansion of STEAM related industry in Southwest Pennsylvania and White flight.

Of the 14 superintendents that responded to the survey, 93.6% (13 respondents) of the respondents completed the item relating to the overall impact on the district relating to changing

minority student demographics. Of the 13 superintendents that responded, the expansion of STEAM related industry in southwest Pennsylvania was identified as the most “significant” reason with 30.8% (4 respondents) and 7.7% (1 respondent) as “very significant”, for changing minority student demographics when compared to the other reasons (See table 13).

Table 13. Minority student enrollment, overall impact on the District

	Very insignificant		Insignificant		Neither		Significant		Very Significant	
	n	%	n	%	n	%	n	%	n	%
Increase of migrant families	3	23.1	6	46.2	3	23.1	1	7.7	0	0.0
Increase of refugee families	5	38.5	4	30.8	3	23.1	1	7.7	0	0.0
Gentrification of urban areas	5	38.5	2	15.4	5	38.5	1	7.7	0	0.0
Expansion of STEAM industry in southwest Pennsylvania	2	15.4	2	15.4	4	30.8	4	30.8	1	7.7
White flight	5	38.5	1	7.7	6	46.2	1	7.7	0	0.0

Additionally, of the 13 superintendents that responded to this item, 92.3 % (12 respondents) did not feel that increase of migrant or refugee families, gentrification of urban areas or White flight had an impact on their districts.

Of the 14 superintendents that responded to the survey, 93.6% (13 superintendents) of the respondents completed the item relating to the overall impact on students qualifying for free/reduced lunch relating to changing minority student demographics. Of the 13 superintendents that responded, 92.3% (12 respondents) did not feel that changing minority student enrollment due to an increase of migrant or refugee families, gentrification of urban areas or White flight had an impact on overall students qualifying for free/reduced lunch (See Table 14).

Table 14. Minority student enrollment, overall impact students qualifying for free/reduced lunch

	Very insignificant		Insignificant		Neither		Significant		Very Significant	
	n	%	n	%	n	%	n	%	n	%
Increase of migrant families	4	30.8	5	38.5	4	30.8	0	0.0	0	0.0
Increase of refugee families	6	46.2	4	30.8	2	15.4	1	7.7	0	0.0
Gentrification of urban areas	6	46.2	3	23.1	3	23.1	1	7.7	0	0.0
Expansion of STEAM industry in southwest Pennsylvania	3	23.1	5	38.5	3	23.1	2	15.4	0	0.0
White flight	5	38.5	2	15.4	5	38.5	1	7.7	0	0.0

Of the 13 superintendents that responded, the expansion of STEAM related industry in southwest Pennsylvania was identified as the most “significant” reason with 15.4% (2 respondents) for having an impact on overall students that qualify for free/reduced lunch when compared to the other reasons.

Of the 14 superintendents that responded to the survey, 93.6% (13 superintendents) of the respondents completed the item relating to the overall impact on the racial achievement gap to changing minority student demographics and of the 13 respondents, 92.3 % (12 respondents) answered the item similarly. The 12 respondents did not feel that changing minority student enrollment due to an increase of migrant or refugee families, gentrification of urban areas or expansion of the STEAM industry in southwest Pennsylvania had an impact on the racial achievement gap. (See Table 15).

Table 15. Minority student enrollment, overall impact on the racial achievement gap

	Very insignificant		Insignificant		Neither		Significant		Very Significant	
	n	%	n	%	n	%	n	%	n	%
Increase of migrant families	4	30.8	4	30.8	4	30.8	1	7.7	0	0.0
Increase of refugee families	5	38.5	4	30.8	3	23.1	1	7.7	0	0.0
Gentrification of urban areas	4	30.8	4	30.8	4	30.8	1	7.7	0	0.0
Expansion of STEAM industry in southwest Pennsylvania	2	15.4	5	38.5	5	38.5	1	7.7	0	0.0
White flight	4	30.8	2	15.4	7	53.8	0	0.0	0	0.0

All 13 respondents did not feel that White flight had an impact on the racial achievement gap and 7.7% (one respondent) of the respondents felt that changing minority student enrollment due to an increase of migrant or refugee families and gentrification of urban areas and expansion of the STEAM industry in southwest Pennsylvania had an impact on the racial achievement gap.

4.4.5 Superintendents’ perceptions on factors influencing minority student success

The second research question asked, “How do school superintendents perceive demographic and academic changes and needs for minority populations in their districts?” For the second part of RQ 2, the respondents were asked three questions to identify their perceptions on potential reasons for factors influencing minority student success, federal reforms influencing minority student success and potential initiatives and practices implemented to influence minority student success.

Of the 14 superintendents that responded to the survey, 93.6% (13 superintendents) of the respondents completed the item relating to factors that influence minority student success. For this item, respondents were given a list of factors influencing minority student success that was

described in Chapter 2 and asked to identify the level of significance ranging from very insignificant to very significant for each factor that included:

- Poverty
- Parenting
- Number of parents
- Level of parent(s) education
- Neighborhood
- Societal/Institutional discrimination
- Genetic predisposition
- Educator beliefs and expectations
- Student beliefs and expectations
- Limited access to educational opportunity

Of the 14 superintendents that responded to the survey, 93.6% (13 respondents) of the respondents completed the item relating to the overall impact on the district relating to changing minority student demographics. Of the 13 superintendents that responded, poverty was identified as the most “significant” factor related to minority student success with 92.3% (12 respondents) of respondents selecting “very significant”. The factor, student beliefs and expectations had the second highest rate of significance with 53.8 % (7 respondents) and 38.5% (5 respondents) identified it as “very significant” and “significant”, respectively (See table 16).

Table 16. Factors influencing minority student success

	Very insignificant		Insignificant		Somewhat		Significant		Very Significant	
	n	%	n	%	n	%	n	%	n	%
Poverty	0	0.0	0	0.0	1	7.7	0	0.0	12	92.3
Parenting	0	0.0	1	7.7	1	7.7	7	53.8	4	30.8
Number of parents	0	0.0	0	0.0	7	53.8	3	23.1	3	23.1
Level of Parent(s) education	0	0.0	0	0.0	5	38.5	4	30.8	4	30.8
Neighborhood	0	0.0	0	0.0	7	53.8	3	23.1	3	23.1
Societal/Institutional discrimination	0	0.0	1	7.7	3	23.1	5	38.5	4	30.8
Genetic predisposition	5	38.5	3	23.1	4	30.8	0	0.0	1	7.7
Educator beliefs and expectations	0	0.0	0	0.0	3	23.1	3	23.1	7	53.8
Student beliefs and expectations	0	0.0	0	0.0	1	7.7	5	38.5	7	53.8
Limited access to educational opportunity	1	7.7	2	15.4	2	15.4	6	46.2	2	15.4

Most of the 13 respondents did not feel that genetic predisposition was a factor contributing to minority student success with 38.5% (five respondents) of the respondents felt that this factor was “Very insignificant” and 23.1% (3 respondents) felt it was “Insignificant”. Important to note, 7.7% (one respondent) felt that genetic predisposition was “Very insignificant”.

Of the 14 superintendents that responded to the survey, 93.6% (13 superintendents) of the respondents completed the item relating to federal reforms and initiatives implemented to eliminate or support strategies to reduce the racial achievement. For this item, respondents were given a list of federal initiatives and reforms that were described in Chapter 2 and asked to identify the level of impact ranging from extremely positive to extremely negative for each initiative or reform that included: No Child Left Behind; Race to the Top and Every Student Succeeds Act.

Of the 14 superintendents that responded to the survey, 93.6% (13 respondents) of the respondents completed the item relating to the overall impact on the district relating to changing

minority student demographics. Of the 13 superintendents that responded, Every Student Succeeds Education Act was identified as the most “Positive” initiative or reform related to eliminating or reducing the racial achievement gap with 38.5% (five respondents) of respondents selecting “Positive”. Conversely, 30.8% (four respondents) and 23.1% (three respondents) felt that No Child Left Behind had a “Negative” and “Extremely Negative”, impact respectively on eliminating or reducing the racial achievement gap (See Table 17).

Table 17. Federal reforms and initiatives

	Extremely Positive		Positive		Neither		Negative		Extremely Negative	
	n	%	n	%	n	%	n	%	n	%
No Child Left Behind	1	7.7	2	15.4	3	23.1	4	30.8	3	23.1
Race to The Top	0	0.0	1	7.7	7	53.8	5	38.5	0	0.0
Every Student Succeeds Act	0	0.0	5	38.5	7	53.8	1	7.7	0	0.0

Additionally, most of the 13 respondents did not feel that Race to The Top was an initiative that contributed to eliminating or reducing the racial achievement gap with 38.5% (five respondents) of the respondents felt that this factor was “Negative” and 53.8% (seven respondents) felt it was “Neither positive or negative”.

4.4.6 Conclusion

In the Pittsburgh area workforce development region, there were 125 possible respondents that were asked to participate in the survey. A total of 11.2 % (14 superintendents) participated in the study in which five out seven intermediate units were represented that make up the Pittsburgh area workforce development region. The respondents included seven female, six male and one respondent who did not complete the gender item. Superintendent experience levels ranged from

10 years' experience for two respondents to three respondents that were in their first year as superintendent. The majority of respondents had less than five years' experience as a superintendent.

For the first part of RQ 2, the respondents were asked three questions to identify their perceptions on potential reasons for changing demographic data within their school districts. Expansion of STEAM related industry in southwest Pennsylvania had the greatest impact on school districts with 30.8% (4 respondents) as "Significant" and 7.7% (1 respondent) as "Very Significant" for changing minority student demographics when compared to the other reasons. The majority of respondents, 92.3% (12 respondents) did not feel that changing minority student enrollment due to an increase of migrant or refugee families, gentrification of urban areas or White flight had an impact on overall students qualifying for free/reduced lunch. Similarly, 92.3 % (12 respondents) did not feel that changing minority student enrollment due to an increase of migrant or refugee families, gentrification of urban areas or expansion of the STEAM industry in southwest Pennsylvania had an impact on the racial achievement gap.

For the second part of RQ 2, the respondents were asked three questions to identify their perceptions on potential reasons for factors influencing minority student success, federal reforms influencing minority student success and potential initiatives and practices implemented to influence minority student success. Poverty was identified as the most "significant" factor related to minority student success with 92.3% (12 respondents) of respondents selecting "very significant" and, student beliefs and expectations had the second highest rate of significance with 53.8 % (7 respondents) and 38.5% (5 respondents) identified it as "very significant" and "significant", respectively.

Every Student Succeeds Education Act was identified as the most “Positive” initiative or reform related to eliminating or reducing the racial achievement gap with 38.5% (five respondents) of respondents selecting “Positive”. Conversely, 30.8% (four respondents) and 23.1% (three respondents) felt that No Child Left Behind had a “Negative” and “Extremely negative”, respectively, impact on eliminating or reducing the racial achievement gap.

