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Nurturing Potential: The Impact of Talent Development on Underrepresented Gifted Populations

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Nurturing Potential: The Impact of Talent Development on Underrepresented Gifted
Populations

By
Sara Elizabeth Newell

A Dissertation Submitted to the
Gardner-Webb University School of Education
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Education

Gardner-Webb University
2018

Approval Page

This dissertation was submitted by Sara Elizabeth Newell under the direction of the persons listed below. It was submitted to the Gardner-Webb University School of Education and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Gardner-Webb University.

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Acknowledgments

“Those who mind don’t matter, and those who matter don’t mind.” – Dr. Seuss

The truth of Dr. Seuss’s words was never clearer than it is now after completing the dissertation process. Those who matter were pillars of support during my journey; and without them, my dissertation would not have been possible. For that, I thank them.

First and foremost, I thank my committee for your hours of reading, coaching, feedback, and support. My work is better because of you. Dr. Brown, thank you for your guidance in thematic organization and theoretical frameworks and for fueling my passion for a transformative study into an authentic piece of work; Dr. Putnam, thank you for helping me become a sophisticated, academic writer and for your guidance on high-ability students; and Dr. Burgess, thank you for imparting me with your knowledge of data collection and analysis and for the many hours you gave to turn numbers into research.

Thank you as well to my district for allowing this research study to occur, empowering me through this study, and supporting the continuation of this research beyond the timeframe of the study. Knowing this research was more than a dissertation to the district will allow the voice of study participants to impact gifted education for years to come. I also owe thanks to my cohort for their encouragement and motivation when I lost mine and to my friends and my family for understanding when I needed to stay home and work and for having faith in my ability even when I did not.

Most importantly though, thank you to my husband for cleaning, cooking, doing laundry, running data, and for your endless love and belief in me even through endless hours of work, breakdowns, and “stressful moments.” I love you forever and always.

To all of you . . . you are the ones who matter, because no matter what, you didn’t mind.

Abstract

Nurturing Potential: The Impact of Talent Development on Underrepresented Gifted Populations. Newell, Sara Elizabeth, 2018: Dissertation, Gardner-Webb University, Underrepresented Populations/Gifted Education/Talent Development

Data on gifted education show a clear problem: lack of diversity in gifted education programs. This fact is compounded by additional data showing a disparaging difference in achievement of Caucasian versus minority students. Together, these concepts are referred to as the excellence gap in gifted education. Talent development, or the location and nurturing of potential talent in underrepresented populations, has been recommended in the gifted community as a possible step in resolving these inequities (Ellis & Martin, 2017; Ford, 2010; National Association of Gifted Children [NAGC], 2015; Reinhard, 2016; Thornbury, 2010).

Through an explanatory mixed methods study, this research analyzed the impact implementation of talent development strategies had on underrepresented populations regarding achievement, motivation, and location of potential in a diverse, mid-sized, urban district. The study focused on implementation of six talent development components (alternative identification methods, training teachers, increased collaboration, adjusted curriculum, cultivation of support networks, and increased communication between home and school) with high-ability fourth- and fifth-grade students at two of six elementary schools in the district over a 12-week period.

Findings of the study showed talent development reified “the Achilles Heel of gifted education is its inability to adequately include children who don’t fall into the nice, neat stereotype of good student” (Renzulli, 2005, p. 80); and talent development can serve as the vehicle of promise for typically underrepresented students as it encourages educators to locate, support, and serve students who do not fit the predetermined mold but show potential for high achievement and success (Burney & Beilke, 2008).

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Chapter 1: Introduction

Introduction to the Study

“A door, nothing special, pink like bubble gum, creates a barrier between students that course through school accelerated (mostly Caucasian), and students that don’t (mostly minority)” (Baker, 2013, “Gifted, Talented, and Separated,” para. 1). No longer can this barrier be accepted, particularly considering that the Census Bureau predicts by 2023 public education will be represented by students who are majority minority (Thornbury, 2010). Truly, the success of the American nation depends on reversing the current state of underrepresentation of culturally, linguistically, and economically diverse (CLED) students in America’s gifted classrooms.

Background to the Study

Underrepresentation of CLED students in gifted education is not a new problem. In fact, the Office of Educational Research and Improvement (1993) called attention to the problem of underrepresentation of CLED students in gifted education. Research since this call to attention has focused on understanding barriers to gifted identification of CLED students (Dunn, 2008; Grissom & Redding, 2016; Jarvis, 2009); redefining the word giftedness (National Association of Gifted Children [NAGC], 2015; Olszewski-Kubilius & Thomson, 2015; Saiying & Olszewski-Kubilius, 2016); and implementing strategies which could be beneficial in locating gifted CLED students (Hooper, 2013; Horn, 2014; Queen, 2006; Siegle et al., 2016). Gifted theorists claim the use of talent development could attend to these barriers, helping to change the mindset of education towards giftedness and encouraging the use of nontraditional methods of instruction such as hands-on, problem-based learning (Thornbury, 2010). Additionally, heavy focus is placed on the use of culturally relevant curriculum (Jarvis, 2009);

increasing teacher knowledge (Grissom & Redding, 2016); and building a support system of all stakeholders in CLED student lives (Coleman & Shah-Coltrane, 2015). NAGC (2015), in their Inaugural European-North American Summit on Talent Development, called attention to ways talent development programs could be inclusive of these elements and serve to positively influence underrepresentation in gifted programs.

Problem Statement and Purpose of the Study

Despite this research, the increased awareness of underrepresentation of CLED students in gifted education, the implementation of laws which protect all children, and the call for curriculum adjustments, the American education system unfortunately is no closer to closing the excellence gap than it was 25 years ago when *The National Excellence Gap: A Case for Developing America's Talent* was first released (Office of Educational Research and Improvement, 1993). One must question why the American education system can acknowledge problems but not move to implement necessary changes to fix them.

Henfield, Woo, and Bang (2017) argued it is because the education system focuses more on naming the intervention than on researching actual implementation of interventions. In fact, they pointed to a research desert in the area of actual programs addressing the problem of underrepresentation in gifted education. Olszewski-Kubilius and Clarenbach (2014) agreed, claiming if the education system hopes to close the gap between subgroups of the American population, “we must make it clear...that we care about the development of high levels of talent in students from all sectors of society AND we have viable solutions to offer” (p. 108). Ford (2010) further supported these statements, calling for research on programs proactively looking for potential in CLED students. Beyond researchers, policymakers have even begun to call for research

regarding solutions to closing the excellence gap. Specifically, NAGC (2015) requested the use of talent development to accomplish this call to action, making “building consensus for the gifted education community regarding the import of a TD perspective and future collaborative advocacy work” (p. 2) the focus of the 2017 National Gifted Conference.

Considering this research, this study took an in-depth look at the impact of talent development interventions on the academic and engagement domains of culturally linguistically and/or economically diverse students in a mid-sized urban district where, according to the U.S. Department of Civil Rights 20% Equity Allowance (Ford & King, 2014), a significant gap existed between the demographics of the entire student population and the demographics of the student population served in gifted education. Specifically, the study collected data on students in fourth and fifth grade in two of the six district elementary schools. Using the Civil Rights Equity Allowance Rule (Ford & King, 2014), students scoring in the top 20% of the district’s three most prevalent subgroups (African-American, Hispanic, and Caucasian) received talent development services based on the talent development framework of NAGC (2015). Talent development interventions, in the form of problem-based learning experiences, were provided by AIG specialists to the students meeting the previously stated qualifications on a weekly basis. Within the elementary schools where the study was implemented, the talent development interventions provided were in addition to any services already provided for gifted students per the district’s state approved AIG plan. Data were additionally collected for comparison purposes on students in the four other elementary schools where students were still receiving the regular gifted programming of the district.

Research Questions and Hypotheses

Creswell (2014), Grant and Osanloo (2012), and Ravitch and Riggan (2017) referred to research questions as the liaison between existing knowledge, the research problem, and the research study. To determine the impact of talent development on CLED populations, the study addressed one qualitative, one quantitative, and two hybrid research questions. Creswell argued this mixed-methods approach allows a researcher to “convey the importance of integrating and combining the quantitative and qualitative elements of a study” (p. 152). Specifically, the transformative mixed methods research questions intended to bring attention to how the lives of the marginalized groups being studied “have been constrained and [what] strategies they can use to challenge or subvert these constraints” (Creswell, 2014, p. 10).

The research questions for the study are listed as follows:

1. What elements of a talent development program have the greatest impact on developing potential in underserved populations? [Qualitative research question]
2. How does implementation of a talent development program impact underrepresented populations regarding achievement? [Hybrid research question]
3. How does implementation of a talent development program impact underrepresented populations regarding engagement? [Hybrid research question]
4. To what degree does a talent development program identify potentially gifted CLED students in comparison to standardized identification methods? [Quantitative research question]

Theoretical Framework of the Study

In taking an in-depth look at talent development with CLED students, the researcher hoped to produce findings to initiate change in gifted education policy and practice. For such change to happen, it was essential for the researcher to take a more aggressive research stance, one “going far enough in advocating for an action agenda to help marginalized people” (Creswell, 2014, p. 9). As recommended by Creswell (2014), this stance could be achieved through a transformative research approach because transformative research aligns with “a political change agenda to confront social oppression” (p. 9).

Current research in the gifted education field points to the social oppression of underrepresented (CLED) populations in gifted education. This information, in conjunction with the Census Bureau statement that by 2023 public education will be represented by students who are majority minority (Thornbury, 2010), makes this call to action more pertinent now than it ever has been. Additionally, within the past 5 years, NAGC (2015) has called for research that will speak to best practices shown to benefit underrepresented groups.

Creswell (2014) further stated transformative research is collaborative, provides a voice for its participants, and develops a study with the intention for results to impact study participants. This research study was collaborative through the implementation of Gifted Rating Scales (GRS) as an observation tool and the use of parent and teacher focus groups as a method of qualitative data collection. Additionally, the district studied was interested in the findings of such a study, so the research findings had the potential to benefit the population groups being studied in a long-lasting way. Last, Creswell argued the collaborative nature of transformative research could allow theoretical perspectives to

merge with philosophical assumptions, allowing researchers to “construct a picture of the issues being examined” (p. 10), and participants to gain a clearer understanding of results.

Mertens (2012) further contended the transformative paradigm “provides a philosophical framework that focuses on ethics in terms of cultural responsiveness, recognizing those dimensions of diversity associated with power differences, building trusting relationships, and developing mixed methods that are conducive to social change” (p. 802); however, because the transformative paradigm is a more recent framework in research, Creswell (2014) recommended focusing this paradigm with a specific educational theory. The theory this study used to focus the transformative paradigm was the Educational Equity Theory.

As stated by the Center for Public Education (2016), the Educational Equity Theory grew out of the U.S. Supreme Court *Brown v. Board of Education* decision and initially spoke of equity of education as education being provided for all. Today, equity is more comprehensive and includes opportunity and access, participation, and outcomes (Center for Public Education, 2016). The Center for Public Education also connected educational equity to the changing student population in America, the excellence gap in gifted education, and the need for rigorous curriculum for all.

The transformative stance of this research developed through the Educational Equity Theory addressed the concept of talent development and how the use of this practice impacted the current excellence gap in gifted education. The talent development framework developed by Olszewski-Kubilius and Thomson (2015) guided the implementation components of the study. Some specific components of this talent development framework included looking beyond an individual’s IQ, recognizing

noncognitive abilities, utilization of the growth mindset (talent is malleable), focusing on general rather than specific skills as indicators of potential, attention to subgroup norms, and deliberate cultivation of psychosocial skills to support students as they “become gifted” (Olszewski-Kubilius & Thomson, 2015, pp. 53-54).

Additionally, Olszewski-Kubilius and Thomson (2015) called attention to the influence of a student’s home life and/or culture on their development and recommended one element of talent development interventions be an intentional building of relationships between a student’s home and/or culture and the educators at the school level in charge of implementing the academic component of talent development. Renzulli (2015) further stated such connections increase levels of active student engagement, transforming the way they approach, attend, and interact with their education. The transformative framework of this study served to pull these concepts together for all levels of participants in the study.

Nature of the Study

The collaborative nature of a transformative framework further supported the explanatory mixed methods nature of this study, defined by Creswell (2014) as research where the researcher collects quantitative data, completes data analysis, and then engages in qualitative research to explain the quantitative results in more detail.

The initial quantitative data collected in this study included i-Ready diagnostic assessments, GRS, Panorama Education Student Surveys, attendance reports, Naglieri Nonverbal Ability Test (NNAT) screening results, and teacher and parent perception surveys. Follow-up qualitative data were collected through teacher and parent focus groups and post-teacher and post-parent perception surveys. The qualitative elements of the explanatory mixed methods study allowed the researcher to utilize input from focus

groups and surveys to help explain the quantitative results of the study (Creswell, 2014). When applied, the explanatory mixed methods research approach assisted the researcher in determining whether the talent development approach to gifted education positively impacted academic performance, engagement, and motivation of students typically underrepresented in gifted programs.

This approach was important to the nature of the study because underrepresentation in gifted education is a multi-faceted issue, with many contributing factors; and engaging in qualitative data discussion with administration, teachers, and parents helped explain discrepancies between data points and further informed the quantitative data collected. Determining specific causes or most impactful solutions to the issue of underrepresentation was essential if the researcher hoped to transform future gifted education practices and policies, and the explanatory mixed methods approach built necessary data knowledge for this transformation (Creswell, 2014).

Definitions

AIG coordinator. An AIG coordinator is the director of academically-intellectually gifted services in a district; one who works with AIG specialists and regular education teachers on developing and refining AIG services provided to students.

AIG specialist. An AIG specialist is an educator with a degree in gifted education who works specifically with AIG identified students.

CLED students. CLED students are students with cultural, linguistic, or economic diversity such as students from African-American or Hispanic backgrounds, students learning English as a second language, or students from low socioeconomic backgrounds (NAGC, 2015).

Cluster grouping. Cluster grouping refers to groups of four to eight gifted

students placed in a heterogeneous classroom who still receive specialized instruction based on their gifted needs.

Cultural bias. Cultural bias is interpreting or judging a situation through standards relative to one's native culture. Cultural bias can be implicit or explicit in nature.

Excellence gap. An excellence gap is "differences between subgroups of students performing at the highest levels of achievement" (Plucker, Burroughs, & Song, 2010, p. 9).

Gifted. Gifted defines an individual with advanced ability in one or more of the following areas: academic, intellectual, creativity, athletics, leadership, musical, or social-emotional perception.

GRS. One form of a teacher rating scale developed by Pfeiffer and Jarosewich (2007). The form has six profile areas districts can use for identifying gifted or high-ability learners: intellectual ability, academic ability, creativity, artistic talent, leadership, and motivation.

Multiple-criteria. Multiple-criteria means utilizing more than one method to identify students for gifted services.

Naglieri Non-Verbal Ability Test (NNAT). A nonverbal aptitude test composed of logic puzzles, given to students ages 4-18 to identify their level of general ability and giftedness.

Regular education teacher. A regular education teacher is an educator with a degree in education who works with all students; most regular education teachers will have AIG students in the inclusion setting at some point in their career.

Talent development. Talent development is the use of instructional and

noninstructional strategies to locate potential talent in students and implement interventions to nurture student potential into product.

Underrepresented population. An underrepresented population is a demographic subgroup not equally represented in an educational program when compared to the “norm” of the demographics in an area.

Assumptions

All research studies, as stated by Simon (2011a), have elements the study is dependent upon but are out of the researcher’s control. Considering the transformative explanatory mixed methods approach of this research study, one of the essential assumptions to address was the assumption of participant honesty. The researcher assumed participants who partook in the surveys and focus groups utilized in this study did so in an honest and candid manner. To provide an environment where participants felt they could be honest and candid, survey participation was optional, participants remained anonymous, and results remained confidential. Focus group results were also confidential, participants remained anonymous, and participation was optional.

Additionally, the researcher assumed participants who agreed to be part of the study were truly interested in participation. As previously stated with the survey, participation in the talent development program was optional; however, the researcher still needed to ensure participants were not swayed into participation by external rewards such as monetary rewards or other forms of recognition for students and/or families who chose to participate. No rewards or recognition of this sort occurred. Furthermore, AIG services currently provided in the district, as stated in the local AIG plan, were provided for students who identified for these services whether the school was participating in the additional talent development services or not. A principal’s decision to implement

additional talent development services for underrepresented groups did not positively or negatively impact any other group. In addition to the absence of rewards and recognition and the continuation of services as determined by the district's AIG plan for all nonparticipants, intervention participants and focus group participants were given the opportunity to withdraw from the study at any time with no ramifications, allowing all participants to exit the study if they in any way felt uncomfortable and/or were no longer interested in being part of the study.

Scope

This dissertation follows a conventional five-chapter dissertation format with Chapter 2 serving as a literature review, Chapter 3 providing methodology, Chapter 4 discussing findings, and Chapter 5 explaining the researcher's conclusions and future recommendations (Bingham, 2012, as cited in Brown, 2017). Each chapter reviews the research problem before connecting the study to the chapter details. Chapter 2 presents the literature and prior research the study was built upon to provide a comprehensive view of the problem being studied. Chapter 3 provides an explanation of the study participants, the study site, the data collection, and the data analysis. Chapter 4 presents the results of the study, referencing results in relation to the research questions. Chapter 5 summarizes all the findings as they relate to future recommendations in policy change, best practice, and research helpful in solving the research problem. Dissemination of findings are expressed through the transformative paradigm and Educational Equity Theory to "encourage use of the results to enhance social justice and human rights" (Creswell, 2014, p. 71).

Limitations/Delimitations

Limitations. All research studies have limitations (influences the researcher

cannot control) and delimitations (choices specifically made by the researcher that could impact the results; Baltimore County Public Schools, 2017). Many of the study's limitations and delimitations revolved around the site choices for the study. As previously stated, there was a documented excellence gap and an issue with underrepresentation of gifted CLED students in the district where the study took place, and leaders within the district were looking for research to support a possible solution. One limitation of this decision was the researcher's role as the district's AIG coordinator. While this role placed the researcher in the field of the study, the researcher was not the teacher of record for the students receiving the intervention, nor did the researcher complete the GRS on these students. Additionally, the researcher was not the only AIG specialist implementing talent development services within the district.

To account for possible bias which could influence the study, the researcher showed both sides of the story, spent extended time in the field of study (to increase accuracy of findings), and used peer debriefing through data collection (Creswell, 2014). Additionally, the researcher, in a position to control decision-making regarding gifted education in the district, needed to take extra steps to build trust with teachers and members of focus groups so data collected in these settings were valid.

Another limitation from site choice was the control the district gave to school leaders regarding participation in the study. Within the district being studied, there were six elementary schools. Only two administrators chose to have their schools participate in the study. Of these two schools, one of the principals also required all staff to receive training in gifted education and talent development. The principal at the other elementary school highly encouraged their staff to receive this training but did not require it. While teacher training is considered an important component to meeting the needs of CLED

students, planning with teachers is a required component of talent development services (Olszewski-Kubilius & Thomson, 2015). Collaborative planning between the AIG coordinator and regular education teachers happened at both participating elementary schools.

Sampling of participants could also be considered a limitation for the study. As previously mentioned, the study was conducted in the researcher's district, so a sample of convenience was utilized. For this reason, the results cannot be generally applied to the entire population but could be suggested as applying to mid-sized, urban school districts with similar demographics to the research site. Additionally, since focus groups were created from a bank of interested teachers and parents, the researcher had to be intentional in choosing participants, so a representative sample from the volunteer group was created. These steps served to increase the validity of the overall study (Creswell, 2014).

Last, the 3-month time constraint of the research study needed to be considered. An intervention such as talent development requires time for implementation to produce change in achievement and identification. Three months did not really provide enough time to determine if the intervention worked to the highest authentication. This time constraint was another reason the researcher completed an explanatory study, specifically probing focus groups of teachers and parents for their thoughts on how talent development, based on the 3-month implementation, could impact future results in achievement and identification of CLED populations.

Delimitations. In addition to these limitations, it is necessary to discuss delimitations of the study such as the choice of intervention practice, study participants, methodology, and evaluation instruments. Starting with the independent variable of the

intervention, the researcher reviewed numerous CLED best practices (valid instruments, multiple sources, providing opportunity, increasing family involvement, adjusted programming, and training teachers) as recommended by Dunn (2008), Ford (2010), and Queen (2006) before settling on the intervention of talent development. While there were many possible interventions shown to be beneficial to CLED students, talent development was chosen for this study because NAGC (2015) recently noted talent development as a best practice they were looking for sites to successfully implement.

Just as there were many interventions available, Peters and Pereira (2017) noted there were numerous rating scales available (Scales for Rating the Behavioral Characteristics of Superior Students, the Scales for Identifying Gifted Students, the HOPE teacher rating scale, and the GRS). The researcher chose to use the GRS in this study because the district already had access to this scale, teachers had training and practice in this tool previously, and the research completed by Peters and Pereira stated none of the four tools noted was significantly better than the others. The GRS, however, did show the highest positive results regarding identification of underrepresented populations, the focus population of the research study (Peters & Pereira, 2017).

Participant selection was another delimitation to call to attention. In determining participant selection, the researcher needed to make decisions regarding three areas of participant description: demographic subgroups, grade levels, and specific student selection. When choosing the subgroups on which to focus in the study, the researcher noted first the subgroups that were under/overrepresented in the district being studied. The top three subgroups where there were discrepancies according to the U.S. Department of Civil Rights Equity Allowance, which states there should be no greater than a 20% discrepancy between general district demographics and demographics of

students served in special education programs (Ford & King, 2014), were African-American, Hispanic, and Caucasian. Additionally, the researcher noted these three subgroups were the three largest subgroups in the district. Urdan (2010) claimed the size of these subgroups would develop a representative sample for the researcher, increasing the strength of the study's statistical analysis. The research of Ford and King (2014) and Urdan supported the researcher's decision to focus on the African-American, Hispanic, and Caucasian subgroups for this study.

The second participant criteria, as determined by the researcher, was to focus the study on fourth- and fifth-grade students. As noted in Urdan (2010), comparative assessment measures are necessary for researchers to complete within-group and between-group data comparisons. In the district where the study was being conducted, the fourth through eighth graders took comparative assessment measures using i-Ready benchmark assessments. Within this window of fourth through eighth grade, Olszewski-Kubilius and Steenbergen-Hu (2017) and A. Harris (personal communication, November 8, 2017) found upper elementary grade ranges (fourth and fifth grade) to be the key time for identification, because students in the upper elementary grade range have been given enough academic foundation to support students on identification measures but still have enough time remaining to build skills for high school honors courses.

Once the researcher decided to focus the research study on fourth and fifth graders in the African-American, Hispanic, and Caucasian subgroups, the final participant selection criteria of individual student participation was determined. Utilizing the guidelines of the U.S. Department of Civil Rights Equity Allowance Rule (Ford & King, 2014), the researcher chose to invite students in the top 20% of their subgroup to receive the talent development intervention. Specifically, the guidelines utilized by the

researcher stated that when there was an extreme discrepancy between demographics of a subgroup and the subgroup's representation in a special education program, schools should utilize the 80-20 philosophy (casting a net of representation for a minimum of 20% of each subgroup) developed from the *Griggs v. Duke Power* court case (D. Ford, personal communication, November 9, 2017). According to D. Ford (personal communication, November 9, 2017), the 80-20 philosophy, while not a perfect path to equality of representation, is a way to guarantee each subgroup in the general population is provided access and opportunity to all levels of education.

Finally, the decision to complete a transformative explanatory mixed methods study was made based on research by Creswell (2014) stating mixed-methods research “provides a stronger understanding of the problem or question than either by itself” (p. 215). Beginning the research with quantitative data provided a foundation for the qualitative phase of the study, where the focus groups helped provide more depth and insight into the quantitative results of the study (Creswell, 2014). Through the explanatory mixed methods approach, the researcher was able to confirm or deny the impact of talent development interventions and determine the most impactful elements of the implemented program.

Significance

Olszewski-Kubilius and Thomson (2015) believed the call for talent development research by NAGC (2015) and the recent holdings of talent development summits by NACG policy groups hoping to locate school-based programs achieving success with low-income and culturally diverse populations proved the field of gifted education was finally ready to “examine its core tenets and ask difficult questions about whether they are still valid or in need of revision” (p. 51). The Department of Education appeared to

support this discussion, recently requiring states to include specific action steps in their gifted education plans (policy reports written every 3 years meant to summarize district programming for gifted education) for CLED student development (Coleman & Shah-Coltrane, 2015). Furthermore, Coleman and Shah-Coltrane (2015) recommended researchers create and study pilot programs intended to nurture potential in early grades. Siegle et al. (2016) supported this recommendation, stating, “promoting research to uncover the essential program components linked to favorable academic outcomes of identified gifted and underrepresented gifted students is of paramount importance” (p. 105).

Summary

Clearly, individuals from the local, state, and national levels are searching for answers to the age-old problem of an excellence gap, demonstrated by the underrepresentation of CLED students in gifted education. It is now clearer than ever, “if we never reap the benefits of the untapped potential talent in these students, we will bear the burden of their failure” (Friedman & Mandelbaum, 2011, p. 4). “The cost to the nation in terms of talent unfulfilled and lives of promise wasted is enormous” (Burney & Beilke, 2008, p. 305); and research in the area of talent development, if successful, could “help move the field of gifted education toward a more sophisticated, nuanced, and developmental approach to giftedness” (Saiying & Olszewski-Kubilius, 2016, p. 104), resulting in success for all populations, rather than only some.

Chapter 2: Literature Review

Introduction

All children deserve a fair chance to have access to rigorous curriculum meant to develop their potential; but unfortunately, NAGC (2017) recently noted high-achieving students in CLED populations are 2.5 times less likely to be given this access. The exclusion of certain populations in gifted education results in intentional enrichment of students who fit a mold and a lack of attention to students who do not (Reinhard, 2016). The result of this exclusion is a growing excellence gap in gifted education. Despite awareness of this problem for decades, only recently has NAGC (2015) called for researchers to locate solutions such as the Talent Development Model of Gifted Education. Stressing the importance of such solutions, Reinhard (2016) and Wiggins-Dockery (2017) warned of the long-term consequences in economic competitiveness for the United States of America and the lack of cultivation of American talent if the excellence gap in gifted education continues to grow. Now is the time. Something must be done for subgroups of students who have previously not been given access to educational opportunities allowing them to develop their giftedness and academic potential.

Literature Search Strategy

The research questions for this study approach gifted education through a transformative lens, with the study's purpose being to assess one possible solution to the growing problem of underrepresentation in gifted education. As the researcher developed knowledge about the excellence gap and the use of the Talent Development Model in gifted education, themes within the research emerged: the problem of the excellence gap has existed for decades; there are consistent factors leading to an increase in the

excellence gap; extensive research exists on what students of CLED populations need; few programs where these elements are implemented exist; and talent development is an educational approach which accounts for research-based needs of CLED students. Using a thematic outline to guide the literature review, the researcher completed a literature search to develop the construct of the study. The literature review used to frame the research study and researcher's decisions is included in this section.

Theoretical Foundation

Javius (2017) defined educational equity as, "providing students and adults what they need to exceed performance targets, then tapping into how students make meaning through their cultural, racial, and social filters . . . to ensure success for all" (p. 18).

Educational equity, Javius contended, has moved to center stage in the education world as excellence gaps have become prevalent in multiple subgroups and at multiple grade levels. The researcher of this study believes in educational equity for all students and is aware of the need to tap into student potential to close the gap educational inequity has created.

Ford and King (2014) further noted educational equity is federal law. In fact, in 1971 through the *Griggs v. Duke Power Co.* court case, the Office of Civil Rights instituted a 20% equity allowance, setting "a targeted goal for the minimally accepted level of underrepresentation of each racial subgroup" (Ford & King, 2014, p. 304) when reviewing placement in special education programs such as special education and gifted education. A school or district's adherence to the Civil Rights Equity Allowance is determined by calculating an Equity Allowance Index (Ford & King, 2014). According to Ford and King, the formula for a Gifted Education Equity Index is $.8 \times$ the total percent of a subgroup in the school or district. The resulting percentage is the minimal

percentage of students in the specific subgroup who should be identified for gifted (or special) education.

Equity of education, however, should not be a goal of an organization simply because law mandates equality. Instead, Javius (2017) recommended researchers and organizations striving for educational equity should look in depth at the theoretical framework of the Equity Theory of Education. Specifically, Javius stated researchers who use the Equity Theory of Education to guide their research study must understand the why, how, and what behind the theory to fix gaps created by inequity.

First and foremost, Javius (2017) noted research studies must have a compelling why that fills researchers with moral imperative and internal fire. The transformative nature of this study illustrates the passion needed to get to the why of educational equity, including the attention to root causes, acceptance of historical issues of power and privilege, and the realization of the fact American schools were designed to accelerate students from the prominent social class (the middle class) and culture (Caucasian) of the country (Javius, 2017, p. 19).

Additionally, Javius (2017) noted the influence of the how and what of educational equity. When referencing the how of educational equity, Javius claimed rigorous instructional planning was essential, specifically the type of planning which leads to culturally conscious teaching and understanding perspectives of multiple cultures. From there, educational equity will result in the what, or the transformation of both adults and students in the educational system ready to advocate against privilege and inequity in the current educational system (Javius, 2017).

In the end, building a research study around the Equity Theory of Education could be uncomfortable and go against the status quo, but a paradigm shift such as the one

necessary to transform the state of gifted education cannot occur without this discomfort (Mezirow, 2009).

Excellence Gap

Plucker and Peters (2016) called to the attention of educators everywhere the fact that the focus of the American education system more often lands on struggling students and filling achievement gaps than on potential of higher-ability learners, in turn, failing to encourage educational excellence. This lack of attention to high-ability students, Plucker and Peters contended, has played a role in low-ranking achievement of the United States in comparison with other countries and could eventually negatively impact the economic growth of the country. Instead of striving for a narrowing of achievement gaps by meeting minimum proficiency, Plucker and Peters argued, “gains could be made by helping talented students learn and achieve at their full potential” (p. 52).

Defining the excellence gap. Many gaps exist in the education field: achievement gaps, opportunity gaps, gender gaps, and race gaps. Plucker and Peters (2016) called attention to another, possibly more dangerous, gap: the excellence gap, often seen in gifted education. As defined by Plucker and Peters, the excellence gap is a gap in achievement between students who began with similar initial ability, but due to disparities in access to higher levels of curriculum and instruction, grow to achieve at different levels. Furthermore, Plucker and Peters noted the excellence gap looked beyond whether students were excellent regarding achievement to whether students who were already high achievers were growing with gaps in performance between groups. Plucker and Peters argued the excellence gap was one of the most perilous gaps in education because the higher levels of access which created the excellence gap were only provided to students who achieved at excellent levels, creating a vicious cycle and only

exacerbating the problem.

History of the problem. The excellence gap in gifted education has existed for many years. Two famous reports calling attention to the problem of the excellence gap in gifted education are Gallagher's (1974) *Talent Delayed-Talent Denied: The Culturally Different Gifted Child* and *National Excellence: A Case for Developing America's Talent* (Office of Educational Research and Improvement, 1993). In the 1974 report on gifted education (cited in Coleman & Shah-Coltrane, 2015), Dr. James Gallagher addressed the nature of school programs, the system implementing these programs, the social environment of children, and public decisions impacting these programs. As reviewed by Coleman and Shah-Coltrane (2015), assessment of these issues brought to the attention of the gifted community how much "unused and unstimulated potentials of talented children from culturally different backgrounds existed" (p. 70). A long 20 years later, *National Excellence: A Case for Developing America's Talent* called attention to similar concepts, stating, the "United States is squandering one of its most precious resources; the gifts, talents, and high interests of many of its students" (Office of Educational Research and Improvement, 1993, p. 1). Both documents focused on the lack of access to CLED students and called for a reform of the American education system that would increase access to advanced educational opportunities for these students; however, 40 years after the initial release of these powerful reports, the problems of underrepresentation in gifted education are still present.

Olszewski-Kubilius and Clarenbach (2014) stated the nation is extremely aware of this problem; but despite awareness of the problem, unfortunately, "the nation does not yet seem committed to changing" (p. 103). Making changes to gifted curriculum, gifted services, and the definition of giftedness are a priority if history is not to repeat itself.

Ultimately, “if we never reap the benefits of this untapped potential talent in these students, we will bear the burden of their failure [in the future]” (Friedman & Mandelbaum, 2011, p. 4).

Proof of the problem. Dunn (2008) and Ford (2010) found generally 41% of the African-American population is underrepresented, while conversely, 17% of the Caucasian population is overrepresented in gifted education; discrepancies determined by comparing the demographics of a school with the demographics of the gifted education program at the same school. Olszewski-Kubilius and Clarenbach (2014) stated this comparison of demographics can show upwards of a 50% disproportionality between school demographics and gifted programs at those same schools (p. 104). Ford (2010) stated that at most there should be no more than a 20% discrepancy when looking at racial breakdown within gifted education based on the Office of Civil Rights Equity Allowance previously discussed (p. 34).

When looking at standardized testing, Grissom and Redding (2016) found similar discrepancies existed, stating even when students had high achievement scores on standardized testing, African-American students were 66% less likely than Caucasian students to be identified as gifted and Hispanic students were 47% less likely than Caucasian students to be identified as gifted.

Gallagher and Gallagher (2013) additionally looked at the low numbers of students of poverty in gifted education, noting multiple sources showed an average of a 44% drop in low-income students who are identified as gifted in first to fifth grade (p. 113). Additionally, Gallagher and Gallagher found regular education classes these students are placed in are typically fact-oriented and have a culture that can discourage high achievement.

This underrepresentation in gifted classrooms of CLED students is a problem, because as Thornbury (2010) stated, “gifted and talented individuals are present throughout the distribution of society (regardless of culture, race, linguistic background and socioeconomic status), so it is illogical to find enrollment in gifted and talented programs disproportionate to the greater population” (p. 10). Going one step further, Baker (2013) blamed the education system, calling it a “flawed system that reinforces segregation and contributes to gaps in achievement” (para. 17). Thornbury stated underrepresentation will become an increasingly larger problem if one looks at the Census Bureau which predicts that by 2023, half of the children in the USA will be current minorities (p. 22). Ford (2010) also discussed this increase and the urgency with which solutions need to be developed.

Why Underrepresentation Exists

Numerous gifted education researchers have analyzed reasons for underrepresentation in gifted education (Dunn, 2008; Ford, 2010; Grissom & Redding, 2016; Hammond, 2015), finding some of the most prominent causes of underrepresentation to lie in biased identification and recruitment procedures; inability to retain underrepresented populations in gifted programs; and student and teacher perceptions of issues such as racial identity, reasons for motivation, and potential in high-ability CLED students. Ford (2010) looked even further past these commonly noted barriers to underlying root causes such as deficit thinking, colorblind ideology, and White privilege. All three of these root causes, Ford (2010) noted, could be linked to low expectations of underrepresented groups and the inability of educators to notice strengths and potential in CLED students.

Biased identification standards and methods. Coleman and Shah-Coltrane

(2015) cited work of Gallagher (2001), which pointed to biased identification methods in gifted education: standardized testing and narrow pathways. While Gallagher (2001, as cited in Coleman and Shah-Coltrane) noted the importance of IQ in determining one's gifted ability, Gallagher (2001) also noted "IQ scores cannot measure 'native ability,' and cannot be used alone without regard to motivational or social factors" (Coleman & Shah-Coltrane, 2015, p. 71). Grissom and Redding (2016) further contended that even when other assessments are utilized in conjunction with IQ testing, the narrow, achievement-based definition of giftedness still leads to biased identification methods based on academic achievement.

Carman and Taylor (2010) and Naglieri and Ford (2003) noted a common response to these arguments about biased identification methods: Use of nonverbal tests result in greater numbers of students identified for giftedness from racially diverse or lower SES backgrounds. While in theory this belief makes sense, Carman and Taylor found there was no significant difference in performance and, in turn, identification of CLED populations when using nonverbal tests. D. Ford (personal communication, November 12, 2017) contended the lack of difference in identification is attributed to the implicit bias and culturally and linguistically loaded information, vocabulary, similarities, and comprehension in the question stems of these assessments. Through multiple research studies, Naglieri and Ford found the only test shown to lack these forms of bias was NNAT. Ultimately, the message when looking at identification measures, including nonverbal assessments, was nonverbal testing is an important tool to utilize in identification but should not be the only tool used in the screening process (Carman & Taylor, 2010; D. Ford, personal communication, November 12, 2017; Naglieri & Ford, 2003).

Educator perceptions. As identified in the previous section, because underrepresented populations often miss the mark on standardized testing pathways, teachers are left controlling the gateways to access for underrepresented populations. Ford (2010) contended this pathway still presents a barrier for underrepresented populations because educators are not trained in gifted characteristics of these populations, blinding them from seeing potential in these students. Additionally, Ford (2010) found deficit thinking, colorblindness, and White privilege to negatively impact educators.

Deficit thinking, as defined by Ford (2010), is “grounded in the belief that culturally different students are genetically and culturally inferior to White students” (p. 32). Olszewski-Kubilius and Clarenbach (2014) agreed, stating deficit thinking leads to the inability of educators to see strengths in students who do not fit the mold of a typical gifted student and can influence educator opinions on criteria, policies, curriculum, and relationships regarding students from a different race or culture than themselves. Ford (2010) suggested deficit thinking is enhanced through White privilege and the belief education is solely an academic meritocracy where students are rewarded only for their academic ability.