4.5 What actions have regional districts taken to address academic success of minority students in their districts? What have been notable successes and lessons learned?

4.5.1 Actions taken to address minority student success

The third research question asked, “What actions have regional districts taken to address academic success for minority students in their districts? What have been notable successes and lessons learned?” For the first part of RQ 3, the respondents were asked six questions to identify their perceptions on the level of importance of potential initiatives and practices referenced in the literature review in Chapter 2. A five-point Likert Scale was employed for respondents to identify the level of importance for each item. This part of RQ 3 featured six questions, each with a focus area that was accompanied with specific initiatives or practices that included: Actions to support minority student success; beliefs and expectations; productive relationships; professional development; professional development for racial equity and; accountability.

Of the 14 superintendents that responded to the survey, 93.6% (13 superintendents) of the respondents completed the item relating to potential initiatives and practices implemented to support minority students to be college career and life ready and ready to enter the Pittsburgh area

workforce development regions. For this item, respondents were given a list of potential initiatives and practices that were described in Chapter 2 and asked to identify the level of importance ranging from not important to very important for each initiative or practice that included:

- Create a sense of urgency
- Develop a collective vision
- Develop non-negotiable goals
- Facilitate the development of a District culture based on shared norms, values and beliefs
- Hire teachers/principals of color
- Ensure principal aligns school mission with the the district vision
- Develop a curriculum and instruction plan to to meet the needs of minority students
- Include principals and teachers in the selection of curriculum

Of the 14 superintendents that responded to the survey, 93.6% (13 respondents) of the respondents completed the item relating to the overall impact on the district relating to changing minority student demographics. Of the 13 superintendents that responded, “Developing a curriculum and instruction plan to meet the needs of minority students” and “including principals and teachers in the selection of curriculum” were identified as the most important initiatives and practices related to minority student success with 53.8% (7 respondents) of respondents selecting “Very Important” for both initiatives and practices (See Table 18).

Table 18. Initiatives and practices

	Do Not Use		Not Important		Somewhat		Important		Very Important	
	n	%	n	%	n	%	n	%	n	%
Create sense of urgency	0	0.0	0	0.0	2	15.4	10	76.9	1	7.7
Develop a collective vision	0	0.0	0	0.0	1	7.7	9	69.2	3	23.1
Develop non-negotiable goals	0	0.0	0	0.0	1	7.7	9	69.2	3	23.1
Facilitate the development of a District culture based on shared norms, values and beliefs	0	0.0	0	0.0	0	0.0	7	53.8	6	46.2
Hire teachers/principals of color	0	0.0	2	15.4	6	46.2	1	7.7	4	30.8
Ensure principal aligns school mission with District vision	0	0.0	0	0.0	0	0.0	7	53.8	6	46.2
Develop a curriculum and instruction plan to meet the needs of minority students	0	0.0	1	7.7	2	15.4	3	23.1	7	53.8
Include principals and teachers in the selections of curriculum	0	0.0	0	0.0	0	0.0	6	46.2	7	53.8

Additionally, the majority of respondents felt that “Creating a sense of urgency”, “Developing a collective vision” and “Developing non-negotiable goals” were important initiatives and practices related to minority students being college, career and life ready, and ready to enter the Pittsburgh area workforce development region. Of the 13 respondents, 76.9% (10 respondents) felt that “Creating a sense of urgency” was “Important” and 69.2% (nine respondents) of the respondents felt that “Creating a collective vision and non-negotiable goals” was “Important”. Out of the eight initiatives and practices listed, 15.4% (two respondents) felt that “Hiring teachers or principals of color” was “Not Important” and 7.7% (one respondent) felt that “Developing a curriculum and instruction plan to meet the needs of minority students” was “Not Important”.

Of the 14 superintendents that responded to the survey, 93.6% (13 respondents) of the respondents completed the item relating to actions taken to support district beliefs and

expectations. For this item, respondents were given a list of potential actions related to beliefs and expectations that were described in Chapter 2 and asked to identify the level of importance ranging from not important to very important for each action that included:

- Model shared beliefs and values
- Communicate clear performance expectations
- Establish high expectations for all students
- Maintain a clear focus on improving instruction
- Challenge staff to reexamine some of their achievement related assumptions
- Establish schools characterized by high expectations and opportunity for all students
- Establish programs to increase minority student participation in Advanced Placement and Honors courses

Of the 13 superintendents that responded, respondents felt that the two actions taken to support beliefs and expectations, “Establishing high expectations for all students” and “Maintaining a clear focus on improved instruction” were identified as the most important with 84.6% (11 respondents) selecting “Very Important” (See Table 19).

Table 19. Actions taken to support beliefs and expectations

	Do Not Use		Not Important		Somewhat Important		Important		Very Important	
	n	%	n	%	n	%	n	%	n	%
Model shared beliefs and values	0	0.0	0	0.0	0	0.0	6	46.2	7	53.8
Communicate clear performance expectations	0	0.0	0	0.0	0	0.0	4	30.8	9	69.2
Establish high expectations for all students	0	0.0	0	0.0	0	0.0	2	15.4	11	84.6
Maintain clear focus on improving instruction	0	0.0	0	0.0	0	0.0	2	15.4	11	84.6
Challenge staff to re-examine some of their achievement related assumptions	0	0.0	0	0.0	0	0.0	5	38.5	8	61.5
Establish school characterized by high expectations and opportunity for all students	0	0.0	0	0.0	0	0.0	3	23.1	10	76.9
Establish programs to increase minority student participation in AP and Honors courses	0	0.0	1	7.7	1	7.7	7	53.8	4	30.8

Additionally, 100% (13 respondents) of the respondents felt that all of the potential actions listed under Beliefs and Expectations were either “Important” or “Very Important” with the exception of, “Establish programs to increase minority student participation in AP and Honors courses”; 7.7% (one respondent) of the respondents did not feel this action was important.

Of the 14 superintendents that responded to the survey, 86.1% (12 respondents) of the respondents completed the item relating to actions taken to support pursuing productive relationships. For this item, respondents were given a list of potential actions related to pursuing productive relationships and asked to identify the level of importance ranging from not important to very important for each action that included:

- Include principals and teachers in goal setting
- Include key community leadership in goal setting process

- Include parents in goal setting process
- Create positive interactions with parents
- Create positive interactions with community members
- Create positive interactions with businesses
- Partner with minority owned businesses
- Establish mentoring partnerships

Of the 12 superintendents that responded, 66.7% (eight respondents) of the respondents identified “including principals and teacher leaders in goal setting” as the most important action taken to support pursuing productive relationships and 100% (12 respondents) of the respondents felt that creating positive relationships with parents and community members and, establishing mentoring partnerships were “Important” or “Very Important” action to take (See table 20).

Table 20. Pursuing productive relationships

	Do Not Use		Not Important		Somewhat Important		Important		Very Important	
	n	%	n	%	n	%	n	%	n	%
Include principals and teacher leaders in goal setting	0	0.0	0	0.0	0	0.0	4	33.3	8	66.7
Include key community leadership in goal setting	0	0.0	0	0.0	5	41.7	5	41.7	2	16.7
Include parents in goal setting process	0	0.0	0	0.0	3	25.0	7	58.3	2	16.7
Create positive interactions with parents	0	0.0	0	0.0	0	0.0	6	50.0	6	50.0
Create positive interactions with community members	0	0.0	0	0.0	0	0.0	6	50.0	6	50.0
Create positive interactions with businesses	0	0.0	0	0.0	4	33.3	4	33.3	4	33.3
Partner with minority owned businesses	1	8.3	1	8.3	3	25.0	3	25.0	4	33.3
Establish mentoring partnerships	0	0.0	0	0.0	0	0.0	6	50.0	6	50.0

Additionally, of the 12 respondents that completed this item, 8.3% (one respondent) of the respondents did not partner with minority owned business and 8.3% (one respondent) of the respondents did not feel this action was important.

Of the 14 superintendents that responded to the survey, 86.1% (12 respondents) of the respondents completed the item relating to actions taken to support professional development. For this item, respondents were given a list of potential actions related to supporting professional development and asked to identify the level of importance ranging from not important to very important for each action that included:

- Strengthen the knowledge and skills of principals as instructional leaders
- Develop the instructional leadership capacity of teachers
- Provide central office training for the use of data
- Provide principal training for the use of data
- Provide teacher training for the use of data

Of the 12 superintendents that responded, 83.3% (10 respondents) of the respondents identified “Provide teacher training for the use of data” as the most important action taken to support professional development and 75% (nine respondents) of the respondents felt that developing the instructional leadership capacity of teachers and, providing principal training for the use of data second most important action to take (See table 21).

Table 21. Actions to support professional development

	Do Not Use		Not Important		Somewhat Important		Important		Very Important	
	n	%	n	%	n	%	n	%	n	%
Strengthen the knowledge and skills of principals as instructional leaders	0	0.0	0	0.0	0	0.0	4	33.3	8	66.7
Develop the instructional leadership capacity of teachers	0	0.0	0	0.0	0	0.0	3	25.0	9	75.0
Provide central office training for the use of data	0	0.0	0	0.0	0	0.0	7	58.3	5	41.7
Provide principal training for the use of data	0	0.0	0	0.0	0	0.0	3	25.0	9	75.0
Provide teacher training for the use of data	0	0.0	0	0.0	0	0.0	2	16.7	10	83.3

Additionally, of the 12 respondents that completed this item, 100% (12 respondents) of the respondents felt that every potential action listed under professional development that included:

- Strengthen the knowledge and skills of principals as instructional leaders
- Develop the instructional leadership capacity of teachers
- Provide central office training for the use of data
- Provide principal training for the use of data
- Provide teacher training for the use of data

was “Important” or “Very Important”.

Of the 14 superintendents that responded to the survey, 86.1% (12 respondents) of the respondents completed the item relating to actions taken to support professional development for racial equity. For this item, respondents were given a list of potential actions related to professional development for racial equity and asked to identify the level of importance ranging from not important to very important for each action that included:

- Central office professional development for culturally relevant instruction
- Principal professional development for culturally relevant instruction
- Teacher professional development for culturally relevant instruction
- Central office professional development for implicit bias
- Principal professional development for implicit bias
- Teacher professional development for implicit bias
- Central office professional development for racial equity
- Principal professional development for racial equity
- Teacher professional development for racial equity

Of the 12 superintendents that responded, 50.0% (six respondents) of the respondents identified “Principal and teacher professional development for racial equity” as the most important action taken to support professional development for racial equity. Furthermore, 41.7% (five respondents) of the respondents felt that “Principal and teacher professional development for culturally relevant instruction”, “Principal and teacher professional development for implicit bias” and “Central office training for professional development for racial equity” were the second most important action to take (See table 22).