Converse to deficit thinking, colorblindness, or “being fair by not seeing differences and treating everyone the same” (Ford, 2010, p. 32), can be just as detrimental to CLED students. While educators believe they are being fair to all students, refusal to see the differences between students of different cultures leads to unintentionally skewed curriculum, policies, and criteria, similar to those brought about through deficit thinking.

Grissom and Redding (2016) connected deficit thinking, colorblindness, and

White privilege to the Bureaucratic Representation Theory, defined as “who the providers of the services are (the teachers) matter to the outputs (services) distributed to the client population (the students)” (p. 2). In applying this theory to gifted services, Grissom and Redding found teachers were more likely to recommend students of the same race as themselves for gifted services; and in schools where there were few to no educators of color, CLED students were recommended at even more disproportionately lower rates than Caucasian students.

Cultural perceptions. Dunn (2008) noted that for many CLED students, negative peer pressure was felt when they participated in gifted services (alienation in gifted classes, isolation from peer groups, or accusations of acting White). Grantham and Biddle (2014) agreed, stating, “peer accusations of acting White undermine gifted and high-achieving Black students’ academic motivation and their interest in challenging courses and programs” (p. 178). Lovett (2011) further pointed out CLED students who are placed in mostly White gifted programs might have difficulty finding others “like them” in their classes, leaving them to develop encouragement and support on their own (p. 56). This ostracism by cultural peers impacts student self-concept and racial identity development and has the potential to lead to a negative sense of self, increased social-emotional concerns, desire to drop out of gifted services, and underperformance of fully capable students (Grantham & Biddle, 2014; Lovett, 2011).

In addition to peer pressure, Burney and Beilke (2008) noted poverty and race are not simply defined by money and color, and additional constraints could have a potential impact on the successes of CLED students. For example, Burney and Beilke noted many CLED families lack self-efficacy, or belief in their child’s ability to be successful in gifted programs. Lovett (2011) supported this statement, noting parents in one of their

research case studies adamantly expressed concern that the expectations of the gifted courses their child was being placed in were too high to equate to success. A. Harris (personal communication, November 8, 2017) further noted students from CLED populations often feel pressure from their families and communities to uphold certain images and cultural expectations, which may hold them back from participating in gifted programs.

Ways Schools Can Decrease the Gap

Dunn (2008) called attention to multiple opportunities for the future of gifted education in relation to decreasing the excellence gap and problem of underrepresentation of CLED populations in gifted education. Specific suggestions included implementing culturally responsive teaching methods, redefining giftedness, improving the identification process, promoting talent development, and addressing policy issues (Dunn, 2008; Ford, 2013).

Culturally responsive curriculum methods. Curriculum can open doors for underrepresented populations, but it can also serve as a greater barrier if it is not developed with cultural considerations in mind (Jarvis, 2009). Breaking down the barrier of curriculum, Jarvis (2009) argued, was the implementation of “the curriculum catalyst” (p. 237), or an appropriate curriculum that can give students a sense of identity and result in emergence of their individual talents. In fact, through research studies, Jarvis found students who were provided a curriculum of opportunity were more likely to display gifted traits than those who did not receive teaching through adjusted curriculum, supporting the belief it was more likely for students exposed to appropriate curriculum to be identified for gifted services.

Ford (2013) also called attention to the need for a culturally relevant curriculum,

or curriculum and instruction designed to meet the needs of CLED students and their specific culturally based learning styles, by developing the Ford-Harris/Bloom-Banks culturally responsive matrix. Eriksson and Lukens (2017) noted another culturally responsive framework, the Culturally and Internationally Responsive Curriculum (CIRC), implemented in Project ELEVATE (English Learner Excellence Evolving through Advanced Teacher Education) with much success for underrepresented populations. As with Ford's (2013) matrix, the CIRC curriculum looks for engaging, collaborative, multicultural, and responsive curriculum, along with lessons meant to provide the chance to critically think, problem-solve, and attend to issues of social justice (Eriksson & Lukens, 2017). Ultimately, Trotman-Scott and Ford (2017) stated, "when used correctly, multicultural curriculum gives students an opportunity to reach their maximum academic potential, as well as develop in areas that the teacher may otherwise not be aware" (slide 4).

One specific culturally responsive teaching method, recommended by Coleman and Shah-Coltrane (2015) and supported by Tomlinson's *Parallel Curriculum* (as cited in Jarvis, 2009), proven to attend to the expectations listed in the two previous culturally responsive frameworks is problem-based learning. Problem-based learning is "a model of curriculum and instruction in which learning starts with an ill-structured, or open-ended problem that is designed to lead students to specific content in the curriculum" (Center for Talent Development, 2013, p. 1). The Center for Talent Development (2013), Coleman and Shah-Coltrane, and Gallagher and Gallagher's (2013) research reinforced problem-based learning as a curricula choice for underrepresented populations. Specifically, Gallagher and Gallagher utilized problem-based learning to identify students with Advanced Academic Potential (AAP) and then continued to develop potential in

AAP identified students through a problem-based learning enriched curriculum. Gallagher and Gallagher's findings showed AAP students, specifically those in CLED populations, showed a greater increase in motivation when using problem-based learning experiences than regular education or lower-level learners (Gallagher & Gallagher, 2013). This research by Gallagher and Gallagher supported the use of problem-based learning as a curriculum catalyst for underrepresented populations in this research study.

Queen (2006) additionally called attention to noninstructional, culturally responsive methods that could enhance student achievement such as parent outreach and teacher training. Davis, Brulles, and Kendrick-Dunn (2017) also stressed the importance of parent outreach, stating when parents are invited to share their voice at the table of discussion, they can serve as the cultural agents who bridge the gap between school, community, and the home. Further connecting with Queen, Davis et al. noted this outreach and inclusion often does not happen because teachers are not appropriately trained in multicultural gifted education. If, instead, teachers were trained in needs of CLED students, not only would CLED students benefit, a group of teachers who truly value gifted education and could serve as advocates for underrepresented populations would be developed.

Definition review. Over the years, the definition of gifted(ness) has been altered numerous times. Dunn (2008) pointed to three pivotal documents or orders which have led to adjustment of the definition of giftedness: The Marland Report in 1972, the Javits Gifted and Talented Act of 1988, and the Office of Education Research and Improvement in 1993, arguing the constant adjustments in the definition of gifted(ness) could increase teacher bias and perception depending on the definition they were taught. The first definition of giftedness, as argued by Dunn, was the Marland Report, where giftedness

was defined as showing outstanding abilities and capability of high performance in a broad range of domains. Similar to the Marland Report, the Javits Act in 1988 defined giftedness as evidence of high performance capability in a broad range of areas, only removing the concept of psychomotor ability from the Marland Report definition (Dunn, 2008). The greatest change in definition, Dunn contended, was achieved in 1993 when the Office of Education Research and Improvement removed the word “gifted” from the definition, replacing it with “outstanding talent” (p. 18). While Queen (2006) agreed with Dunn’s progression of the definition of giftedness, Queen noted other influential reports or research that swayed development of the definition: Project Head Start in 1962 (making educators aware of the need to address talent in society); the increased use of the Torrence Tests of Creative Thinking in the 1980s; and the debates between Gardner, HermStein, Murray, and Gagne on the true meaning of giftedness.

Most recently, Olszewski-Kubilius and Clarenbach (2014) called attention to a more necessary discussion than defining giftedness, the discussion of changing the discussion of giftedness from performance of students to potential for performance in students. Gifted education advocates, according to Olszewski-Kubilius and Clarenbach, need to help education “move from the mindset that we identify first and serve second, to the mindset that we serve first in order to develop talent that can then be identified” (p. 105). Renzulli (2002) and Tomlinson (2001, cited in Jarvis, 2009) agreed, stating the definition of giftedness must be multi-faceted, consider cultural backgrounds, and look at potential rather than only performance to bring about change in gifted education.

Mindset shift. Dai (2015) advocated for gifted education to look at the mindset shift from performance to potential as the difference between the pyramid of opportunities (the naturally selective mindset that places only a few at the top) and the

revolving door (the mindset that all individuals should be able to try out enrichment, allowing those with potential, excellence, or motivation to stay).

Gifted education, Dai (2015) suggested, is currently driven by an elitist viewpoint which is intensified by unclear identification methods and services only meant to impact small numbers of “cognitively elite” students (p. 270). This viewpoint is compounded by the meritocratic nature of the education system, where being gifted is determined by criterion-based systems, excellence is possessed not earned, and being “gifted” is seen as a privilege. Dai warned this IQ-stratified approach could create a “social efficiency model” of a “gifted, average, and mentally challenged” (p. 270) breakdown of the population. Opposing the social efficiency model is the egalitarianism viewpoint built on the belief that everyone is equally capable and no merit-based selections are needed. This viewpoint is just as troublesome as social efficiency when considering under the egalitarianism viewpoint no social recognition is given for excellence and no differentiated education is provided, making advanced education a moot point.

Instead of either of these thought processes, Dai (2015) suggested shifting mindset to a talent development paradigm where a middle ground between the socially elite and egalitarianism viewpoints could be created. Dai referred to this mindset as the Jeffersonian Vision, or “a vision of human potential and ideal society, which sees human potential as pluralistic rather than monolithic, and diverse talents as widely distributed across all walks of life (rich and poor)” (p. 270). The Jeffersonian Vision, developed from Gardner’s belief that intelligence is multidimensional and creativity is widely distributed in a population, would encourage “society to cultivate talents and reward people for what they do, not what they are” (Dai, 2015, p. 270).

Dai (2015) completed further research with the Jeffersonian principle to provide

justifications of this model. The key points he found included paying attention to emergent talents; providing opportunity in the areas of high aptitude; and the use of curriculum based on creativity, leadership, and innovation. Through these steps, a group of elite performers, rather than an elitist mentality, is created. Locating this group of performers required Dai and his fellow researchers to consider multiple criteria and multiple methods of assessment, all elements shown to benefit typically underrepresented gifted populations.

Increase student engagement. Renzulli (2015) asked educators to imagine teaching students who were as excited about their core classes as they are for a robotics competition or their school yearbook class. The reason these experiences do not typically mirror the same excitement in students, Renzulli (2015) noted, is due to the fact students are not engaged in core academics in the same ways they are engaged in robotics or classes such as yearbook. While Renzulli (2015) did not deny core classes must teach as prescribed by standards, he argued high-engagement activities could be aligned with standards-based curriculum. Thornbury (2010) found talent development, particularly with students of high potential, to be a pathway for increasing student engagement and intrinsic motivation while still aligning to state standards. Specifically, Thornbury pointed to the critical thinking, creative problem-solving, and deductive thinking components of talent development programs as engaging factors and intrinsic motivators for students. Thornbury further found these components to benefit typically underrepresented populations because students from CLED populations “have fewer opportunities to develop the academic skills (such as critical thinking and problem-solving) necessary for success in school” (p. 33). Ford (2010) further noted, CLED students often exhibit gifted potential in unique ways such as creative problem-solving

and deductive thinking.

Research by Renzulli and Reis (2009, as cited in Cleveland, 2017) confirmed the connection between motivation and engagement, noting motivation to achieve is necessary for a student to be engaged and on task. Renzulli and Reis (as cited in Cleveland, 2017) also found both characteristics to be important indicators of potential giftedness in students. Again, Ford (2010) supported these findings in relation to CLED populations, stating that many times creativity and problem-solving rather than high scores on standardized testing are the gifted characteristics CLED populations exude.

Cleveland (2017) found one way “to effectively document observable behaviors such as motivation” and engagement (p. 12) was to utilize the GRS designed by Pfeiffer and Jarosewich (2007). Pfeiffer and Jarosewich confirmed this finding, stating the component of their rating scale ranking student motivation measures a student’s drive, desire to succeed, and tendency to engage in challenging tasks even without encouragement. Pfeiffer and Jarosewich found students who scored well on this section could be characterized as having “a dynamic energy that drives or impels a student to achieve” (p. 42). Renzulli (2015) believed this drive was necessary for students to be engaged in learning. Additionally, Renzulli (2015) found when students were driven to achieve, they expressed their engagement in learning through increased attendance at school. As noted by Renzulli (2015), this increased attendance positively impacts academic achievement, reversing the cycle of lack of access and achievement gaps with CLED populations currently existing in the American education system.

Teacher training. Grissom and Redding (2016) warned that when teachers are the gateway to students being flagged for services, these gateways can be clouded. Furthermore, the use of biased identification processes can lead to unintentional

segregation in schools and increased inequality in gifted education. Instead, Olszewski-Kubilius and Clarenbach (2014) encouraged school systems to train teachers and leaders who will ensure the advanced education of CLED students is made a priority. Through teacher training, deficit thinking decreases (Ford, 2010) and teachers become more likely to notice behavioral indications of advanced reasoning and thinking in all students (Olszewski-Kubilius & Clarenbach, 2014).

Eriksson and Lukens (2017) further supported these statements, noting the importance of increasing teacher self-efficacy when dealing with CLED students through the development of professional learning communities, professional development for school staff, and continuous support for teachers by a gifted specialist. Ultimately, the teachers in a school have the greatest impact on student achievement; and if CLED students are to be positively impacted, the implementation begins with teacher training (Eriksson & Lukens, 2017).

Talent Development Connects All

Jackson (2011, as cited in Hertzog, 2017) asked the question, “with all good intentions and stipulations, why is there still not a systematic practice or pedagogy aimed at developing high intellectual performance in all students instead of instilling marginalizing practices for students of color, especially those in urban areas” (p. 219)? Hertzog (2017) contended talent development pedagogy was the answer, stating a talent development pedagogy “identifies and activates student strengths, elicits high intellectual performance, provides enrichment, and integrates prerequisites of some format” (p. 220). Additionally, Hertzog stated a talent development pedagogy has the potential to “increase motivation, achievement, and engagement of students who were not normally identified for gifted education services” (p. 220).

Defining talent development. NAGC (2017) noted the first step in implementing talent development is developing a clear definition of what talent development is. In the finalized position paper by NAGC (2017), talent development was defined as providing opportunities for students to develop and present their talents in multiple skills and domains rather than solely through their IQ. Thornbury (2010) additionally defined talent development as an intervention found to “provide enriching educational opportunities these [CLED] students otherwise would not receive” (p. 45).

Jarvis (2009) asked educators to look at the current gifted education system versus a talent development framed gifted program as a DIP (Definition-Identity-Provision) model versus a PEP (Provision-Evaluation-Provision) model. A DIP model has a clearly defined definition for giftedness, students are identified based on their degree of fit with this definition, and then students gain access to curriculum provisions based on their identification (Jarvis, 2009). Instead, under the talent development mindset, students receive services in a PEP model where curriculum provisions are provided with potential for giftedness in mind, students are evaluated on their ability to interact with these provisions, and then additional curriculum provisions are provided to students based on their evaluations (Jarvis, 2009). Since the PEP model is “more authentic in nature and less dependent on one standardized measure, minorities and other students typically missed in gifted identification testing are more likely to be noticed” (Jarvis, 2009, p. 235).

Talent development framework. Olszewski-Kubilius and Clarenbach (2014) looked at the school-based programs showcased at the NAGC summit to locate programs that were achieving success with low-income, culturally diverse populations and then provided what they considered a roadmap to repeating this success (based on common

elements of the successful programs). The roadmap included matching identification procedures and programming with level of developed talent, building awareness about diversity and high-ability learners, attending to noncognitive factors that affect achievement, providing challenging and enriching curriculum, deliberately cultivating support networks, and creating program components such as partnerships to equalize opportunities (Olszewski-Kubilius & Clarenbach, 2014).

Taking into consideration the elements noted in Olszewski-Kubilius and Clarenbach's (2014) talent development framework, NAGC (2017) highlighted the importance of attending to the social-emotional needs of CLED students. Olszewski-Kubilius and Clarenbach agreed, noting no talent is developed exclusively in school, and deliberate creation of support networks can help CLED students work through previously mentioned perception and cultural barriers. Davis et al. (2017) further recommended utilizing outside sources such as mentors who had struggled through the same path as these underrepresented students, sport coaches, and faith-based connections as support systems for CLED students. As a village, these support systems can help students develop belief in their ability and motivation to succeed in gifted programs (Lovett, 2011; Thornbury, 2010). By increasing self-efficacy, Burney and Beilke (2008) further found comprehensive support systems could help the development of resilience in CLED students in a way that could positively impact their academic success.

Additionally, NAGC (2017) called attention to the following tenets of the talent development framework: attention to individual abilities, belief that intelligence is malleable, existence of opportunity, development of mental and social skills, and understanding the talent development pathway is a long-term project. Ultimately, through implementation of this framework and these tenets, students should have the

opportunity to show gifted traits such as interest, motivation, humor, problem-solving ability, inquiry, memory, imagination and creativity, insight, reasoning, and communication skills to help identify them through gifted education standards.

Programs that work. While Henfield et al. (2017) pointed to a research desert in the area of actual programs addressing the problem of underrepresentation in gifted education, NAGC (2015) located a few pockets of excellence future talent development research could attempt to imitate. Three of the highlighted programs, all funded by the Jacob Javits Education Act of 1988, meant to identify high achievers who are not identified as gifted, were the Young Scholars Program in Virginia, Project ELEVATE in Florida, and Project U-Stars (a nationally renowned talent development method).

Young Scholars. Horn (2014) called Young Scholars a model rather than a program, stating the notion of the model was to provide equity of opportunity to all students. The Young Scholars model followed the tenets of a talent development program, with initial identification of potential, nurturing and support for the development of this potential, use of research-based interventions and culturally responsive curriculum, and providing ongoing training for the professionals involved in the implementation. Specifically, student portfolios, performance-based assessments, and nonverbal ability tests were utilized to locate potential in students. Once a group of students was located, model lessons were taught to these students by gifted specialists, and teachers received extensive training on gifted characteristics and culturally responsive teaching. Regular education teachers also completed GRS on the students in the Young Scholars group to include in the portfolios of student work the teachers developed. Young Scholars were also involved in summer camp programs where they completed multiple problem-based activities and utilized *The Parallel Curriculum* by

Tomlinson et al. (2009) and The William and Mary Literature Units. While a very successful program, Horn noted the hardest adjustment for leadership was changing their mentality of giftedness from the notion giftedness is static to the notion giftedness is malleable.

Project ELEVATE. Similar to Young Scholars, Eriksson and Lukens (2017) stated the purpose of Project ELEVATE was to utilize alternative methods for identification of giftedness and focus on developing excellence in identified students. The four components of Project ELEVATE included identification of potential, implementation of talent development, increased professional development, and increased family engagement. After completing professional development on CIRC and Developing Intercultural Competence and Excellence (DICE), Project ELEVATE encouraged their teachers to develop culturally responsive lessons to be used in the talent development program. Unlike Young Scholars, a year-long intervention, Project ELEVATE was implemented in 8-week increments, with third- through fifth-grade students being served in the fall and kindergarten through second-grade students being served in the spring (Eriksson & Lukens, 2017). Project ELEVATE also had an extended learning component, where additional talent development was offered to students in the program after school or during the summer. Following the tenets of talent development, support for staff was essential to the success of Project ELEVATE (Eriksson & Lukens, 2017).

Project U-Stars. Similar to both of the previous programs, Project U-Stars is aimed at supporting teachers in the early recognition of and additional nurturing of CLED students (M. Coleman, personal communication, November 8, 2017). Following the tenets of talent development, Project U-Stars has a professional development element,

culturally responsive curriculum for teachers to use during implementation, and an alternative method for identification. Unlike Young Scholars and Project ELEVATE which utilize previously created teacher observation tools, Project U-Stars has created their own assessment tool: TOPS. The TOPS tool is organized around nine domains of giftedness: learns easily, shows advanced skills, displays curiosity and creativity, has strong interests, shows advanced reasoning, displays spatial abilities, shows motivation, shows social perceptiveness, and displays leadership (Coleman, Shah-Coltrane, & Harrison, 2010). Using the TOPS tool, observation of students occurs over a 6-week period, and students who illustrate gifted potential are then served through the Project U-Stars program. Additionally, teachers are encouraged to use the results of the TOPS portfolio when speaking with parents about their children's abilities as well as an aid in differentiating regular education curriculum.

Identification Methods and Changing the Madness

Ford (2013) warned educators about the current obsession with testing students in American education. In particular, Ford (2013) discussed tests used in gifted education, pointing to the fact these tests are subjective, biased, and unfair to CLED students. Instead, Ford (2013) recommended assessment, which she defined as a more broad and comprehensive approach to evaluation in the least discriminatory way. Assessment by this definition involves more than one standardized test, requiring educators to collect multiple data points. Furthermore, when these data points are culturally competent, more students from underrepresented populations are identified for gifted education (Ford, 2013).

Multiple methods of identification. Grissom and Redding (2016) also recommended using identification methods that “are not culture blind” (p. 16). Dunn

(2008) supported culturally appropriate identification practices as well, stating a culturally appropriate identification mindset would result in the use of valid instruments, multiple sources of evidence, providing opportunity for nurturing of potential, increasing family involvement, and training teachers in identification procedures. Coleman and Shah-Coltrane (2015) agreed with the use of multiple, culturally appropriate assessment methods, stating while IQ is “the single most effective predictor of success in school” (p. 71), motivational and social factors must be considered when looking at CLED populations where IQ alignment is not research proven.

As school systems look for other methods of identification, there are plenty of choices available: The TAB Summary Form (Thornbury, 2010), the Children’s Academic Intrinsic Motivation Inventory (Thornbury 2010), The Classroom Engagement Rubric (Gallagher & Gallagher, 2013), Renzulli’s Scales for Rating Superior Students (Queen, 2006), TOPS (Coleman et al., 2010), and the Gifted Teacher Rating Scale (Peters & Pereira, 2017) are some of the more well-known and research-based options. For this reason, the tool school systems choose to utilize, Olszewski-Kubilius and Clarenbach (2014) argued, is not as important as the intention to use the tool to cast a wider net and serve a broader range of students in gifted programs.

Gifted-assignment gap. The intentional use of nontraditional identification methods to identify gifted potential in students is what Grissom and Redding (2016) referred to as decreasing the gifted-assignment gap. In addition to the tools previously mentioned, Grissom and Redding recommended student background be obtained (including information from the parent, student, and previous teachers) so the students’ probability of placement can be built off knowledge of the whole child. Baker (2013) agreed, stating decreasing the gifted-assignment gap is essential because students in

gifted programs typically proceed to honors classes in high school; and when students miss the opportunity in early years to be part of the program, they only get continuously farther behind and are less prepared for the rigor necessary in high school and beyond. Plucker and Peters (2016) also called attention to gifted-assignment gaps, noting them as a cause of increased excellence gaps and perpetuation of the vicious cycle keeping excellence gaps from decreasing.

Summary and Conclusions

“The only way diversity will conceivably get better is to give young, poor, [and culturally diverse] kids the same opportunity young, affluent [White] kids get” (Baker, 2013, para. 43). Clearly, a problem of underrepresentation of CLED populations exists in gifted education, and no longer can we ignore the problem. Additionally, educators can no longer only make incremental changes to their practices, policies, or mindsets. For the problem of underrepresentation in gifted education to change, the education system must respect the problem and be willing to shake things up. As A. Harris (personal communication, November 8, 2017) stated, educators need to change the game: “We need a third end zone. Who knows what that game will look like, but the game will be different, and different is what we need.”

Chapter 3: Methodology

Introduction/Restatement of the Problem

Gifted and talented individuals are present throughout the distribution of society; and just as there is not only one image of a gifted student, one veritable definition of giftedness does not exist either. If these statements are true, it seems fair to question why so many of America's gifted classes fail to include a diverse group of students and even more so to adamantly search for ways the education system can alter the inequitable situation it has created. One step towards the answer is in locating potential giftedness rather than setting identification gateways students must cross. One research-based intervention meeting this criterion and providing a possible solution to the underrepresentation of CLED students in gifted education classrooms is talent development. Through a transformative, explanatory mixed methods approach, this research study determined if talent development could build a pathway to increase CLED student participation in advanced education.

Review of Research Questions

The research questions for the study are listed as follows.

1. What elements of a talent development program have the greatest impact on developing potential in underserved populations?
2. How does implementation of a talent development program impact underrepresented populations regarding achievement?
3. How does implementation of a talent development program impact underrepresented populations regarding engagement?
4. To what degree does a talent development program identify potentially gifted CLED students in comparison to standardized identification methods?

Setting

The district where the study was completed is a mid-size, urban town located in eastern North Carolina. According to OnBoard Informatics (2014), at the time of the study, the population of the town was approximately 45,245 people, with a gender breakdown of 47.7% male and 52.3% female and a demographic breakdown of 64.7% Caucasian, 20.5% African-American, 11.6% Hispanic, and 3.6% other races (OnBoard Informatics, 2014, p. 1).

Previously a mill town, the small city historically struggled with education. Many of the families in the town did not receive college degrees because their families always depended on the mill as their source of income. However, in 2003, the mill closed; and in 2005 an entrepreneur purchased the property where the mill was located with plans to erect a research institute. In the years after the mill closed, many families in town dealt with economic strife. Recent data from OnBoard Informatics (2014), however, shows the average income of the town increased from \$35,532 in 2000 to \$44,524 in 2014. The impact of the research campus was also positive for the education system in the town, providing resources, partnerships, and grant money for programs such as biotechnology and agriculture in the schools. Despite this change, the district still contended with poverty. In fact, based on the district free/reduced lunch average of 76.075% at the time of the study, all students received free breakfast and lunch through the Community Eligibility Provision program (A. Treanor, personal communication, October 12, 2016).

Additionally, between 2012 and 2018, three charter schools opened within or near the school district. Creation of these institutions led to some parents pulling their children from the city school system to attend the charter schools and, in turn, the school system being held responsible for monetary debt. One initiative the school system began

to encourage parents to remain in the district was the implementation of magnet programs at the elementary school level (at the time of the study the district had an arts magnet, global studies magnet, and a Spanish immersion program). The goal of the magnet programs was to offer innovative opportunities for students of all subgroups. The middle and high school in the district also added arts programs such as dance, yoga, theater, and speech and debate; and STEM programs such as Project Lead the Way and welding to increase interest in students and parents at all educational levels. Implementation of these programs aligned with the vision of the district to “create learning environments that meet diverse and customized needs of students and prepare students for the globally competitive 21st century” (district website).

Implementation of talent development was aimed at these same missions: increasing interest from families to remain in the district, meeting student needs, and preparing students for a globally competitive society. Additionally, recent data pointed to underrepresentation of culturally linguistically and/or economically diverse students in the gifted classrooms in the district when compared to the overall demographics district wide. Table 1 shows the current demographics of the district in relation to the demographics of the identified gifted population.

Table 1

Demographics of District vs. Demographics of AIG Identified Population

Grade	Total	Asian n (%)	African- American n (%)	Hispanic n (%)	American Indian n (%)	Two or More n (%)	Pacific Islander n (%)	Caucasian n (%)
K- all	416	2 (.5%)	115 (27.6%)	123 (29.6%)	2 (.5%)	22 (5.2%)	2 (.5%)	150 (36.0%)
K- identified	<i>District does not identify AIG students until 3rd grade.</i>							
1- all	411	6 (1.2%)	100 (24.3%)	137 (33.3%)	0 (0%)	31 (7.5%)	3 (.7%)	134 (32.6%)
1- identified	<i>District does not identify AIG students until 3rd grade.</i>							
2- all	408	3 (.7%)	111 (27.2%)	129 (31.6%)	2 (.5%)	24 (5.9%)	1 (.3%)	138 (33.8%)
2- identified	<i>District does not identify AIG students until 3rd grade.</i>							
3- all	426	4 (.9%)	113 (26.5%)	157 (36.9%)	1 (.2%)	23 (5.4%)	0 (0%)	125 (29.3%)
3- identified	20	1 (5%)	1 (5%)	8 (40%)	0 (0%)	0 (0%)	0 (0%)	10 (50%)
4- all	440	3 (.6%)	131 (29.8%)	157 (35.7%)	1 (.2%)	23 (5.2%)	0 (0%)	125 (28.4%)
4- identified	39	0 (0%)	9 (23.1%)	9 (23.1%)	0 (0%)	4 (10.2%)	0 (0%)	17 (43.6%)
5- all	444	6 (1.2%)	121 (27.3%)	140 (31.5%)	1 (.2%)	24 (5.4%)	2 (.5%)	150 (33.8%)
5- identified	34	2 (5.9%)	1 (2.9%)	4 (11.8%)	0 (0%)	0 (0%)	0 (0%)	27 (79.4%)
6- all	419	9 (2.1%)	103 (24.6%)	147 (35.1%)	3 (.7%)	27 (6.4%)	0 (0%)	130 (31.0%)
6- identified	39	1 (2.6%)	3 (7.7%)	9 (23.1%)	0 (0%)	4 (10.3%)	0 (0%)	22 (56.4%)
7- all	405	4 (.9%)	107 (26.4%)	134 (33.1%)	3 (.7%)	19 (4.7%)	0 (0%)	138 (34.1%)

(continued)

Grade	Total	Asian n (%)	African- American n (%)	Hispanic n (%)	American Indian n (%)	Two or More n (%)	Pacific Islander n (%)	Caucasian n (%)
7- identified	55	1 (1.8%)	5 (9.1%)	11 (20%)	1 (1.8%)	4 (7.3%)	0 (0%)	33 (60%)
8- all	372	8 (2.2%)	103 (27.7%)	122 (32.8%)	0 (0%)	17 (4.6%)	0 (0%)	122 (32.8%)
8- identified	50	1 (2%)	7 (14%)	14 (28%)	0 (0%)	1 (2%)	0 (0%)	27 (54%)
9- all	459	5 (1.9%)	132 (28.8%)	155 (33.8%)	0 (0%)	18 (3.9%)	0 (0%)	149 (32.5%)
9- identified	52	2 (3.8%)	3 (5.8%)	12 (23.1%)	0 (0%)	1 (1.9%)	0 (0%)	34 (65.4%)
10- all	456	5 (1.1%)	147 (32.2%)	138 (30.3%)	0 (0%)	26 (5.7%)	2 (.4%)	138 (30.3%)
10- identified	40	2 (5%)	5 (12.5%)	5 (12.5%)	0 (0%)	2 (5%)	0 (0%)	26 (65%)
11- all	389	8 (2.1%)	118 (30.3%)	116 (29.8%)	0 (0%)	25 (6.4%)	0 (0%)	122 (31.4%)
11- identified	29	1 (3.4%)	1 (3.4%)	4 (13.8%)	0 (0%)	1 (3.4%)	0 (0%)	22 (75.9%)
12- all	338	5 (1.5%)	121 (35.8%)	74 (21.9%)	0 (0%)	14 (4.1%)	0 (0%)	124 (36.7%)
12- identified	48	1 (2.1%)	2 (4.2%)	11 (23.0%)	0 (0%)	2 (4.2%)	0 (0%)	32 (66.7%)
Total- all	5534	71 (1.3%)	1586 (28.7%)	1748 (31.6%)	18 (.3%)	297 (5.4%)	11 (.2%)	1803 (32.6%)
Total- identified	406	12 (3%)	37 (9.1%)	87 (21.4%)	1 (.2%)	19 (4.7%)	0 (0%)	250 (61.6%)

As shown in Table 1, the demographics of the school district in the study were diverse, but a clear discrepancy existed in demographic representation in the gifted program across all grades in the district. According to Ford and King (2014), discrepancies of less than 10% between total district population and gifted population are acceptable, discrepancies of 10%-19% are warning signs, and discrepancies of 20% or

more are unacceptable. As shown in Table 1, the greatest discrepancies between whole district population and identified students are in the African-American and Caucasian subgroups, with the Hispanic population showing pockets of inconsistent representation.

Research Design and Rationale

The research study followed an explanatory mixed methods design utilizing a collaborative transformative framework. As defined by Creswell (2014), an explanatory mixed methods research design allows the researcher to collect quantitative data, complete data analysis, and then engage in qualitative research to explain the quantitative results in more detail. Through the mixed-methods research, the researcher intended to examine two dependent variables: academic performance and engagement of students. The treatment, or independent variable of the study, was talent development services. By comparing the dependent variables before and after the independent variable was implemented and through utilizing qualitative data to further explain the quantitative data collected, the researcher looked at two of the three “prototypic outcome measures” suggested by Rosenthal and Rosnow (1991, as cited in Creswell, 2014, p. 169): the direction and amount of observed change.

The initial quantitative data collected in this study included i-Ready diagnostic assessments, GRS, Panorama Education Student Surveys, attendance reports, NNAT screening results, and teacher and parent perception surveys. Follow-up qualitative data were collected through teacher and parent focus groups, and post-teacher and post-parent perception surveys. The qualitative elements of the study allowed the researcher to utilize input from other stakeholders to help explain the quantitative results of the study (Creswell, 2014). Once applied, the explanatory mixed methods research approach assisted the researcher in determining whether the talent development approach to gifted

education positively impacted academic performance and engagement of students typically underrepresented in gifted programs.

This explanatory mixed methods approach was important to the nature of the study because underrepresentation in gifted education is a multi-faceted issue with many contributing factors; and while strong quantitative data sources were available to illustrate achievement and representation of CLED students in gifted programs, the data needed to be explored at a deeper level to account for the multiple factors of influence which existed when looking at underrepresented populations. The collaborative transformative framework enhanced the researcher's understanding of the data collected and increased the probability of the research results impacting future education practices and policies.

Closing an achievement gap in education will not occur overnight, and small-level initiatives such as this research study were unlikely to result in changes of significant academic outcomes immediately; however, Noguera (2008) advised researchers providing qualitative data to support even the smallest quantitative changes could turn "effective strategies into incremental changes and higher rates of achievement for minority groups in the future" (p. 99), providing support for the design of the explanatory mixed methods study.

Role of the Researcher

In this explanatory mixed method research, the researcher had two separate roles, defined by Simon (2011b) as an unbiased observer and as an instrument of data collection. Simon (2011b) contended researchers in a quantitative study should be theoretically nonexistent, with the ability for the quantitative data to be collected by any other individual. All quantitative data sources utilized in the research study (i-Ready

diagnostic assessments, Panorama Education Survey results, Gifted Teacher Rating Scales, attendance, NNATs, and teacher perception surveys) were set up to yield close to similar results without regard to the person collecting the data and, for this study, were all collected by someone other than the researcher. These research decisions allowed the researcher to fulfill her role as an unbiased observer of quantitative data.

As a qualitative researcher, Simon (2011b) called the researcher an insider. The researcher was an insider of the research through parent and teacher focus groups and collection of qualitative survey results where coding of survey results was necessary. To ensure the researcher remained objective in the qualitative research, focus groups were monitored and recorded, a wide variety of literature was reviewed, and the researcher worked with a parent and teacher advisory group to assist in the development of initial questions and effective probing questions for the surveys and focus groups. Additionally, the intention of the focus groups was to help the researcher explain the thematic results from the surveys, ensuring any bias of the researcher was not present in the presentation of study findings.

Participant Selection Logic

Three levels of participant selection were utilized in this study: demographic subgroup decisions, grade level decisions, and school participation decisions. As noted in Table 1, the three subgroups with inequitable discrepancies of representation in the gifted program in this district included African-American (underrepresented), Hispanic (underrepresented), and Caucasian (overrepresented) subgroups. In addition to showing pernicious discrepancies in representation, these three subgroups were the three largest subgroups in the district. Urdan (2010) stated the size of these populations in the district provided a representative sample, defined as “purposely selected cases so they will match

the larger population on specific characteristics” (p. 3), for the research study. Within these subgroups, the study focused on the top 20% of students in each subgroup, based on the U.S. Department of Education Office for Civil Rights’ Equity Allowance Discrepancy Rule (Ford, 2010).

In addition to the demographic participation selection, the study collected data on fourth- and fifth-grade students in the district. Fourth- and fifth-grade students were the intended focus groups for the research based on Olszewski-Kubilius and Steenbergen-Hu’s (2017) finding that identification in upper elementary years “allows for sufficient opportunity and time to have a significant impact on student preparation for high school, but also allows program administrators to feel confident that talent potential could be ascertained reliably with standardized testing” (p. 204). Since the district did not identify students until the middle of third grade and used initial-year testing for third-grade identification (which were different measurements than used in fourth through eighth grade), using third-grade students in the research study could have skewed comparison results of third grade with other grades. Conversely, students in the fourth and fifth grade took valid and reliable common assessments, and identification procedures for both grades were the same, so the level of confidence referenced by Olszewski-Kubilius and Steenbergen-Hu (2017) was possible to achieve. Additionally, A. Harris (personal communication, November 8, 2017) noted that students of talent who begin middle school without the talent being recognized will be more likely not to use their talent, not to be included in honors classes, or not receive access to opportunities that could develop their potential.

The final participation selection criterion was administrative agreement to participate in the study. It is important to note since talent development was not the only

program being implemented in the district, school leaders were given the option as to whether they wanted to participate in the program (and research study) during the 2017-2018 school year. Two of the six elementary schools (where fourth- and fifth-grade students are housed) chose to participate. Neither of the schools choosing to participate were implementing a magnet program this year, so their focus intentionally could be placed on talent development implementation. The administrative decisions regarding participation in the study created a quasi-experimental design, with two elementary schools receiving the intervention and four elementary schools not receiving the intervention. The four schools not receiving the intervention served as comparison groups, as they still received gifted services for identified students in their population as dictated by the state and local AIG plan. The current demographics for all six elementary schools, whether they were a magnet school and whether they were part of the study, are shown in Table 2 through Table 7. Table 2 and Table 3 provide demographics on the treatment schools, and Table 4 through Table 7 provide demographics on the comparison schools.

Table 2

Demographics of School 1 (nonmagnet school, receiving intervention)

Grade	Total #	Asian	African-American	Hispanic	American Indian	Two +	Pacific Islander	White
K	62	0	9	16	0	2	1	34
1	76	1	7	28	0	7	1	32
2	76	0	13	23	1	4	0	35
3	70	0	13	25	1	2	0	29
4	78	0	22	21	0	6	0	29
5	76	1	14	19	0	4	1	37
Total	438	2	78	132	2	25	3	196

Table 2 shows the overall school size of School 1 was 438 students, with a

demographic breakdown regarding the three subgroups studied in this research of 18% African-American, 30% Hispanic, and 45% White. School 1 was typically one of the higher performing schools in the district but underwent major staffing changes the year prior to the research study, one change being a new principal. Table 3 shows the demographic information of School 2.

Table 3

Demographics of School 2 (nonmagnet school, receiving intervention)

Grade	Total #	Asian	African-American	Hispanic	American Indian	Two +	Pacific Islander	White
K	56	0	18	14	0	1	0	23
1	56	0	11	25	0	1	0	19
2	60	0	14	19	0	3	0	24
3	52	1	8	21	1	2	0	19
4	70	0	20	26	0	3	0	21
5	68	0	15	29	1	2	0	21
Total	362	1	86	134	2	12	0	127

Table 3 shows the overall school size of School 2 was 362 students, with a demographic breakdown regarding the three subgroups studied in this research of 24% African-American, 37% Hispanic, and 35% White. Similar to School 1, School 2 went through a large change in staffing the year of the study. To support the new (and returning) staff, the principal at School 2 decided all staff members would receive monthly professional development on gifted students and gifted education. Table 4 shows the demographic information of School 3.

Table 4

Demographics of School 3 (nonmagnet school, not receiving intervention)

Grade	Total #	Asian	African-American	Hispanic	American Indian	Two +	Pacific Islander	White
Pre-K	4	0	3	1	0	0	0	0
K	72	0	23	13	1	8	0	27
1	85	1	30	20	0	4	0	30
2	75	1	25	18	0	5	0	26
3	102	2	30	27	0	5	1	37
4	88	0	36	23	1	4	0	24
5	94	3	32	12	0	7	1	39
Total	520	7	179	114	2	33	2	183

Table 4 shows the overall school size of School 3 was 520 students, with a demographic breakdown regarding the three subgroups studied in this research of 34% African-American, 22% Hispanic, and 35% White. School 3 was historically the district's least economically disadvantaged school in the district. Table 5 shows demographics of School 4.

Table 5

Demographics of School 4 (magnet school, not receiving intervention)

Grade	Total #	Asian	African-American	Hispanic	American Indian	Two +	Pacific Islander	White
K	81	1	14	35	0	5	0	26
1	64	0	14	26	0	5	0	19
2	48	1	8	24	0	0	0	15
3	44	0	10	15	0	2	0	17
4	66	2	13	30	0	3	0	18
5	57	0	11	25	0	3	0	18
Total	360	4	70	155	0	18	0	113

Table 5 shows the overall school size of School 4 was 360 students, with a demographic breakdown regarding the three subgroups studied in this research of 19% African-American, 43% Hispanic, and 31% White. School 4 was historically one of the

district's highest poverty schools. Additionally, School 4 implemented two magnet programs during the 2017-2018 school year: a Spanish immersion program and a global studies magnet. Table 6 shows demographics of School 5.

Table 6

Demographics of School 5 (magnet school, not receiving intervention)

Grade	Total #	Asian	African-American	Hispanic	American Indian	Two +	Pacific Islander	White
K	90	1	35	21	1	3	0	29
1	87	4	31	19	0	8	1	24
2	97	0	40	21	1	7	1	27
3	105	1	45	27	1	2	0	29
4	79	0	29	25	0	5	0	20
5	89	2	39	27	0	3	0	18
Total	547	8	219	140	3	28	2	147

Table 6 shows the overall school size of School 5 was 547 students, with a demographic breakdown regarding the three subgroups studied in this research of 40% African-American, 25% Hispanic, and 27% White. School 5 was the newest elementary school in the district and was opened to highlight the new arts magnet program in the district. Table 7 shows the demographic information for School 6.

Table 7

Demographics of School 6 (nonmagnet, not receiving intervention)

Grade	Total #	Asian	African-American	Hispanic	American Indian	Two +	Pacific Islander	White
Pre-K	72	2	30	17	0	5	0	18
K	44	0	10	21	0	2	1	10
1	43	0	7	19	0	6	1	10
2	54	1	12	25	0	5	0	11
3	55	0	7	27	0	8	0	13
4	60	1	11	32	0	2	0	14
5	61	0	10	28	0	5	0	18
Total	389	4	87	169	0	33	2	94

Table 7 shows the overall school size of School 6 was 389 students, with a demographic breakdown regarding the three subgroups studied in this research of 22% African-American, 43% Hispanic, and 24% White. School 6 was historically the district's highest poverty school. School 6 also saw many staffing changes the year the study was completed.

The decision to utilize a quasi-experimental method of study, where participant groups were receiving a modified intervention and comparison groups were receiving their normal intervention, allowed the researcher to determine if the talent development intervention had a greater positive, greater negative, or null effect on the students in the district.

A visual of this design is shown here.

Group A O ----- X ----- O (Talent development services)

Group B O----- O (Current level of services, no change)

In collecting information from multiple sites within the district where the services were implemented, the researcher looked to generalize the results to underrepresented populations throughout the district. This form of quasi-experimental design still upheld Gardner-Webb University's policy stating, "researchers will not withhold treatment from any given group if such treatment is thought to be beneficial" (S. Brown, personal communication, May 22, 2017), because the intent of the study was to serve all schools in the district, even though not all district administration agreed to participate.

Instrumentation

Numerous instruments were used to collect data for this research study. These tools were used to define the research question terms of potential (showing a capacity for learning), achievement (successful completion of tasks), engagement (active involvement

in an activity), and identification (students meet the expectations of gifted as determined by the district and reviewed in the district AIG plan). Table 8 illustrates which instruments aligned with each specific research term.

Table 8

Matrix Aligning Research Terms and Tools

Research Term	i-Ready	GRS	Panorama Education Survey	Teacher Survey	Parent Survey	Attendance	NNAT	Parent Focus Group	Teacher Focus Group
Potential	X	X			X		X	X	X
Achievement	X	X						X	X
Engagement		X	X		X	X		X	X
Identification		X		X			X		X

As shown in Table 8, potential was determined by both qualitative and quantitative data: i-Ready and NNAT scores were used to flag students in the top 20% of their subgroup (based on the 20% Equity Index, Ford, 2010; Ford & King, 2014) as having gifted potential; the GRS (a field observation checklist developed by Pearson Education) and parent survey initially showed whether students had potential for higher learning; and teacher and parent focus groups encouraged discussion of potential as seen in the students throughout the study to determine alignment between parent opinion and teacher perspective.

Achievement data were collected through i-Ready standardized benchmark assessments. To operationalize equally for all grades involved in the study, the decision was to utilize i-Ready district assessments because i-Ready uses a scale score, allowing for inferential statistic calculations. Additionally, the district gave i-Ready assessments

to all students in fourth and fifth grade three times during the year, rather than only once, as was the case with the End-of-Grade test. The Gifted Teacher Rating Scales discussed in operationalizing potential were used to show achievement through informal observations and teacher open-ended responses. Achievement, as with potential, was also discussed in parent and teacher focus groups so a deeper understanding of student achievement, which may not have shown up in testing data, could be explained.

Based on research by Renzulli (2015) on the School Enrichment Model framework, students who enjoy school are more engaged in class and more enthusiastic to attend school. Engagement was operationalized through looking at student attendance, motivation, and perception towards school. The district naturally collected data on all three of these categories. In the area of attendance, the researcher utilized PowerSchool to collect attendance data on particular students; and the areas of motivation and perception towards school were observed through Panorama Education surveys students took throughout the school year. Parent and teacher focus groups also provided data on engagement as the groups reviewed and explained their opinions regarding the quantitative data results.

Last, the term identification was viewed in two different ways in this study: identification of a student through the standard methods of the district and identification regarding potential of giftedness seen in talent development. The NNAT results were utilized as the standard determination of identification, and the GRS checklist scores from the end of the study were used as identification of potential. These results were compared to those completed prior to the study to show if potential was recognized in any of the study participants. Additionally, parent and teacher focus groups were utilized to identify and explain barriers or reasons the NNAT and GRS identification could differ.

Quantitative instruments. The quantitative measurement tools used in this study included i-Ready assessments, GRS, Panorama Education surveys, teacher perception surveys, attendance reports, and NNAT results.

i-Ready assessments. i-Ready diagnostic assessments are online assessments intended to determine the level of reading and math skills in the students being assessed. When developed, the i-Ready diagnostic assessments were aligned with Common Core state standards so periodic completion of the exams could be predictors for level of success of Common Core standardized exams. As previously mentioned, the research study used i-Ready diagnostic assessments as the measure of achievement, because unlike the End-of-Grade achievement test only given one time during the school year, i-Ready diagnostic assessments were taken three times throughout the school year. Additionally, Curriculum Associates (2016) noted i-Ready diagnostic assessments had a .81 (ELA) and .84 (math) correlation to Common Core state exams. Curriculum Associates further noted results of i-Ready diagnostic assessments showed “a .90 or higher Area Under the Curve value, providing evidence i-Ready assessments can accurately predict students’ proficiency status” (p. 3).

GRS. Another quantitative tool utilized in the study was the GRS observational checklist. As noted by Dunn (2008) and Queen (2006), teacher input often serves as a major deciding factor in identification of underrepresented gifted children. Therefore, if this study was to adequately show how underrepresented children can become identified through talent development, it was essential to involve teachers in the data collection process. Teachers were included in the study using a focused protocol, the GRS, developed by Pfeiffer and Jarosewich (2007). This tool was already utilized in the district, so teachers had previously received training for using this tool. Due to the

makeup of the checklist (the Likert scale ranges from 1-9 and asks observers to first determine a low [1-3]-middle [4-6]-high [7-9] range and then a low-middle-high range from within that category), Peters and Pereira (2017) noted it was possible for a statistically significant increase to occur in a short length of time.

Peters and Pereira (2017) additionally supported the use of the GRS, noting the assessment was “developed based on the federal report *National Excellence: A Case for Developing America’s Talent*” (p. 104) and had consistently been shown to have greater fit indices for underrepresented populations than overrepresented populations. Furthermore, internal consistency of the GRS ranged from .97 to .99, test-retest reliability ranged from .83 to .97, and interrater reliability ranged from .64 to .79 (Peters & Pereira, 2017, p. 104).

Panorama education surveys. Additionally, district-wide surveys, developed by Panorama Education, were used regularly within the district. To accommodate district needs, Panorama Education provides districts with a list of possible questions to be included in their survey, all questions which have been tested for validity (Panorama Education, 2005). The district where the study was completed chose strands from the bank of Panorama survey domains (classroom climate, engagement, grit, learning strategies, mindset, pedagogical effectiveness, rigorous expectations, school belonging, teacher-student relationship, and valuing the subject) and administered the survey to students twice a school year. The survey domains chosen for the 2017-2018 district survey were classroom climate, rigor, teacher-student relationships, pedagogical effectiveness, classroom engagement, and grit. The survey data collected from these domains were used to provide data on student engagement, motivation, and classroom rigor from the perspective of the students for the district senior leadership team, school

administration, and classroom teachers. The research study used results to assess the same domains.

Each of the domains were developed by Panorama Education through a six-step design process including a literature review, interviews and focus groups, synthesis of indicators, item creation (which follows best survey practice design), expert review, and cognitive pretesting (Panorama Education, 2005, p. 4). After this rigorous development stage, all scales were implemented in large-scale pilot tests and continue to be validated each time a district utilizes the survey. The most recent survey validations show a reliability of .70 or greater for each domain (Panorama Education, 2005). Additionally, Panorama Education (2005) correlated their student responses with administrative observations and found “students’ perceptions and administrators’ observations were highly congruent with each other” (Panorama Education, 2005, p. 8).

Teacher and parent perception surveys. Creswell (2014) argued surveys allow researchers to “generalize from a sample to a population so that inferences can be made about some characteristic, attitude, or behavior of this population” (p. 157). The surveys utilized in this research study looked at the population of teachers as well as the population of students (through the eyes of the parents) in the study. Both surveys served to collect data “on attributes of the large (district) population from a small group of individuals” (Creswell, 2014, p. 157) in a short amount of time. While the surveys were administered to specific groups (all teachers in the district and parents of participants) in a convenience sample fashion, the demographic spread of these individuals was characteristic of the entire population being studied.

The teacher survey utilized in this study was designed for this research study using key themes in the study’s literature review. The questions were developed and

reviewed by a panel of four educators (district-level employees trained in research by the American Research Institute). Questions were revised and refined based on the feedback received during this session. Survey questions are included in Appendix A.

The parent survey utilized in this study was also designed by using key themes in the study's literature review. The questions were developed and reviewed by four parents who have high-achieving students and are members of the underrepresented populations being studied in this research. The parent panel helped refine the questions with specific attention to implicit bias in the wording of the questions. The reviewed and refined questions included in the parent survey are included in Appendix B.

Attendance reports. Attendance data were a naturally occurring form of data collection in the district. PowerSchool attendance reports were run daily for administration to review. These reports were utilized to monitor the attendance of students who were in both the participant and comparison groups of the study.

NNATs. The NNAT is a culturally sensitive IQ test given to students throughout the country to determine eligibility in gifted programs. The test is comprised of geometric designs in 2X2 and 3X3 matrices, and students are asked to determine what available shape belongs in the missing box of the matrix. Of all nonverbal tests reviewed by Naglieri and Ford (2003), the NNAT fared best for underrepresented populations, showing only a minimal difference of .25 (or 4 standard points) between Caucasian and African-American students and a .17 (or 2.5 standard points) between Caucasian and Hispanic students (p. 157). Additionally, Naglieri and Ford found student performance on the NNAT was predictive of their scores on nationally normed achievement tests (such as the SAT).

Qualitative instruments. Qualitatively, the study utilized focus groups and

open-ended survey questions which were thematically coded to analyze the research questions.

Focus groups. The researcher's goal of using focus groups was "to elicit a narrative from the participants" (Butin, 2010, p. 98) to better gauge the components of a gifted program that help develop potential as well as note the barriers preventing this development. The researcher purposefully selected focus group participants to create a demographically representative sample for the group, which Creswell (2014) suggested makes it more possible to collect qualitative information that can help explain discrepancies in quantitative data. Members of the focus groups were chosen randomly from survey results where individuals were given a chance to express interest in being part of a focus group. The intended group size of each focus group was five to eight individuals (based on the recommendation of Krueger & Casey, 2009).

Additionally, the researcher used a second moderator (an individual who was not part of the study) who "has characteristics similar to the participants" (Krueger & Casey, 2009, p. 164). The researcher set up the focus group and ensured probing questions were asked when necessary, encouraging the second moderator to ask some of the questions and probe for further details as needed. The decision to utilize a second moderator was based on Krueger and Casey's (2009) recommendation to include a demographically similar moderator when working with cross-cultural focus groups. A different second moderator was used in the teacher and parent focus groups to align characteristics of both groups. Additionally, the researcher taped the focus group discussions and transcribed both focus groups after the sessions. Transcription of the focus group discussions allowed the researcher to focus on leading the discussion, rather than needing to take copious notes during the discussion.

Utilizing the explanatory research design, while preliminary focus group questions were designed, final questions for the focus groups were determined based on initial survey results and other quantitative data collected during the study. The panel of educators and parents who reviewed the initial survey questions also reviewed the preliminary focus group questions for clarity, bias, and organizational order. Preliminary focus group questions for the teacher focus group are included in Appendix C, and preliminary focus group questions for the parent focus group are included in Appendix D. The focus group questions were refined after data collection, and the same educator and parent panels reviewed the revised questions prior to holding the focus group sessions. The finalized focus group questions for the teacher and parent focus groups are shown in Appendix E.

Survey questions. As reviewed previously, both survey tools (teacher and parent) were designed specifically for this research study. Panels of individuals with the same demographic makeup and background as the individuals taking the surveys reviewed their respective surveys. This review included the review of open-ended questions as well. In analysis of the survey results, parent and teacher focus groups were used to explain the data and confirm thematic breakdowns developed by the researcher. The continued involvement of other stakeholders besides the researcher increased the validity and decreased the bias in the use of surveys in the study.

Intervention studies

The intervention of talent development in this study utilized three curriculum models to provide participants with rigorous, engaging, and collaborative activities where they could exhibit potential talent. The three frameworks included the talent development framework, the Bloom-Banks culturally responsive framework, and the

problem-based learning curriculum design. Participants receiving the talent development intervention received the intervention for a minimum of 1 hour each week from February through April, totaling a minimum of 12 hours of talent development services. In addition to the intervention of talent development, teachers received training to increase their knowledge of talent development implementation. Teachers involved in the study also planned with the AIG coordinator of the district to help increase the rigor and challenge the talent development participants received in the regular classroom.

Talent development framework. As noted by NAGC (2017), there is not one specific framework that aligns talent development to all populations. Instead, NAGC (2017) has developed a set of tenets for educators to use when developing a framework that they could implement to create a talent development program. Those tenets include extending the pedagogy once thought exclusive only to gifted students to typically underrepresented populations, using best practices with all students, increasing access to challenging curriculum to typically underrepresented populations, and having high ceiling expectations and personalization for these same groups (Plucker et al., 2010). Additionally, talent development programs need to provide opportunities for students to show giftedness in multiple domains over an extended period of time (NAGC, 2017).

Bloom-Banks culturally responsive framework. Ford (2013) discussed the Blooms-Banks matrix and how it could be useful in developing a culturally responsive framework for curriculum. The matrix, shown in Table 9, includes the spectrum of Bloom's Taxonomy (knowledge, comprehension, application, analysis, synthesis, and evaluation) across the top of the matrix and Banks' levels of culturally diverse education (contributions, additive, transformation, and social action) along the side. The goal of a multi-cultural curriculum is for lessons to fall in the boxed quadrant.

Table 9

Blooms-Banks Matrix (Ford, 2013, pp. 197-198)

	Knowledge	Comprehen- sion	Application	Analysis	Synthesis	Evaluation
Contribu- tions	Students are taught and know facts about cultural artifacts, events, groups, and other cultural elements.	Students show an understanding of information about cultural artifacts, groups, etc.	Students are asked to and can apply information learned about cultural artifacts, events, etc.	Students are taught to and can analyze information about cultural artifacts, groups, etc.	Students are required to and can create a new product from the information on cultural artifacts, groups, etc.	Students are taught to and can evaluate facts and information based on cultural artifacts, groups, etc.
Additive	Students are taught and know concepts and themes about cultural groups.	Students are taught and can understand cultural concepts and themes.	Students are required to and can apply information learned about cultural concepts and themes.	Students are taught to and can analyze important cultural concepts and themes.	Students are asked to and can synthesize important cultural concepts and themes.	Students are taught to and can critique and evaluate cultural issues, concepts and themes.
Trans- formation	Students are given information on important cultural elements, groups, etc. and can understand this information from different perspectives.	Students are taught to understand and can demonstrate an understanding of important cultural concepts and themes from different perspectives.	Students are asked to and can apply their understanding of important concepts and themes from different perspectives.	Students are taught to and can examine important cultural concepts and themes from more than one perspective.	Students are required to and can create a product based on their new perspective or the perspective of another group.	Students are taught to and can critique, evaluate or judge important cultural concepts and themes from different viewpoints.
Social Action	Based on information about cultural artifacts, etc. students recommend specific social action.	Based on their understanding of important concepts and themes, students recommend specific social action.	Students apply their understanding of important social and cultural issues; they also recommend AND take the action they recommend.	Students are required to and can analyze social and cultural issues from different perspectives and they take action on these issues.	Students create a plan of action to address a social and cultural issue(s); they seek change.	Students critique important social and cultural issues and seek to make change.

According to the Bloom-Banks model for culturally responsive curriculum,

students in the transformation mode can view issues and events from the perspectives of diverse racial and cultural groups, and students in the social action mode can make decisions on these issues to the point where they become empowered to do something about the issues. When students can approach curriculum topics with a transformation or social action mentality and engage in analysis, synthesis, and evaluation of issues, they are truly engaged in multi-cultural education.

Problem-based learning curriculum design. The researcher brought together the talent development framework and Bloom-Banks model of curriculum instruction through the implementation of problem-based learning. Gallagher and Gallagher (2013) agreed with this implementation, stating many underrepresented students find themselves engaging daily in curriculum that is “overly simplistic and fact-oriented” (p. 113). Instead, these students need to have their interests piqued through the problem-based learning design, which provides students with an ill-structured problem for which they need to find a solution. In the process, students are engaged in learning about topics included in the standard curriculum. Gallagher and Gallagher contended that not only did problem-based learning increase engagement of students, it provided a chance for teachers to observe gifted traits in students they otherwise may not have recognized. Moore, Ford, and Milner (2005) agreed, stating problem-based learning can attend to the cultural needs of underrepresented populations such as the need to communicate, move, and express their individualism. Through the talent development intervention, the researcher presented participants with multiple culturally relevant problem-based learning assignments. Each assignment took approximately two to three weeks, allowing the students to complete a minimum of four assignments during the intervention period. Teachers who completed the GRS on the participants were asked to observe students

while they were working on the problem-based learning assignments as well as in the regular classroom.

Teacher training. The final element of a successful talent development program as noted by Grissom and Redding (2016), Horn (2014), and Sears (2016) was teacher training. This research study included two levels of teacher training. The first required element of teacher training was weekly meetings with the AIG coordinator. During these meetings, teachers planned with the AIG coordinator, modifying lessons and activities so they more closely mirrored the talent development framework outlined in the previous three sections. Teachers were also able to ask questions about specific students, characteristics of CLED learners, or other questions pertaining to gifted education and multi-cultural curriculum during these meetings.

Additionally, teachers in the study were invited to participate in a local AIG certification module where they learned more in-depth knowledge about gifted education and CLED students. One school in the study agreed to provide this professional learning to their entire staff, and the other school participating highly encouraged their staff to partake. The module was available for all teachers in the school district.

Procedures for Participation

Specific determination of the experimental groups was established by looking at subgroup data for all three subgroups being studied (African-American, Hispanic, and Caucasian) for the i-Ready diagnostic assessments taken in September and January of the 2017-2018 school year. Within each subgroup, the top 20% of the students at participating schools were invited to participate in the talent development intervention.

Students who returned permission slips to participate received the talent development services as previously described. Teachers of these students completed a

preliminary GRS on the students, and parents were asked to complete an initial parent survey. Throughout the study, i-Ready assessments, GRS, attendance, NNAT, and survey data continued to be collected on the participants.

Prior to the focus groups, parents of students receiving the talent development intervention were invited to participate in the focus group. The researcher randomly selected focus group participants from those interested, ensuring creation of focus group samples that were demographically representative of the intervention subgroups, a suggestion by Creswell (2014) as a way to ensure as many discrepancies in quantitative data as possible could be explained. Teachers participating in the focus group were invited to participate based on their involvement in the talent development program. While all teachers were involved in the survey responses, only teachers involved in the talent development intervention were invited to the focus groups. This decision ensured the teachers who were part of the focus group understood the procedures, data, and students being discussed. Including parents and teachers who were aware of the study and its purpose increased the effectiveness of the explanatory mixed methods research design.

At the close of the study, parents and teachers were asked to complete a postsurvey (mirroring the initial survey), and teachers completed a final GRS on the participating students. Parents and teachers were made aware participation was voluntary, and they were welcome to remove themselves from the research study at any time.

Data Collection Plan

Quantitatively, the district collected multiple forms of data throughout the school year due to “federal requirements, state-level decision making...and the particular district

initiatives” (Butin, 2010, p. 89). Additionally, the study utilized focus groups and open-ended survey questions to provide qualitative study data. While these data have been previously described, a schedule of data collection is explained here.

i-Ready assessments. i-Ready benchmark data were collected at three points: the September 5-22 testing window, the January 17 through February 2 testing window, and the April 9-27 testing window.

GRS. Teachers completed the GRS checklist on all students who fell in the top 20% of i-Ready results from the September and January testing window and completed a GRS on the participants who were still part of the study at the end of April.

Panorama education surveys. The district administered the Panorama Education survey in October and March of the 2017-2018 school year. Data from October were used as preintervention data and data from March were used as postintervention data.

Teacher perception surveys. Teacher perception surveys were given preintervention (end of January) and postintervention (end of April). Two files of the same survey were developed, with one being sent to schools implementing the intervention and one being sent to schools not implementing the intervention. This process allowed the researcher to effectively compare results and analyze the impact of the study, while still allowing all survey participants to remain anonymous.

Attendance reports. Attendance reports were collected on all participants in the study for each semester of the school year: August-January (preintervention), and February-April (postintervention).

NNAT. NNAT scores were collected as a measure of baseline intelligence on all study participants. Taken in the first 20 days of the school, NNAT data for all

participants were available in archived data in the district testing folders. While NNAT data were not used as a postdata measure in the study, they were used to compare the percentage of students in the research sites who identified under the district’s current identification qualifications versus the number of students whose potential was identified through the talent development intervention.

Focus groups. Focus groups occurred at the end of the research study (May). Two separate focus groups were held: one with parents and one with teachers.

Surveys. The preintervention surveys were sent to teachers in the district at the end of January and to parents of invited participants at the beginning of February. Postintervention surveys were sent to teachers and parents at the end of the research study in May.

Figure 1 provides a timeline visual of the previously described data collection process.

Phases of Data Collection

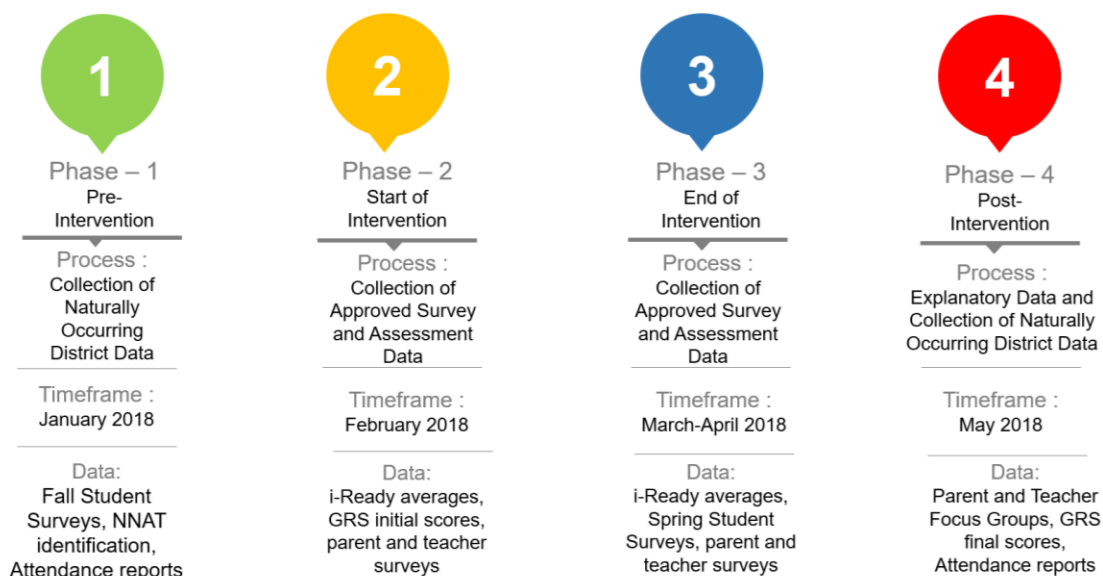


Figure 1. Phases of Data Collection. This figure shows a timeline for the data collection completed throughout this research study.

As shown in Figure 1, data collection occurred throughout the study and was used in an explanatory manner during the data analysis explained in the following section.

Data Analysis Plan

Creswell (2014) and Urdan (2010) stated the importance of choosing the most effective statistics when completing data analysis. Additionally, Creswell and Urdan believed a holistic account of research helped “develop a complex picture of the problem or issue under study...and involved reporting multiple perspectives” (p. 186). Data analysis helps researchers present a visual model of their holistic account. In looking at multiple subgroups and their achievement and engagement levels before and after talent development, the researcher analyzed means, ranges, and correlation comparisons of all pre and posttest results for the participants in both the experimental and comparison groups. These data analyses were represented in column and stacked column graphs based on recommendations by Urdan.

In addition to descriptive statistics, Urdan (2010) suggested, “larger statistics [like t tests and z scores] are more likely to be judged by the researcher to indicate a meaningful, or statistically significant, effect in the sample” (p. 59). This suggestion paired with the recommendation of Dr. Burgess, one of the committee members, to “utilize t -tests and z -scores along with chi-squares in your final analysis” (K. Burgess, personal communication, June 16, 2017).

In considering z scores, it is important to note z scores allow for comparison between participants, whether normal distribution of data exist or not. In researching

CLED populations and talent development services, there are numerous external factors essential to consider. The use of z scores and their confidence intervals helped account for these variables.

T tests, in addition to z scores, were used to help “determine the practical significance of the results” (Urdan, 2010, p. 77). According to Creswell (2014) and Urdan (2010), this significance, or truth finding in a study, occurs when a researcher identifies sample size, sample mean, standard deviation, and standard error of the mean in order to determine a t value and then uses this value to calculate the degrees of freedom, confidence intervals, and effect size. Using these data analyses in conjunction with z scores enhanced the statistical significance of the study’s findings.

The third statistical analysis tool the researcher used was the chi-square analysis. The chi-square analysis allowed the researcher to determine if there was a significant difference between the observed frequencies and what would be expected (Urdan, 2010). Specifically, the researcher looked at data on how many students showed growth through the talent development intervention per subgroup to determine how many students in the normal population could be expected to be impacted by a similar talent development intervention.

In addition to these statistics, Urdan (2010) noted the necessity to account for external variables such as between-group and within-group differences, suggesting the use of a grand mean which looks at the mean of all groups combined to compare between-group data. Using a grand mean in this study, the researcher looked at the impact of talent development on ALL students/groups included, compared this grand mean to individual subgroup data, and then determined whether the impact of the independent variable of talent development was statistically beneficial for some,

beneficial for all, or beneficial for none. Accounting for “other” variables that might impact data results was a huge piece of this research because “variables are related to each other in very complex ways” (Urdan, 2010, p. 130). Qualitative data collected in an explanatory way through focus groups at the end of the study further assisted in looking at variables through multiple lenses.

Table 10 illustrates how each analysis tool aligns with the data instruments and research questions.

Table 10

Methods Table: An “At a Glance” Guide

Research Question	Tools/ Instruments	Methodology Type	Data Collected	Method(s) of Analysis
What elements of a talent development program have the greatest impact on developing potential in underserved populations?	Parent and Teacher Focus Groups Parent and teacher surveys	Qualitative	Parent and teacher responses about each component of the talent development program	Thematic Coding Analyze negative and positive responses Descriptive statistics
How does implementation of a talent development program impact underrepresented populations regarding achievement?	i-Ready GRS ratings [Academic section] Parent and Teacher Focus Groups	Mixed Methods (QUAN + qual)	i-Ready BOY-MOY-EOY scores GRS MOY-EOY ratings Teacher reflections on informal and formal observations	Subgroup breakdowns of growth using chi-square (for i-Ready and GRS) Correlation analysis between QUAN data and qual focus group responses
How does implementation of a talent development program impact underrepresented populations regarding engagement?	Panorama Education Surveys [Engagement and Grit] GRS ratings [Motivation section] Attendance Reports Parent and Teacher Focus Groups	Mixed Methods (QUAN + qual)	Panorama Education BOY-EOY survey responses [Engagement and Grit] GRS MOY-EOY ratings PowerSchool Attendance Reports Parent and Teacher perspective on student engagement during program/with talent development activities	Breakdowns of growth using chi-square (for Panorama Education Surveys (full group only) and for GRS (full group and subgroup)) Grand mean comparison for attendance Correlation analysis between QUAN data and qual focus group responses
To what degree of	NNAT	Quantitative	Previous	Comparison of

(continued)

Research Question	Tools/ Instruments	Methodology Type	Data Collected	Method(s) of Analysis
difference does a talent development program identify potentially gifted CLED students in comparison to standardized identification methods?	GRS [All sections] Teacher surveys [coded to quantitative data]		identification results GRS EOY rating	Identification of GRS (top 20%) to Identification by NNAT + EOG through descriptive statistics

Urduan (2010) reminded researchers all factors cannot be controlled within a study, but “the key is to provide enough information so that readers of your results can make sense of them” (p. 124). The data analysis tools chosen by the researcher intended to call attention to possible variables and their impact on the study’s findings, so the research would be useful for others. Ultimately, the goal of the research study was to go beyond simply being able to generalize research results, to the production of statistically significant results which would lead to the recommendation for further implementation of talent development services in the district.

Threats to Validity

Taking into consideration the factors of the study, it was possible for there to be threats to validity. Internally, the students participating in the study were of elementary school age, and therefore maturation of some students but not others could impact the results. Additionally, some students in the study/district historically dealt with external life events that could negatively impact them and/or their results. These possible threats were considered in the data analysis stage of the experiment and were controlled for by using qualitative data that called attention to possible external factors. Last, while the sites in the district were demographically similar, there were differing characteristics

between each site's populations, so the ability to generalize results from one site to another might be restricted. The researcher took this information into consideration and recommended further experiments be conducted at other sites before confirming any generalizations.

Issues of Trustworthiness

As noted by Davis et al. (2017) as well as Krueger and Casey (2009), the biggest issue of trustworthiness for this study was the sensitivity of the topic being discussed, namely, underrepresented populations in the gifted education program in the district. While there was potential for heightened emotion around this topic, the researcher continuously reinforced to all participants the goal of the research was to understand needs and address concerns of the participants to determine appropriate interventions for the future (Krueger & Casey, 2009). Additionally, the researcher listened to the participants, particularly in the focus group setting, to show she was not assuming a position of power over the participants. To positively impact this understanding, the researcher had a moderator of a similar ethnic/racial background to the participants in the study (for this study, a member of an underrepresented population) who assisted in leading the focus group discussions (a recommendation of Krueger & Casey, 2009).

Ethical procedures. Creswell (2014) and Krueger and Casey (2009) both noted building trust could be accomplished by completing the research study in an ethical manner. Prior to the research study, the researcher obtained permission from the participating district and school-level administrators and received approval from the Institutional Review Board at Gardner-Webb University to complete the research study. Throughout the study, the researcher ensured ethical procedures by obtaining informed consent from all participants. As previously stated, no participants were required to

participate in the study, and no rewards were given to participants for their participation. Additionally, throughout the study, the researcher collected data without being disruptive to the organizations participating. When disseminating results, the researcher did not disclose any participant names or identifying data and reported the findings as they were, disclosing all results, positive or negative. Last, the results of the study were made available for participants to review (Creswell, 2014; Krueger & Casey, 2009).

Summary

Underrepresentation of CLED students is not a one time, one place problem. Ultimately, underrepresentation of CLED students is a national issue. It is for this reason the researcher approached this study with a transformative mindset, involved stakeholders of CLED populations and teachers of CLED students in the study, and utilized data analysis tools proving to be both practically and statistically significant. Ultimately, CLED students who are gifted deserve to have access to the same resources as their Caucasian counterparts. This transformative, mixed methods explanatory study showed implementation of a talent development framework could have a positive impact on CLED student access to these gifted resources.

Chapter 4: Results

Review of Problem Statement

The education world is becoming a more diverse arena; and within the next 10 years, the current minority populations will be the majority (Ford, 2013; Thornbury, 2010). Despite this projected growth, the realm of gifted education remains culturally stacked against minority populations: a discrepancy that has widened the excellence gap in student achievement. To combat the growing excellence gap and underrepresentation of CLED populations in gifted education, educators must take steps to increase the equity of access to these programs. Without question, Plucker et al. (2010) warned that allowing the excellence gap to widen further will deny the nation of future innovators and will ultimately have a negative effect on America's global competitiveness and survival (Friedman & Mandelbaum, 2011).

Restatement of Research Focus

According to NAGC (2015), talent development interventions, such as the intervention focused on in this research study, are one avenue shown to increase equity of access for CLED populations in gifted education programs. Olszewski-Kubilius and Thomson (2015) warned researchers, however, that talent development interventions are multi-faceted and include numerous best practices. In particular, Olszewski-Kubilius and Thomson called attention to the following elements of successful talent development programs: professional development for teachers, initial enrichment provided to a greater population of students, ongoing assessment so groups can be flexible, comprehensive assessment so different giftedness can be measured, using local norms, looking for students who have major jumps between benchmark assessments, and providing feedback that encourages effort over success particularly for students in CLED populations. Ford

(2013) further noted communication between home and school, curriculum adjustments, and multiple identification pathways as essential components of a talent development program. The key components of the talent development intervention implemented in this research study included looking beyond traditional assessment measures for gifted potential, providing professional development for teachers, increasing collaboration between regular education teachers and AIG specialists, making curriculum adjustments, and cultivating student support networks with specific attention to an increased communication between home and school. Ultimately, these components of a talent development program were utilized to increase the access of CLED populations to gifted education programs.