Table 22. Actions to support professional development for racial equity

	Do Not Use		Not Important		Somewhat Important		Important		Very Important	
	n	%	n	%	n	%	n	%	n	%
Central office professional development for culturally relevant instruction	1	8.3	0	0.0	0	0.0	8	66.7	3	25.0
Principal professional development for culturally relevant instruction	1	8.3	0	0.0	0	0.0	6	50.0	5	41.7
Teacher professional development for culturally relevant instruction	1	8.3	0	0.0	0	0.0	6	50.0	5	41.7
Central office professional development for implicit bias	0	0.0	0	0.0	1	8.3	7	58.3	4	33.3
Principal professional development for implicit bias	0	0.0	0	0.0	2	16.7	5	41.7	5	41.7
Teacher professional development for implicit bias	0	0.0	0	0.0	2	16.7	5	41.7	5	41.7
Central office professional development for racial equity	0	0.0	0	0.0	2	16.7	5	41.7	5	41.7
Principal professional development for racial equity	0	0.0	0	0.0	2	16.7	4	33.3	6	50.0
Teacher professional development for racial equity	0	0.0	0	0.0	2	16.7	4	33.3	6	50.0

Additionally, 8.3% (one respondent) of the respondents indicated that “Professional development for culturally relevant instruction for central office, principals or teachers” was not provided, and 16.7% (two respondents) felt that implicit bias and professional development for racial equity for central office, principals and teachers was a “Somewhat Important” action to take for Professional Development for Racial Equity.

Of the 14 superintendents that responded to the survey, 86.1% (12 respondents) of the respondents completed the item relating to actions taken to support accountability. For this item,

respondents were given a list of potential actions related to accountability and asked to identify the level of importance ranging from not important to very important for each action that included:

- Develop an infrastructure for use of data to inform practice and monitor student performance
- Monitor the consistency between district and school goals
- Monitor the progress on district's non-negotiable goals
- Use in-school visits and walkthroughs to assure alignment with district goals
- Establish a process to support and/or remove central office staff that do not comply with district vision to support minority student success
- Establish a process to support and/or remove principal(s) that do not comply with district vision to support minority student success
- Establish a process to support and/or remove teacher(s) that do not comply with district vision to support minority student success

Of the 12 superintendents that responded, 75.0% (nine respondents) of the respondents identified “Developing an infrastructure for use of data to inform practice and monitor student performance” and “Monitoring consistency between district and school goals” as the most important action taken to support Accountability. Furthermore, 66.7% (eight respondents) felt that monitoring progress of district's non-negotiable goals as the second most important action to take (See table 23).

Table 23. Actions that support accountability

	Do Not Use		Not Important		Somewhat Important		Important		Very Important	
	n	%	n	%	n	%	n	%	n	%
Develop an infrastructure for use of data to inform practice and monitor student performance	0	0.0	0	0.0	0	0.0	3	25.0	9	75.0
Monitor the consistency between district and school goals	0	0.0	0	0.0	1	8.3	2	16.7	9	75.0
Monitor the progress on district's non-negotiable goals	0	0.0	0	0.0	2	16.7	2	16.7	8	66.7
Use in-school visits and walkthroughs to assure alignment with district goals	0	0.0	0	0.0	2	16.7	5	41.7	5	41.7
Establish a process to support and/or remove central office staff that do not comply with district vision to support minority student success	0	0.0	0	0.0	4	33.3	6	50.0	2	16.7
Establish a process to support and/or remove principals that do not comply with district vision to support minority student success	0	0.0	0	0.0	3	25.0	4	33.3	5	41.7
Establish a process to support and/or remove teachers that do not comply with district vision to support minority student success	0	0.0	0	0.0	1	9.1	4	36.4	6	54.5

Additionally, 100% (12 respondents) of the respondents felt that all of the potential actions listed in this item were of some level of importance ranging from “Somewhat Important” to “Very Important”. “Establishing a process to support and/or remove central office staff that did not comply with the district vision to support minority student success” was identified as the least important of actions taken for accountability with 33.3% (four respondents) of the respondents selecting “Somewhat Important”

4.5.2 Successes, challenges and lessons learned from initiatives and practices implemented to increase minority student success

The second Research Question, “How do school superintendents perceive demographic and academic changes and needs for minority populations in their districts?” and the third Research Question, “What actions have regional districts taken to address academic success of minority students in their districts? What have been notable successes and lessons learned?” also included open-ended items that used prompts to obtain fuller description and clarification of specific superintendent perspectives on which initiatives and/or practices were most successful, why they were successful and challenges they experienced with implementation and lessons learned along the way.

In relation to the second and third research questions, there were three open-ended question. The first open-ended question included a pre-populated list of initiatives and practices that the respondent answered, “Very Important” and was then asked to identify the top two initiatives and/or practices to assure success of minority students being college, career and life ready, and ready to enter the Pittsburgh area workforce development region.

Of the 14 superintendents that responded to the survey, 57.1% (eight respondents) of the respondents completed the item relating to identifying the top two initiatives and practices to assure minority students are college, career and life ready, and ready to enter the Pittsburgh area workforce development region. The respondents’ identified a total of 15 initiatives and practices that were coded for emerging themes of which five emerged that include: Utilizing data; high expectations for all, maintain focus, professional development and a shared belief system.

Of the five emergent themes, 50.0% (four respondents) felt that having “High expectations for all” and “Professional development” were the top initiatives or practices to assure minority

students are college, career and life ready, and ready to enter the Pittsburgh area workforce development region. For “High expectations for all”, comments included:

- Establish high expectations and maintain focus...
- Establishing high expectations for all and maintaining clear focus on instruction...
- Communicate clear performance expectations...
- We have removed barriers to high level courses. All high school students now take College in High School course...

And, comments for “Professional development” included:

- Maintaining a clear focus on improving instructions...
- Teachers professional development for racial equity...
- We are also doing implicit bias training in August for all faculty and administration...
- Strengthen the knowledge and skill of principals as instructional leaders...

Additionally, 38.0% (3 respondents) of the respondents felt that the emergent theme, “Utilizing data”, was the second most important initiative and practice to assure minority students are college, career and life ready, and ready to enter the Pittsburgh area workforce development region. Comments for “Utilizing data” included:

- Everyone must be aware of data. It does not come alive at the district office, it must occur at the building level...
- Currently review data with principal...minimal success...
- We have set meeting times to talk about these items and to create, monitor and adapt plans...

The second open-ended question asked respondents to consider the two initiatives and practices that were identified in the previous question to assure success of minority students being college, career and life ready, and ready to enter the Pittsburgh area workforce development region and were further asked to describe the challenges that the respondents experienced while implementing the initiative and/or practice.

Of the 14 superintendents that responded to the survey, 57.1% (eight respondents) of the respondents completed the second open-ended item, describing the challenges of implementing the top two initiatives and practices. The respondents' identified a total of 13 challenges were coded for emerging themes of which two emerged that include: Faculty staff buy in and using data. Of the two emergent themes, 63.0% (five respondents) of the respondents identified that "Faculty and staff buy in" was the top challenge to assure success of minority students being college, career and life ready, and ready to enter the Pittsburgh area workforce development region, comments included:

- Teachers balked initially and felt certain students wouldn't perform or would disrupt class...
- There was a long-standing belief that any testing is bad, and it will eventually go away...
- Teacher belief about student ability (this did not only apply to minority students) ...
- There is a belief that some students just can't handle more rigorous coursework...
- Getting principals away from managing the building to taking the lead on instructional initiatives that affect all students...

Additionally, 38.0% (3 respondents) of the respondents felt that the "Availability of resources" was the second biggest challenge to implementing initiatives and practices to assure

minority students are college, career and life ready, and ready to enter the Pittsburgh area workforce development region. Comments for “Availability of resources” included:

- Limited financial resources...
- Appropriating adequate time to ensure quality researched-based programs...
- Implementation personnel...

Other miscellaneous challenges that the respondents identified included “Using data effectively”, “Parental support” and “Access to rigorous instructional material”.

The third open-ended question asked respondents to consider the two initiatives and practices that were identified and challenges experienced in the previous two questions to assure success of minority students being college, career and life ready, and ready to enter the Pittsburgh area workforce development region and were further asked to describe the lessons learned that the respondents experienced while implementing the initiative and/or practice.

Of the 14 superintendents that responded to the survey, 64.3% (nine respondents) of the respondents completed the item relating to describing lessons learned of implementing the top two initiatives and practices. The respondents’ identified a total of six primary lessons learned that were coded for emerging themes of which two themes emerged that include:

- Utilizing professional development
- Teachers are most important factor
- Relationships
- Discrimination free environments
- Utilizing data
- Invest in resources

Of the six emergent themes, three lessons were identified by the respondents as the most critical. 33.3% (three respondents) of the respondents identified “Teachers are the most important factor” and, 22.2% (two respondents) of the respondents identified that “Relationships” and “Utilizing data” were additional lessons learned to assure success of minority students being college, career and life ready, and ready to enter the Pittsburgh area workforce development region. Comments for “Teachers are the most important factor” included:

- The number one factor in student achievement is the teacher...
- When teachers hesitate to conform, administrators have to dig in and drive change because all kids should have access to meaningful and rigorous instruction that will prepare them for life after high school...

Comments for “Relationships” included:

- More importantly, the positive relationships that that teachers establish with their students...
- I continue to hope for mentorship and family to support the student in the vision that education is a good thing and we all need to be educated...

Other miscellaneous lessons learned that the respondents identified included utilizing data effectively, establish and maintain a discrimination free environment, investing in resources and utilizing professional development.

4.5.3 Guided interviews

In order to obtain additional contextual information about district practices related to assuring that minority students are college, career and life ready and, and ready to enter the

Pittsburgh area workforce development region, a guided interview was conducted with four participants to examine their motivations, thinking processes and implementation complexities involved in addressing minority student needs. The actual interview was a guided conversation to gain an understanding of the context of actions taken by superintendents to assure minority student success.

The anticipated response rate of survey was 40% (50 completed surveys) of the possible 125 superintendents. The actual response rate was 11.2%, 14 respondents. Given that the response rate was less than 40%, interviews were conducted with all respondents that agreed to be interviewed with 29.7% (four participants) of the respondents being interviewed.

The four participants represented two out of the eight intermediate units with three participants from Intermediate Unit 3 and 1 participant from Intermediate Unit 7. Two of the participants were female and two were male with all four participants being White. The participants varied in total years' experience as a superintendent with three participants having five years or less in the role and one superintendent having more than five years. The majority of the participants (three participants), have served as superintendent in one school district.

Each guided interview lasted approximately 35 minutes and consisted of the following five questions:

1. Please describe the current student demographics including race and free/reduced lunch percentage in your district. Has it changed over the past decade? If so, please explain.
2. In the survey, you had listed several initiatives and practices that had a positive impact in your district to assure the successful preparation of minority students to be college, career and life ready, and prepared to enter the southwest Pennsylvania workforce. What accounted for the initiative/practice success?

3. Please discuss your motivations and thinking processes involved in addressing minority student needs.
4. Within the context of your district's culture, what have been the implementation complexities involved in addressing minority student needs?
5. Considering all that you have attempted to do in your district to have minority students be college, career and life ready, what are your most important lessons learned? Please elaborate.

Of the four superintendents that participated in the interview, 100.0% (four respondents) of the respondents answered the question, "Please describe the current student demographics including race and free/reduced lunch percentage in your district. Has it changed over the past decade? If so, please explain." In the school districts represented by the four participants, 50.0% (two school districts) of the districts' student enrollment was comprised mostly of majority students and 50.0% (two school districts) with mostly minority students. Additionally, 50.0% (two school districts) of the districts' had a free/reduced lunch population of less than 55% and 50.0% (two school districts) qualified for the Community Eligibility Provision. The Community Eligibility Provision (CEP) is a Federally supported, non-pricing meal service option for schools and school districts in low-income areas and allows the nation's highest poverty schools and districts to serve breakfast and lunch at no cost to all enrolled students in school or district using a formula based on the percentage of students categorically eligible for free meals based on their participation in other specific means-tested programs, such as the Supplemental Nutrition Assistance Program (<https://www.fns.usda.gov/school-meals/community-eligibility-provision>).

All four respondents indicated that their student demographics had changed over the past decade and discussed a total of 12 reasons for the change that were coded for emerging themes of

which two emerged that include: White flight with influx of minority students and the impact of charter schools. Of the two emergent themes, 100.0% (four respondents) of the respondents identified that “White flight, with an influx of minority students” as the top reason for shifting student demographics.

Of the four superintendents that participated in the interview, 100.0% (four respondents) of the respondents answered the question, “In the survey, you had listed several initiatives and practices that had a positive impact in your district to assure the successful preparation of minority students to be college, career and life ready, prepared to enter the southwest Pennsylvania workforce. What accounted for the initiative/practice success?” The participants shared 16 explanations that accounted for the initiative/practice success that was coded for emerging themes of which six emerged that included:

- High expectations for all
- Creating a sense of urgency
- Empower principal/teachers to lead
- Teacher buy in
- Effectively use data
- Leverage relationships

Of the six emergent themes, 100.0% (four respondents) of the respondents identified “High expectations for all” and “Leverage relationships” as the top reasons that accounted for initiative/practice success.

Of the four superintendents that participated in the interview, 100.0% (four respondents) of the respondents answered the question, “Please discuss your motivations and thinking processes involved in addressing minority student needs.” The participants shared eight explanations that

described motivations and thinking processes involved in addressing minority student success that was coded for emerging themes of which two themes emerged: Belief that all students can be successful and minority students are disadvantaged. 100.0% (four respondents) of the respondents felt that “Belief that all students can be successful” and “Minority students are disadvantaged” were the primary motivations in addressing minority student success.

Of the four superintendents that participated in the interview, 100.0% (four respondents) of the respondents answered the question, “Within the context of your district’s culture, what have been the implementation complexities involved in addressing minority student needs?” The participants shared 17 explanations that described implementation complexities involved in addressing minority student needs that was coded for emerging themes of which five themes emerged that included:

- Low teacher expectations
- Funding and sustainability
- Breaking down racial barriers
- Building positive relationships
- Board members having negative perception of students that do not look like them

Of the five emergent themes, 100.0% (four respondents) of the respondents identified that “Low teacher expectations” and “Breaking down racial barriers” were complexities that had to be navigated to address minority student needs.

Of the four superintendents that participated in the interview, 100.0% (four respondents) of the respondents answered the question, “Considering all that you have attempted to do in your district to have minority students be college, career and life ready, what are your most important lessons learned? Please elaborate.”. The participants shared 21 explanations that described

lessons learned involved in addressing minority student needs that was coded for emerging themes of which seven themes emerged that included:

- Be aware of the school board
- Teachers must be able to lead
- Keep focused and persist
- Implicit bias is a given
- Takes time to see improvement
- Know when to pull back and when to proceed
- Trust

Of the seven emergent themes, 100.0% (four respondents) of the respondents identified that “Be aware of the school board” and “trust” were important lessons learned when working to assure that minority students are college, career and life ready, and ready to enter the Pittsburgh area workforce development region.

4.5.4 Conclusions

The third research question asked, “What actions have regional districts taken to address academic success for minority students in their districts? What have been notable successes and lessons learned?” For the first part of RQ 3, the respondents were asked six questions, each with a focus area that was accompanied with specific initiatives or practices that included: Actions to support minority student success; beliefs and expectations; productive relationships; professional development; professional development for racial equity and; accountability.

Of the 14 superintendents that responded to the survey, 93.6% (13 superintendents) of the respondents completed the items related to the first part of research question 3. For the item related to potential initiatives and practices implemented to support minority students to be college, career and life ready and ready to enter the Pittsburgh area workforce development region, the majority of respondents felt that “Developing a curriculum and instruction plan” to meet the needs of minority students and “Including principals and teachers in the selection of curriculum” were the most important initiatives and practices related to minority student success with 53.8% (7 respondents) of respondents selecting “Very Important”. Actions taken to support district beliefs and expectations was 84.6% (11 respondents) of the respondents felt that “Establishing high expectations for all students” and “Maintaining a clear focus on improved instruction” were identified as the most important.

The remaining items related to the first part of research question 3 was completed by 86.1% (12 respondents) of the respondents. The item relating to actions taken to support pursuing productive relationships, 66.7% (eight respondents) of the respondents identified “including principals and teacher leaders in goal setting” as the most important action taken to support pursuing productive relationships. For the item relating to actions taken to support professional development, 83.3% (10 respondents) of the respondents identified “Provide teacher training for the use of data” as the most important action taken to support professional development. For the item related to professional development for racial equity, 50.0% (six respondents) of the respondents identified “Principal and teacher professional development for racial equity” as the most important action taken to support professional development for racial equity.

Lastly, for the item related to actions that support Accountability, 75.0% (nine respondents) of the respondents identified “Developing an infrastructure for use of data to inform practice and

monitor student performance” and “Monitoring consistency between district and school goals” as the most important action taken to support Accountability.

In relation to the second and third research questions, there were three open-ended questions that used prompts to obtain fuller description and clarification of specific superintendent perspectives on which initiatives and/or practices were most successful, why they were successful and challenges they experienced with implementation and lessons learned along the way. The responses were coded for emerging themes.

Of the 14 superintendents that responded to the survey, 57.1% (eight respondents) of the respondents completed the item relating to identifying the top two initiatives and practices to assure minority student success where 50.0% (four respondents) of the respondents, felt that having “High expectations for all” and “Professional development” were the top initiatives or practices to assure minority students are college, career and life ready, and ready to enter the Pittsburgh area workforce development region.

The second open-ended item, describing the challenges of implementing the top two initiatives and practices, 63.0% (five respondents) of the respondents identified that “Faculty and staff buy in” was the top challenge to assure success of minority students being college, career and life ready, and ready to enter the Pittsburgh area workforce development region.

The third open-ended question asked respondents to consider the two initiatives and practices that were identified, and challenges experienced in the previous two questions and to describe the lessons learned that the respondents experienced while implementing the initiative and/or practice. Of the 14 superintendents that responded to the survey, 64.3% (nine respondents) of the respondents completed the item relating to describing lessons learned of implementing the top two initiatives and practices. 33.3% (three respondents) of the respondents identified

“Teachers are the most important factor” as lessons learned to assure success of minority students being college, career and life ready, and ready to enter the Pittsburgh area workforce development region.

To obtain additional contextual information about district practices related to minority student success in the Pittsburgh area workforce development region, a guided interview was conducted with four participants to examine their motivations, thinking processes and implementation complexities involved in addressing minority student needs. Two of the participants were female and two were male with all four participants being White. All four respondents indicated that their student demographics had changed over the past decade with “White flight, with an influx of minority students” as the top reason for shifting student demographics.

The second interview question asked, “What accounted for the initiative/practice success?”, 100.0% (four respondents) of the respondents identified that “High expectations for all” and “Leverage relationships” were the top reasons that accounted for initiative/practice success. For the third interview question, participants were asked to discuss “...motivations and thinking processes involved in addressing minority student needs”. 100.0% (four respondents) of the respondents felt that “Belief that all students can be successful” and “Minority students are disadvantaged” were their primary motivations in addressing minority student success.

In the fourth and fifth questions of the interview, participants were asked to discuss implementation complexities and lessons learned, respectively, while addressing minority student needs. 100.0% (four respondents) of the respondents identified that “Low teacher expectations” and “Breaking down racial barriers” were complexities that had to be navigated and identified that “Be aware of the school board” and “trust” were important lessons learned when working to

assure that minority students are college, career and life ready, and ready to enter the Pittsburgh area workforce development region.

5.0 Discussion

This study was situated within the Pittsburgh area workforce development region which consists of 10 counties, seven intermediate units and 125 K-12 public school districts (<https://www.alleghenyconference.org>). In geographic terms, this region is unique. Location identifiers include city, suburban, town and rural areas, and in some cases, only several miles of separation exist between locales. Despite the close proximity of locales, residents living within the different neighborhoods tend to be isolated from one another. City and rural areas in the region have a higher percentage of students qualifying for free or reduced lunch, and suburban, town and rural areas have a higher percentage of majority student enrollment (Kids Count Data Center, 2019).

The results from the regional demographic data analysis and the exploratory analysis of grouping characteristics indicate that overall student enrollment declined while minority student enrollment and students that qualify for free or reduced lunch both increased. This was true across the workforce development region, regardless of the intermediate unit in which the school district was located, from 2009 – 2010 through 2016 – 2017. These results are aligned with prior research on enrollment trends across the United States over the past decade (NCES, 2018). The loss of student enrollment was a significant concern that was discussed during the guided interviews. All the participants cited family mobility, an aging population and charter school competition as primary reasons for enrollment decline.

Also aligned with research (Orfield and Frankenberg 2014; Bryant et al. 2017), majority student enrollment decreased as minority students have increasingly moved into the region. Minority student enrollment increases were experienced across all locations including city, rural,

suburban and town designations (NCES, 2018). The majority of survey respondents did not identify a main reason for the increase of minority student enrollment across the region and did not believe the increase in migrant or refugee families, gentrification of urban areas or White flight to be significant reasons the increase in minority student enrollment. Important to note however, and not aligned with survey responses, the majority of participants who were interviewed stated that the increase of minority student enrollment in their districts was due to affordable housing and the location of public housing development plans. This supports the idea that gentrification of urban areas was having an impact on the increase of minority student enrollment.