To best determine the impact of talent development on CLED populations as well as develop a list of components within a talent development intervention that have the greatest impact on CLED students, the research study was developed using an explanatory mixed methods approach where the researcher collected quantitative data on achievement and engagement and then utilized qualitative data from parent and teacher focus groups and surveys to support the quantitative findings (Creswell, 2014). The mixed-methods study specifically addressed the following research questions.

1. What elements of a talent development program have the greatest impact on developing potential in underserved populations?
2. How does implementation of a talent development program impact underrepresented populations regarding achievement?
3. How does implementation of a talent development program impact underrepresented populations regarding engagement?
4. To what degree does a talent development program identify potentially gifted

CLED students in comparison to standardized identification methods?

Overview of the Chapter

The previously listed research questions were used to frame the following chapter of the research report. Specifically, the chapter provides a review of each research question, followed by the presentation and summary of results related to each research question. As the research questions are analyzed, the data analyses used for each research question are explained and a detailed description of results through tables, charts, figures, and narratives is provided. As previously mentioned, the purpose of the research study was to pinpoint specific components of a successful talent development intervention as well as determine whether talent development interventions positively or negatively impacted achievement and engagement in CLED populations. The research study focused on the top 20% of students in fourth and fifth grade (defined by Ford & King, 2014 as high-ability learners) for each of the three most prevalent demographic populations in the district where the study was conducted (African-American, Caucasian, and Hispanic). To account for any differences in subgroup results, data presented in this chapter will frequently include subgroup analysis.

Presentation of Results

Research Question 1. As previously stated, talent development interventions are multi-faceted and have numerous components meant to assist students socially, emotionally, and academically. While a range of elements such as looking beyond IQ tests, recognizing noncognitive abilities in students, paying attention to subgroup norms, increasing communication between home and school, increasing student engagement through active learning, providing professional learning to build awareness of CLED populations, mentoring, and developing partnerships within the community are found to

be beneficial to talent development programs, gifted education researchers such as Ford (2013), NAGC (2017), Olszewski-Kubilius and Thomson (2015), and Renzulli (2015) have yet to develop one universal model for talent development implementation. The absence of a universal talent development framework provides freedom for educators who are implementing talent development programs but does not provide a foundation for consistency among talent development programs.

Research Question 1, “What elements of a talent development program have the greatest impact on developing potential in underserved populations,” was formed to address the absence of a universal talent development framework. Specifically for this research study, the researcher chose to implement the following elements from the talent development frameworks of Ford (2013), NAGC (2017), Olszewski-Kubilius and Thomson (2015), and Renzulli (2015): locating potential beyond IQ testing, training teachers on CLED populations, increasing collaborative planning time with teachers, adjusting curriculum to include more active learning through problem-based activities, deliberately cultivating support networks, and increasing the communication between school and home. Through Research Question 1, the researcher gained knowledge of these consistent elements by collecting qualitative data from parent and teacher surveys and parent and teacher focus groups.

Survey data. Parent and teacher surveys were sent to both the comparison and treatment groups prior to implementing talent development services and at the close of the 12-week program. Parent surveys focused on whether parents were informed about gifted programming, the level of support parents felt their children had, whether their children were acknowledged for accomplishments, whether students were held to high academic expectations, and the educational equity of their child’s education. Parents

were also asked to share what their culture values, how they defined giftedness, and the strengths and areas of improvement they saw for their child. Teacher surveys focused on how teachers defined giftedness; the level of supports they felt were in place for parents, teachers, and students in gifted programs; their perception of current gifted identification methods; and their level of multi-cultural understanding. Teachers were also asked to share how they defined giftedness, factors that would cause them to recommend or not recommend students for a gifted program, and benefits and drawbacks they saw to using teacher referrals to identify students for a gifted program.

The parent and teacher surveys for this research study were aligned with the talent development framework the researcher used for the study. Prior to survey data collection, the researcher met with a panel of teachers (for the teacher survey) and CLED parents (for the parent survey) to align the components implemented through the research study with the survey items. Based on panel review of survey items, some components of the talent development intervention were more heavily accounted for in the surveys than others. The panel team felt some themes were not survey conducive without further explanation to survey participants, and the panel wanted to keep the survey focused on information survey participants would be able to relate to and answer in an informed manner. Table 11 shows the alignment between the surveys and talent development components focused on in this research.

Table 11

Survey Alignment to Talent Development Components

Talent Development Component	Aligned Items in Parent Survey	Aligned Items in Teacher Survey
Locating Potential Beyond IQ Testing	3, 10, 11, open-ended 2	9, 10, 11, 12, open-ended 1
Training Teachers on CLED Populations	12, 19, 20, open-ended 3	2-4, 13, 15-17, open-ended 2
Increasing Collaborative Planning Time with Teachers	None	6, 7
Adjusting Curriculum to Include more Active Learning	17, 18	14, open-ended 6
Deliberately Cultivating Support Networks	4-9, 13-16 open-ended 4	1, 8, open-ended 3
Increasing Communication Between School and Home	1, 2, open-ended 1	5

As shown in Table 11, locating potential and training teachers were two of the main components focused on in the parent and teacher surveys. These two components were found in all frameworks reviewed by the researcher, and the panel of survey creators additionally felt these two components could be addressed by both parents and teachers in a knowledgeable way.

The parent and teacher surveys were sent to both the treatment and comparison groups at the beginning and end of the 12-week intervention period. Results from the parent and teacher surveys are presented in this section, and complete results of the surveys can be found in Appendices F-M. Results shared in this section compare the results of the pre and postsurveys for each group through stacked column graphs and narrative explanations. Figures 2-15 show the breakdowns of each of the clusters with

treatment and comparison group pre and post responses. Open-ended responses and focus group responses specifically supporting survey responses are summarized in the narratives following the figures. Additional focus group data are elaborated on later in this section.

Locating potential beyond IQ. Figure 2 begins with parent responses for cluster one—locating potential beyond IQ.

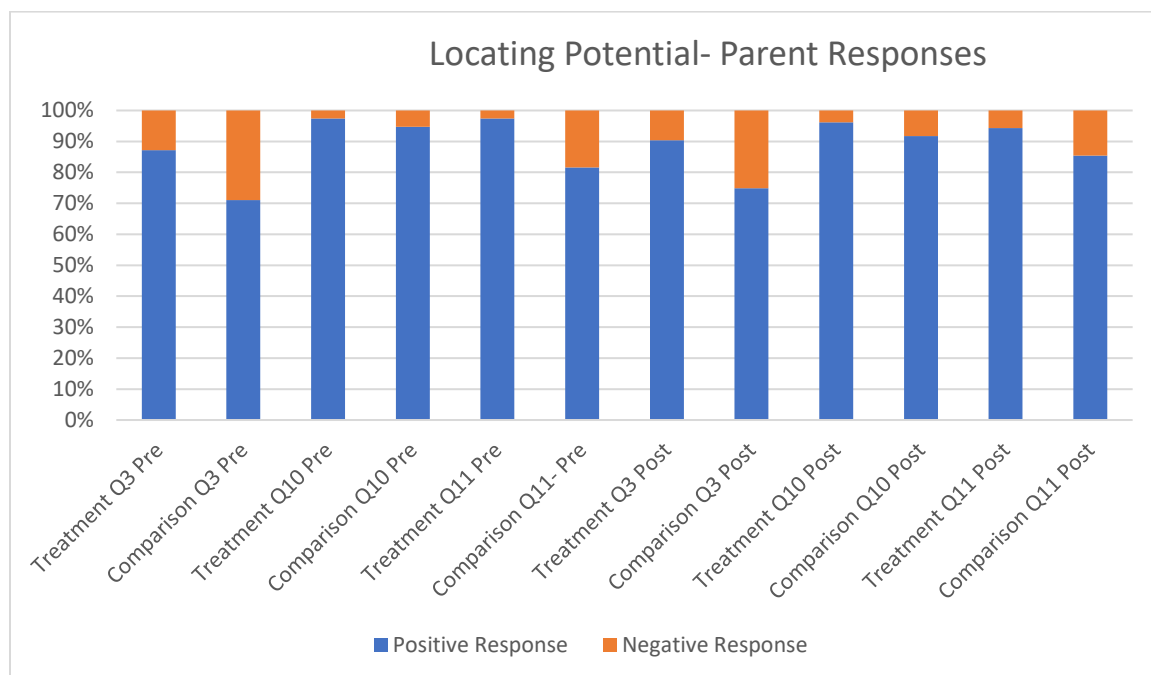


Figure 2. Parent Survey Responses for Locating Potential Cluster. This figure shows the positive and negative responses for the parents in the treatment and comparison groups prior to and after the intervention period.

As shown in Figure 2, for both the pre and postsurvey results, the treatment and control group had more positive than negative responses. The stacked graph additionally shows the treatment group had more positive responses than the comparison group in all questions in both the pre and postsurveys. Specifically, item three, which focused on whether the district’s gifted education program adequately located gifted students,

showed greater agreement in the treatment group.

Additionally, the researcher analyzed open-ended item two on defining giftedness to determine whether parents had a more traditional academic definition of giftedness or a “beyond IQ” definition of giftedness. In the treatment group, presurveys showed 16 traditional and 10 nontraditional definitions, and the comparison group presurveys showed 16 traditional and 13 nontraditional definitions. In the postsurvey, the treatment group had 14 traditional and 19 nontraditional definitions, and the comparison group had 16 traditional and 12 nontraditional definitions. Figure 3 shows teacher survey responses for the same theme—locating potential beyond IQ.

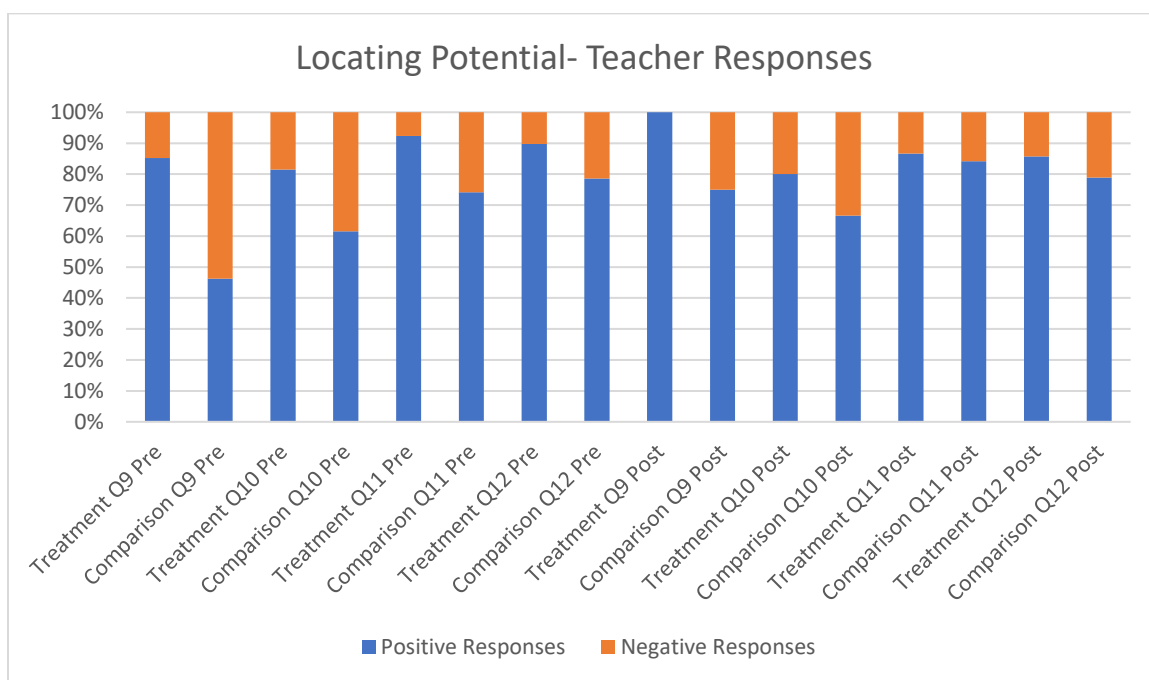


Figure 3. Teacher Survey Responses for Locating Potential Beyond IQ. This figure shows the positive and negative responses for the teachers in the treatment and comparison groups prior to and after the intervention period.

As with the parent survey, the treatment group had more positive responses than the comparison group for all items. Looking specifically at item nine, which asked if the

district had multiple pathways for gifted enrollment, a 100% positive response in the treatment group was shown in the postsurvey. Items 10, 11, and 12, which related to adequate enrollment of diverse populations, remained mostly the same between pre and postsurveys in both groups.

Open-ended item one in the teacher survey, like open-ended item two in the parent survey, asked teachers how they would define giftedness. This item was intended to show whether teachers had a more traditional, academic definition of giftedness or a “beyond IQ” definition of giftedness. In the treatment group, presurveys showed 15 traditional and 12 nontraditional definitions, and in the comparison group presurveys showed 13 traditional and 10 nontraditional definitions. In the postsurvey, the treatment group had seven traditional and eight nontraditional definitions, and the comparison group had eight traditional and seven nontraditional definitions.

Training teachers of CLED populations. The second cluster of survey questions addressed the component of training teachers of CLED populations. Figure 4 shows the parent responses to this cluster.

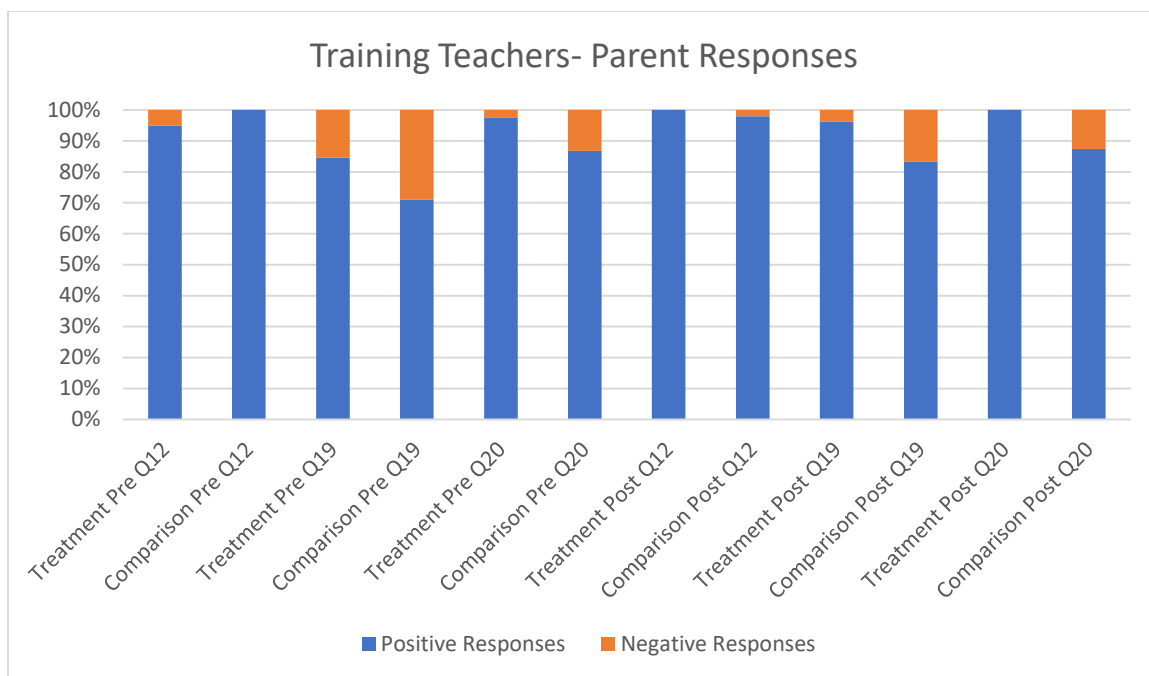


Figure 4. Parent Survey Responses for Training Teachers. This figure shows the positive and negative responses for the parents in the treatment and comparison groups prior to and after the intervention period.

As with the cluster of locating potential, parent responses for training teachers were mostly positive, with greater positive responses from the treatment group than comparison group. Item 12, which asked whether the child’s teachers believed they could be successful, was originally 100% positive in the comparison group but had a slight negative response in the postsurvey results. The treatment group had the opposite effect on item 12 with a slightly negative response in the presurvey and a 100% positive response in the postsurvey. The treatment group also had a 100% positive response in the postsurvey for item 20, “My child’s education is equal to others.”

Open-ended survey item three, which focused on strengths of children, was meant to show what parents wanted teachers to acknowledge about their children (a skill that could be developed through professional learning). Item three was also developed to

show alignment with parent definitions of giftedness. Data analysis of open-ended item three showed 16 parents in the comparison group presurvey wanted their students to be acknowledged for traditional gifted traits and 14 parents wanted their children to be acknowledged for nontraditional traits; and 15 looked at traditional traits and 16 looked for nontraditional traits to be acknowledged in the postsurvey. In the treatment group, 18 parents in the presurvey wanted their students to be acknowledged for traditional gifted traits and 13 parents wanted their children to be acknowledged for nontraditional traits; and 13 looked for traditional trait recognition and 20 looked for nontraditional trait recognition in the postsurvey.

Teacher responses to the cluster of teacher training are included in Figure 5.

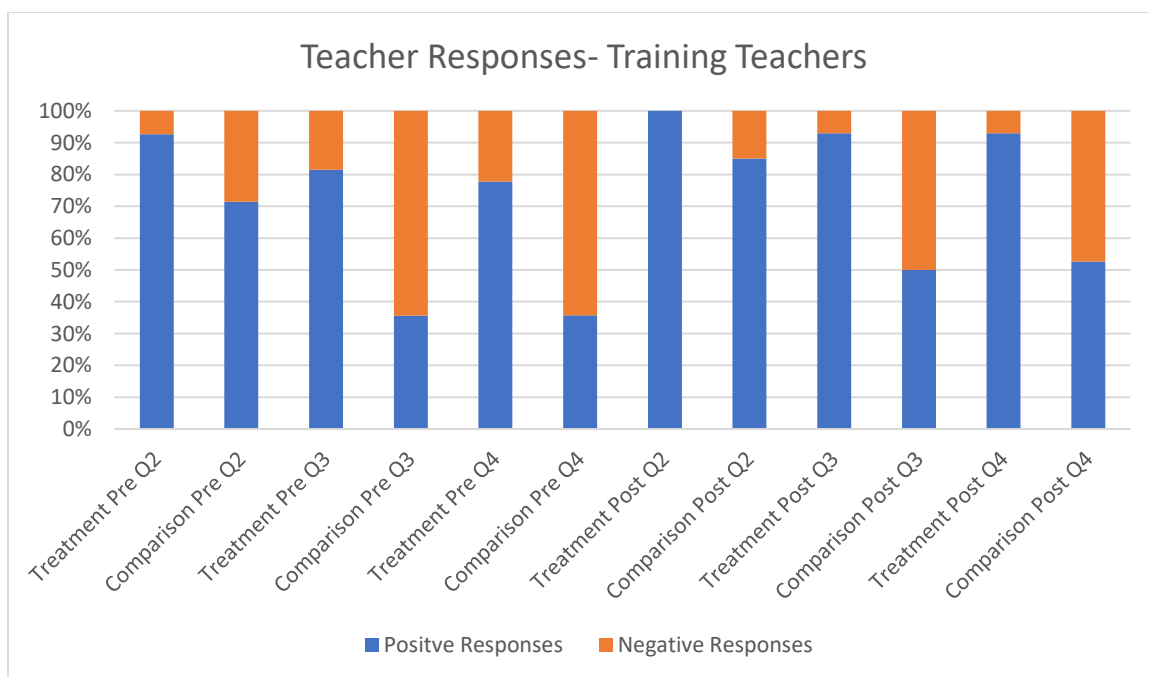


Figure 5. Teacher Survey Responses to Training Teachers. This figure shows the positive and negative responses for the teachers in the treatment and comparison groups prior to and after the intervention period.

Figure 5 illustrates the first teacher training cluster focused on teacher knowledge

of gifted education (definition, criteria, and curriculum). The stacked column graph shows the comparison group viewed these components negatively, while the treatment group viewed them more positively, with an even greater gap shown in the postsurveys. Items with the most negative responses (for the comparison group answers only) included item three, “I have a clear understanding of a gifted education program,” and item four, “The district provides a clear definition of their gifted program.” Responses to the second section of the cluster, items 13, 15, 16, and 17, are shown in Figure 6.

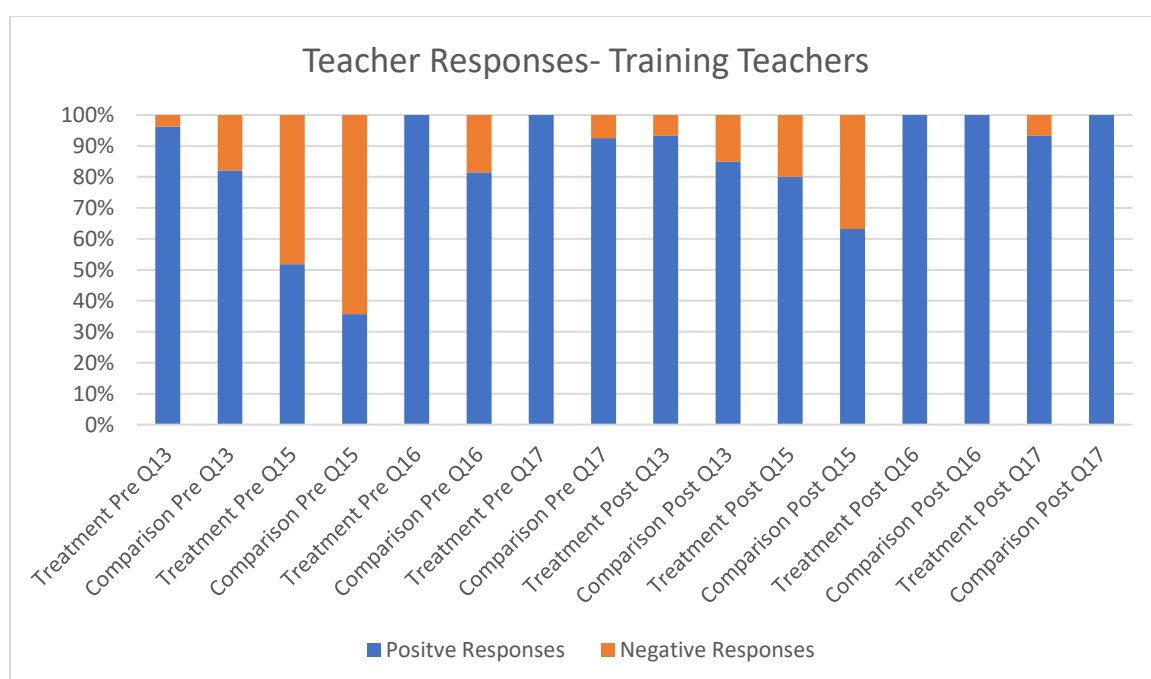


Figure 6. Teacher Survey Responses to Training Teachers. This figure shows the positive and negative responses for the teachers in the treatment and comparison groups prior to and after the intervention period.

As shown in Figure 6, the second cluster on teacher training again showed more positive responses from the treatment group than the comparison group, with the only item not falling into this analysis being item 20, which asked teachers if they looked at all subgroups in a fair and equitable way. Focus group responses supported the survey data,

specifically drawing attention to the underlying biases teachers have and how they can influence their decisions to recommend students. Focus group participants also called attention to how the training provided during the intervention made them more aware of what their biases were.

Increasing collaborative planning time with teachers. As noted previously, increasing collaborative planning time between teachers and AIG specialists closely aligns with the concept of providing professional development for teachers. The researcher intentionally separated the two concepts for this research to determine if both were necessary, or if one was more essential than the other. It is important to note, parent responses, while related to training of teachers, were not related to collaborative planning. Since parents are not present in the school building during teacher planning sessions, the researcher and survey panel determined only teachers would be surveyed on questions related to collaborative planning time. Figure 7 shows the teacher survey responses to this cluster.

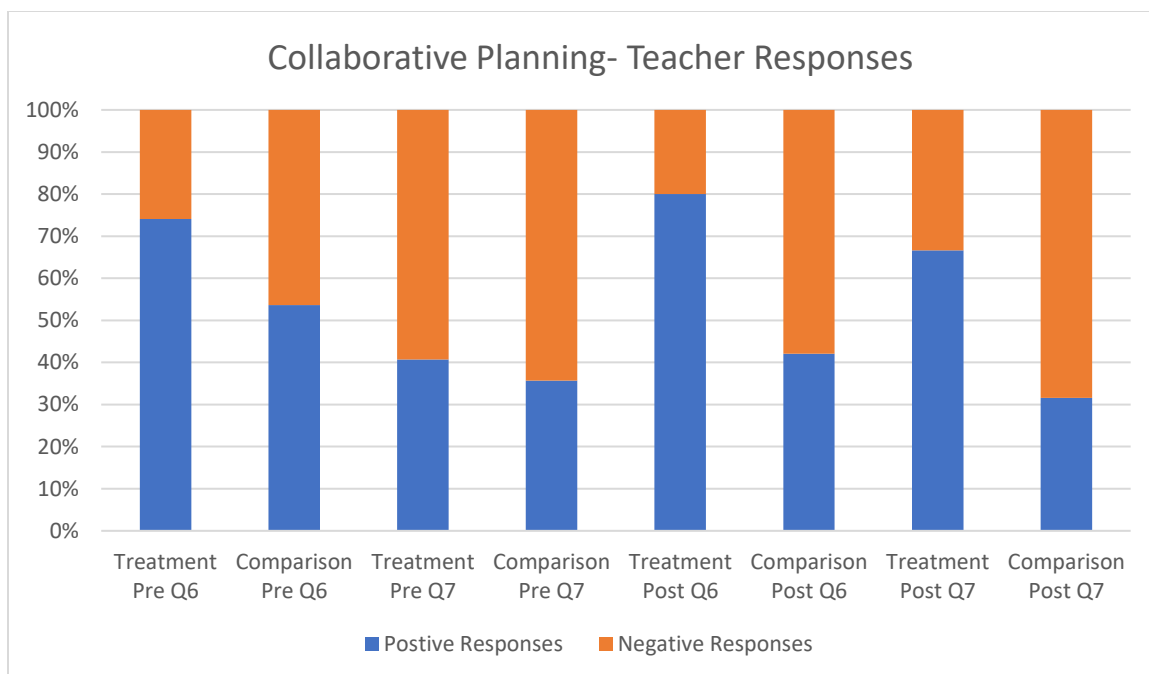


Figure 7. Teacher Survey Responses to Collaborative Planning with Teachers. This figure shows the positive and negative responses for the teachers in the treatment and comparison groups prior to and after the intervention period.

As shown in Figure 7, the action of providing resources and support to teachers was not occurring in mass at either the treatment or control sites prior to the intervention, as teachers in both groups noted negative response to these questions in the presurveys. In the postsurveys, while the comparison group remained about the same in the breakdown between positive and negative responses, the treatment group showed more positive feedback on collaborative support. Support for this growth was addressed during teacher focus groups when three different teachers called attention to how the collaborative sessions during the program assisted them in better supporting gifted students of all populations in their classrooms. The data analysis of these survey items confirmed the greatest need in this cluster was in item seven, teachers needing more support on the social and emotional needs of gifted learners.

Adjusting curriculum to include more active learning. Coleman and Shah-Coltrane (2015) and Gallagher and Gallagher (2013) discussed how collaborative sessions between regular education teachers and specialists could lead to adjusting curriculum and instructional practices to better meet the needs of CLED students. Specifically, Ford (2013) reminded educators they cannot locate potential in CLED students or serve their needs appropriately if they continue using sit-and-get traditional teaching strategies. Instead, Gallagher and Gallagher and NAGC (2015) encouraged teachers to focus on active learning such as the problem-based learning approach. Ford (2013) and Hammond (2015) additionally directed educators to include multi-cultural curriculum components in their classrooms. These research points were utilized to develop the curriculum cluster of survey items which focused on whether teachers and parents perceived engaging, multi-cultural lessons were being implemented in the classroom. Figure 8 shows both parent responses to the survey items in this cluster.

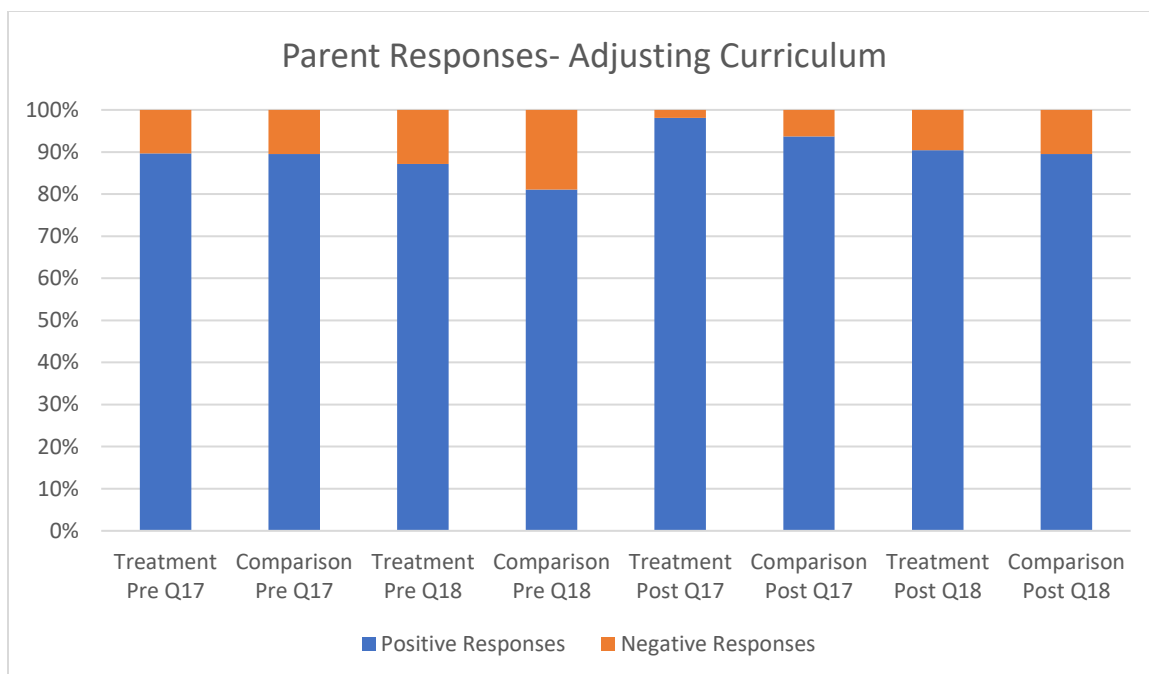


Figure 8. Parent Survey Responses for Adjusting Curriculum. This figure shows the positive and negative responses for the parents in the treatment and comparison groups prior to and after the intervention period.

As shown in Figure 8, parents across both the treatment and comparison groups perceived their children to be receiving engaging, culturally responsive curriculum that met the needs of their child's learning in presurveys. Additionally, survey responses showed this perception improved in both groups over the 12-week intervention period. Teacher survey responses, shown in Figure 9, supported these findings.

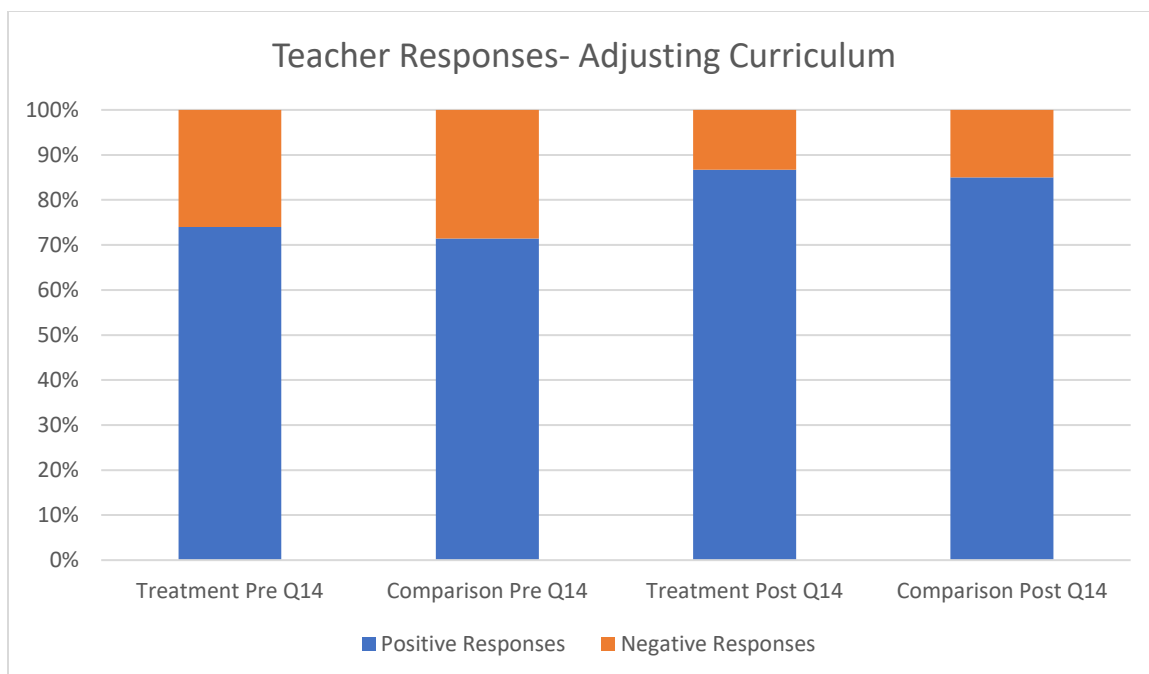


Figure 9. Teacher Survey Responses to Adjusting Curriculum. This figure shows the positive and negative responses for the teachers in the treatment and comparison groups prior to and after the intervention period.

As shown in Figure 9, teachers are adjusting their teaching to attend to the needs of CLED populations. Teacher and parent focus group responses relating to the increase of problem-based learning in the classroom, differentiation of lessons based on student needs, and students feeling excited and engaged with what they were learning further confirmed the overwhelmingly positive responses for this cluster of the parent and teacher surveys.

In addition to making learning more active, Ford (2010, 2013) argued educators needed to address multi-cultural education practices within their instruction. The researcher knew to effectively assist in bringing about these curriculum changes, it was essential to clarify teacher understanding of the principle of multi-cultural education. Teacher survey open-ended item six addressed this need, asking teachers what their

current understanding of multi-cultural education was. In analysis of the responses, the researcher broke the responses into two categories: change of content and change of perspective, based on Ford (2013) and Hammond's (2015) notation of two avenues of multi-cultural education: instruction changes and learning environment changes. In the treatment group, 13 responses referenced changing content and 11 referenced changing perspectives in the presurvey, while seven responses referenced changing content and seven responses referenced changing perspective in the postsurvey. For the comparison group, 11 responses referenced changing content and eight referenced changing perspectives in the presurvey, while nine responses referenced changing content and four responses referenced changing perspective in the postsurvey.

Deliberately cultivating support networks. Ford (2013) and Hammond (2015) also called attention to the need not to simply serve CLED students in gifted education but to cultivate support systems around them so they would be retained in the programs. While culturally responsive instruction is one step in retaining CLED students in gifted education, Ford (2013) pointed out relationships, expectations, student belief in self, and the learning/growing environment of the child matter just as much, if not more. To account for the multiple facets of support networks, many of the survey items related to this cluster. The survey panel felt parents and teachers would have great insight on the concept of deliberately cultivating support networks because they are in the trenches building these supports daily.

Additionally, the survey panel felt parent perceptions of support systems were extremely important, as sometimes educators may perceive situations one way while parents see the situation differently. For this reason, in the parent survey, two sections were devoted to support systems (one section focusing on outside-of-school support and

one section focusing on in-school support). Figures 10 and 11 share parent survey results for the support cluster. Figure 10 shows parent responses to questions related to outside-of-school support systems.

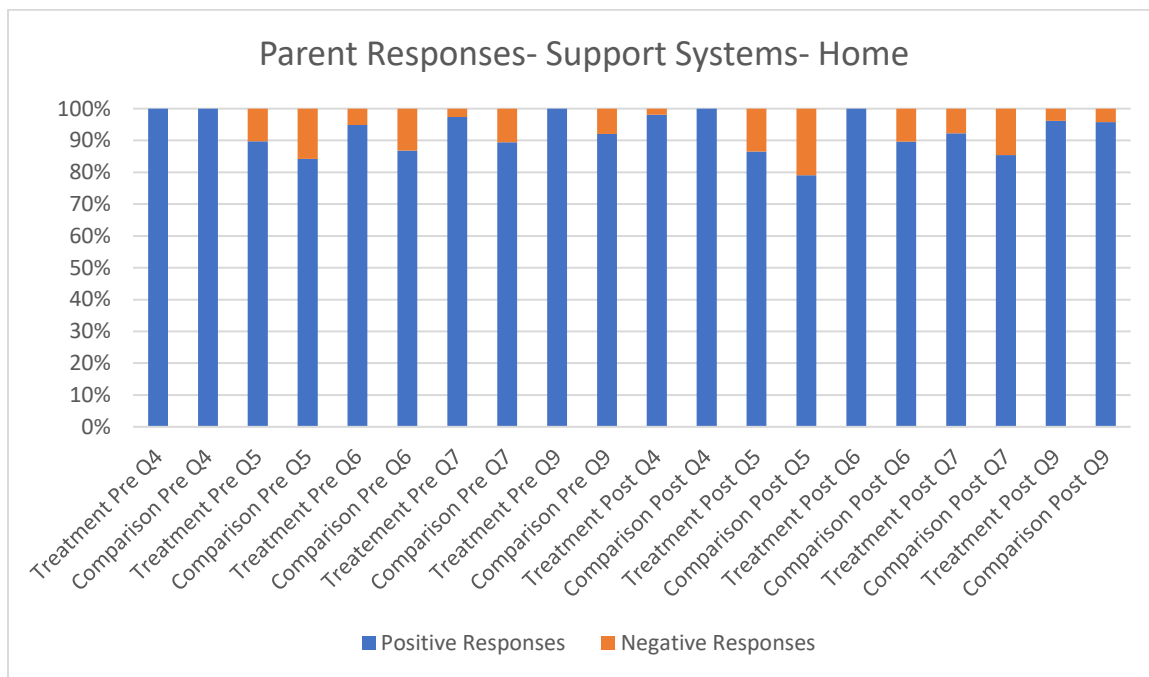


Figure 10. Parent Survey Responses (Part One) for Cultivating Support Systems. This figure shows the positive and negative responses for the parents in the treatment and comparison groups prior to and after the intervention period.