Additionally, as overall enrollment decreased and minority enrollment increased across the region, the total number of students that qualified for free or reduced lunch increased from 2009 – 2010 through 2016 – 2017. It was surprising that the respondents that completed the survey and the participants of the guided interview did not identify a main reason for the increase of students qualifying for free or reduced lunch across the region and did not believe the increase in migrant or refugee families, gentrification of urban areas or White flight to be significant reasons the increase. It may be possible that the increase in the number of students that qualified for the free or reduced lunch program may be the result of the increase of minority families moving into the region as well as Pennsylvania's Department of Education's Community Eligibility Provision (CEP) which qualifies and provides schools and/or districts with 100.0% of the students qualifying for free breakfast and lunch (<https://www.fns.usda.gov/school-meals/community-eligibility-provision>). Further exploration of the increase of minority students and the increase of free or reduced lunch is needed to determine the correlation.

Using the Pennsylvania State System of Assessment (PSSA) as an indicator of success for students to be college, career and life ready, and ready to enter the Pittsburgh area workforce

development region, from 2009 – 2010 through 2016 – 2017 both majority and minority students experienced decreases in overall proficiency in math and reading PSSA scores. In 2009 – 2010, there was a 28.1% gap in math and 26.1% gap in reading between minority and majority students (NCES, 2018). In 2016 – 2017, the gap slightly increased, 1.0%, in math and increased by approximately 4.0% in reading (NCES, 2018). Minority students experienced a bigger decrease in both math and reading when compared to majority students.

Using the PSSA math and reading scores from 2009 – 2010 through 2016 – 2017 (NCES, 2018) as an indicator of success for minority students, as of the 2016 – 2017 school year, minority students are not as prepared to be college, career and life ready, and ready to enter the workforce development region as they were in 2009 – 2010. One reason for the decline in PSSA scores for both majority and minority students may be the PSSA was revised in 2014 – 2015 to directly align with the adopted Pennsylvania Core Curriculum Standards, making it a much more rigorous assessment. As most school districts in the region were experiencing increases for both majority and minority students in PSSA scores prior to 2014 – 2015, most experienced decreases with the newly revised assessment. Based on the math and reading PSSA scores over the past decade, minority students in the Pittsburgh area workforce development region, experienced a greater decline in reading and math proficiency when compared to majority students.

It is important to note that in the 2016 – 2017 school year that K – 12 public school superintendents in the Pittsburgh area workforce development region who were members of The University of Pittsburgh’s Western Pennsylvania Forum for School Superintendents (Forum), and/or the Tri-State Area School Study Council (Tri-State), outperformed school districts in both PSSA math and reading proficiency for majority, African-American, Hispanic and Multi-Racial students that were not members of Forum or Tri-State. Both Forum and Tri-State provided

professional development opportunities for its members that focused on current issues facing public school superintendents. Superintendents that participated in professional development provided by Forum and/or Tri-State positioned them to build stronger relationships aligned with professional development for principals and teachers that fostered a useful link between the development of social trust within a district or school and was able to build collective capacity, leading to improvements in student achievement (Leithwood & Mascall, 2008). It may be one of the reasons school districts whose superintendents are members of Forum and/or Tri-State outperform non-member school districts in the Pittsburgh area workforce development region. However, it may also be true that the correlation of higher achieving K – 12 public school districts and membership in Forum or Tri-State compared to nonmember K – 12 public school districts, could be that higher achieving superintendents are more attracted to organizations like Forum and Tri-State.

In addition, the findings of the study indicated that superintendents' perceptions in the Pittsburgh area workforce development region are aligned with research on the impact of superintendent leadership practices that include providing professional development (Leithwood & Mascall, 2008), collaborative goal setting, non-negotiable goals for achievement and instruction, as well as monitoring achievement and instruction goals (Marzano & Waters, 2006). Superintendents in the region felt that communicating goals, using data and progress monitoring of goals, having high expectations for students, faculty and staff, along with providing professional development for both principals and teachers on implicit bias, racial equity and the use of data were the most likely initiatives/practices to implement to assure minority student success. In such instances, superintendents are positioning themselves to be transformational leaders to foster and

grow capacity development in principals and teachers leading to higher levels of personal commitment (Jantzi & Leithwood, 2000) to assure minority student success.

During the guided interviews, the participants provided additional context to survey questions that both intersected with the survey results as well as added new information not captured in the survey. The participants discussed the importance of staff and faculty buy-in, with teachers being the most important group connected to assuring minority student success. Teacher and staff buy-in was also reported in the survey and discussed during the interviews as one of the biggest challenges that superintendents had to overcome. The primary pathway towards teacher and staff buy-in is to develop and have trust with the superintendent as well as within the principal, teacher and staff ranks. Leveraging a bottom up approach of teachers and principals who hold the key to classroom and school-level innovations will best position all students successfully for the twenty first century skills and knowledge (Sofa, 2008). Fostering and leveraging teacher and staff buy-in may lead to developing more productive and authentic relationships and higher levels of trust within the organization. In such instances, transformation is possible (Leithwood, 1992) leading to increased minority student success.

Furthermore, the findings of the study indicate that superintendents in the region believe their most important lessons learned were that teachers are the most important factor to assure minority student success. The participants in the study conveyed that nothing can move forward without teacher buy-in. It must be pursued and fostered to overcome deficit thinking, deeply embedded in educational thought and practice and pervades schools that serve children from low-income homes and children of color (Skrla & Scheurich, 2001). Teacher buy-in can be enhanced through empowering teachers to be leaders of professional development and thought partners to

principals and central office administrators. Superintendents in the region conveyed that they would not be able to implement initiatives/practices to assure minority student success without it. Another lesson learned while implementing initiatives/practices to assure minority student success was that principal, teacher, student and staff buy-in was only part of the formula needed for successful implementation. The other portion of the formula included the Board of Directors. The participants of the guided interview conveyed that the superintendent must “know” the board members; when to push, when to pull back, and when to persist. For Superintendents to successfully implement initiatives/practices, they must inspire and teach board members to understand the impact of implicit bias and the importance of collaborative goal setting while listening to all stakeholders (Padilla, 2019). Superintendents are key negotiators and implementers of policy and serve as crucial linkages between policy and action (Hallinger & Heck, 1998; Sherman 2008) and will be more likely to successfully implement initiatives and practices when they “know” their board members well and partner with them.

Although, there national enrollment trends are showing shifting student demographics over the past decade in city, suburban, town and rural locales with increased minority student enrollment and decreased majority student enrollment (Orfield and Frankenberg 2014; Bryant et al. 2017), superintendents that participated in the study seemed less aware/concerned with demographic shifts in enrollment. I wonder if this is because the demographic shifts in minority student enrollment patterns have been steady at several percentage points of change per year and it is not a priority to consider yet? Or, it may be that survey and interview questions were not direct or specific enough to elicit additional superintendent perceptions on demographic enrollment shifts in the region. It was a surprising finding from the survey that the majority of the

respondents did not correlate the increase of minority student enrollment with the increase of students qualifying for free or reduced lunch.

It is important to note that there was a finding that particularly stood out in the survey item that asked respondents to identify the level of significance ranging from very insignificant to very significant relating to factors influencing minority student success. The majority of the respondents answered the item in line with current research for factors influencing minority student success that include socio-economic status (Duncan, Magnuson, 2005), discrimination and racism (Seaton, 2010), environmental reasons (Nisbett, 2011), and access to the same opportunities that majority students experience (Milner, 2012). However, opposite to the majority of the respondents, 7.7% (one respondent) indicated that a factor contributing to minority student success is genetically predetermined (Herrnstein, Murray, 1994) as “Very Significant”. A considerable amount of literature has been generated in the field to disprove the premise that intelligence is genetically predetermined. This one finding in particular, is very concerning as it represents a claim that leads to minority students experiencing lower expectations, stereotype threat and discrimination (Aronson, Steele, 1995).

Given that response rates for electronic survey requests is low, 10% - 25% (Roach & Sauermann, 2012), K – 12 public school superintendents in the region reinforce what the literature states and their response rate fell within the range identified by Roach and Sauermann (2012). Despite sending three separate email invitations, as well as introductory emails sent out to superintendents that participate in the Western Pennsylvania Forum for School Superintendents and the Tri-State Area Study Council, the response rate was 11.2%. As such, the findings of the study may be limited and more generalized. To elicit a higher survey response rate and be able to obtain a higher percentage of superintendent perceptions on initiatives/practices to assure minority

student success, other strategies should be considered. This may include providing a monetary incentive to complete the survey and/or attending professional development sessions or meetings attended by superintendents to distribute hard copies of the survey or weblink connections.

5.1 Limitations and strengths

While the findings from this study are informative and important to the field, it is important to mention that the sample was limited to a potential of 125 K – 12 public school districts in the Pittsburgh area workforce development region, not including charter, private or parochial schools. As a result, these findings cannot be generalized across all types of schools that work towards minority students being college, career and life ready. Additionally, the actual sample size of superintendents participating in the study fell well below the anticipated participation rate. This severely limits particular aspects of the study, especially related to superintendents' perceptions. However, while participation was limited, the detail of responses, especially to interviews, provided a wealth of interesting data to consider. As such, the study has strength.

The regional demographic data analysis and the exploratory analysis of grouping characteristics can be viewed as a strength as it provided a comprehensive demographic and achievement description of total enrolled students over the past decade in 125 K – 12 public school districts in the Pittsburgh area workforce development region.

5.2 Recommendations and implications for future practice

Over the past decade, minority students in the Pittsburgh area workforce development region have performed significantly lower on PSSA math and reading assessments. In the 2016 – 2017 school year, the majority students outperformed minority students by 29.0% in math and 31.0% in reading, an indication that fewer minority students will be college, career and life ready, and ready to enter the Pittsburgh workforce development region upon graduation. However, for K – 12 public school superintendents in the region to assure minority student success, there are several initiatives and/or practices that if implemented with fidelity, will increase the percentage of minority student success.

To assure minority student success in K – 12 public schools in the Pittsburgh area workforce development region, superintendents reported that minority students are more likely to succeed when superintendents, principals and teachers believe that all students have the ability to achieve at high levels and expect minority students to achieve at high levels. Minority students are more likely to be successful when they are in schools and classrooms with educators that believe in them.

Positive beliefs for learning and high expectations for minority student success should be reinforced through collaborative goal setting with the central office and school, with principals and teachers. Once specific goals for minority student success are established at both the district and school level, they are regularly progress monitored to determine whether or not the district and/or school is on track to meet the agreed upon goals. If they are not on track, why, and what needs to be done to course correct?

Ongoing professional development opportunities should be provided to principals and teachers to help them evolve as practitioners to better meet the needs of minority students. For

minority students in the region, professional development topics focusing on racial equity, implicit bias and the use of data are likely to have a significant impact on minority student achievement.