As shown in Figure 10, parents perceived their children’s outside-of-school support systems in a mainly positive manner. Additionally, shown through item four, “I am involved in my child’s education,” parents in all surveys and survey groups saw their support in a positive way. These data were supported by the overwhelming parental support comments discussed during focus group data presentation. Figure 11 shows parent responses to questions related to within-school support systems.

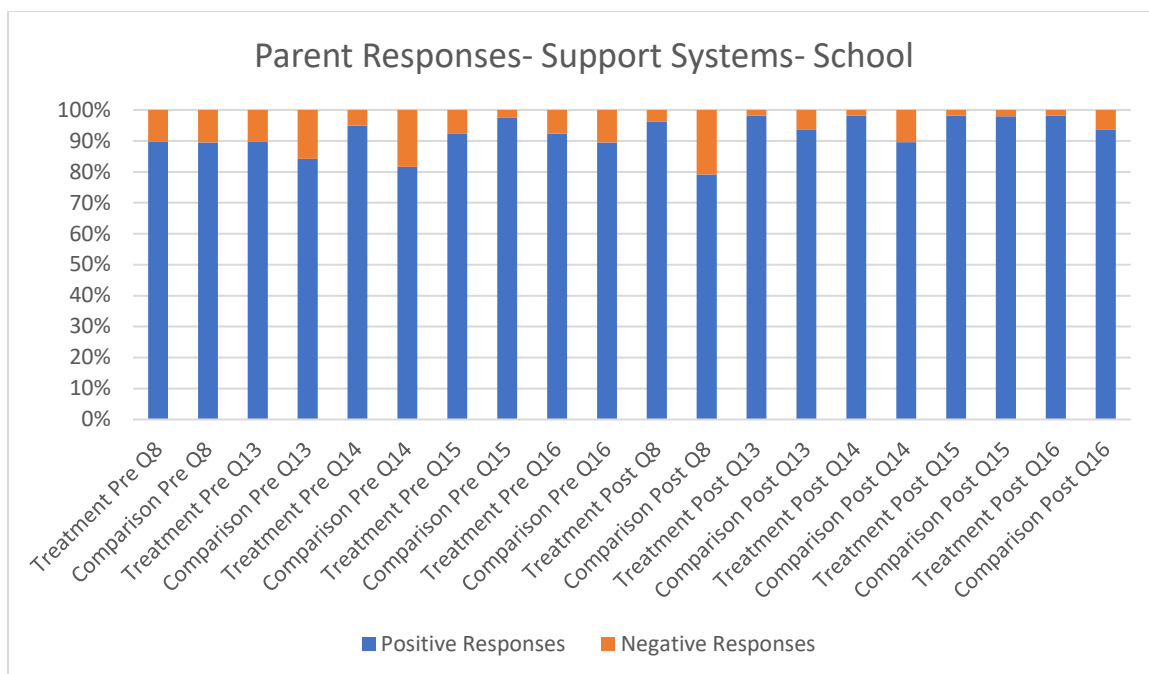


Figure 11. Parent Survey Responses (Part Two) for Cultivating Support Systems. This figure shows the positive and negative responses for the parents in the treatment and comparison groups prior to and after the intervention period.

Similar to the responses regarding the outside-of-school support systems, parents viewed in-school support systems for their children in a positive light in both surveys and across both groups. Over the 12-week period between surveys, all but one of the survey items gained more positive reactions. The only item where more negative responses existed was item eight, “I have a collaborative relationship with my child’s teacher,” for the comparison group.

In addition to the qualitative survey responses, open-ended item four on the parent survey asked parents in what areas the school could support their children. As with other open-ended items, the researcher looked for responses related to traditional, academic supports as well as responses related to nonacademic supports. In the treatment group presurveys, 17 responses focused on traditional supports and 17 responses focused on

nontraditional supports. In the treatment group postsurveys, 12 responses focused on traditional supports and 19 focused on nontraditional supports. In the comparison group presurveys, 18 responses focused on traditional supports and 13 responses focused on nontraditional supports. In the comparison group postsurveys, 14 responses focused on traditional supports and 15 focused on nontraditional supports. One response from the comparison group surveys worth noting was a request to “help my child know she is accepted no matter her race, culture, or gender.” This response directly connected to a statement made in the parent focus group on acceptance:

Yes, that acceptance. Because, just being honest, in the past people, or the black community, has established this idea that AIG was only for certain kids, so they developed the idea that “oh you think you are better than me” because they think “oh AIG is for the white folks or teacher kids, or affluent members of the society’s kids...but that isn’t me, so I must not be good enough.” (Parent focus group participant, personal communication, May 8, 2018)

In addition to acceptance, Ford (2013) reminded educators they need to let students know they are supported and that they are believed in, no matter their gender, race, or culture. Items on the teacher surveys related to support addressed Ford’s (2013) recommendation by focusing on providing support for students who might struggle adjusting to the gifted education program and in believing all students have potential to succeed. Figure 12 shows the teacher responses to the cluster on support systems in place.

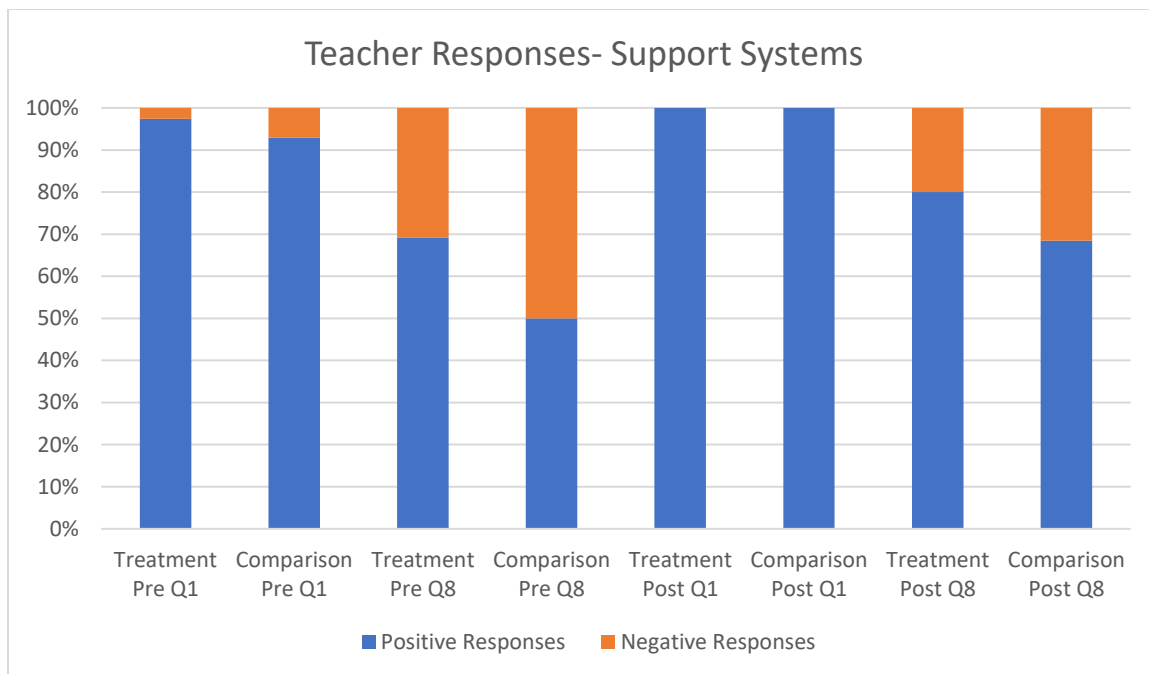


Figure 12. Teacher Survey Responses for Cultivating Support Systems. This figure shows the positive and negative responses for the teachers in the treatment and comparison groups prior to and after the intervention period.

As shown in Figure 12, item one, “All students have the potential to achieve at higher levels,” was mostly positive in the presurveys for both groups and received 100% positive ratings in the postsurvey from both groups. Conversely, item eight, which reflected on the district’s support for struggling students was an area of concern in the presurveys for both groups and still in the postsurvey for both groups, with a greater need in the comparison group.

Open-ended teacher survey item three, “What factors would keep you from seeing a student as having gifted potential,” was developed to provide more information on what might keep teachers from seeing all students as having high potential. Common themes and responses from the surveys are outlined in Table 12.

Table 12

Reasons for Not Recommending Students for Gifted Programs

Common Theme	Treatment Presurvey	Comparison Presurvey	Treatment Postsurvey	Comparison Postsurvey
None	4	4	4	2
Grades	3	1	1	0
Work Ethic	6	6	3	4
Behavior	6	5	5	10
Program Barriers (i.e., space)	2	1	0	0
Other	Doesn't fit mold, Shy	Attendance issues		Maturity

As shown in Table 12, grades, work ethic, and behavior were the top three barriers teachers saw in recommending students to gifted programs. While these three barriers received about the same amount of responses per group per survey, behavior was an increased concern in the comparison postsurvey. Additionally, none was a lower response in the comparison postsurvey than in the presurvey or when compared to the treatment group.

Increasing communication between home and school. The final component of talent development focused on in this research study was increasing communication between home and school, a component Davis (2008) and Davis et al. (2017) noted as the most essential component to a successful talent development program. While the survey panel predetermined increased communication would be a heavy focus during focus groups, the parent and teacher surveys had a few items related to the component for comparison and support purposes. Figure 13 shows the parent responses to this cluster.

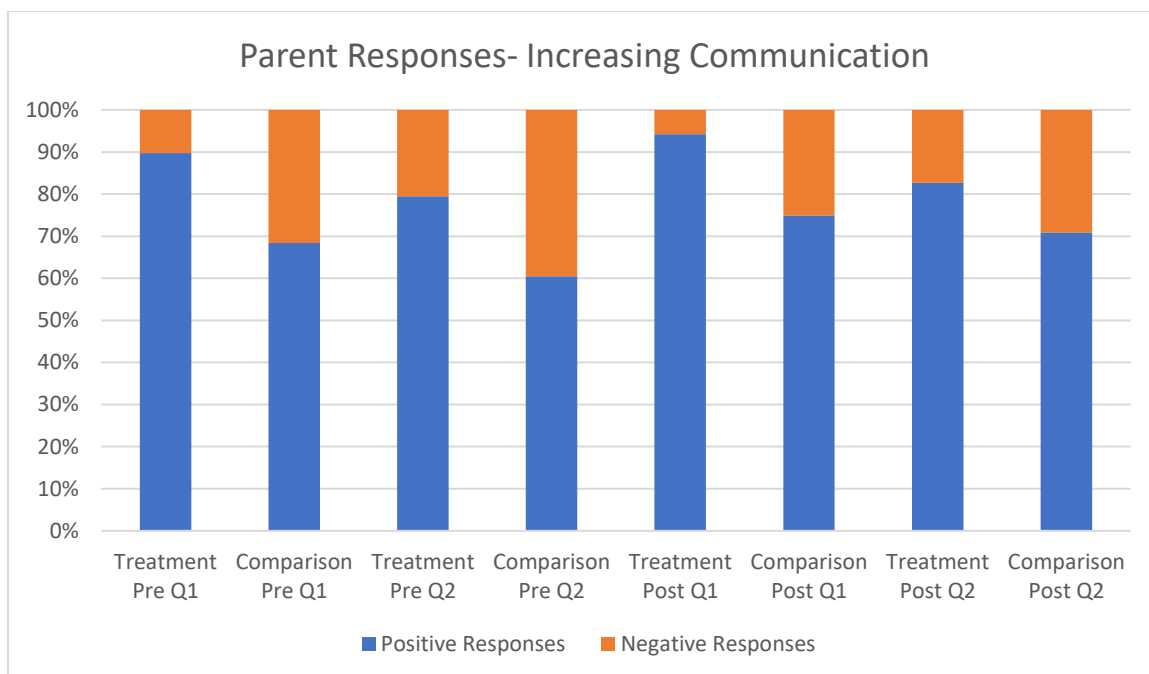


Figure 13. Parent Survey Responses for Increasing Communication. This figure shows the positive and negative responses for the parents in the treatment and comparison groups prior to and after the intervention period.

As shown in Figure 13, both items one and two, which focused on whether parents have received adequate information about the gifted program in the district, have some negative responses. Both groups did, however, increase in positive responses from the presurvey to postsurvey in both questions.

In addition to the focus on information about gifted programming, Gay (2010, as cited in Hammond, 2015) noted, “positive relationships exemplified by caring are one of the major pillars of cultural responsiveness” (p. 72). Based on Gay’s (as cited in Hammond) research, open-ended item one, “What does your culture value,” was added to the communication cluster, so the researcher could better understand how to build relationships where open communication could occur. Responses from both the treatment and comparison group for this item were extremely similar (both in the pre and

postsurveys as well as in focus groups). The researcher grouped these responses into seven cultural values referenced in surveys and focus groups as important to parents of all populations. Quantitative representation of these values is shown in Table 13.

Table 13

Quantitative Representation of Cultural Values

Cultural Value	Referenced in Surveys	Referenced in Focus Groups	Total Referenced
Acceptance	9	11	20
Character	11	5	16
Education	8	4	12
Family	11	3	14
Faith	12	1	13
Hard work	9	1	10
Language	5	8	13

As shown in Table 13, the value expressed as most important to CLED populations was acceptance. Character, family, faith, and language were noted as secondary in importance. When these values were established, education and hard work became important. Using these data, the researcher developed a Cultural Values Wheel to create a visual representation of values that are important to CLED populations. The Cultural Values Wheel will be further discussed in Chapter 5 of this research report.

Since parents ultimately control the door of communication, parents were the greater focus in the cluster of communication. One item in the teacher surveys, item five, was added to collect teacher feedback in this cluster. Responses for item five, regarding whether teachers felt parents were informed about gifted education in the district, are shown in Figure 14.

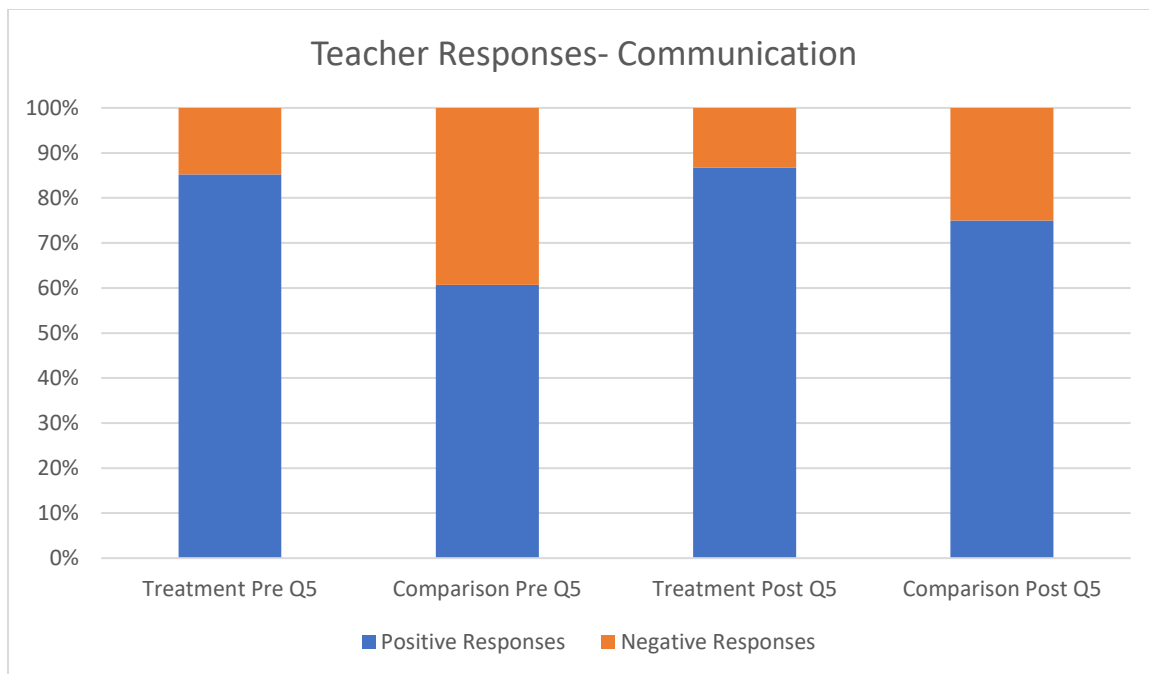


Figure 14. Teacher Survey Responses for Increasing Communication Between Home and School. This figure shows the positive and negative responses for the teachers in the treatment and comparison groups prior to and after the intervention period.

As shown in Figure 14, teachers in both the treatment and comparison group see room for improvement regarding communication between home and school, but both groups also showed perception of growth in this area over the 12-week period of the intervention.

Focus group data. In conjunction with parent and teacher surveys, the researcher conducted one parent and one teacher focus group at the end of the 12-week program. The focus groups were completed at the end of the intervention and after data collection, according to the flow of an explanatory sequential mixed methods approach where quantitative data are collected in phase one of the research, followed by qualitative data collected in phase two of the research (Creswell, 2014, p. 224). Additionally, following advice of Krueger and Casey (2009), parents and teachers involved in the focus groups

were connected to the study; teachers had students in the talent development intervention, and parents had children in the talent development intervention. Parents in the focus group were also part of the CLED populations being studied in the research. The focus group questions were aligned with the survey questions and talent development framework previously outlined to provide comparison data for the explanatory mixed methods study. The focus group questions can be found in Appendix E.

Alignment to themes. Using the same panels of educators and CLED parents used to align the survey with the research, the researcher and survey panel ensured the focus group questions aligned to the surveys and research. This alignment allowed the researcher to take answers from these focus group questions, transcribe them, and thematically code the responses to determine which of the key elements of a talent development program were most essential.

Table 14 quantitatively breaks down the focus group sessions as related to the talent development components. One additional talent development component of having high expectations was added to the list based on high numbers of parent and teacher responses on this topic.

Table 14

Quantitative Breakdown of Parent and Teacher Focus Groups

Talent Development Component	Referenced in Parent Group	Referenced in Teacher Group	Total
Locating Potential Beyond IQ Testing	12	16	28
Training Teachers in CLED Populations	10	17	27
Increasing Collaborative Planning Time with Teachers	0	6	6
Adjusting Curriculum to Include more Active Learning	8	8	16
Deliberately Cultivating Support Networks	20	7	27
Increasing Communication Between School and Home	17	2	19
**Added based on focus group responses: High Expectations for All Students	3	5	8

As shown in Table 14, the top three components parents and teachers felt were most essential to successful talent development programs included locating potential of students beyond their IQ testing, training teachers in CLED populations, and deliberately cultivating support networks for the students. These components were closely followed by the concept of increasing communication between school and home and adjusting curriculum to include more active learning. The least mentioned component of essential talent development (even in the teacher group) was the element of increased collaborative planning time between regular education teachers and AIG specialists. One other concept the teachers and parents both brought up in their focus group discussions was having high expectations for all students. While a lower number of responses fell in this

category, there were more responses noting the importance of high expectations than there were for increased collaborative planning time, so the researcher included data from the focus groups for this component of talent development. Information from the focus groups as related to the talent development components are shared in the following narratives.

Locating potential beyond IQ testing. Responses from the focus groups related to locating potential beyond IQ testing revolved around the following concepts: looking at multiple sources of data, the need to take the whole child into account, the detriment for students who are not good test takers, and the hard line that gets drawn when one test score is utilized to determine placement. Some specific quotes from focus groups related to this theme are included in Table 15.

Table 15

Focus Group Responses–Locating Potential Beyond IQ Testing

Supporting Quote	Focus Group
“I think the biggest thing for me is to find where they are gifted. It is not always just one area, but it is not always all areas either.	Teacher
“I think sometimes the kids [other students] are the best indicators...like you see their eyes open as they say ‘you are really good at this subject.’”	Teacher
“Sometimes you just need to look at what the teacher says who has spent time with them and knows what they are capable of everyday in the classroom rather than trust a onetime test.”	Teacher
“Through this program it never became about one Naglieri score or one EOG test, it was always about the whole student.”	Teacher
“You need to consider daily classroom observations...what if I didn’t test well because something had gone wrong in my house, but my teacher says I should be in the gifted classes because I am one of their best students?”	Parent
“There are always going to be kids who do not meet the criteria exactly or specifically, but what do you do about that? If they don’t necessarily hit the criteria head on but they are close why should we exclude them from that opportunity?”	Parent
“I mean obviously we want to take the political part out of AIG identification. There has to be integrity to the system and one test does not provide integrity.”	Parent

A subtheme to the locating potential beyond IQ quotes shown in Table 15, addressed in both the teacher and parent focus groups, was the concept of paying attention to students who exhibit behavior problems in school. In fact, five responses from the groups elaborated on or questioned whether students who are acting out behaviorally might simply need to be challenged more within the classroom. One participant specifically stated,

I almost look for giftedness through behavior problems because I discovered

some of the kids that get sent to the office repeatedly, when I sit down with them with their work, you notice some incredibly special skills they have and you start to wonder if these behaviors are why they are not being acknowledged for their ability...are we allowing their behaviors to mask their potential? (Teacher focus group participant, personal communication, May 4, 2018)

Other concepts that were addressed regarding looking beyond potential in learners included the concept of developing a portfolio on students to show their learning over a course of time and looking for students who exhibit critical thinking when solving problems and/or who make large gains in their academics in a short period of time. These points are discussed at greater length in the recommendations section of Chapter 5.

Training teachers in CLED populations. Another theme from the focus groups was the importance of training teachers on students in CLED populations, such as in the ways CLED students learn best; how they show giftedness differently; and most importantly, how awareness of their differences is essential in seeing their potential. Specifically, participants in both groups mentioned the need to use training to shift teacher mindsets from the old mold of what a “typical gifted student” is to the new understanding that there is no one-size-fits-all requirement to gifted education. One extremely powerful quote on this shift was,

Too often we look at students and their success is judged by whether they conform to the norms of school which are predominantly middle-class white norms. Are you quiet? Do you sit there? Do you raise your hand? And if you are loud and brazen and you are not comfortable sitting still then a lot of our reaction to that is you are not bright and you are not able to handle school...and that can actually be quite the opposite. (Teacher focus group participant, personal

communication, May 4, 2018)

Other quotes from the focus groups supporting the need for training teachers on students in CLED populations are shown in Table 16.

Table 16

Focus Group Responses–Training Teachers in CLED Populations

Supporting Quote	Focus Group
“I now know that they may not show their intelligence through writing, so I need to give them the chance to respond orally. I may not have done that in the past.”	Teacher
“Some teachers might have a belief that a person of a minority background is not as intelligent as another student...but that is not true. We need to help teachers understand you can’t base a decision on the color of a child’s skin or their background.”	Teacher
“To gain awareness at a greater extent, quality ongoing professional development like we received in this program needs to happen in other schools.”	Teacher
“I need to add that in the past I have seen kids removed because they did not fit the mold of the AIG program. This year, we have been asked to break the mold and find students we never would have suggested before. I think this year we have completely taken the stigma of ‘gifted’ away.”	Teacher
“I think another thing that helped was offering the course we offered this year. It has been eye-opening...and has provided resources and ideas that have been essential.”	Teacher
“I mean there are research studies on just how people test different culturally–this is a huge piece we need to make teachers aware of.”	Parent

Increasing collaborative planning time with teachers. A theme connected with teacher training was the theme of increasing collaborative planning time between regular education teachers and AIG specialists. While the two themes may seem similar, there are differences; and including both was intentionally done to determine which element was more important. As shown in Table 14, increasing collaborative planning time

between teachers and specialists was the least important of all talent development components. The few responses related to this theme focused on the ability for classroom teachers to carry over talent development lessons into the regular classroom, increase their access to instructional resources, and have a chance to discuss student data. Some supporting quotes for collaborative planning time are shown in Table 17.

Table 17

Focus Group Responses—Increasing Collaborative Planning Time

Supporting Quote	Focus Group
“We are having them show giftedness in the classroom by trying to do more problem-based learning things with them and using our outside resources to support their learning.”	Teacher
“The instruction is not just something they are getting in the intervention setting, we are both enriching and supporting each other’s classroom time.”	Teacher
“The planning meetings with you have made a difference to me. Through them, even students who don’t see you are able to benefit from the resources you have provided. So in class when I notice potential, I have given them those activities.”	Teacher

Adjusting curriculum to include more active learning. The data on collaborative planning and teacher training showed some comments alluding to adjusting curriculum to make more active learning environments. Parents and teachers specifically connected this theme to the idea of teacher training in that students of CLED populations learn differently, so adjustment of curriculum would be necessary. When probed to further elaborate on changes to the curriculum they were referencing, the common responses circled around the concepts of activities that increased the excitement and engagement of school, teaching of thinking skills, placing kids in a challenging environment, and providing more choice to students. Choice, in fact, was mentioned on five separate

occasions during the focus group sessions. Some specific quotes to support the theme of adjusting curriculum for CLED learners are included in Table 18.

Table 18

Focus Group Responses—Adjusting Curriculum to Include Active Learning

Supporting Quote	Focus Group
“When we started giving them choice within their product, I was like oh they have an artistic talent, and now I am giving them a chance to show that in product rather than give them a test.”	Teacher
“I know now I need to give them more audience time, presentation time. As [she] mentioned, the kids can see the talents of their classmates then.”	Teacher
“We also need to fill in the gaps and level the playing field through our curriculum. Like providing background experiences for the kids, watching videos, going on field trips.”	Teacher
“We need to include more culturally relevant texts too so the students see themselves in the situation. It helps them engage and learn from the text when they can see themselves in the text.”	Teacher
“I think for us we really appreciated the problem model learning because it has forced my child to think critically, problem-solve, and think outside the box. He is also really excited to do the projects.”	Parent
“My daughter wants to be challenged, but she needs learning to be fun and enjoyable, not stale and rigid. You know, so the students don’t even realize they are learning.”	Parent

Deliberately cultivating support networks. All the above themes helped build the foundation required to deliberately cultivate support networks for students. While support can mean many things to different people, when the theme came up during focus group discussions, parents and teachers focused on support networks that helped build confidence, created access, developed positive relationships, and broke down barriers of preconceived notions in gifted education. Specific comments supporting the need for deliberately cultivating support networks are shown in Table 19.

Table 19

Focus Group Responses–Deliberately Cultivating Support Networks

Supporting Quote	Focus Group
“Students who knew they were close to being in AIG at the start of the year and who were invited to be part of the group- it has boosted their confidence and they are performing better in class. Confidence goes a long way.”	Teacher
“We need to be a voice for the students you know don’t necessarily have access to resources, providing them access to these resources, whether it is the summer reading book or an extra field trip.”	Teacher
“Maybe we could hold a summer camp to focus on some science or math skills... just like a football coach brings them in to prepare them physically, schools need to bring them in to prepare them mentally.”	Parent
“And maybe a mentor, like a student already in the next grade. They could talk to them and explain ‘I mean this is what we do, and it isn’t that bad’ so the students have less anxiety. It would also give them somebody to connect with too.”	Parent

Focus group participants also noted the importance of supporting students through transition periods in their life and understanding how these transitions were more difficult for high-ability CLED students. For example, parent participants called attention to the concept of high-ability CLED students being seen by their peers as “acting White” because they used more advanced vocabulary or feeling pressure from their peers who were not in the gifted education classroom, even to the extent that one parent shared their child was told, “they must be big time now.” Teacher participants also noted seeing CLED students struggle with accepting their entrance into the gifted classroom. On the positive side of cultivating support networks, one teacher shared a unique situation where students in her room who were in the treatment group cultivated support between each other. Here is the experience she shared:

I have a unique situation. I have someone who was regularly identified as AIG and it became very uncool to be AIG so he became really lax in the classroom. But through your program, a couple of their good friends started to go too, and I noticed a change in class. All of a sudden it wasn't this little isolated world...it was no longer uncool to be smart. For others too, they are saying "I want to go too, what do I have to do to get there next year?" (Teacher focus group participant, personal communication, May 4, 2018)

Increasing communication between school and home. The final research component of the talent development intervention was a focus on increasing communication between school and home. In the teacher focus group, this theme was barely touched upon; but in the parent group, it was a concern from all the participants. Specific touch points brought up by parents regarding communication between school and home were providing resources to parents, educating parents on gifted policies, and helping parents see open dialogue and feedback were welcomed. Some specific quotes to support the need for communication are shown in Table 20.

Table 20

Focus Group Responses—Increasing Communication Between School and Home

Supporting Quote	Focus Group
“I think a lot of times we just need to put more information out there...maybe on the community channel or through ConnectEd messages.”	Teacher
“A big part of the educational piece might be in helping parents understand what the criteria for the gifted program actually looks like.”	Teacher
“I think it would be very valuable in helping maintain my child’s success to have things sent home over the summer or throughout the school year...like giving me some tips on things he needs to work on so he doesn’t regress.”	Parent
“I think the ongoing communication- making sure that the communication lines continue to be open.”	Parent
“You just have to be able to give parents the opportunity to provide tutoring or hands-on sessions before you decide to deny services to a child.”	Parent
“We need parent meetings—not just flyers, but real meetings. Like what we are doing here. We need to continue these to show you do want feedback from the parents and you want to maintain open dialogue...that you will allow people to voice their concerns.”	Parent
“We need to continue to remember to provide information in the languages of our students. Seeing your language at least means you are accepted.”	Parent

Resoundingly, the message from the parents was that they cared about their child’s education and wanted to be involved; but often, they were unaware of what they needed to be doing to help, and this lack of information closed a door on their active participation.

High expectations for all students. As noted in Table 14, one component of a talent development program the researcher did not originally include as a focus but was brought up eight times in the parent and teacher focus groups was the concept of high expectations for all students. Parents and teachers alike wanted to see all students held to

high standards, encouraged to take on challenges, and pushed to take part in higher academic programs even if they had not previously done so. Specifically, claims made by parents and teachers are included in Table 21.

Table 21

Focus Group Responses—High Expectations for All Students

Supporting Quote	Focus Group
“We need to have high expectations for everybody...they should all start the year with a clean slate no matter what happened the previous year.”	Teacher
“The kids start to see the high expectations and challenge each other. Before the i-Ready benchmark two of my students who used to think they couldn’t act smart issued each other a challenge of push-ups to the lower score.”	Teacher
“They need to be challenged. Even if like she said, that might be frustrating, when they meet a challenge and they are able to work through it, they gain confidence and feel like ‘I got this.’ Then they start challenging themselves.”	Parent

Research Question 2. While Plucker et al. (2010) argued educational gaps among the highest achieving students required a unique response, they did not deny the fact standardized achievement still needed to be emphasized (p. 24). Research Question 2, “How does implementation of a talent development program impact underrepresented populations regarding achievement,” was developed to fulfill Plucker et al.’s advice. To answer this research question, i-Ready standardized data, GRS teacher ratings from the academic section of the rating form, and parent and teacher focus group data were collected. Descriptive statistics, *t* tests, and chi-squared tests were completed during the data analysis. The following tables and figures present data for Research Question 2.

i-Ready. As noted in Chapter 3, i-Ready benchmark data were collected on students in the treatment and comparison group in January (scale score average from

September and January) and April. Using the scale scores from these assessments, the researcher calculated average growth for all subgroups in the study (treatment and comparison). Figure 15 shows the comparison of average growth between subgroups and treatment and comparison groups.

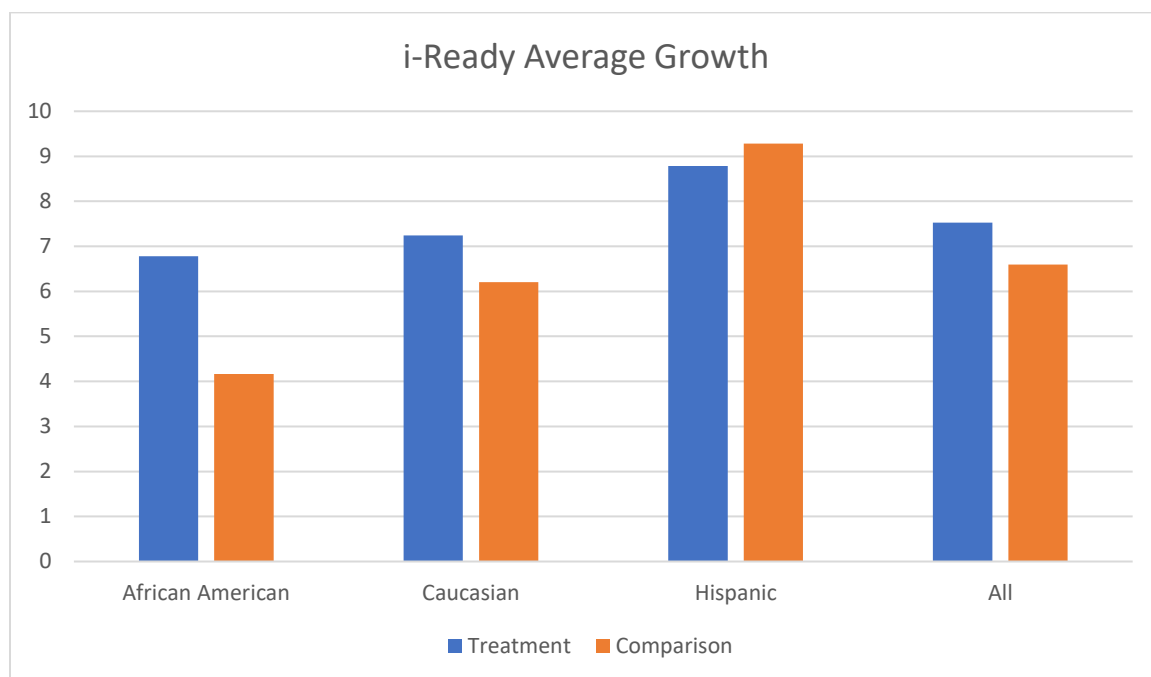


Figure 15. Average i-Ready Growth. This figure shows the average growth from January to April for the treatment and comparison groups in the study and between subgroups within the district where the study was completed.

As shown in Figure 15, the average growth of the treatment group was greater than the average growth of the comparison group. Within subgroups, the African-American and Caucasian subgroups in the treatment group showed greater growth than those in the comparison group; and the Hispanic subgroup remained relatively the same, with a slightly higher average in the comparison group (both averages being higher than any other groups).

Based on advice by Urdan (2010) to ensure the statistical significance of

descriptive analysis, the researcher ran a *t*-test analysis of two samples assuming equal variance as well as a chi-squared test to determine how the growth made on the i-Ready test by the treatment group compared to the expected growth of the population. Table 22 shows the results of these statistical analysis tests for the entire treatment and comparison group as well as breakdowns between subgroups within the research study.

Table 22

t-Test and Chi-Square Results for i-Ready Testing

Group or Subgroup	Degrees of Freedom (df)	<i>p</i> value	Critical <i>t</i> value	Chi-square <i>p</i> value	Significance (<.05 alpha)
ALL	202	0.737090876	1.971777385	.805214385	Not enough evidence to conclude samples are different
African-American	56	0.683868699	2.003240719	.476796406	Not enough evidence to conclude samples are different
Caucasian	76	0.79171628	1.99167261	.64790144	Not enough evidence to conclude samples are different
Hispanic	63	0.920921681	1.998340543	.104158043	Not enough evidence to conclude samples are different

As shown in Table 22, the *p* value of both the *t*-test and chi-square analyses does not meet the required less than .05 alpha significance level. For this reason, the data

relating to i-Ready achievement growth is listed as not enough evidence of significant difference between treatment and control groups as well as within subgroups in the research study.

GRS. GRS data were also collected at the beginning and end of the 12-week intervention. GRS data served as a second checkpoint for academic achievement using the academic component of the tool. Using the scale scores from teacher observations, the researcher calculated average growth for all subgroups in the study (treatment and comparison). Figure 16 shows the comparison of average growth between subgroups and within treatment and comparison groups.