Additionally, it is essential that superintendents in the region are also afforded professional development opportunities to assure minority student success. The findings revealed that K – 12 public school superintendents that participated in either The University of Pittsburgh’s Western Pennsylvania Forum for School Superintendents (Forum) or the Tri-State Area School Study Council (Tri-State), outperformed school districts in both PSSA math and reading proficiency for majority, African-American, Hispanic and Multi-Racial students that were not members of Forum or Tri-State. By participating in Forum or Tri-State professional development, superintendents in the region are able to network and focus on current issues that address minority student success. Implications for practice to assure K – 12 public school minority students in the region are college, career and life ready, and ready to enter the regions’ workforce include:

1. K – 12 public school districts in the Pittsburgh area workforce development should identify reasons for declining, overall student enrollment and explore strategies to slow or reverse the pattern.
2. Minority enrollment over the past decade has increased in the region. Minority students should be in classrooms and schools with teachers and principals that believe that they can achieve at high levels and have expectations and goals in place to assure it.
3. Teachers are one of the most critical elements connected to minority student success. Empower teachers to collaborate with each other, school-based administration and central office administration. Empower teachers to lead professional development and set goals for students and themselves.

4. Superintendents that participate in professional development opportunities focusing on local issues and networking with other superintendents facing similar challenges are more likely to have higher achieving majority and minority students.

5.3 Implications for future study

Because this was an exploratory study related to superintendents' perceptions of changing learner-profile demographics and academic achievement levels, with specific emphasis on assuring minority student success, the process may be replicated in K – 12 schools in the Pittsburgh area workforce development region that are classified as charter, private or parochial. The process might be replicated in these types of schools to assess school leaders that include superintendents, principals and heads of schools' perceptions of changing learner-profile demographics and academic achievement levels, with specific emphasis on assuring minority student success. Upon completion and review of the additional perspectives, the researcher could provide additional information to school and district leaders and stakeholders in the Pittsburgh area workforce development region regarding initiatives and practices leading to minority student success.

Additionally, by collecting nonpublic school superintendents', principals' and heads of schools' perspectives on how to prepare minority students to be college, career and life ready in southwest Pennsylvania, the researcher could provide an important snapshot of their perspectives and investigate whether or not initiatives and/or practices and minority success is similar in public, charter and nonpublic schools and/or districts. It would be interesting to explore nonpublic and charter schools in the Pittsburgh area workforce development region get a better understanding how all minority students in the region are being successfully prepared to be college, career and

life ready.

It is important that researchers, education practitioners and educator preparation programs continue to explore and expand the discourse on the current state of minority student learner profile and achievement in the Pittsburgh area workforce development region as well as successful initiatives and/or practices assuring their success. The findings of this study were based on a regional demographic data analysis and an exploratory analysis of grouping characteristics, perceptions of regional, K – 12 public school superintendents and descriptions of current successful initiatives and/or practices leading to minority student success. The groundwork for discussion and further exploration of district and school leaders' perceptions of changing learner profiles and successful initiatives and practices assuring minority student success is reasonable and warranted.

Future research should also explore K – 12 public, charter and nonpublic majority and minority students outside of the Pittsburgh area workforce development region in Pennsylvania. Past research has documented reasons for minority student success on both macro and micro levels. Future research on this topic can explore if there is a difference between minority student success in the eastern part of Pennsylvania compared to the western part. Research could include exploring similarities and differences in K – 12 superintendent and school leaders' perspectives on changing learner profiles and achievement rates of minority students, as well as initiatives and/or practices implemented to assure their success. This additional research could better inform educator preparation programs and public school districts, as well as charter, private and parochial schools on professional development topics to pursue, and successful initiatives and/or practices that prepare minority students to be college, career and life ready.

Appendix A

Survey chart showing survey question relationships to research questions and literature

RESEARCH QUESTIONS		
RQ 2. How do school superintendents perceive demographic and academic changes and needs for minority populations in their districts? RQ 3. What actions have regional districts taken to address academic success of minority students in their districts? What have been notable successes and lessons learned?		
Survey Questions	Related Research Question	Related Literature
Background Information		
Q1. Number of years as Superintendent in current district:		
Q2. Number of years as Superintendent in any district:		
Q3. What is your gender?		
Q4. What is your ethnicity?		
Superintendent and Intermediate Unit Executive Director Perceptions: Minority Student Enrollment		
Q5. Please rate each of the following on how significant you consider each of the following enrollment conditions over the past decade has impacted your school district.	RQ 2	Nisbett, 201; Seaton, 2010; (NCES, 2018).
Q6. Please rate each of the following on how significant you consider each of the following enrollment conditions over the past decade has impacted the percentage of Free/Reduced Lunch students in your school district.	RQ 2	Duncan, Magnuson, 2005; Paige & Witty, 2010
Q7. Please rate each of the following on how significant you consider each of the following enrollment conditions over the past decade that has impacted the racial achievement gap for students in your school district.	RQ 2	Williams et al. 2003; Seaton, 2010
Factors Influencing Minority Student Success		
Q10. How significant do you consider each of the following factors in contributing to the racial achievement gap between minority and majority students?	RQ 2 and RQ 3	Lisa Delpit (1995, 2006); Massy, Scott and Dornbusch (1975); Farkas (2004); Armor (2006); Singham, 1998

Q11. To what extent do you feel that each of the following reforms and initiatives has had a positive impact on the overall achievement of minority students in your school district?	RQ 2 and RQ 3	Osborne, 1965; Sizemore, 2008; The Elementary and Secondary Education Act (1965); Elementary and Secondary Education (1993); Skinner, 2010
Actions to Support Minority Students		
Q12. Please rate each of the following on the importance of "actions taken to support" efforts to increase minority student achievement and reduce the racial achievement gap	RQ 3	Leithwood & Montgomery, 1986; Duke, 1987; Smith & Andrews, 1989; Leithwood, 1992; Kegan, Wagner, et al, 2006; Hallinger & Heck, 1998; Sherman 2008; Jantzi & Leithwood (2000)
Q13. Please rate each of the following on the importance of "actions taken to convey superintendent's beliefs and expectations" to increase minority student achievement and reduce the racial achievement gap:	RQ 3	Leithwood & Montgomery, 1986; Duke, 1987; Smith & Andrews, 1989; Leithwood, 1992; Kegan, Wagner, et al, 2006; Hallinger & Heck, 1998; Sherman 2008
Q14. Please rate each of the following on the importance of "pursuing productive relationships" to increase minority student achievement and reduce the racial achievement gap:	RQ 3	Leithwood & Montgomery, 1986; Duke, 1987; Smith & Andrews, 1989; Leithwood, 1992; Kegan, Wagner, et al, 2006; Hallinger & Heck, 1998; Sherman 2008; Leithwood (2005)
Q15. Please rate each of the following on the importance of "actions taken to create and deliver professional development" to increase minority student achievement and reduce the racial achievement gap:	RQ 3	Leithwood & Montgomery, 1986; Duke, 1987; Smith & Andrews, 1989; Leithwood, 1992; Kegan, Wagner, et al, 2006; Hallinger & Heck, 1998; Sherman 2008; Sanzo, Sherman and Clayton (2011)
Q16. Please rate each of the following on the importance of "actions taken to create and deliver professional development directly connected to racial equity" to increase minority student achievement and reduce the racial achievement gap:	RQ 3	Leithwood & Montgomery, 1986; Duke, 1987; Smith & Andrews, 1989; Leithwood, 1992; Kegan, Wagner, et al, 2006; Hallinger & Heck, 1998; Sherman 2008; Sanzo, Sherman and Clayton (2011)
Q17. Please rate each of the following on the importance of "Actions taken to institute accountability" to increase minority student achievement and reduce the racial achievement gap:	RQ 3	Leithwood & Montgomery, 1986; Duke, 1987; Smith & Andrews, 1989; Leithwood, 1992; Kegan, Wagner, et al, 2006; Hallinger & Heck, 1998; Sherman 2008
Successes, Challenges and Lessons Learned		
Q18. Listed here are all initiatives and practices that you responded, "Very Important". what are your top two that have had most positive impact in your district to assure the successful preparation of minority students to be college career and life ready, prepared to enter the southwest Pennsylvania workforce? List them below and for each, briefly describe the initiative/practice and what accounts the success:	RQ 3	Leithwood & Montgomery, 1986; Duke, 1987; Smith & Andrews, 1989; Leithwood, 1992; Kegan, Wagner, et al, 2006; Hallinger & Heck, 1998; Sherman 2008; Jantzi & Leithwood (2000)
Q19. Using the two initiatives you indicated in question 15, what was challenging in your district to prepare minority students to be college career and life ready, prepared to enter the southwest Pennsylvania workforce? Please elaborate.	RQ 3	Leithwood & Montgomery, 1986; Duke, 1987; Smith & Andrews, 1989; Leithwood, 1992; Kegan, Wagner, et al, 2006; Hallinger & Heck, 1998; Sherman 2008; Jantzi & Leithwood (2000)

Q20. Considering all that you have attempted to do in your district to have minority students be college, career and life ready, what are your most important lessons learned? Please elaborate?	RQ 3	Leithwood & Montgomery, 1986; Duke, 1987; Smith & Andrews, 1989; Leithwood, 1992; Kegan, Wagner, et al, 2006; Hallinger & Heck, 1998; Sherman 2008; Jantzi & Leithwood (2000)
Contact Information		
Q21. Would you be willing to be contacted to provide clarification or extension regarding your responses, if needed?		
Q22. If yes, please provide your contact information (Name, District, Email, Phone).		
Q23. How would you prefer to be contacted?		

Appendix B

Superintendent's Letter

An Exploration of Superintendent Perceptions and District Initiatives Related to Minority

Student Success in Southwest Pennsylvania

The University of Pittsburgh

Principal Investigator: David May-Stein

Dear Superintendent,

I am David May-Stein and a doctoral student at the University of Pittsburgh. I am also the Chief of School Performance for the Pittsburgh Public School District, Pennsylvania. I am completing my dissertation research with a study to explore K – 12, public school superintendents' perceptions on changing minority student demographics and current initiatives and practices that assure minority student success. The sample group includes all public-school districts in the Pittsburgh area workforce development region. You are receiving an invitation to participate in the study because your school district is located in one of the following 10 counties that make up the Pittsburgh area workforce development region: Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, Indiana, Lawrence, Washington, and Westmoreland. If you choose to participate in the study, you will complete an online survey. If you consent to participate, please complete the confidential electronic survey accessed by the included link below. Your assistance will help me to complete research objectives in my doctoral program and learn about and

understand superintendent efforts, success, challenges and lessons learned in supporting minority student success their districts.

Thank you very much for your consideration. If you have any questions, please feel free to contact me via email or by phone at 412-606-7782. I appreciate your interest and look forward to your participation.