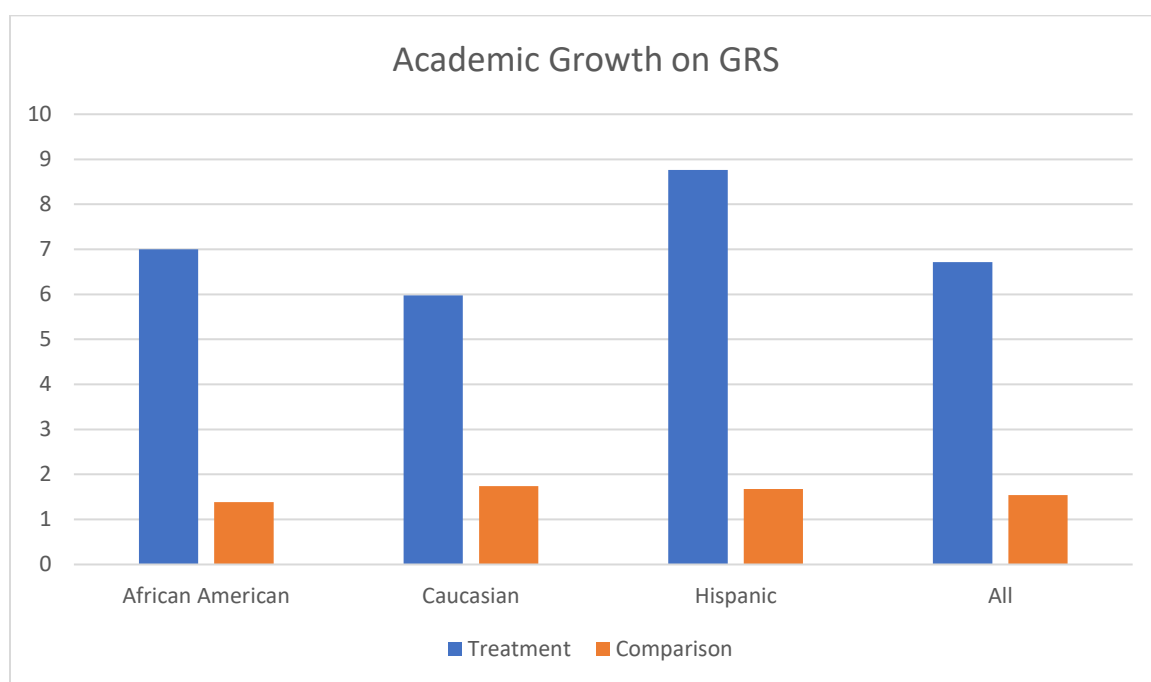


Figure 16. Academic Growth on GRS Academic Achievement Component. This figure shows the average growth on the Academic Achievement component of the GRS for research participants overall and within subgroups.

As shown in Figure 16, the overall average growth in the treatment group was almost four times the overall average growth in the comparison group. Additionally, all

subgroups in the treatment group showed greater growth than the subgroups of the comparison group. Again, based on the advice of Urdan (2010), the researcher completed a *t*-test analysis and chi-square analysis for the entire treatment and comparison group as well as breakdowns between subgroups to determine the statistical significance of these results. Table 23 shows the results of these statistical analysis tests for the entire treatment and comparison group as well as breakdowns between subgroups within the research study.

Table 23

t-Test and Chi-Square Results for GRS Academic Section

Group or Subgroup	Degrees of Freedom (df)	<i>p</i> value	Critical <i>t</i> value	Chi-square <i>p</i> value	Significance (<.05 alpha)
ALL	200	0.003558096	1.971896224	1.92341E-06	Enough evidence to conclude samples are significantly different
African-American	55	0.008744868	2.004044783	.158516893	Not enough evidence to conclude samples are different
Caucasian	76	0.001450611	1.99167261	.000586551	Enough evidence to conclude samples are significantly different
Hispanic	62	0.000213611	1.998971517	8.20089E-07	Enough evidence to conclude samples are significantly different

As shown in Table 23, when comparing the participants in the treatment and control group, the overall *t*-test and chi-square analysis was less than the required .05

alpha, making the academic growth based on GRS ratings scales for the study significant as a whole. Within the subgroups, the p values were also significant for the Caucasian and Hispanic subgroups. The GRS academic rating scale results provided a greater than .05 alpha for both tests in the African-American subgroup however, making the results for that subgroup inconclusive.

Focus group responses. The last pieces of data collected for Research Question 2 were parent and teacher focus group data. While much of the focus group data were previously explained, additional focus group data supporting academic growth of students in the program are included here. In the parent focus group, parents referenced increased achievement during the talent development intervention 13 times, sharing observations of children who felt “thankful for their learning,” wanted to work on academic work at home, and who they saw excelling in the classroom based on their new confidence. Additionally, parents called attention to their personal interest in their child’s achievement during their involvement in the talent development program, noting,

I don’t know if the resources are available or not, but I would be interested in hearing about things we could do at home to ensure our child stays up to par with their academics and can remain in the program. (Parent focus group participant, personal communication, May 8, 2018)

As a parent, if I am informed of something my child is struggling with...I could arrange tutoring or something. I mean really, I will eat rice with no gravy all summer to make sure my child gets what they need academically. (Parent focus group participant, personal communication, May 8, 2018)

Teachers also referenced increased achievement of students during the intervention, with 19 notations of achievement increase and specific mention of increased

positive competition in their classrooms; the necessity to move students to higher reading, math, or science groups due to their increased achievement during the program; and the importance of looking at multiple avenues of achievement. Using an explanatory mixed methods research approach allowed the researcher to use data from parent and teacher focus groups to support the growth shown in the i-Ready and GRS quantitative data.

Research Question 3. In addition to achievement, Renzulli (2015) noted the importance of students being engaged in their learning. Research Question 3, “How does implementation of a talent development program impact underrepresented populations regarding engagement,” was developed to address this component of learning. Rezuilli (2015) argued engagement plays an essential role in student achievement because students who are engaged in their learning are more motivated to learn and are more likely to attend school on a regular basis. To analyze engagement of students, the researcher utilized Panorama Education surveys given by the district (with specific attention to the engagement and grit section), GRS rating forms (the motivation section), attendance reports, and parent and teacher focus group responses.

Panorama Education survey results. One data tool used to measure student engagement was a naturally occurring data method of Panorama Education surveys given by the district where the research study was completed. Panorama Education surveys are given to students because “students play an essential role in informing teaching effectiveness” (Panorama Education, 2015, p. 2). Panorama surveys have nine classroom specific domains and 11 school specific domains for districts to utilize. For this research study, data were collected in the engagement and grit domains based on research by Hammond (2015) and Renzulli (2015) which showed connection between a student’s

mindset, their ability to persevere when challenged, and how engaged they were in their personal success. Results from the Panorama Education surveys were collected for the treatment and control groups in the fall (preintervention) and the spring (postintervention). Results were analyzed by treatment and control only and not by specific demographics, as with other data, to keep anonymity of the student responders. General rather than specific reporting when related to student participants and their opinions also upheld Gardner-Webb University's policy regarding protection of children in research studies. Full data results from the Panorama Education surveys can be found in Appendix N (fall results) and Appendix O (spring results). The survey questions collected by the district were in the areas of engagement, school climate, and grit. All survey responses are provided in the appendices. Figures 17 and 18 show the survey results in chart format for the engagement and grit categories. Figure 17 illustrates the difference between treatment and comparison group responses for the engagement category.

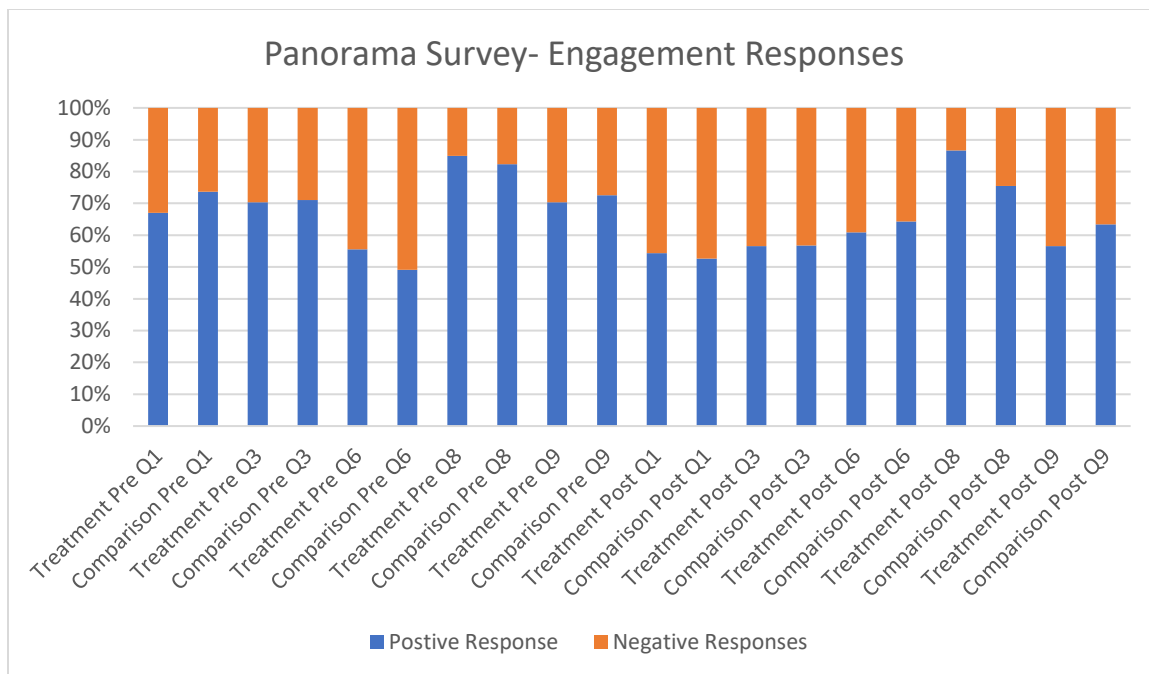


Figure 17. Panorama Education Survey Responses for Engagement Domain. This figure shows the positive and negative responses of students in the treatment and comparison group for the engagement domain of the student surveys. Data show survey results from the fall and spring surveys.

As shown in Figure 17, all items in the engagement domain increased in the percentage of negative responses from the presurvey to the postsurvey for both the treatment and comparison group except for item six, “When you are not in school, how often do you talk about ideas from class?” While responses only became slightly more positive for this item, the trend was leaning in the positive direction. Figure 18 shows the difference between treatment and comparison group responses for the grit category.

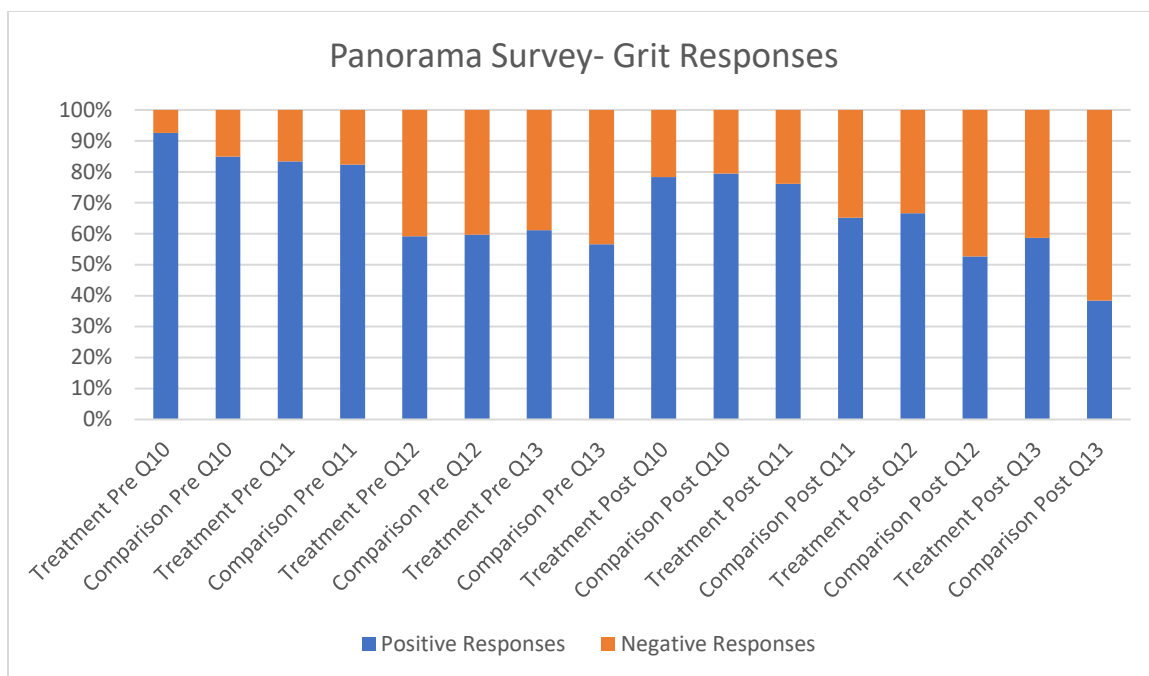


Figure 18. Panorama Education Survey Responses for Grit Domain. This figure shows the positive and negative responses of students in the treatment and comparison group for the grit domain of the student surveys. Data show survey results from the fall and spring surveys.

As shown in Figure 18, all items in the grit domain increased in the percentage of negative responses from the presurvey to the postsurvey for both the treatment and comparison group except for item 12, “When working on a project that matters, I can stay focused despite distractions.” Unlike the results in the engagement domain for question six, question 12 did not increase for both groups; instead, the treatment group showed increased positive responses, and the comparison group showed increased negative responses.

Last, the researcher ran chi-square analyses to determine if the difference between treatment and comparison group responses was significant. All items were analyzed, but for this research study, only questions one, three, six, eight, and nine [engagement domain] and 10, 11, 12, and 13 [grit domain] were considered for research significance.

Table 24 provides the questions of the survey and their respective chi-square analysis.

Table 24

Panorama Education Chi-Square Results

Question #	Question	FALL Chi-square <i>p</i> value <i>* must be <.05 to be considered significant</i>	SPRING Chi-square <i>p</i> value <i>* must be <.05 to be considered significant</i>
	Engagement Questions [*]		
	Grit Questions [^]		
1 [*]	How excited are you about going to your classes?	.35358579	.848508296
2	How positive or negative is the energy of the school?	.229906872	.980840561
3 [*]	In your classes, how excited are you to participate?	.92760211	.978421149
4	How fair or unfair are the rules for the students at this school?	.531115842	.00224941
5	At your school, how much does the behavior of other students hurt or help your learning?	.081106974	.126181974
6 [*]	When you are not in school, how often do you talk about ideas from your classes?	.435972412	.685693875
7	How often do your teachers seem excited to be teaching your classes?	.833968801	.645934716
8 [*]	How focused are you on the activities in your classes?	.676083157	.1216659
9 [*]	How interested are you in your classes?	.767856145	.420287737
10 [^]	If you fail at an important goal, how likely are you to try again?	.163842098	.865755735
11 [^]	If you have a problem while working towards an important goal, how well can you keep working?	.869141143	.180470838
12 [^]	When you are working on a project that matters a lot to you, how focused can you stay when there are lots of distractions?	.961652692	.10971775
13 [^]	How often do you stay focused on the same goal for more than 3 months at a time?	.583631826	.019601048

As shown in Table 24, most of the Panorama Education survey questions showed normal distribution between the treatment and comparison group. The two items

showing a significant difference according to the less than .05 alpha requirement of a chi-square analysis were item four (How fair/unfair are the rules at your school?), an item not related to the engagement or grit domains, and item 13 (How often do you stay focused on the same goal for more than three months at a time?), an item in the grit domain.

GRS ratings for motivation. GRS data were also collected at the beginning and end of the 12-week intervention on student motivation. GRS data served as a second checkpoint for student engagement using the motivation component of the tool. Using the scale scores from teacher observations, the researcher calculated average growth for all subgroups in the study (treatment and comparison). Figure 19 shows the comparison of average growth between subgroups and within treatment and comparison groups.

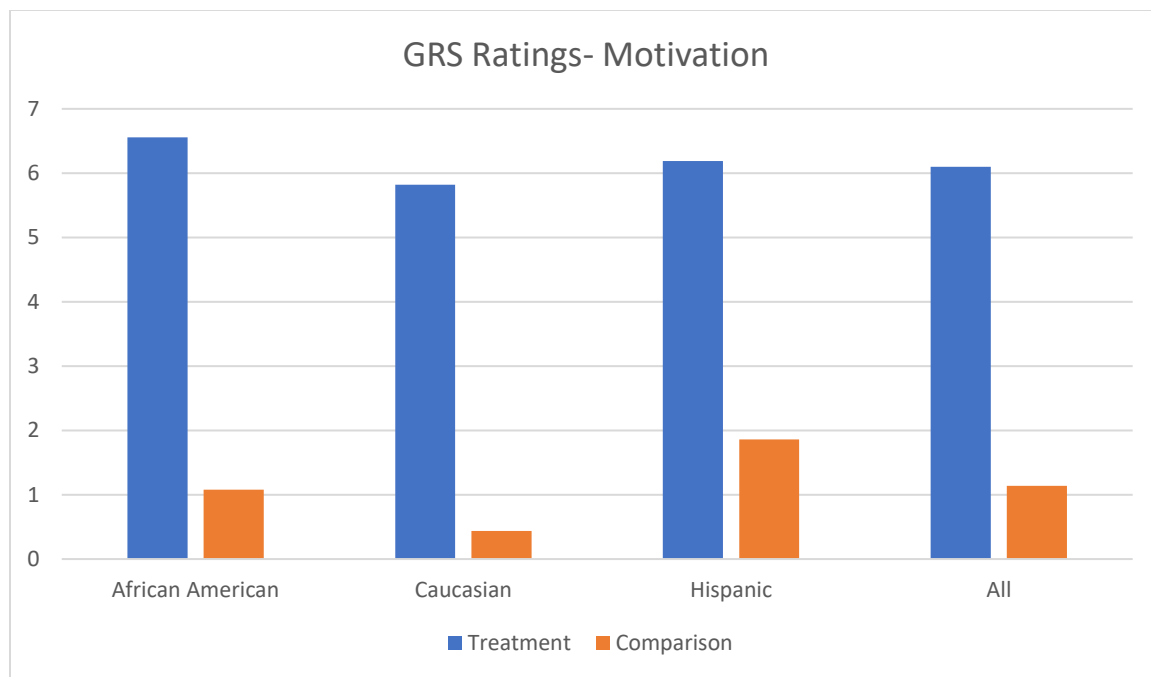


Figure 19. Motivation Growth on GRS Motivation Component. This figure shows the average growth on the motivation component of the GRS for research participants overall and within subgroups.

The column chart shown in Figure 19 illustrates overall growth in motivation was

highest for the treatment group as well as for all subgroups within the treatment group when compared to the comparison group. As with all other descriptive data in the research study, the researcher also conducted *t*-test and chi-square analyses to determine the significance of these averages. Table 25 shows the results of these statistical analysis tests for the entire treatment and comparison group as well as breakdowns between subgroups within the research study.

Table 25

t-Test and Chi-Square Results for GRS Motivation Section

Group or Subgroup	Degrees of Freedom (df)	<i>p</i> value	Critical <i>t</i> value	Chi-square <i>p</i> value	Significance (<.05 alpha)
ALL	200	4.71113E-08	1.971896224	1.79036E-07	Enough evidence to conclude samples are significantly different
African-American	55	0.025082946	2.004044783	.217007754	Not enough evidence to conclude samples are different
Caucasian	76	2.5631E-06	1.99167261	.000289545	Enough evidence to conclude samples are significantly different
Hispanic	62	0.003921419	1.998971517	.000454122	Enough evidence to conclude samples are significantly different

As shown in Table 25, when comparing the participants in the treatment and control group, the overall t -test and chi-square analysis was less than the required .05 alpha, making the motivational growth based on GRS ratings scales for the study significant as a whole. Within the subgroups, the p values were also significant for the Caucasian and Hispanic subgroups. The GRS motivation rating scale results provided a greater than .05 alpha for both tests in the African-American subgroup however, making the results for that subgroup inconclusive.

Attendance reports. Renzulli (2015) connected student engagement and motivation to being interested in school and driven to attend school daily. To assess engagement through Renzulli's theory of attendance, the researcher utilized PowerSchool reports to determine the average days of absence first semester (preintervention) and second semester (postintervention) for the overall groups and for the individual subgroups in the research study. The results are shown in Figure 20.

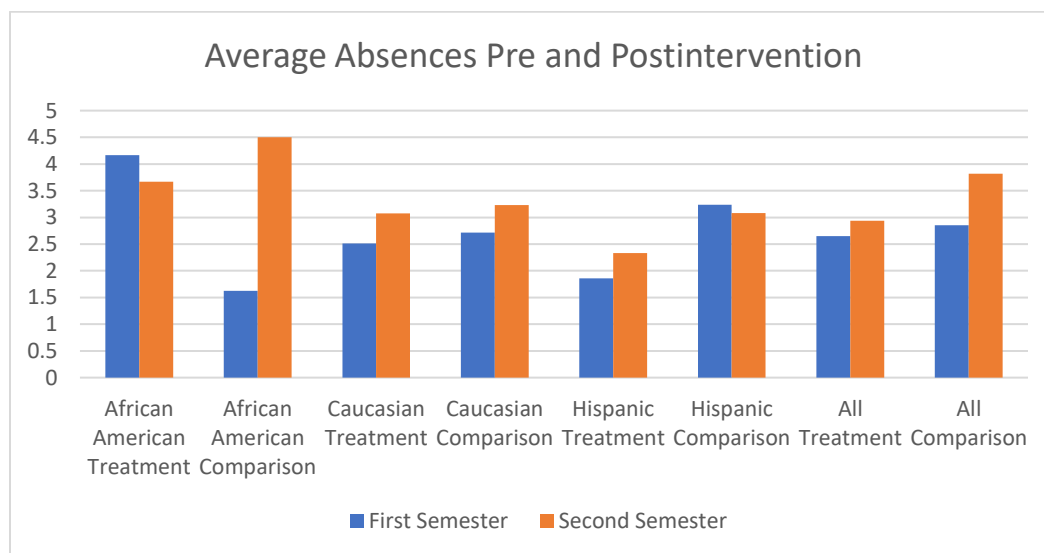


Figure 20. Average Attendance Pre and Postintervention. This figure shows the average days absent for the treatment and control group as well as within subgroups in these groups for first semester (preintervention) and second semester (postintervention).

As shown in Figure 20, most subgroups and the overall group of participants had more days absent on average second semester than first. To help determine the significance of these average absences between research study participants and subgroups, the researcher calculated the grand mean for both groups. Overall, the study participants missed 2.771 days in first semester and 3.468 days in second semester. Comparing these grand means with the data from Figure 20 verified the researcher's original statement regarding normal increases in absences from first semester to second semester. It is worth noting, however, attendance report data showed discrepancies in the African-American subgroups, with the treatment group having fewer days on average absent second semester (during the intervention) than would be considered normal based on the grand mean, and the comparison group tripling their first quarter absences and having more days absent on average second semester than would be considered normal based on the grand mean.

Focus group responses. While focus group responses were elaborated on in the presentation of findings for Research Question 1, teachers specifically called attention to the engagement and increase in motivation they saw in students during the 12-week intervention 11 times during the focus group sessions, and parents specifically called attention to the engagement and increase in motivation they witnessed 13 times during the focus group sessions. These responses were utilized to support Renzulli's (2015) research on student engagement and its impact on student achievement. One specific response from the focus groups relating to engagement was,

Like last night after the baseball game I figured he would come home and want to go to bed, but he was so excited about and wanted to work on his project for AIG. This is unusual, but his enthusiasm has led him to personally take it on himself to

do these challenges. (Parent focus group participant, personal communication, May 8, 2018)

Research Question 4. As with all previous research and data collection, the main purpose of a talent development program is to increase the equity of access to gifted education for CLED students. Research Question 4, “To what degree does a talent development program identify potentially gifted CLED students in comparison to standardized identification methods,” was developed to analyze the difference in students who would identify for gifted education based on the district’s identification policy (NNAT + End-of-Grade test percentile) and those who would identify based on the GRS reporting measure (a score of 555 total or higher, an 85th percentile flag in the district). Two forms of data were collected to answer Research Question 4: identification numbers and coded themes from teacher surveys [open-ended items five and six].

Identification numbers. Table 26 shows the difference in identification between methods and groups. Table 26 also notes the subgroups represented in the identification changes.

Table 26

Difference in Identification Between Talent Development and Traditional Methods

Identification Method	# Identified in Treatment Group	# Identified in Comparison Group
Traditional Method (NNAT + End-of-Grade)	21/80 = 26.25%	30/132 = 22.73%
Talent Development Method (Composite GRS rating scale score)	Identified: 6/80 = 7.5%	32/122 = 24.24%
Difference in # Identified (Talent Development – Traditional)	Previously Identified: 3 New: 3	Previously Identified: 9 New: 23
Subgroup Breakdown of Identification Difference	Previously Identified: 2 Caucasian, 1 Hispanic Newly Identified: 2 African-American, 1 Hispanic	Previously Identified: 1 African-American, 7 Caucasian, 1 Hispanic New: 5 African-American, 7 Caucasian, 11 Hispanic

As shown in Table 26, there are many discrepancies in the data between the treatment and comparison group. When the original groups were compiled, 26.25% (treatment) and 22.73% (comparison) of the students were identified through the district's identification requirements, making the groups comparable for the research study (Creswell, 2014). At the close of the study, when teachers were asked to complete the GRS rating scales on their students, a lower percentage (7.5%) was identified by the treatment group, and a similar percentage (24.24%) to preintervention was identified by the comparison group. When looking in depth at these identifications, however, there was a greater percentage of newly identified students in the comparison group (71.8% of the identified students were new) when compared to the treatment group (50% of the identified students were new). Of the students who would have identified using the GRS,

27% were African-American, 27% were Caucasian, and 46% were Hispanic.

Teacher survey results. Continuing to uphold Creswell’s (2014) definition of an explanatory mixed methods study, the researcher utilized data from teacher surveys to further explain the results shared in Table 26. Open-ended item five, “What benefits do you see in using teacher referrals to help identify students,” and item six, “What disadvantages do you see in using teacher referrals to help identify gifted students,” from the teacher surveys were used for this analysis. Quantitative coding results on benefits of using a teacher referral process like the GRS are listed in Table 27.

Table 27

Teacher Surveys Responses to Explain Identification Numbers–Positive

Benefits	Treatment Presurvey	Treatment Postsurvey	Comparison Presurvey	Comparison Postsurvey
Teachers know the whole student	13	7	12	8
Test scores are not always accurate	7	3	7	6
Referrals allow multiple perspectives	3	3	2	1
Referrals address nonacademic behaviors	3	0	0	1

As shown in Table 27, using teacher referrals such as the GRS is seen as beneficial because teachers know the whole child and they provide a perspective of the students beyond one NNAT or standardized test score. Quantitative coding results on disadvantages of using a teacher referral process like the GRS are listed in Table 28.

Table 28

Teacher Surveys Responses to Explain Identification Numbers–Negative

Disadvantages	Treatment Presurvey	Treatment Postsurvey	Comparison Presurvey	Comparison Postsurvey
Teachers may only recommend students who “fit the mold”	5	2	6	3
Teachers may have bias towards or against students	4	3	6	7
Teachers are not trained in the referrals or rigor necessary for scoring authentically	3	3	4	3
Teacher referrals are subjective	6	2	1	2

As shown in Table 28, using teacher referrals such as the GRS also has its disadvantages. Some specific disadvantages teachers pointed out included teachers who only recommend students who fit the typical gifted child “good kid” mold, teachers who have bias towards or against other students, teachers who are not trained in gifted education, and the subjective nature of teacher referrals. Teacher focus group participants discussed the subjective nature of teacher referrals as well, noting sometimes teachers have a cohort of students lower than normal, and the one student who is on par with grade level standards appears gifted even though they are not. Focus group participants felt these misconceptions occurred less when teachers were trained in gifted education, further supporting the teacher survey results where lack of training was noted as a disadvantage.

Summary of Results

Research Question 1. Research Question 1, “What elements of a talent development program have the greatest impact on developing potential in underserved populations,” addressed the absence of a universal talent development framework and looked specifically at the components of locating potential beyond IQ testing, training teachers in CLED populations, increasing collaborative planning time with teachers, adjusting curriculum to include more active learning through problem-based activities, and creating support networks through increasing communication between school and home to determine which components were most essential to a successful talent development program. Data collected for Research Question 1 were qualitative and involved parent and teacher surveys (prior to and after treatment implementation) and parent and teacher focus groups (after the treatment was implemented). These data were analyzed through thematic coding, graphing of positive and negative responses, and descriptive analysis of results. Each talent development component was independently analyzed, and this analysis was used to determine overall importance of the components.

In the element of locating potential beyond IQ, data showed greater positive responses from the treatment groups over the control groups, with treatment groups calling attention to adequate location of gifted students using multiple pathways, considering the whole child, and breaking the mold of having to meet the testing hard line to receive services. Parent and teacher responses validated multiple pathways, defining giftedness through both traditional and nontraditional traits.

When looking at training of teachers who work with CLED populations, data showed greater positive responses from the treatment groups over the control groups, specifically in understanding of gifted programming for all students, believing all

students could succeed, and noticing students were being given the chance for an equitable education. Additionally, parents and teachers in the treatment groups were able to acknowledge current inequitable practices and admit that a mindset shift in gifted education was essential before change was possible. This ability to see inequities was shown in teacher survey responses when the treatment group had more negative responses in their postsurveys than presurveys regarding whether they felt they looked at all students in fair and equitable ways.

Results regarding collaborative planning between teachers and specialists continued the trend of more positive responses from the treatment group than the comparison group. In fact, comparison group responses remained relatively unchanged. Conversely, treatment groups felt resources that may not have been available previously were available to them now. Treatment groups also reiterated the need to continue building social-emotional resources, a statement supported by their increased awareness in other survey responses.

When asked to address if curriculum approaches were being made more active, parents and teachers in both the treatment and control groups showed increases in positive responses over the 12-week implementation period. Focus group participants as well as survey respondents addressed seeing more problem-based learning, critical thinking, and choice activities in the classrooms. The researcher also asked these groups to address whether multi-cultural curriculum was being implemented. All groups responded positively to this statement as well, calling attention to both curriculum and mindset shifts as related to multi-cultural education.

One element of multi-cultural education addressed in the research was cultivation of support networks for CLED students. Survey results showed parents in both the

treatment and control groups felt outside-of-school support systems were extremely positive. In-school relationships, while still extremely positive, did show an increase in negative responses from the comparison group in the postsurveys. Additionally, survey and focus group responses illustrated how relationships and acceptance could support CLED students as respondents called attention to both academic and nonacademic supports that could help students. One other notation from teacher surveys and focus groups worth noting is the barrier of behavior in identifying CLED students for gifted programs. The researcher connected this data point with building relationships, because as Hammond (2015) noted, relationships have a great impact on student behavior.

Last, Research Question 1 looked at the impact communication between home and school had on talent development programs. In both parent and teacher surveys, the need for increased communication was evident. While responses did increase in positivity over the 12-week treatment period, focus groups called attention to the need for even more communication to occur. Focus group participants further pointed out the student's home can control whether it opens the door to the school, so it is essential for educators to understand the values of CLED families. These values, as identified in surveys and focus groups, included acceptance, family, language, faith, character, education, and hard work, with acceptance being most important.

Overall, the data collected for Research Question 1 illustrated the most essential component of a talent development program was awareness of CLED populations, which can be cultivated through educator training. Additionally, once educated, districts should begin to locate students using multiple methods of identification, increasing communication between the home and the school throughout the process to cultivate welcoming relationships with families and students in CLED populations. Once the

foundation of equitable programs is established, districts can turn the focus to specific instructional adjustments, keeping in mind that communication, support, and high expectations must be maintained.

Research Question 2. Research Question 2, “How does implementation of a talent development program impact underrepresented populations regarding achievement,” addressed the standardized expectations districts and states have for students. Data were collected for Research Question 2 in a mixed-methods format and included i-Ready benchmark results, GRS scores for the academic achievement domain, and parent and teacher focus group responses. Data were analyzed through descriptive statistics as well as inferential statistics in the form of *t*-test and chi-square analyzes. Focus group responses were used to confirm or refute the qualitative data collected.

Review of i-Ready benchmark assessments showed higher overall growth on average for the treatment group over the comparison group as well as for African-American and Caucasian subgroups in the treatment group. Students in the Hispanic subgroup showed greater average growth in the comparison group over the treatment group. Despite overall average growth for all populations, *t*-test and chi-square analyzes did not result in *p* values less than .05 alpha, meaning there was not enough evidence to conclude the growth of the treatment groups was significantly different to the growth of the comparison groups.

Review of the GRS scores in the academic domain, however, did show some significant difference between treatment and comparison groups. Similar to i-Ready, descriptive statistical analysis of GRS scores in the academic domain showed greater average growth in all groups in the treatment group over the comparison group. Additionally, when the researcher ran *t*-test and chi-square analyzes on GRS data, there

was enough evidence to conclude there was a statistical difference between the treatment and control groups as a whole and for the Caucasian and Hispanic populations independently. The p value for the African-American subgroup, while showing higher average growth in descriptive statistics, did not provide enough evidence to conclude there was a statistically significant difference between treatment and control groups for this demographic subgroup. When asked to elaborate on achievement of CLED populations involved in the talent development intervention, focus group participants felt there was a significant change in daily academic achievement, supporting what the data said regarding i-Ready and GRS score reports.

Research Question 3. Research Question 3, “How does implementation of a talent development program impact underrepresented populations regarding engagement,” addressed the element of engaging CLED students in their learning. This question also followed the mixed-methods approach, as data were collected through Panorama Education surveys, GRS scores in the motivation domain, attendance reports, and parent and teacher focus groups. Data were analyzed using descriptive statistics, chi-square analysis, grand mean, and explanatory correlation.

The first data source, Panorama Education surveys, was completed by students in the district. Students were asked to respond to items regarding engagement and grit as they applied to the classroom environment. Results between treatment and control groups were very similar for each of the items in both domains, with the general trend for both groups from preintervention to postintervention being in the negative direction. The only items not receiving a greater negative response from pre to postsurvey were “When you are not in school, how often do you talk about ideas from class” (a positive increase for both treatment and control groups) and “When working on a project that matters, I

can stay focused despite distractions” (a positive increase for the treatment group only). When a chi-square analysis was run on the survey results, all items in the engagement and grit domains showed no significant difference between groups except for item 13, “How often do you stay focused on the same goal for more than three months at a time?” This item showed a significant difference between the two groups, with the treatment group being significantly more positive in their responses than the comparison group.

Review of the GRS scores in the motivation domain as with results from the GRS scores in the academic domain showed a larger average increase in treatment group scores to comparison group scores. In fact, most averages in the treatment group were three times greater than the comparison group. When *t*-test and chi-square analyses were run on these data, there was enough evidence to conclude there was a statistical difference between the treatment and control groups as a whole and for the Caucasian and Hispanic populations independently. The *p* value for the African-American subgroup, while showing higher average growth in descriptive statistics, did not provide enough evidence to conclude there was a statistically significant difference between treatment and control groups for this demographic.

One area where the African-American population did show greater positive results than other demographics was in attendance. In general, the attendance reports showed a trend for most participants to have an increase in absences from first quarter to second quarter; however, the African-American population in the treatment group had fewer absences second quarter, and the African-American population in the comparison group had more absences than considered average using the grand mean second quarter.

When asked to elaborate on engagement of CLED populations involved in the talent development intervention, focus group participants felt there was a significant

change in level of engagement in the CLED students in the study. Parents of African-American students further noted students being more interested in attending school, confirming the attendance data the researcher collected.

Research Question 4. Research Question 4, “To what degree do talent development programs identify potentially gifted CLED students in comparison to standardized identification methods,” addressed the different methods of identification as related to the researcher’s literature review: traditional standardized methods and nontraditional observational methods. Data collected for Research Question 4 included numbers of students in the treatment and control groups who were previously identified by the district’s traditional methods of identification as well as numbers of students who would be identified through the GRS nontraditional method of identification. These numbers were compared and analyzed using descriptive statistics. Teacher survey data were also quantitatively coded to show possible advantages and disadvantages to using teacher referrals over standardized identification measures.

Review of these data points showed similar starting percentages of students in the top 20% of the demographic subgroups as previously identified using the district’s traditional identification methods. At the close of the study, GRS rating scales showed a lower percentage of students identified in the treatment group and a similar percentage to preintervention identified in the comparison group. Additionally, there was a greater percentage of newly identified students in the comparison group when compared to the treatment group. In both the treatment and comparison groups, the majority of newly identified students were from CLED populations.

Teacher survey responses correlated with these data showing teacher referrals were beneficial to CLED populations because teachers were able to address the whole

child (including nonacademic behaviors and observations in all subjects) through tools such as the GRS, rather than trusting one standardized test score which is not always accurate. Conversely, teachers warned against over referring students through teacher referral tools, paying attention to teacher bias (particularly towards students who fit the “good kid” mold), lack of teacher training in gifted education, and the subjective nature of the tools.

Further interpretation of these findings and recommendations and implications based on these findings can be found in Chapter 5.

Chapter 5: Conclusions

Overview

Javius (2017) reminded educators that “educational equity is about more than closing gaps...it is about providing children what they need to exceed performance targets...in turn ensuring success for all” (p. 18). Javius’s message served as the foundation and driving force of this research study and is present throughout the final chapter of the research report which provides a summary of the research, interpretation of the research findings, limitations of the research, and recommendations and implications for the future. Using these findings and recommendations, the researcher developed two visual frameworks (a Pyramid of Talent Development Components, or essential practices, and a CLED Cultural Values Wheel) which are included in the interpretation of findings section of this report. Additionally, the researcher focused the recommendation section around the framework of the Educational Equity Theory, explaining why, how, and what to do to provide access to students with academic potential in ways that could break down the walls of inequity gifted education has spent years building up (Javius, 2017).