To access the survey, please click here:

Sincerely,

David May-Stein

Appendix C

Survey

Superintendent Perceptions of Initiatives/Practices Assisting Minority Student Success

Superintendent Perceptions of Initiatives/Practices Assisting Minority Student Success

The purpose of this survey is to identify superintendent perceptions of changing minority student demographics, actions taken to support minority student success and, success, challenges and lessons learned of those actions. The survey is accessible through a computer or on a mobile device.

There is minimal risk in completing this survey. The primary, potential risk is a breach of confidentiality, but everything possible will be done to protect your privacy. You will not be asked to identify yourself to complete this survey, however, there is a voluntary section that does give you an opportunity to identify yourself, if desired. All records pertaining to your involvement in this study will be kept confidential and any data that includes your identity will be stored in secured files. Your identity will not be revealed in any description or publication of the research.

There are no costs to you for participating in this study and you will receive no compensation for your participation. There are no direct benefits for participating in this study but may feel satisfaction at being able to discuss the important work you do. You may decline to answer any question and may withdraw from the survey at any time.

If you consent to completing the survey, please continue to Question 1.

Q1. Number of years as superintendent in your district.

Q2. Number of years as superintendent in any district:

Q3. What is your gender?

- ☐ Female
- ☐ Male
- ☐ Defined otherwise

Q4. What is your ethnicity?

- ☐ White
- ☐ Black or African American
- ☐ Latino/Hispanic
- ☐ American Indian or Alaska Native
- ☐ Asian
- ☐ Native Hawaiian or Pacific Islander
- ☐ Bi-Racial
- ☐ Defined otherwise

Q5. Minority Student Enrollment in Your School District

How significant has each of these conditions been in impacting your district over the last decade?

	Very insignificant	Insignificant	Neither insignificant or significant	Significant	Very Significant
Increase of migrant families	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increase of refugee families	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gentrification of urban areas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Expansion of STEAM-related industry in southwest Pennsylvania	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
White flight	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q6. Minority Student Enrollment in Your School District

How significant has each of these conditions been in impacting the percentage of Free/Reduced students in your district over the last decade?

	Very insignificant	Insignificant	Neither insignificant or significant	Significant	Very significant
Increase of migrant families	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increase of refugee families	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gentrification of urban areas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Expansion of STEAM-related industry in southwest Pennsylvania	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
White flight	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q7. Minority Student Enrollment in Your School District

How significant has each of these conditions been in impacting the racial achievement gap in your district over the last decade?

	Very insignificant	Insignificant	Neither insignificant or significant	Significant	Very significant
Increase of migrant families	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increase of refugee families	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gentrification of urban areas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Expansion of STEAM-related industry in southwest Pennsylvania	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
White flight	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q8. Factors Influencing Minority Student Success

How significant do you consider each of the following factors in contributing to the racial achievement gap between minority and majority students?

	Very insignificant	Insignificant	Somewhat significant and insignificant	Significant	Very significant
Poverty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parenting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of parents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Level of parent(s) education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Neighborhood	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Societal/Institutional Discrimination	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Genetic predisposition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Educator beliefs and expectations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student beliefs and expectations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Limited access to educational opportunity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q9. Over the past two decades, a number of federal reforms and initiatives have been implemented with the intention of eliminating or supporting strategies to eliminate the racial achievement gap between minority and majority students. To what extent do you feel that each of the following reforms and initiatives have had a positive impact on the overall achievement of minority students in your school district?

	Extremely positive	Positive	Neither positive nor negative	Negative	Extremely negative
No Child Left Behind	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Race to The Top	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Every Student Succeeds Act	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q10. Questions 10 - 15 includes a list of potential initiatives and practices that support minority students to be college, career and life ready, prepared to successfully enter into the regional workforce.

ACTIONS TO SUPPORT MINORITY STUDENT SUCCESS

	Do Not Use	Not Important	Somewhat Important	Important	Very Important
Create a sense of urgency	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Develop a collective vision	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Develop non-negotiable goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Facilitate the development of a District culture based on shared norms, values and beliefs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hire teachers/principals of color	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ensure principal aligns school mission with the district vision	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Develop a curriculum and instruction plan to meet the needs of minority students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Include principals and teachers in the selection of curriculum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q11. ACTIONS TAKEN TO SUPPORT BELIEFS AND EXPECTATIONS

Please rate each of the following on the importance of "actions taken to convey superintendent's beliefs and expectations" to increase minority student achievement and reduce the racial achievement gap:

	Do Not Use	Not Important	Somewhat Important	Important	Very Important
Model shared beliefs and values	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communicate clear performance expectations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Establish high expectations for all students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Maintain a clear focus on improving instruction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Challenge staff to re-examine some of their achievement related assumptions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Establish schools characterized by high expectations and opportunity for all students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Establish programs to Increase minority student participation in AP and Honors Courses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q12. ACTIONS TO SUPPORT PURSUING PRODUCTIVE RELATIONSHIPS

Please rate each of the following on the importance of "pursuing productive relationships" to increase minority student achievement and reduce the racial achievement gap:

	Do Not Use	Not Important	Somewhat Important	Important	Very Important
Include principals and teacher-leaders in goal setting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Include key community leadership in goal setting process	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Include parents in goal setting process	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Create positive interactions with parents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Create positive interactions with community members	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Create positive interactions with businesses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Partner with minority owned businesses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Establish mentoring partnerships	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q13. ACTIONS TO SUPPORT PROFESSIONAL DEVELOPMENT

Please rate each of the following on the importance of "actions taken to create and deliver professional development" to increase minority student achievement and reduce the racial achievement gap:

	Do Not Use	Not Important	Somewhat Important	Important	Very Important
Strengthen the knowledge and skills of principals as instructional leaders	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Develop the instructional leadership capacity of teachers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provide central office training on the use of data	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provide principal training for the use of data	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provide teacher training for the use of data	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q14. ACTIONS TO SUPPORT PROFESSIONAL DEVELOPMENT FOR RACIAL EQUITY

Please rate each of the following on the importance of "actions taken to create and deliver professional development directly connected to racial equity" to increase minority student achievement and reduce the racial achievement gap:

	Do Not Use	Not Important	Somewhat Important	Important	Very Important
Central office professional development for culturally relevant instruction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Principal professional development for culturally relevant instruction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher professional development for culturally relevant instruction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Central office professional development on implicit bias	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Principal professional development for implicit bias	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher professional development for implicit bias	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Central office professional development for racial equity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Principal professional development for racial equity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher professional development for racial equity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q15. ACTIONS TAKEN TO SUPPORT ACCOUNTABILITY

Please rate each of the following on the importance of "Actions taken to institute accountability" to increase minority student achievement and reduce the racial achievement gap:

	Do Not Use	Not Important	Somewhat Important	Important	Very Important
Develop an infrastructure for use of data to inform practice and monitor student progress	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Monitor the consistency between district and school goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Monitor progress on district's nonnegotiable goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use in-school visits and walkthroughs to assure alignment with district goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Establish process to support and/or remove central office staff that do not comply with district vision to support minority student success	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Establish process to support and/or remove principal(s) that do not comply with district vision to support minority student success	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Establish process to support and/or remove teacher(s) that do not comply with district vision to support minority student success	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q16. Listed here are all initiatives and practices that you responded, "Very important". Which are your top two that have had most positive impact in your district to assure the successful preparation of minority students to be college career and life ready, prepared to enter the southwest Pennsylvania workforce?

List them below and for each, briefly describe the initiative/practice and what accounts the success:

Q17. Using the two initiatives you indicated in the previous question, what were the most challenging aspects in developing and implementing the initiatives and practices in your district, please elaborate.

Q18. Considering all that you have attempted to do in your district to have minority students be college, career and life ready, what are your most important lessons learned? Please elaborate.

Q19 *Thank you very much for taking the time out of your busy day to complete the survey. Your input is valuable to my study. It is my hope that the very important information you provided will help to inform school districts in the Pittsburgh area workforce development region of the successful initiatives and practices that are being implemented to support minority students' success and to be college, career and life ready.*

Would you be willing to be contacted to provide clarification or extension regarding your responses, if needed?

☐ Yes

☐ No

Q20. If yes, please provide your contact information (Name, District, Email, Phone).

Q21 How would you prefer to be contacted?

☐ Email

☐ Phone

Appendix D

Guided Interview

In order to obtain additional contextual information about district practices and policies from willing participants, a guided interview will be conducted to examine the motivations, thinking processes and implementation complexities involved in addressing minority student needs. The actual interview will be a guided conversation with the hope of understanding the context of actions taken by superintendents to assure minority student success and it will evolve through the conversation. Given, the guided interview's intent is to be conversational, the interviewer may ask the interviewee to expand upon responses. This may be done by the interviewer asking, "Can you say more?"



Interview Questions
1. Please describe the current student demographics including race and free/reduced lunch percentage in your district. Has it changed over the past decade? If so, please explain.
2. In the survey, you had listed several initiatives and practices that had a positive impact in your district to assure the successful preparation of minority students to be college career and life ready, prepared to enter the southwest Pennsylvania workforce. What accounted for the initiative/practice success?
3. Please discuss your motivations and thinking processes involved in addressing minority student needs.
4. Within the context of your district's culture, what have been the implementation complexities involved in addressing minority student needs?
5. Considering all that you have attempted to do in your district to have minority students be college, career and life ready, what are your most important lessons learned? Please elaborate.