Summary of Research

While inequities in gifted education have been acknowledged at the district, state, and national level, actual action has been a slow-moving process. NAGC (2015) called educators and researchers alike into action at their Talent Development Summit in 2015 and have since been encouraging leaders to join the charge for educational equity for CLED populations. This call to action led the researcher to identify a district where discrepancies with gifted programming existed. According to the U.S. Department of Civil Rights 20% Equity Allowance (Ford & King, 2014), a significant gap existed between the demographics of the entire student population and the demographics of the

gifted education population in the mid-sized urban district where the study was conducted. The district leadership team, while aware of this discrepancy, had not been able to change the discrepancy through previous programming adjustments and was interested in the impact a talent development intervention would have on their CLED populations.

Considering NAGC (2015) research and district needs, the researcher developed a 12-week talent development intervention, based on the talent development frameworks of Ford (2013), NAGC (2017), Olszewski-Kubilius and Thomson (2015), and Renzulli (2015), in the form of problem-based learning experiences to be provided to students in the top 20% of the district's three most prevalent subgroups (African-American, Hispanic, and Caucasian). Through this intervention, students in the top 20% of these demographics at two elementary schools in the district were provided intentional instruction by gifted specialists on a weekly basis. Four other elementary schools in the district chose not to receive the intervention but to continue current services as dictated by the district AIG plan. Students in the top 20% of the African-American, Caucasian, and Hispanic subgroups at these schools served as comparison groups in the research study.

Through an explanatory mixed methods approach, qualitative and quantitative data in the form of standardized test results, teacher observation tools, parent and teacher surveys, student surveys, attendance records, and parent and teacher focus groups were collected on both the treatment and comparison groups of students to answer the following research questions.

1. What elements of a talent development program have the greatest impact on developing potential in underserved populations?

2. How does implementation of a talent development program impact underrepresented populations regarding achievement?
3. How does implementation of a talent development program impact underrepresented populations regarding engagement?
4. To what degree does a talent development program identify potentially gifted CLED students in comparison to standardized identification methods?

Using multiple data points to answer these four questions was an intentional researcher decision meant to produce findings capable of initiating change in gifted education policy and practice and capable of transforming an inequitable education system into one where previously marginalized populations have a voice. To ensure the framework of the study remained focused on the research questions in a transformative manner, the researcher built the study around the Educational Equity Theory (Center for Public Education, 2016; Javius, 2017). Additionally, the researcher intentionally connected quantitative data collection with qualitative focus groups to support the explanatory mixed methods research approach (Creswell, 2014). This approach assisted the researcher in determining whether the talent development intervention implemented for this study positively impacted academic performance, engagement, and motivation of students typically underrepresented in gifted programs in this district.

The multiple layers of these decisions were necessary because underrepresentation in gifted education is a multi-faceted issue with many contributing factors; and simply collecting quantitative data over a 3-month period would not effectively address all elements of a successful talent development intervention, a necessity if the researcher hoped to transform future gifted education practices and policies and “enhance social justice and human rights” (Creswell, 2014, p. 71).

Interpretation of Findings

Olszewski-Kubilius and Thomson (2015) believed the call for talent development research by NAGC (2015) and the recent holdings of talent development summits by NACG policy groups showed the field of gifted education was finally ready to “examine its core tenets and ask difficult questions about whether they are still valid or in need of revision” (p. 51). The Department of Education supported this charge as well, recently adding requirements for states to include action steps in their policy reports addressing CLED student development (Coleman & Shah-Coltrane, 2015). Additionally, researchers such as Ford (2010) and Siegle et al. (2016) advocated for researchers to locate programs where CLED students were receiving equitable education so they could be replicated everywhere. This research study met the charge of these researchers and the needs of CLED students, and the researcher hopes the findings from the study will serve as the sounding board for CLED populations today and in the future.

Essential elements of a talent development program. While the call to action for increased diversity in gifted education has been issued, defining components of successful talent development programs still seems elusive. Olszewski-Kubilius and Thomson (2015) connected vagueness in requirements to how multilayered a talent development program must be to meet the needs of all CLED populations. To determine best practices in talent development, talent development frameworks established by Ford (2013), NAGC (2017), Olszewski-Kubilius and Thomson and Renzulli (2015) were reviewed by the researcher and utilized in setting the parameters for the talent development intervention used in this study. The researcher chose to examine school-based elements of teacher training, collaborative planning, curriculum redesign, and nontraditional versus traditional identification methods of identification as well as

outside-of-school elements of support networks and increased home-school communication in this study. Through quantitative and qualitative data collection, these elements were sorted by importance to create the Pyramid of Talent Development shown in Figure 21.

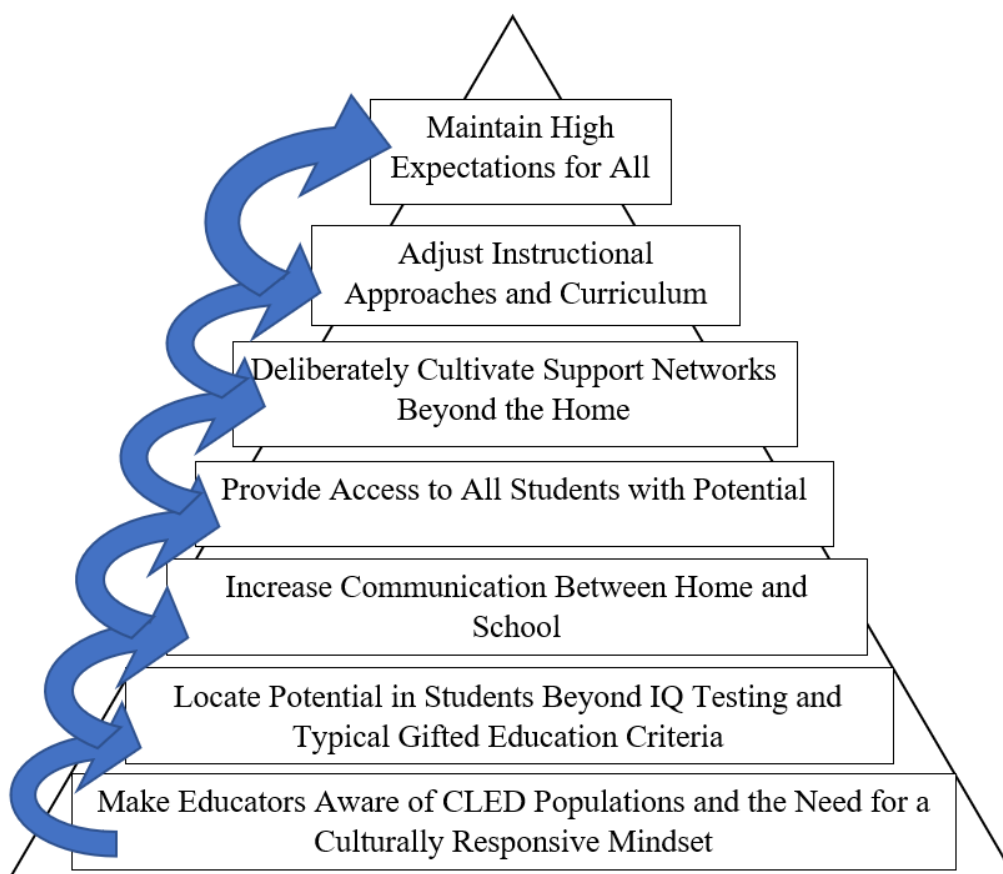


Figure 21. Pyramid of Talent Development Components. This figure illustrates the components of talent development reviewed in this research study; listing components found to be most important as the foundation of the pyramid and additional concepts building in importance on each another.

As shown in Figure 21, successful talent development programs begin with educating educators. Ford (2013) confirmed this finding, reminding everyone today's society is built upon deficit thinking, intentional and unintentional prejudice, White privilege, and hidden and visible bias; and until those working with CLED populations

can vocalize their underlying assumptions and beliefs, no program meant to benefit CLED populations is possible. It is additionally important to note the base of the Pyramid of Talent Development is not just awareness but includes the creation of a culturally responsive mindset in educators. As Hammond (2015) warned, when educators do not welcome, understand, or believe in CLED populations, seeing gifted potential in them and appropriately serving them are impossible. The base on the pyramid is the most difficult step in the implementation of a talent development program. Once the mindset shift has begun though, the other levels of the pyramid are more easily achieved. In fact, Ford (2013) even went as far as to argue all other components of a talent development program could be in place; but if awareness and understanding were not intentionally established, CLED students would still miss out on opportunities due to implicit bias, deficit thinking, and colorblind conceptions of giftedness.

Ford's (2013) research, along with the findings in this research study, play out in the Pyramid of Talent Development in that once educators are aware and have begun their shift in thinking, they are then able to see students differently and locate their potential beyond the student's IQ. As students are seen as having potential, educators will need to communicate with parents about this potential as well as about how the school and home can work together to grow this potential. The findings of this research study prove CLED parents want this communication and will move mountains (or as one parent focus group participant noted—"eat rice with no gravy") to help their children be successful.

The Pyramid of Talent Development does not stop here though; because as access is granted to students in CLED populations, communication between school and home and development of student support systems need to continue to be cultivated. As noted

in Ford (2013) and Hammond (2015), many CLED students have not been given access to higher education in the past, and they will need scaffolding and support to rise to the level of students who have been granted access for years. Much of this support comes in the form of relationship building and cultivation of social-emotional deficits but also requires redesign and adjustment of instructional practices. CLED students do not learn best in the traditional sit-and-get school setting. They need active learning with authentic purpose. They need a chance to share their opinions and have their voice heard. They need to know it is okay to fail and even better to try again. Teachers who provide these arenas for CLED populations are aware of their needs, have communicated with homes, and have welcomed diversity into their worlds. These same teachers also believe in all students and expect the best from every child in their classroom.

When the components shown on the Pyramid of Talent Development come together and build upon each other, the equitable education setting that is created benefits not only CLED students, but all students. Truly, if districts want to increase diversity and maintain diverse settings in their gifted programs, they need to build a strong Pyramid of Talent Development in their schools. Building a strong pyramid will not happen overnight, but staying the course and remaining focused on connecting all of the components will increase the educational equity and ultimately positively impact the future of our nation (Friedman & Mandelbaum, 2011).

Academic pressures diminished. It is worth noting, districts are under a lot of pressure to produce specific, standardized results, and many times district leaders are not willing to wait the amount of time implementation of the Pyramid of Talent Development will take. This concern was the catalyst behind Research Question 2, which looked at the impact of a talent development intervention on CLED students and academic

achievement. As noted in Chapter 4, evidence from data collected on academic achievement was inconclusive as far as statistical significance was concerned. The researcher pointed out the time constraint of the study as influencing these results; 3 months of academic learning is simply not enough time to prove a significant difference in standardized measures. Nevertheless, standardized data showed academic growth in the treatment group at the same level as students in the comparison group, showing talent development did not harm these students. Additionally, teachers and parents observed increased confidence, interest in academics, and desire to learn in students who received the talent development services. Costa and Kallick (2008) called these skills the Habits of Mind and argued students with the Habits of Mind know how to behave intelligently and have a disposition likely to result in academic achievement. This likelihood for achievement was illustrated in the teacher ratings on the GRS forms. In fact, when academic achievement was scored based on daily classroom observations, a significant statistical difference existed between the treatment and comparison groups, with greater growth in the treatment group. These data points give hope that continued implementation of talent development interventions can produce statistically significant changes in standardized assessments over time as the Habits of Mind being created through these interventions are cultivated (Costa & Kallick, 2008; Hammond, 2015).

Engaging the habits of mind. Development of Habits of Mind, Hammond (2015) and Renzulli (2015) argued, result in more engaged, independent learners, the focus of Research Question 3. Specifically, participants in parent and teacher focus groups made connections between the Habits of Mind of increased persistence by students, striving for accuracy in classroom work, increased creativity, and renewed desire for learning and the students involved in the talent development intervention

(Costa & Kallick, 2008). Data findings related to Research Question 3 further supported the research of Hammond and Renzulli (2015) and the development on the Habits of Mind (Costa & Kallick, 2008), as data showed a statistically significant difference in engagement and motivation of students in the talent development intervention when compared to students not receiving the intervention. It is important here to remember the Pyramid of Talent Development. Students who were observed as engaged in their learning had been chosen for this opportunity based on their potential, communication had been made with their home, and the teachers who worked with them daily had been trained in their needs. Additionally, when the students received talent development services, the curriculum was adjusted to be more active and problem-based and support was provided on a weekly basis. These changes are essential for increased engagement to occur.

Locating potential through alternate methods. Ultimately, while Jarvis (2009) asked educators to consider revamping identification pathways from the current DIP model to a more CLED friendly PEP model, for districts to meet the U.S. Department of Civil Rights 20% Equity Allowance (Ford & King, 2014), CLED students need to be officially identified for gifted services. Research Question 4 looked at data points to determine to what degree, if any, talent development programs could officially identify students versus traditional methods. Research collected for this purpose showed that yes, some students identified through the top 20% talent development philosophy will identify by adding services and using other methods of identification. Others, however, will not. In fact, even students who did not receive the intervention were located simply by using alternative identification methods. Furthermore, students in the comparison group were identified in greater capacity through alternative methods than were students in the

treatment group, a fact while seemingly optimistic, met with warnings from teachers (both in the treatment and control groups) regarding over referral of students simply because they fit a mold and/or teachers who were not properly trained in evaluating gifted potential using the observation tools.

Referring again to the Pyramid of Talent Development and the foundation of the pyramid being teacher training, the researcher noted teachers in the comparison group did not receive training on traits of gifted potential in CLED populations and may have over scored students using the GRS tool. Additionally, since the students these teachers were rating were not receiving services, teachers may have over scored intentionally or unintentionally in hopes the students would receive services in the future. Conversely, teachers in the treatment group had been trained in traits of gifted potential and knew their ratings would not remove students from these services. It is as Ford (2011a, cited in Ford, 2013) claimed, “the less we know about others, the more we make up. The more we know about others, the less we make up” (p. 83). Alternative methods to identification can identify CLED populations, but authentic identification only happens when educators have been properly trained in both the alternative methods of identification being used and the populations of students being assessed.

Keeping culture in mind. In addition to all the interpretations previously stated, one other clear message from the research study was while CLED populations have similarities, they also have differences. Regarding similarities, the message was clear—all CLED populations want to be accepted. Digging deeper into the meaning of acceptance, CLED populations want others to understand their values of family, faith, character, and language. Only after these values have been accepted can CLED populations buy into education and working hard in the setting provided. To help visualize the values the

researcher found to be important to CLED populations, the researcher developed the Cultural Values Wheel shown in Figure 22.

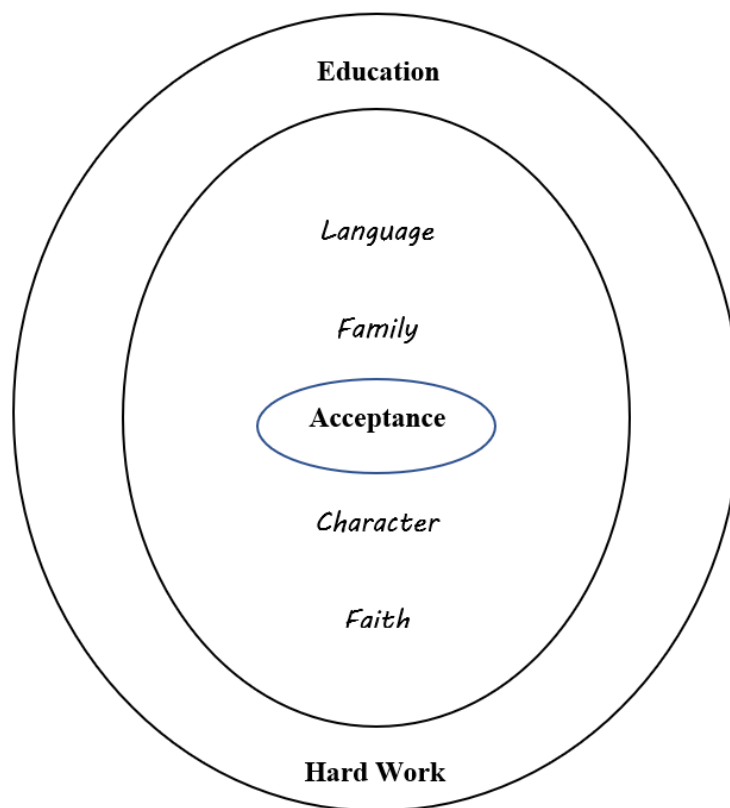


Figure 22. Cultural Values Wheel. This figure shows the Cultural Values Wheel of CLED populations. Values in the center are most important and must exist for outer values to matter.

As shown in Figure 22, acceptance is the value most important to CLED populations. Confirmed in focus group data, parents of CLED populations are not willing to open the door to communication until they know they will be received as is, in their language, and will be respected for the opinions they bring to the conversation. This message was clear in open-ended survey data as well. Beyond acceptance, the second circle includes the next four cultural values CLED populations ranked as important in research data: family, language, faith, and character. Ancillary values to acceptance,

these values are viewed by CLED families as necessary supports for attaining genuine acceptance. Finally, shown in the outer circle, are values mentioned with less frequency than the others: education and hard work, two values typically acted in domains outside of the home. This layering of importance was supported by focus group conversations, survey data, and research by Ford (2013) and Hammond (2015), which showed students and parents in CLED populations value education and hard work but will be more likely to act on these values in a positive way once they feel accepted, see the school domain as an extension of their family domain, and understand the character of the person they are working with is strong.

Conversely, CLED populations are different. For starters, African-American families place high value on respect and partnerships. As dictated in the parent focus groups, African-American families will work with schools only if they truly feel they are valued. Brookfield (2000, as cited in Hammond, 2015) referred to relationships in African-American subgroups as the “affective glue in teaching and learning” (p. 73). While it can be argued relationships matter to all populations, educators must remember that to make a difference with African-American populations, both regarding students and parents, nothing matters more. Educators must also remember relationship building takes time. In fact, the necessary time investment needed to build solid relationships helps explain the inconclusive findings in the research study regarding African-American subgroups. Three months was not enough time for these students to truly see acceptance and build the relationships necessary for academic achievement and emotional change.

Within the Hispanic population, however, many families (at least as stated by parents in the research focus groups) send their students to school already trusting the schools to do what is necessary for their children. Additionally, many Hispanic families

are uncomfortable communicating with schools due to language barriers. As the researcher realized when setting up focus groups, Hispanic parents were friendly on the phone, complimentary about the program, and willing to attend the meeting; yet when the time for the focus group came, few Hispanic parents attended. The parents who did attend noted this absence was not due to disrespect but was out of fear of not being able to communicate (even though a translator was present). Further conversation with teachers showed these tendencies to also exist between teachers and Hispanic parents in the classroom setting. Based on these findings, the researcher noted schools need to focus their attention when working with the Hispanic population on the students in their classroom. Not only does this strengthen relationships built with the students, it increases the likelihood of the students relaying information about school to their parents. Furthermore, Hispanic students in the study made the most growth, particularly in the engagement domains, support for focusing on students in this population.

Again, what CLED populations primarily want is to be accepted. While acceptance may be perceived differently in each population, acceptance is the key. Keeping in mind the Cultural Values Wheel as schools build the Pyramid of Talent Development will ensure all paths toward equitable education are taken.

Limitations

As noted in Chapter 1, all research studies have limitations. This research study had four limitations which were discussed in Chapter 1 as well as two additional limitations realized by the researcher during the explanatory phase of the data collection. All the limitations are reviewed in this section.

Researcher's role. As previously stated, there was a documented excellence gap and an issue with underrepresentation of gifted CLED students in the district where the

study took place; and leaders within the district were looking for research to support a possible solution. While this need and request provided the researcher with leadership support, one limitation of the decision was the researcher's role as the district's AIG coordinator. As the district AIG coordinator, the researcher was placed in the field of the study on a regular basis and worked with some of the participants in both the treatment and comparison groups. The researcher, however, was not the teacher of record for students in either group, nor did the researcher complete the GRS on any of the students. Additionally, the researcher was not the only AIG specialist implementing talent development services within the district. A second AIG specialist also worked with some of the treatment and comparison group students.

Creswell (2014) warned researchers when they were placed in the field of their research the possibility exists for researcher bias. To account for possible bias which could influence the study, the researcher showed both sides of the story in the research report, spent extended time in the field of study (to increase accuracy of findings), and used peer debriefing through data collection (Creswell, 2014) to ensure her personal bias towards the study and/or the results did not influence the study and/or the results. Additionally, the researcher utilized an explanatory mixed methods approach to the research bringing others' voices and opinions to the table. Through these steps, the researcher worked to build trust with teachers and members of focus groups so data collected in these settings was valid and the researcher's role in the district did not positively or negatively impact study results.

Administration choice. Another limitation from site choice was the control the district gave to school leaders regarding participation in the study. Rather than require all six elementary schools in the district to implement the talent development program,

administrators were given the option to implement the study or continue with the current district gifted program. Two administrators chose to have their schools participate in the study, while four administrators chose to continue gifted education services according to the current district programming. Administration choice, while a limitation, allowed the researcher to include a comparison group in the research study.

Furthermore, focusing on implementation in only two sites increased the consistency of implementation. Specifically, the two elements of implementation controlled by administration were teacher training and collaborative planning between regular education teachers and the AIG coordinator. Of the two schools involved in the study, one of the principals required all staff to receive training in gifted education through a district level professional learning module. The principal at the other elementary school highly encouraged their staff to receive this training but did not require it (five of the eight teachers involved in the study participated in the training). Even though training was not required at both sites, both administrators required their fourth- and fifth-grade teachers to attend collaborative planning sessions with the AIG coordinator. At these sessions, the AIG coordinator planned with the teachers but also presented information from the teacher training sessions that related to the research study for those participants who were not participating in the full training module.

Sampling of participants. As noted in the previous limitations, the study was conducted in the researcher's district. This decision created a sample of convenience. Creswell (2014) reminded researchers that results received when using samples of convenience cannot be generally applied to the entire population. Instead, the results can only be suggested as applying to similar populations: in the case of this study, mid-sized, urban school districts with similar demographics to the research site. Additionally, since

focus groups were utilized, the sample of convenience needed to be accounted for in choosing focus group participants. To address this concern, the researcher formed focus groups from a bank of interested teachers and parents, intentionally choosing participants so a representative sample from the volunteer group was created. All these steps served to increase the validity of the overall study despite utilizing a sample of convenience (Creswell, 2014).

Time constraint. As Javius (2017) noted, creating educational equity is a multi-tiered process requiring culture changes within organizations. These transformational changes, Javius reminded educators, do not happen overnight. In fact, implementing transformational change at an effective level can take anywhere from 3-5 years (Hall & Hord, 2015). Therefore, the 3-month time constraint of the research study needed to be considered as a limitation, particularly when addressing issues of change in standardized achievement and identification. To account for the time constraint of the research study, the researcher utilized the explanatory mixed methods approach (Creswell, 2014) and intentionally probed focus groups of teachers and parents for their thoughts on how the 12-week talent development program data could impact future results in achievement and identification of CLED populations.

Additional limitations. During the explanatory mixed methods research study, the researcher determined two other possible study limitations that had not been considered prior to implementation of the talent development program: the district's nurturing policy within their gifted programming and the ability for all staff to participate in the district gifted education professional learning module.

District nurturing policy. Discrepancies in demographic representation of the district's gifted population, according to the U.S. Department of Education Civil Rights

20% Equity Allowance (Ford & King, 2014), had been acknowledged by district administration in the past. In fact, this research study was not the first time the district took steps to address these inequities. Over the previous 5 years, the district adjusted cut-scores, implemented multiple pathways for identification, and added a nurturing component to their gifted programming to build diversity. Despite intentional efforts, discrepancies still existed, resulting in their support for this study.

When the researcher reflected on data with focus group participants, the nurturing component of the district's programming was addressed. Students included in the nurturing program, as defined in the district AIG plan, were chosen based on grades, standardized achievement scores slightly below the cut-line, and high-level benchmark assessment scores. These students received the same gifted services dictated in the district AIG plan as identified students. Some of these students, 58 (this number includes the 30 identified students) of the 132 (43.93%) were the same students located by the researcher when identifying the top 20% of the demographic subgroups. Since the four schools where the study was not being implemented still received gifted services according to the district plan, nurturing students falling in the top 20% group of the study received similar interventions to those added to the study in the schools where the 12-week talent development program was implemented. Even though the treatment groups were receiving intentionally adjusted curriculum and the teachers in the treatment group were receiving specific training for addressing the needs of students in the treatment group, the comparison group students were still being served in an intentional manner. This similarity could limit the results of the research data. While the researcher cannot control this limitation, it will be discussed in the recommendation section of this research report.

Gifted education module. In addition to some students in the comparison group receiving similar services as all students in the treatment group, five of the 28 teachers in the comparison group (17.8%) participated in the district's gifted education professional learning module, as this module was made available at the beginning of the school year to all district staff. While the percentage of teachers in the comparison group was smaller than the percentage of teachers from the treatment group (13 of 16, or 81.25%) who participated in the module, involvement in the module by teachers in the comparison group could have increased knowledge and understanding of gifted education in CLED populations for teachers in the comparison group. If this growth in knowledge occurred, data collected from teachers in the comparison could be limited as a comparison. This increase in knowledge (just like the lack of knowledge mentioned in the Interpretation of Findings) could have impacted the teacher ratings and/or created advocacy in these teachers for underrepresented populations. Again, while the researcher cannot control this limitation, it will be discussed in the recommendation section of this research report.

Recommendations and Implications for the Future

“Culturally different students are here to stay...the future is now, and we are in this journey together” (Ford, 2013, p. 201). Moving forward, the research completed in this study needs to continue. A teacher focus group participant (personal communication, May 4, 2018), when asked what steps could be taken to increase awareness of underrepresentation in gifted education, stated, “We do this program in other schools. That is where it starts and the perception is changed. The changes trickle up and requires acceptance of these kids.”

Personally, the researcher recommends two pathways for further research: (1) the talent development intervention continues in the district where the study was conducted

to look at data over the course of time; and (2) the study is replicated in other districts (with similar or different demographics) to see if results are similar. The researcher recommends continuation of this research for complete districts to specifically account for the limitations of time, programming similarities between treatment and comparison groups, and the increased possibility to streamline training for teachers.

In addition to these recommendations, the researcher encourages future research studies on talent development interventions to look more closely at students who are reprimanded for behaviors that go against the grain of traditional schooling for hidden giftedness and to consider researching the impact of portfolios as alternate assessments in identification of students in CLED populations. Both these concepts were brought up in parent and teacher focus groups, along with the specific detail that portfolios create a picture of the whole child as well as illustrate when students make large gains in achievement in short periods of time, a sign of giftedness in CLED populations (Coleman et al., 2010).

No matter which path future researchers take, they cannot forget to start with the focus on building awareness and acceptance of CLED populations. Advocates for equitable gifted education programs need to help break the barriers years of meritocratic education systems have built (Dai, 2015). Gifted education can no longer only be provided to the “cognitively elite” students as a privilege for their good behavior (Dai, 2015, p. 270). Instead, advocates for equitable gifted education programs must change the mindset of educators to a more Jeffersonian viewpoint built on the belief everyone is equally capable; no merit-based selections are needed; and individuals should be judged on what they can do, not who they are (Dai, 2015).

Unfortunately, until this mindset shift happens in gifted education, CLED

populations will not be seen for their true potential, and nothing will be accomplished. In closing, consider the following statements from focus group participants.

It starts with access—and not just course access, access to experiences and materials. If they [CLED populations] don't have access to these supports, they are denied access to the course. In the end it isn't about their giftedness, it is all about their inability to access what they need to be successful. (Teacher focus group participant, personal communication, May 4, 2018)

“When we have a cut-off to opportunity, who are we really hurting in this situation...we are hurting the child. In the end, if we hurt enough of our children- we are hurting our community. Think about that” (Parent focus group participant, personal communication, May 8, 2018).

Truly, these statements are what equity of access boils down to: Either we make access equitable and everyone benefits, or we deny opportunity and our community and eventually our nation fails. Today is the day to start becoming more aware of CLED students among us with potential and the time when gifted educators need to take action to ensure these CLED students receive equitable access to the same programs as their Caucasian counterparts.

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Appendix A
Teacher Survey

Teacher Survey Questions

Please answer the following questions both honestly and to the best of your knowledge. All responses will remain anonymous.

The following questions are Likert response questions:

Defining Giftedness					
	Question	Strongly Agree	Agree	Disagree	Strongly Disagree
1	All students have potential to achieve at higher levels.				
2	I have a clear understanding of gifted characteristics.				
3	I have a clear understanding of the components of a gifted education curriculum.				
4	The district provides a clear definition of what giftedness means.				
Support of Parents, Teachers, and Students					
	Question	Strongly Agree	Agree	Disagree	Strongly Disagree
5	Parents are made aware of the gifted program in the district.				
6	The district provides adequate support for teachers regarding academic needs of gifted students in the regular classroom.				
7	The district provides adequate support for teachers regarding social-emotional needs of gifted students.				
8	The district provides adequate support for students receiving gifted services who are struggling to meet program expectations.				
Gifted Identification					
	Question	Strongly Agree	Agree	Disagree	Strongly Disagree
9	The district has multiple pathways for students to be enrolled into the gifted program.				
10	The district's gifted referral pathways adequately identify students who need gifted services.				

11	Gifted referral procedures fairly apply to all students.				
12	The district adequately enrolls minority students in the gifted program.				
Multi-Cultural Understanding					
	Question	Strongly Agree	Agree	Disagree	Strongly Disagree
13	I have a clear understanding of multicultural education.				
14	I implement multicultural education in my classroom on a regular basis.				
15	I have a clear understanding of gifted traits in cultures different than my own.				
16	I am aware of cultural/socioeconomic biases I have.				
17	I look at all subgroups of students in a fair and equitable way.				

The following questions require a short answer:

1. How do you define the word gifted?
2. What traits do you look for when recommending students for the AIG program?
3. If a student has gifted potential, what factors might keep you from recommending him or her for the AIG program?
4. What benefits do you see in using teacher referrals to help identify gifted students?
5. What disadvantages do you see in using teacher referrals to help identify gifted students?
6. What does it mean to you to implement multicultural education?

Appendix B
Parent Survey

Parent Survey Questions

Please answer the following questions honestly. All responses will remain anonymous.

The following questions are Likert response questions:

Informed Programming					
	Question	Strongly Agree	Agree	Disagree	Strongly Disagree
1	I have previously been informed about the district's gifted program.				
2	Schools provide adequate information about gifted education to all parents.				
3	The current gifted identification process in the district adequately locates students who need gifted services.				
Support System					
	Question	Strongly Agree	Agree	Disagree	Strongly Disagree
4	I am strongly involved in my child's education.				
5	My child's support system consists of an extended family (church, extracurricular groups, etc.).				
6	My child's peers support their high academic achievement.				
7	My child has adequate support outside of school to develop their academic potential.				
8	I have a collaborative relationship with my child's teacher.				
9	My child has adequate support at school to develop their academic potential.				
Acknowledgment of Ability					
	Question	Strongly Agree	Agree	Disagree	Strongly Disagree
10	My child's academic accomplishments are recognized by the school.				

11	Other accomplishments of my child are recognized by the school.				
12	My child's teachers believe my child can be successful.				
Academic Expectations					
	Question	Strongly Agree	Agree	Disagree	Strongly Disagree
13	My child's teachers consistently set high expectations for them.				
14	My child is provided with opportunities to increase their academic potential.				
15	My child believes they can be successful.				
16	I believe my child is capable of performing at a higher level than they are currently performing.				
Educational Equity					
	Question	Strongly Agree	Agree	Disagree	Strongly Disagree
17	My child is engaged at school.				
18	My child is exposed to a multicultural education.				
19	My child's teacher understands their cultural needs.				
20	My child's education is educationally equal to other students.				

The following questions require a short answer:

1. My culture values
2. My definition of giftedness is.....
3. My child's strengths are....
4. Please help my child improve in

Appendix C

Teacher Focus Group Questions

Focus Group Introductory Script

Good evening and welcome to this group discussion. My name is Sara Newell and this is [name of second moderator]. As you have been previously informed, you were invited here tonight to discuss my research study for Gardner-Webb University on talent development and how this type of intervention impacts populations typically underrepresented in gifted education. [Name of second moderator] and I will be facilitating the discussion by asking multiple open-ended questions related to the study and topic of interest.

Please know we invited you here tonight because your personal opinions and viewpoints are very important to us and this research. There are no right or wrong answers. Feel welcome to express yourself freely during the discussion, but also be considerate of others in the focus group, allowing them a chance to openly share their opinions too. Your participation is strictly voluntary, so understand you are welcome to leave the discussion at any time and can remove your responses from the research if desired.

As noted in the consent form you signed earlier, the discussion tonight will be recorded. This is only for the purpose of the research, and once I have reviewed the tape it will be destroyed. We will also be making brief notes during the discussion. These notes will remain confidential and only be used for research purposes. After the research is published, the notes will be destroyed. No names or personal information will be used in any part of the research report. Since the goal is to keep sessions confidential, we ask that you not use names or anything directly identifying when you talk about your personal experiences. We also ask that you not discuss other participants' responses outside of this discussion session.

Lastly, I would like to review some housekeeping details for the session. The total length of time for the focus group meeting is expected to be about one hour. As we are discussing, [name of other moderator] and I might move you along in conversation, so everyone has a chance to speak and we have time to get through all the focus group questions. Additionally, since we have limited time, we ask that questions or comments off the topic currently being discussed be asked at the end of the focus group session. Do you have any questions before we begin?

Teacher Focus Group Questions

1. How do your expectations differ for students of different backgrounds?
2. How do you allow students to show their giftedness in your classroom?
3. During problem-based learning activities what characteristics or actions did you notice in students involved in the talent development intervention?
 - a. How did these observations compare with what you notice about those same students on a regular day?

PROBING QUESTION: How did the levels of engagement differ in the talent development students when they were completing problem-based learning activities versus when they were working in the regular classroom?

4. Other than standardized testing, what other criteria could be included in recommending gifted students for gifted programs?
5. How could teacher perceptions and/or knowledge impact the representation of minority students in gifted education?
6. How could bias towards minority students impact their representation in gifted education?
7. What steps can be taken to increase awareness towards the issue of underrepresentation of minority students in gifted education?
8. What steps do you think schools can take to develop gifted potential in all children?

PROBING QUESTION: How could the increase in use of a multicultural curriculum impact observation and/or development of gifted potential in all children?

Focus Group Closing Statement

I think we've come to the end of our questions. Let me be the first to say thank you for your honest opinions – you were tremendously helpful at this important stage of the research study. We truly appreciate your participation and the help you have provided today. You will be given a debriefing statement with more information about the research study and contact information, if needed in the future, as you leave. We hope you have a wonderful evening and thank you again for your time.

Appendix D
Parent Focus Group Questions

Focus Group Introductory Script

Good evening and welcome to this group discussion. My name is Sara Newell and this is [name of second moderator]. As you have been previously informed, you were invited here tonight to discuss my research study for Gardner-Webb University on talent development and how this type of intervention impacts populations typically underrepresented in gifted education. [Name of second moderator] and I will be facilitating the discussion by asking multiple open-ended questions related to the study and topic of interest.

Please know we invited you here tonight because your personal opinions and viewpoints are very important to us and this research. There are no right or wrong answers. Feel welcome to express yourself freely during the discussion, but also be considerate of others in the focus group, allowing them a chance to openly share their opinions too. Your participation is strictly voluntary, so understand you are welcome to leave the discussion at any time and can remove your responses from the research if desired.

As noted in the consent form you signed earlier, the discussion tonight will be recorded. This is only for the purpose of the research, and once I have reviewed the tape it will be destroyed. We will also be making brief notes during the discussion. These notes will remain confidential and only be used for research purposes. After the research is published, the notes will be destroyed. No names or personal information will be used in any part of the research report. Since the goal is to keep sessions confidential, we ask that you not use names or anything directly identifying when you talk about your personal experiences. We also ask that you not discuss other participants' responses outside of this discussion session.

Lastly, I would like to review some housekeeping details for the session. The total length of time for the focus group meeting is expected to be about one hour. As we are discussing, [name of other moderator] and I might move you along in conversation, so everyone has a chance to speak and we have time to get through all the focus group questions. Additionally, since we have limited time, we ask that questions or comments off the topic currently being discussed be asked at the end of the focus group session. Do you have any questions before we begin?

Parent Focus Group Questions

1. Describe your child's experience in the talent development program.
 - a. How did your child's experience in the talent development program influence your opinion of the gifted program?
2. What are the needs of students to be successful in a program like talent development?
3. What are some barriers that you and/or your child has run into as far as receiving higher level curriculum?
4. What steps do you think schools can take to equalize educational opportunities for all children?
 - a. What can schools do to make the transition from regular education to gifted education classes easier for students of minorities?
5. How does the role of culture impact your child's education?
6. What cultural values would you like to see taught in the school curriculum?
7. How could the district better inform parents about the gifted program?

Focus Group Closing Statement

I think we've come to the end of our questions. Let me be the first to say thank you for your honest opinions – you were tremendously helpful at this important stage of the research study. We truly appreciate your participation and the help you have provided today. You will be given a debriefing statement with more information about the research study and contact information, if needed in the future, as you leave. We hope you have a wonderful evening and thank you again for your time.