Bibliography

- Allegheny Conference on Community Development. (2017). Publications. <https://www.alleghenyconference.org>.
- Ansell, S. (2011). Achievement Gap. Retrieved from <http://www.edweek.org/ew/issues/achievement-gap/>
- Armor, D. J. (2006). Brown and black-white achievement. *Academic Questions*, 19(2), 40–46. <http://doi.org/10.1007/s12129-006-1014-8>
- Bambrick-Santoyo, P. (n.d.). *Leverage Leadership: A Practical Guide to Building Exceptional Schools*. San Francisco: Jossey-Bass.
- Blase, J., & Blase, J. (1999). Principals' Instructional Leadership and Teacher Development: Teachers' Perspectives. *Educational Administration Quarterly*, 35(3), 349–378. <http://doi.org/10.1177/0013161X99353003>
- Braun, H., & Chapman, L. (2010). Black White Achievement Gap Revisited.
- Braun, H., Chapman, L., & Vezzu, S. (2010). The Black-White Achievement Gap Revisited. *Education Policy Analysis Archives*, 18(21), 1–99. <http://doi.org/10.14507/epaa.v18n21.2010>
- Bryant, A. C., Triplett, N. P., Watson, M. J., & Lewis, C. W. (2017) The Browning of American Public Schools: Evidence of Increasing Racial Diversity and the Implications for Policy, Practice, and Student Outcomes. *Urban Review*, 49(2), 263-278.
- Burney, V. H., & Beilke, J. R. (2008). The Constraints of Poverty on High Achievement. *Journal for the Education of the Gifted*, 31(3), 171–197.
- Burney, V. H., & Beilke, J. R. (2008). The Constraints of Poverty on High Achievement. *Journal for the Education of the Gifted*, 31(3), 171–197.
- Carter, R. L., Coleman, W. T., Hastie, W. H., Hayes, G., Hill, O., Motley, C. B., & James, M. Brown v. Board of Education of Topeka. (1954). 436 U.S. 483, 98 L.Ed. 873, 74 S.Ct. 686.
- Chubbuck, S. M. (2004). Whiteness Enacted, Whiteness Disrupted: The Complexity of Personal Congruence. *American Educational Research Journal*, 41(2), 301–333. <http://doi.org/10.3102/00028312041002301>
- Crum, K. S., & Sherman, W. H. (2008). Facilitating high achievement: High school principals' reflections on their successful leadership practices. *Journal of Educational Administration*, 46, 562–580. <http://doi.org/10.1108/09578230810895492>

- Delpit, L. (1995). *Other People's Children: Cultural Conflict in the Classroom*. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED387274&site=ehost-live>
- Duncan, G. J., & Magnuson, K. a. (2005). Can family socioeconomic resources account for racial and ethnic test score gaps? *Future of Children*, 15(1), 35–54. <http://doi.org/10.1353/foc.2005.0004>
- Eccles, J. S., Wong, C. A., & Peck, S. C. (2006). Ethnicity as a social context for the development of African-American adolescents. *Journal of School Psychology*, 44(5), 407–426. <http://doi.org/10.1016/j.jsp.2006.04.001>
- English, F. W. (2002). On the Intractability of the Achievement Gap in Urban Schools and the Discursive Practice of Continuing Racial Discrimination. *Education and Urban Society*, 34(3), 298–311. <http://doi.org/10.1177/0013124502034003002>
- Evans, A. (2007). School Leaders and Their Sensemaking About Race and Demographic Change. *Educational Administration Quarterly*, 43(2), 159–188. <http://doi.org/10.1177/0013161X06294575>
- Evans, R. (2001). *The human side of school change : reform, resistance, and the real-life problems of innovation. The Jossey-Bass education series* (Vol. 1st pbk).
- Farkas, G. (2004). The Black-White Test Score Gap. *Contexts*, 3(2), 12–19. <http://doi.org/10.1525/ctx.2004.3.2.12>
- Fordham, S., & Ogbu, J. U. (1986). Black students' school success: Coping with the “burden of ‘acting white.’” *The Urban Review*, 18(3), 176–206. <http://doi.org/10.1007/BF01112192>
- Fullan, M. (2014). *The Principal: Three Keys to Maximizing Impact*. San Francisco: Jossey-Bass.
- Guskey, T. R. (2005). Achievement Gaps The Contribution of. *NASSP Bulletin*, 89(644), 76–89.
- Hart, B., & Todd R, R. (1995). *Meaningful differences in the everyday experience of young American children*. Baltimore: P.H. Brookes.
- Hartney, M. T., & Flavin, P. (2014). The Political Foundations of the Black-White Education Achievement Gap. *American Politics Research*, 42(1), 3–33. <http://doi.org/10.1177/1532673X13482967>
- Heifetz, R. A., & Linsky, M. (2002). *Leadership On The Line: Staying Alive Through the Dangers of Leading*. Boston: Harvard Business School Press.
- Hernstein, R. J., & Murray, C. (1994). *The bell curve*. New York: Free Press.
- Jencks, C., & M. Phillips. (1996). The Black-White Test Score Gap.

- Kids Count Data Center. (2019). <https://datacenter.kidscount.org>
- Leithwood, K., & Jantzi, D. (2008). Linking Leadership to Student Learning: The Contributions of Leader Efficacy. *Educational Administration Quarterly*, 44(4), 496–528. <http://doi.org/10.1177/0013161X08321501>
- Leithwood, K., & Jantzi, D. (2000). The effects of transformational leadership on organizational conditions and student engagement with school. *Journal of Educational Administration*, pp. 112–129. <http://doi.org/10.1108/09578230010320064>
- Leithwood, K. (1992). The Move Toward Transformational Leadership. *Educational Leadership*, 49(5), 8–13.
- Leithwood, K. (1994). Leadership for School Restructuring. *Educational Administration Quarterly*, 30(4).
- Leithwood, K. (2005). Understanding successful principal leadership: progress on a broken front. *Journal of Educational Administration*, 43(6), 619–629. <http://doi.org/10.1108/09578230510625719>
- Leithwood, K., & Mascall, B. (2008). Collective Leadership Effects on Student Achievement. *Educational Administration Quarterly*, 44(4), 529–561. <http://doi.org/10.1177/0013161X08321221>
- Lewis, A. C. (1993). Title: The administration's education agenda. *Phi Delta Kappa*, 75(3).
- Love, B. J. (2004). *Brown Plus 50 Counter-Storytelling: A Critical Race Theory Analysis of the "Majoritarian Achievement Gap" Story*. *Equity & Excellence in Education*, 37(3), 227–246. <http://doi.org/10.1080/10665680490491597>
- Marzano, R.J. & Waters, T.J. (2006). *School District Leadership that Works: The Effect of Superintendent Leadership on Student Achievement*. Denver: Mid-continent Research for Education and Learning.
- Milner, H. R. (2012). Rethinking Achievement Gap Talk in Urban Education. *Urban Education*, 48(1), 3–8. <http://doi.org/10.1177/0042085912470417>
- Moore, E. G. (1986). Family socialization and the IQ test performance of traditionally and transracially adopted Black children. *Developmental Psychology*, 22(3), 317–326. <http://doi.org/10.1037/0012-1649.22.3.317>
- Mora, J. (2010). *Superintendents and Latino Student Achievement: Promising Practices That Superintendents Use to Influence the Instruction and Increase the Achievement of Latino Students In Urban School Districts*. University of Southern California
- Nisbitt, R. (2011). Gap past present futue.pdf. *Daedalus, the American Academy of Arts and Sciences*.

- Orfield, G. & Frankenberg, E (2014). Increasingly Segregated and Unequal Schools as Courts Reverse Policy. *Education and Administration Quarterly*, 50(5), 718-734.
- Osborne, B. (1965). The Elementary and Secondary Education Act of 1965. *Journal of Jewish Education*, 36(1), 24–27. <http://doi.org/10.1080/15244116508547955>
- Padilla, R. (2019). Courageous Conversations, Concrete Actions. *School Administrator*, 76(7) 16-20.
- Paige, R., & Witty, E. (2010). *The Black-White Achievement Gap; Why Closing It Is the Greatest Civil Rights Issue Of Our Time*. New York: American Management Association.
- Pennsylvania Department of Education (2018). State Assessment Report
- Pennsylvania Department of Education (N.D.) Data and Statistics. <https://www.education.pa.gov/Data-and-Statistics>
- Pennsylvania State University, Pennsylvania State Data Center. Census Reports. <https://pasdc.hbg.psu.edu>
- Sanzo, K. L., Sherman, W. H., & Clayton, J. (2011). Leadership practices of successful middle school principals. *Journal of Educational Administration*, 49(1), 31–45. <http://doi.org/10.1108/09578231111102045>
- Seaton, E. K. (2010). What the Achievement Gap Conversation is Missing. *Review of Black Political Economy*, 37(3), 275–277. <http://doi.org/10.1007/s12114-010-9072-0>
- Sellers, R. M., Smith, M. a, Shelton, J. N., Rowley, S. a J., & Chavous, T. M. (1998). Multidimensional model of racial identity: A Reconceptualization of African American racial identity. *Personality and Social Psychology Review*, 2(1), 18–39. <http://doi.org/10.1207/s15327957pspr0201>
- Singleton, G., & Linton, C. (2006). *Courageous Conversations About Race: A Field Guide for Achieving Equity in Schools*. Thousand Oaks: Corwin Press.
- Sizemore, B. (2008). *Walking in Circles: The Black Struggle For School Reform*. Chicago: Third World Press.
- Skinner, R. (2010). The Elementary and Secondary Education Act (The No Child Left Behind Act of 2001). Retrieved from <http://www2.ed.gov/policy/elsec/leg/esea02/index.html>
- Skrla, L. & Scheurich, J.J. (2001). Displacing Deficit Thinking in School District Leadership. *Education and Urban Society*, 33(3) 235-259).
- Smith, S. (n.d.). *A case study of a principal's leadership practices on promoting student achievement*. South Carolina State University.
- Stake, R. E. (1995). *The Art of Case Study Research*. Thousand Oaks: Sage Publications Inc.

- Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology*, 69(5), 797–811. <http://doi.org/10.1037/0022-3514.69.5.797>
- Sofo, R. (2008) Beyond NCLB and AYP: One Superintendent's Experience of School District Reform. *Harvard Educational Review*, 78(2), 391–430.
- Sue, D. W., Capodilupo, C. M., Torino, G. C., Bucceri, J. M., Holder, A. M. B., Nadal, K. L., & Esquilin, M. (2007). Racial microaggressions in everyday life: implications for clinical practice. *The American Psychologist*, 62(4), 271–86. <http://doi.org/10.1037/0003-066X.62.4.271>
- United States Department of Agriculture. (2017). The School Lunch Program. *Journal of School Health*, 39, 440-448.
- United States Department of Agriculture. (2019). Community Eligibility Provision <https://www.fns.usda.gov/school-meals/community-eligibility-provision>
- United States Department of Education. (2010). A Blueprint for Reform: The Reauthorization of the Elementary and Secondary Education Act. Retrieved <http://www2.ed.gov/policy/elsec/leg/blueprint/>.
- United States Department of Education. (2015). Every Student Succeeds Act.
- United States Department of Education. (2018). National Council of Education Statistics, Enrollment and Distribution in Public Elementary and Secondary Schools by Race/Ethnicity/Religion. <https://nces.ed.gov/ccd/>
- US Department of Education. (2005). Education Funding Report.
- University of Pittsburgh, University Center for Social and Urban Research. Data Reports. <https://ucsur.pitt.edu>
- Valentine, J. W., & Prater, M. (2011). Instructional, Transformational, and Managerial Leadership and Student Achievement: High School Principals Make a Difference. *NASSP Bulletin*, 95(1), 5–30. <http://doi.org/10.1177/0192636511404062>
- Wagner, Tony and Kegan, R. (2006). *Change Leadership: A Practical Guide to transforming Our Schools*. San Francisco: Jossey-Bass.
- Western Pennsylvania Regional Data Center. Data Reports. <http://www.wprdc.org>
- Williams, D. R., Neighbors, H. W., & Jackson, J. S. (2003). Racial/ethnic discrimination and health: findings from community studies. *American Journal of Public Health*, 93(2), 200–208. http://doi.org/10.2105/AJPH.98.Supplement_1.S29