Appendix E

Final Teacher Focus Group Questions

Focus Group Introductory Script

Good evening and welcome to this group discussion. My name is Sara Newell and this is [name of second moderator]. As you have been previously informed, you were invited here tonight to discuss my research study for Gardner-Webb University on talent development and how this type of intervention impacts populations typically underrepresented in gifted education. Doretha Grier (parent group)/Cara Wolford (teacher group) and I will be facilitating the discussion by asking multiple open-ended questions related to the study and topic of interest.

Please know we invited you here tonight because your personal opinions and viewpoints are very important to us and this research. There are no right or wrong answers. Feel welcome to express yourself freely during the discussion, but also be considerate of others in the focus group, allowing them a chance to openly share their opinions too. Your participation is strictly voluntary, so understand you are welcome to leave the discussion at any time and can remove your responses from the research if desired.

As noted in the consent form you signed earlier, the discussion tonight will be recorded. This is only for the purpose of the research, and once I have reviewed the tape it will be destroyed. We will also be making brief notes during the discussion. These notes will remain confidential and only be used for research purposes. After the research is published, the notes will be destroyed. No names or personal information will be used in any part of the research report. Since the goal is to keep sessions confidential, we ask that you not use names or anything directly identifying when you talk about your personal experiences. We also ask that you not discuss other participants' responses outside of this discussion session.

Lastly, I would like to review some housekeeping details for the session. The total length of time for the focus group meeting is expected to be about one hour. As we are discussing, [name of other moderator] and I might move you along in conversation, so everyone has a chance to speak and we have time to get through all the focus group questions. Additionally, since we have limited time, we ask that questions or comments off the topic currently being discussed be asked at the end of the focus group session. Do you have any questions before we begin?

Teacher Focus Group Questions

1. How do your expectations differ for students of different backgrounds?
2. How do you allow students to show their giftedness in your classroom?
3. During your students' participation in the talent development intervention, what characteristics or actions did you notice in these students in the regular classroom?
 - a. How did these observations compare with what you noticed about these same students prior to their participation in the talent development intervention?

PROBING QUESTION: How did the levels of engagement differ in the talent development students when they were completing problem-based learning activities during their AIG time versus when they were working on more academic based activities?

4. Other than standardized testing, what other criteria could be included in recommending gifted students for gifted programs?
5. How could teacher perceptions and/or knowledge impact the representation of minority students in gifted education?

PROBING QUESTION: How could bias towards minority students impact their representation in gifted education?

6. What steps can be taken to increase awareness towards the issue of underrepresentation of minority students in gifted education?
7. What steps do you think schools can take to develop gifted potential in all children?

PROBING QUESTION: How could the increase in use of a multicultural curriculum impact observation and/or development of gifted potential in all children?

Parent Focus Group Questions

1. Please describe your child's experience in the talent development program.
 - a. How, if at all, has your child's engagement and attitude towards school been impacted by their participation in the talent development program?
 - b. How did your child's experience in the talent development program influence your opinion of the gifted program?
2. What are the needs of students to be successful in a program like talent development?
3. What are some barriers that you and/or your child has run into as far as receiving higher level curriculum?

4. What steps do you think schools can take to equalize educational opportunities for all children?
 - a. What can schools do to make the transition from regular education to gifted education classes easier for students of minorities?
5. How does the role of culture impact your child's education?
6. What cultural values would you like to see taught in the school curriculum?
7. How could the district better inform parents about the gifted program?

Focus Group Closing Statement

I think we've come to the end of our questions. Let me be the first to say thank you for your honest opinions – you were tremendously helpful at this important stage of the research study. We truly appreciate your participation and the help you have provided today. You will be given a debriefing statement with more information about the research study and contact information, if needed in the future, as you leave. We hope you have a wonderful evening and thank you again for your time.

Appendix F

Parent Survey–Preintervention Comparison Group

Parent Survey Questions

Please answer the following questions honestly. All responses will remain anonymous.

The following questions are Likert response questions:

	Question	Strongly Disagree	Disagree	Agree	Strongly Agree
Informed Programming					
1	I have previously been informed about the district's gifted program.	5.3% (2)	26.3% (10)	36.8% (14)	31.6% (12)
2	Schools provide adequate information about gifted education to all parents.	7.9% (3)	31.6% (12)	42.1% (16)	18.4% (7)
3	The current gifted identification process in the district adequately locates students who need gifted services.	5.3% (2)	23.7% (9)	47.4% (18)	23.7% (9)
Support System					
4	I am strongly involved in my child's education.	0	0	13.2% (5)	86.8% (33)
5	My child's support system consists of an extended family (church, extracurricular groups, etc.).	5.3% (2)	10.5% (4)	18.4% (7)	65.8% (25)
6	My child's peers support their high academic achievement.	5.3% (2)	7.9% (3)	50% (19)	36.8% (14)
7	My child has adequate support outside of school to develop their academic potential.	5.3% (2)	5.3% (2)	34.2% (13)	55.3% (21)
8	I have a collaborative relationship with my child's teacher.	2.6% (1)	7.9% (3)	39.5% (15)	50% (19)
9	My child has adequate support at school to develop their academic potential.	0	7.9% (3)	44.7% (17)	47.4% (18)
Acknowledgment of Ability					
10	My child's academic accomplishments are recognized by the school.	0	5.3% (2)	39.5% (15)	55.3% (21)
11	Other accomplishments of my child are recognized by the school.	0	18.4% (7)	39.5% (15)	42.1% (16)

12	My child's teachers believe my child can be successful.	0	0	31.6% (12)	68.4% (26)
	Question	Strongly Disagree	Disagree	Agree	Strongly Agree
Academic Expectations					
13	My child's teachers consistently set high expectations for them.	0	15.8% (6)	36.8% (14)	47.4% (18)
14	My child is provided with opportunities to increase their academic potential.	0	18.4% (7)	44.7% (17)	36.8% (14)
15	My child believes they can be successful.	0	2.6% (1)	28.9% (11)	68.4% (26)
16	I believe my child is capable of performing at a higher level than they are currently performing.	0	10.5% (4)	44.7% (17)	44.7% (17)
Educational Equity					
17	My child is engaged at school.	0	10.5% (4)	34.2% (13)	55.3% (21)
18	My child is exposed to a multicultural education.	2.6% (1)	18.4% (7)	36.8% (14)	42.1% (16)
19	My child's teacher understands their cultural needs.	0	28.9% (11)	31.6% (12)	39.5% (15)
20	My child's education is educationally equal to other students.	0	13.2% (5)	50% (19)	36.8% (14)

The following questions require a short answer:

My culture values

honesty

effort and honesty

are very important to my child's education and are not always a good influence (friend wise)

Honesty, commitment, reliability

indian/american

N/A

family, god, the food are the one thing that is important in our culture. successfulness

independence

education and being the best you can be

self-help control, action/work orientation, informality

include my child having a diverse multi-cultural perspective of the world and the different groups of people in it and how we all affect one another

respect your elders, live a true christian life and always honest

family, equality, education

hard work, academics, being well rounded & respectful

equality, self help, honesty, integrity

gifted children should be grouped and allowed to be pushed & learn above grade level -

similar to kis model we previously had in 5th & 6th grade

doing as much together as a family that I can. Meals & Quality time

I am a college student obtaining my bachelor degree in criminal justice. I have high

expectations for myself and I set the same standards for savannah to be great

very strong

I teach my child to always aim to be more than what others expects her to be. Smart,

respect, strong willed

respect for law and order, family, respect for my national heritage. Respect for everyone,

strive to accomplish my goals

god, education, truth, love, laughter

are consistent with the values I instill in my child. I teach her to embrace diversity and to

see/recognize the best in everyone

are to be family oriented and be involved in my church and in the community

education in a collaborative setting. Values pushing my student to exceed expected goals

to engage in my child's education - as a parent I have equal responsibility to provide

educational opportunities for education to be a priority in my family's life

My definition of giftedness is.....

educated

any skill above the norm

excelling in a specific area or being very smart about a subject

having a good memory, use large vocabulary for age

blessed

being above school levels

skills that my or any is capable of doing with support from others

gifted children who have high performance

meeting the requirements to be proficient and grade level goals but needs to learn more

and wanting to learn more and taken to next level

intellectual giftedness ability significantly higher than average

when a person has a level of awareness, curiosity and maturity beyond their demographic

is a child that preforms a higher level then his/her peers

achieves at a high level

thinking outside the box, being able to do work, figure problems at a different level than

same aged peers

higher than average

ability to learn & preform at a higher than grade level proficiency

going above what others are doing

special

A child performing above grade level

The ability to exceed standard expectations

someone very special

thinking outside of what most children her age is expected, when asked to perform a task

having something extra than the normal

higher than average, etc

a keen sense/ability to think things through with ingenuity and persistence, continuously stimulated and eager to continuously learn & grow academically

a child that is eager to learn, that wants to learn new things, asks questions when they don't know the answers, someone who retains gathered information, someone who thinks mechanically and performs at a higher level than other students.

someone naturally born with a higher aptitude for something

an individual who is able to exceed expected achievement standards based on effort or intellect

My child's strengths are....

reading (3)

reading, math (2)

compassion for others, openness, tough spirit

she's a great reader, loves helping others, and has a great imagination

drawing, comprehension

jesus and believing in herself

talking! Communication I would say its math as well

bravery, baseball, teamwork, math, reading

reading, science

compassion, empathy, math, reading, and offering a helping hand & kind word

His/her love of people, wants to do well in school and loves to read and write songs

math, reading informational text

numbers, problem solving, reading

family

math and his willingness to learn something new

working inependent, following rules

kindness

eager to learn, fun personality, reading, writing

she strives for greatness

art

being able to learn with no struggle

reading, following directions and disciplined

reading, communication, math when focused

Reading (oral/comprehension/vocabulary/pronunciation) Inquisitive to the extent of getting all facts to form conclusions, has a natural desire to learn

reading, creating, directing/leading, wanting to learn, teaching, responsibility

imagination, building and creating

Advanced reading and math comprehension. The ability to quickly analyze/assess or issue/learning standards and respond to it

Please help my child improve in

math (5)

social studies

perseverance and dealing with failure

math & science

everything he does, so he can be successfu

ELA

any subject that she is having trouble with. I would like my child to help in social studies and reading

grammar, spelling

gaining self confidence in math. She is very capable but doubts herself

overcoming social fears and apprehension problem-solving

math and confidence in his/her work

engagement of fiction text

continue to make him think!

science

writing gramatically correct, sentences & spelling

fractions

anything you can do to make his life better

Confident in knowing she was the correct answers often times savannah second guesses herself instead of being confident in her answer

any area you see the need for improvement

understanding math (fractions)

focusing on one task at a time. Specific steps that she doesn't understand yet. Grammer.

Impulsivity/self control, Math (factors), word problems

handwriting public speaking (she's really anxious to learn cursive)

organization, goal setting

developing interest in areas of strength that are reliable and engaging to continue their emotional & intellectual development. To foster independent learning & exploration beyond the expected standards in the traditional classroom with individual curriculum choices.

Appendix G

Parent Survey–Preintervention Treatment Group

Parent Survey Questions

Please answer the following questions honestly. All responses will remain anonymous.

The following questions are Likert response questions:

	Question	Strongly Disagree	Disagree	Agree	Strongly Agree
Informed Programming					
1	I have previously been informed about the district's gifted program.	2.6% (1)	7.7% (3)	59% (23)	30.8% (12)
2	Schools provide adequate information about gifted education to all parents.	2.6% (1)	17.9% (7)	56.4% (22)	23.1% (9)
3	The current gifted identification process in the district adequately locates students who need gifted services.	0	12.8% (5)	66.7% (26)	20.5% (8)
Support System					
4	I am strongly involved in my child's education.	0	0	35.9% (14)	64.1% (25)
5	My child's support system consists of an extended family (church, extracurricular groups, etc.).	5.1% (2)	5.1% (2)	35.9% (14)	53.8% (21)
6	My child's peers support their high academic achievement.	0	5.1% (2)	69.2% (27)	25.6% (10)
7	My child has adequate support outside of school to develop their academic potential.	0	2.6% (1)	43.6% (17)	53.8% (21)
8	I have a collaborative relationship with my child's teacher.	0	10.3% (4)	51.3% (20)	38.5% (15)
9	My child has adequate support at school to develop their academic potential.	0	0	51.3% (20)	48.7% (19)
Acknowledgment of Ability					
10	My child's academic accomplishments are recognized by the school.	2.6% (1)	0	41% (16)	56.4% (22)
11	Other accomplishments of my child are recognized by the school.	2.6% (1)	0	41% (16)	56.4% (22)

12	My child's teachers believe my child can be successful.	0	5.1% (2)	35.9% (14)	59% (23)
	Question	Strongly Disagree	Disagree	Agree	Strongly Agree
Academic Expectations					
13	My child's teachers consistently set high expectations for them.	2.6% (1)	7.7% (3)	53.8% (21)	35.9% (14)
14	My child is provided with opportunities to increase their academic potential.	0	5.1% (2)	56.4% (22)	38.5% (15)
15	My child believes they can be successful.	0	7.7% (3)	30.8% (12)	61.5% (24)
16	I believe my child is capable of performing at a higher level than they are currently performing.	0	7.7% (3)	46.2% (18)	46.2% (18)
Educational Equity					
17	My child is engaged at school.	0	10.3% (4)	53.8% (21)	35.9% (14)
18	My child is exposed to a multicultural education.	0	12.8% (5)	61.5% (24)	25.6% (10)
19	My child's teacher understands their cultural needs.	0	15.4% (6)	64.1% (25)	20.5% (8)
20	My child's education is educationally equal to other students.	2.6% (1)	0	71.8% (28)	25.6% (10)

The following questions require a short answer:

My culture values

arts, education & family

Hispanos

being thoughtful and kind, helping others, honest and respectful. Open-minded and fair, while keeping my faith first and foremost

Christianity, and loving each other regardless of race

Believe in God, be the best person you can, try your best family, religion and education

demonstrating good character & integrity, academic excellence, exploring opportunities, positive influence in the community

hardwork, creativity, competitiveness & success

perseverance, hard work

education and family

her language is spanish and english

hard work, accountability

hard work pays

none really

Family culture, hard work ethic, putting forth best effort

being at our full frequency/vibration at all times, sow seeds of knowledge & wisdom, we are the universe as one!

going to church, spending family time together, eating together as a family. Sharing our feelings with one another, having a strong family connection

hard work, goal setting, determination

kindness

family

doing what feels right

consist of christianity and family. We value that education is the key to success, freedom & wealth

are equality and independence

My definition of giftedness is.....

achievement beyond basic standards on a consistent basis

excelling in certain subjects or actiities

A person/child who shows they are above average intellectually

someone who is above average in any area

children that are capable of doing higher levels of academics, sports, etc.

high perfomance in academics

intelligence & ability beyond the norm

having an area where you can work above and beyond the norm

is having determination even after many failures

she's friendly and kind

being self reliant

realizing and using your full potential

someone with above average intelligence

having an area that you excel in

being able to explore your creativity

a child that show high performance in areas of intellectual, leadership, artistic, creativity or academic fields

above grade level

having the ability to think and produce quality work above and beyond the average child

you can be gifted in many ways, I personally think everyone has a gift of some type

someone who is able to preform at a higher academic level

it means overachieving & accomplishing all your needs and goals

above what is normal

a child that performs beyond the expectations of his/her current grade level

is an intellectual ability sifnificantly higher than average

being above and beyond basic standards

being talented and being higher than average

My child's strengths are....

math

Mathematicas, Lectura

being independent and standing up for herself and others

Mathmatics, being able to catch on to things quickly

competitive and drive to be the best

math and writing ability and science

desire to learn & excel, competitive

intelligence, writing, creativity

reading, math, attention to detail

speaking, making friends, leadership

family

following directions, independent thinker

math/science

reading, writing short stories, technology, creative imagination, kindness, honest, fun to be with

math, problem solving, drawing

reading comprehension, writing, science

Being independent, leadership, loving, love to learn, read, creative, strong work ethics, organization, honesty, enthusiasm, writing, communication.

pushing himself

math, reading, thinking out loud, creativity, curious, needs to find out why, breaking things apart

reading & writing

focus on tasks & puts in 100% effort

writing

reading, writing

reading, math, solving problems

communication, math skills & social studies

creative

math, science and story telling

reading, science

Please help my child improve in

reading (2)

reading due to it being boring to him

Vocabulario

slowing down and learning how to focus on her work to help improve her math skills

Science, and not getting so frusterated when he doesn't understand something

division problem solving

excelling beyond grade level, being involved in other school activities such as student government, community involvment

symbolic thing

self confidence & to value how smart she is (and believe it)

self-esteem

math and reading

any area you feel she needs help

organizations @ School

social skills with other kids

writing, not giving up

multiplication/fractions

improve problem solving, strong listening skills, memorizing facts, classifying, working in groups

reading confidence

completing of product instead of re-starting to make it better. Organization with thoughts and information

the amount of effort put into work. applying themselves.

math (multiplication & division)

Confidence in academic abilities

the most topics possible

knowing its okay to be a leader and not a follower

reading comprehension & creative writing skills

writing skills, with the growing technology age and use of computers and tablets, I fear

writing with decrease

math & history

Appendix H

Parent Survey–Postintervention Comparison Group

Parent Survey Questions

Please answer the following questions honestly. All responses will remain anonymous.

The following questions are Likert response questions:

	Question	Strongly Disagree	Disagree	Agree	Strongly Agree
Informed Programming					
1	I have previously been informed about the district's gifted program.	6.3% (3)	18.8% (9)	58.3% (28)	16.7% (8)
2	Schools provide adequate information about gifted education to all parents.	8.3% (4)	20.8% (10)	56.3% (27)	14.6% (7)
3	The current gifted identification process in the district adequately locates students who need gifted services.	6.3% (3)	18.8% (9)	62.5% (30)	12.5% (6)
Support System					
4	I am strongly involved in my child's education.	0	0	33.3% (16)	66.7% (32)
5	My child's support system consists of an extended family (church, extracurricular groups, etc.).	2.1% (1)	18.8% (9)	35.4% (17)	43.8% (21)
6	My child's peers support their high academic achievement.	0	10.4% (5)	64.6% (31)	25% (12)
7	My child has adequate support outside of school to develop their academic potential.	4.2% (2)	10.4% (5)	33.3% (16)	52.1% (25)
8	I have a collaborative relationship with my child's teacher.	4.2% (2)	16.7% (8)	45.8% (22)	33.3% (16)
9	My child has adequate support at school to develop their academic potential.	2.1% (1)	2.1% (1)	60.4% (29)	35.4% (17)
Acknowledgment of Ability					
10	My child's academic accomplishments are recognized by the school.	0	8.3% (4)	58.3% (28)	33.3% (16)
11	Other accomplishments of my child are recognized by the school.	2.1% (1)	12.5% (6)	62.5% (30)	22.9% (11)

12	My child's teachers believe my child can be successful.	0	2.1% (1)	43.8% (21)	54.2% (26)
	Question	Strongly Disagree	Disagree	Agree	Strongly Agree
Academic Expectations					
13	My child's teachers consistently set high expectations for them.	2.1% (1)	4.2% (2)	62.5% (30)	31.3% (15)
14	My child is provided with opportunities to increase their academic potential.	2.1% (1)	8.3% (4)	60.4% (29)	29.2% (14)
15	My child believes they can be successful.	2.1% (1)	0	37.5% (18)	60.4% (29)
16	I believe my child is capable of performing at a higher level than they are currently performing.	2.1% (1)	4.2% (2)	47.9% (23)	45.8% (22)
Educational Equity					
17	My child is engaged at school.	2.1% (1)	4.2% (2)	52.1% (25)	41.7% (20)
18	My child is exposed to a multicultural education.	6.3% (3)	4.2% (2)	52.1% (25)	37.5% (18)
19	My child's teacher understands their cultural needs.	8.3% (4)	8.3% (4)	45.8% (22)	37.5% (18)
20	My child's education is educationally equal to other students.	6.3% (3)	6.3% (3)	58.3% (28)	29.2% (14)

The following questions require a short answer:

My culture values

very important (2)

I need teachers to understand parent point of view and family relationships before calling social worker to investigate and accuse parents for child abuse

Education, spirituality

equality and personal development

equality for all

traditional, moral & ethical based

honesty, good morals and kind hearted. Trustworthy and responsible, considerate of others

feelings and needs

Honesty, integrity, empathy

I don't know if i ever really value what my "culture" sees as important. What I value as a parent to young men is respect, integrity, and a desire to do your best in school.

"out of many people, one culture - West Indian Culture" Serve god, live in peace with our community, live a life of integrity
 family is very important to my hispanic culture
 hard work and dedication
 education - achievement
 respect, morals, equality
 to love one another
 connection with family
 learning
 respect & value life
 respect, dedication, determination, and persistence
 my culture values are based on religion, marriage, raising children, decision making and problem solving. Life values towards adolescents & elders, work expectations, authority, friendship & leadership
 education and respect of & to others
 Empathy for others and their differences. All children learn differently and should be allowed to express themselves as they learn
 The importance of education
 economic preparedness, education, family
 family, being kind and respectful, always try your best
 strong

My definition of giftedness is.....

Some teachers was very helpful but still some are destroy student and parent trust and relationship
 Ease in academics, common sense, problem solving
 naturally exceeding the average
 creative, intellect
 any child that strives to succeed, despite adversity, disabilities, and or limitations. Children that want to better their education
 what my daughter is good for and the potential for performing
 high achieving with exceptional potential
 exceeds grade level and expectations
 being able to easily tackle information that would require more time with other kids
 Creativity, reads avidly, persistent intellectual curiosity
 being aware that you can achieve big things in life if you work hard enough
 the ability to strive for more and go beyond the norm
 being able to excel in various things
 high capacity, intellectual, artistic, academic
 something that comes natural with no effort
 academic, intelligence
 perform above grade level
 ability to achieve goals without little to no assistance
 willpower
 a student who exceeds grade level performance scholastically
 giftedness in an individual is someone who excels in a subject or many subjects and/or their personal strengths. There is a desire for them to learn and figure out how things work. Their comprehension is usually extremely higher than their peers.

a person that excels in academics
 Ambitious and extremely capable of exceeding the potential of the average student
 exceeding average standards and expectations
 When a child's ability level is higher than the norm for children their age
 having educational needs that surpass those of your peers and require more of a challenge
 needing enrichment above grade level
 something that i'm very good on
 intelegent

My child's strengths are....

reading (3)
 Kind and love support
 Reading, English, science, story telling
 anything mathematical
 artistic, academic skills, leadership qualities
 Strong willed, analytical thinking while maintaining creativity. Dedicated, compassionate & fun
 hard worker, kind, considerate, bright and confident
 math & english
 math, problem
 compassion, kindness, math, science
 avid reader, broad/creative writer
 determination and a kind heart
 energy and compassion
 reading - science, math
 she likes to read, robotics, math, she follows the rules, respectful
 work well with others, quick learner
 intelligent, respectful
 determination to understand
 determination
 communication, art, and computer technology
 comprehension, concentration, working alone or as team, following instructions, attentiveness,
 cautiousness, self control, taking initiative, and taking responsibility. Expressing empathy and
 sympathy.
 reading, interest in science
 self-confidant, honest, kind, smart and good work ethic, ambitious
 math and english
 creativity, leadership, artistic & organizational skills
 reading, problem solving, emotional intelligence
 easy going personality
 math, run, main ideas
 writing

Please help my child improve in

math (2)
 patience and control anger
 confidence in math
 reading comprehension

expressing how he feels

handwriting

writing

asking teacher to explain how to do something. They don't like asking for the teacher to explain something while others students are watching. They are embarrassed

impulse control (behavior)

all areas, reading comprehension, critical thinking

knowing that she is accepted no matter her race, culture or gender. Especially in cabarrus county and kannapolis city schools

reading & comprehension

organization and goal setting

understanding why guidelines exist

science

being more outspoken

reading level

written comp.

self confidence in learning

science

working with others respectfully

hand writing, public speaking

writing and math

Asking questions when she's not certain about something. She doesn't what to ask for any assistance or explanation in front of the other children

understanding differences

Sharing her ideas with others as she tends to be shy

speaking in front of unfamiliar groups/people

self confidence

grammer

Appendix I

Parent Survey–Postintervention Treatment Group

Parent Survey Questions

Please answer the following questions honestly. All responses will remain anonymous.

The following questions are Likert response questions:

	Question	Strongly Disagree	Disagree	Agree	Strongly Agree
Informed Programming					
1	I have previously been informed about the district's gifted program.	0	5.8% (3)	51.9% (27)	42.3% (22)
2	Schools provide adequate information about gifted education to all parents.	0	17.3% (9)	50% (26)	32.7% (17)
3	The current gifted identification process in the district adequately locates students who need gifted services.	0	9.6% (5)	65.4% (34)	25% (13)
Support System					
4	I am strongly involved in my child's education.	0	1.9% (1)	32.7% (17)	65.4% (34)
5	My child's support system consists of an extended family (church, extracurricular groups, etc.).	5.8% (3)	7.7% (4)	28.8% (15)	57.7% (30)
6	My child's peers support their high academic achievement.	0	0	59.6% (31)	40.4% (21)
7	My child has adequate support outside of school to develop their academic potential.	1.9% (1)	5.8% (3)	28.8% (15)	63.5% (33)
8	I have a collaborative relationship with my child's teacher.	1.9% (1)	1.9% (1)	50% (26)	46.2% (24)
9	My child has adequate support at school to develop their academic potential.	0	3.8% (2)	46.2% (24)	50% (26)
Acknowledgment of Ability					
10	My child's academic accomplishments are recognized by the school.	3.8% (2)	0	40.4% (21)	55.8% (29)
11	Other accomplishments of my child are recognized by the school.	3.8% (2)	1.9% (1)	53.8% (28)	40.4% (21)

12	My child's teachers believe my child can be successful.	0	0	34.6% (18)	65.4% (34)
	Question	Strongly Disagree	Disagree	Agree	Strongly Agree
Academic Expectations					
13	My child's teachers consistently set high expectations for them.	1.9% (1)	0	50% (26)	48.1% (25)
14	My child is provided with opportunities to increase their academic potential.	1.9% (1)	0	46.2% (24)	51.9% (27)
15	My child believes they can be successful.	0	1.9% (1)	25% (13)	73.1% (38)
16	I believe my child is capable of performing at a higher level than they are currently performing.	0	1.9% (1)	40.4% (21)	57.7% (30)
Educational Equity					
17	My child is engaged at school.	0	1.9% (1)	42.3% (22)	55.8% (29)
18	My child is exposed to a multicultural education.	0	9.6% (5)	46.2% (24)	44.2% (23)
19	My child's teacher understands their cultural needs.	0	3.8% (2)	53.8% (28)	42.3% (22)
20	My child's education is educationally equal to other students.	0	0	55.8% (29)	44.2% (23)

The following questions require a short answer:

My culture values

N/A (2)

school is very important and you should always try your best

family & education first

everyone is equal, no matter status or race

honesty, integrity, family

if a child is happy they will be successful

character

buying into the educational environment that produces a lifelong learner

faith, family, and a strong community to allow myles to thrive

family, faith, morals, music, respect, communication

none

strong discipline, respect for elders, the space to represent our african decents

hard work, determination, acceptance driven, desire to be successful
 church
 performance, personal values, dedication
 my language
 hardwork, your effort, citizenship
 education, moral values, hardwork
 my family
 hard work, academic success, economic achievement, athletic performance
 hardwork, respect, and knowledge
 education and good morals
 Treat others as you want to be treated
 Integrity, Faith, hardwork & service
 to respect others and to have dignity and pride within himself
 being held accountable for actions inside and outside of school. The idea that school,
 responsibility, and accountability is necessary for individual growth
 a solid work ethic. Working hard, trying your best, and learning from your mistakes. That is
 important to us
 moral integrity, honesty and kindness. Always put my son first, no matter what

My definition of giftedness is.....

one who excels over the average in any given area
 having more ability to accomplish goals never thought of
 the ability to succeed and perform at a higher level
 being advanced in learning capabilities
 being above expectations for current grade level/age
 a child who performs in one area or more at a level above expectations
 to be gifted is to see things differently than the normal
 being empathetic and humble
 a child who exceeds expectations of the normal level of a particular age group
 any child who is willing to exceed expectations
 a student that performs above it's peers in certain areas
 high performance capability, creative, artistic, leadership and specific academic fields, and
 intellectual
 a student who performs over grade level & needs extra work & harder work to keep them
 interested
 the ability of a person to be able to use their resources to make connections, synthesize,
 knowledge disseminate knowledge, and think critically
 students with higher academic potential than that of the traditional classroom setting
 ready to learn above and beyond
 excelling beyond what is expected at a given level or situation
 art
 going beyond the norm in an area
 having an area that is above & beyond
 discipline
 ability to perform at a higher level than average, or in a way that others cannot
 an ability to perform above grade level academically or is able to adapt to challenges
 the ability to solve problems effectively
 performing at a high level above classmates in school

children who show and go beyond the typical "standards"
 developing at an above average growth rate in specific areas
 you just are, its not something that can be taught. Seeing the world in a different way
 above average. Where others may struggle, it comes natural with very little effort to the gifted.
 using one's given talents and strengths in creative ways
 a willingness to try, do, perform, learn, accomplish and understand a variety of topics that may
 not be at their grade level
 natural or learned ability to be great at either one thing or many things. I believe that each person
 has a particular gift

My child's strengths are....

math (2)
 her determinationcompetitiveness
 math, reading, science
 thinking outside the box, adapting and problem solving
 reading & math
 math, details
 math & reading
 my child is very compassionate
 helpful, caring
 focus, work ethic, character
 a quick learner; kindness; willing to push through to the next level
 she is determined, kind, honesty and can be very creative
 creativity, curiosity, bravery, determination, dedication, respectful, enthusiasm, honestly, being a
 leader
 critical thinking, leans quickly, articulates his thoughts very well when prompted, athletic
 desire to excel
 reading, math, science
 academics, creativity, group interation
 my family
 caring, creative, determination
 drawing, problem solving, curiosity
 writing
 math & science
 he is great in academic areas
 reading and problem solving
 good moral values, science, art, empathetic
 drive and ambition
 Faith, honesty, determination & headstrong
 reading, math, helping others
 his imagination, quick wit, caring for others, and willingness to serve. When he sees the value in
 something he will give 100% effort
 creativity, curiosity, stubbornness, willing to try most things. She also loves to teach and share with
 others.
 Smart, funny, strong, intuitive, honest, musical - teaches himself to play different instruments as
 he knows I can't afford lessons yet he never complains. He is kind and can adapt to any
 environment and there have been many hard times. He is quite frankly amazing

Please help my child improve in

math (2)

understanding that she doesn't have to be first in everything, as long as she puts in her best effort in completing a task (or assignment) she doesn't have to beat herself up if she isn't first in class

N/A

pushing himself to the next level. Typical boy, sometimes lazy

putting his thoughts on paper

communication - verbal & written

writing skills

the dreaded word math problems

personal friendships

time management

asking for help when needed

math, would love to see more push in math area

Math, Listening skills, being bossy, impatient

none

eliminating his shyness and feeling more comfortable speaking in front of others and

strengthening his work ethic

confidence, ongoing academic efforts/success

showing her work, taking her time, talking when time to learn

Dealing with set backs & frustration

belief in her abilities

writing

multiplication

reading comprehension, grammar, ability to write

critical thinking skills. He has the knowledge but sometimes struggles to think out of the box to apply it. I think exposure to more critical thinking challenges and teaching him the steps to think through them would benefit him greatly

believing in himself

Strong willed, perfectionist & bossy

handwriting, getting along with peers

being more confident and secure with himself

organization, following through with activities. He needs his effort to be more with items he doesn't see the value in.

her focus and time management. She strives for her idea of perfect that she often stops, and starts over instead of persevering.

Academically, I would say math. However, I think he needs support with social issues as he has had to grow up fast and took on adult roles that he should not have to - like being supportive to a disabled mom (me) and never knowing if he will have a place to call home. Not your typical 10 year old worries.

Appendix J

Teacher Survey–Preintervention Comparison Group

Teacher Survey Questions

Please answer the following questions both honestly and to the best of your knowledge. All responses will remain anonymous.

The following questions are Likert response questions:

	Question	Strongly Agree	Agree	Disagree	Strongly Disagree
Defining Giftedness					
1	All students have potential to achieve at higher levels.	42.9% (12)	50% (14)	7.1% (2)	0
2	I have a clear understanding of gifted characteristics.	14.3% (4)	57.1% (16)	28.6% (8)	0
3	I have a clear understanding of the components of a gifted education curriculum.	3.6% (1)	32.1% (9)	60.7% (17)	3.7% (1)
4	The district provides a clear definition of what giftedness means.	7.1% (2)	28.6% (8)	50% (14)	14.3% (4)
Support of Parents, Teachers, and Students					
5	Parents are made aware of the gifted program in the district.	10.7% (3)	50% (14)	28.6% (8)	10.7% (3)
6	The district provides adequate support for teachers regarding academic needs of gifted students in the regular classroom.	3.6% (1)	50% (14)	39.3% (11)	7.1% (2)
7	The district provides adequate support for teachers regarding social-emotional needs of gifted students.	3.6% (1)	32.1% (9)	53.6% (15)	10.7% (3)
8	The district provides adequate support for students receiving gifted services who are struggling to meet program expectations.	3.6% (1)	46.4% (13)	39.3% (11)	10.7% (3)
Gifted Identification					
9	The district has multiple pathways for students to be enrolled into the gifted program.	7.7% (2)	38.5% (10)	53.8% (14)	0
10	The district's gifted referral pathways adequately identify students who need gifted services.	7.7% (2)	53.8% (14)	34.6% (9)	3.8% (1)
11	Gifted referral procedures fairly apply to all students.	18.5% (5)	55.6% (15)	14.8% (4)	11.1% (3)
12	The district adequately enrolls minority students in the gifted program.	7.1% (2)	71.4% (20)	14.3% (4)	7.1% (2)

	Question	Strongly Disagree	Disagree	Agree	Strongly Agree
Multi-Cultural Understanding					
13	I have a clear understanding of multicultural education.	10.7% (3)	71.4% (20)	17.9% (4)	0
14	I implement multicultural education in my classroom on a regular basis.	17.9% (5)	53.6% (15)	28.6% (8)	0
15	I have a clear understanding of gifted traits in cultures different than my own.	7.4% (2)	40.7% (11)	44.4% (12)	7.4% (2)
16	I am aware of cultural/socioeconomic biases I have.	7.4% (2)	74.1% (20)	18.5% (5)	0
17	I look at all subgroups of students in a fair and equitable way.	25.9% (7)	66.7% (18)	7.4% (2)	0

The following questions require a short answer:

1. How do you define the word gifted?

A unique insight and perspective on problem solving and information intake.

The ability to apply critical thinking in multi- subjects

A student who demonstrates the intellectual critical thinking several grades higher than what they are enrolled. It is more than just being "smart" and a straight "A" student.

Having a strength in an area that is beyond typical for the age

A student who thinks above and beyond what is expected of them.

Someone who goes above what I expect and then can show detailed explanation and thinking of why they answered a question as they did.

Gifted students are higher than other peers academically OR socially

A person who understands concepts and general with little or no prior instructions. A person is self motivated and always seeking new ways and concepts to better understand and deal with the society around them.

Can perform in classroom well above expectations in one or many areas.

A student who is talented in one area, does not need to be educational

Having abilities to understand work in a more complex and advanced way above average

Students who are working independently above their current grade level.

Students who learn and express their knowledge in many ways.

3-6 times throughout the year

Talented beyond standard

High achievers.

"Everyone is a genius, but if you judge a fish on its ability to climb a tree, it will live its whole life thinking it is stupid." A. Einstein ... We all have gifts, we just need help identifying them. In the classroom setting, I define gifted as academically excellent.

talented! there are many forms of gifted

A knowledge that sets them apart from peers

Students that have natural gift in art, music, math, etc. Students with unique problem solving skills. Students with a curiosity and enthusiasm for certain areas math, science.etc
 Student performing above grade level that will need additional services to meet their academic and social needs

Students who are performing better than their peers or other students at the state level.

2. What traits do you look for when recommending students for the AIG program?

Inquisitiveness and the ability to consume and synthesize information in a unique way.

Critical thinking, high performance, risk-taking, creativity

Postive attitude, great work ethic, parental support, high achievement scores

Self-disciplined, Goal setter, inquisitive, use of imagination and creativity

Quick ability to learn, correct answers, explanations of work, and a high motivation to learn.

creative, high academics, "think outside the box"

Self motivated, a willingness to learn, a person who looks outside and inside the concept to fully understand the idea.

I look for motivation to learn. I look to see that they can complete tasks in one, or many, areas well above grade level expectations.

Higher level thinking, hard working, the ability to think outside the box, and works at a higher level then peers.

I look for someone who not only completes assignments correctly, but is going above and beyond. Someone who is able to look at assignments from multiple perspectives.

working past their grade level without support

High achievement, problem solving skills, critical thinking skills

Knowledge that is above grade level.

quiet, hard working, able to solve problems in different ways

Exceeds average

N/A

I am part of the EC department, so AIG recommendations are not something with which I am familiar.

determination strong desire to know more

Ability to advance quickly through topics and understand things at a deeper level

creative problem solving, eagerness to learn, aptitude or talent in a certain (or multiple areas)

High emotional literacy as well as high academic grades

EOG Data

3. If a student has gifted potential, what factors might keep you from recommending them for the AIG program?

Behavior (2)

None!

Low performance, low motivation, poor behavior

If the student is lazy and refuses to do work in the regular classroom, even if it is challenging and meeting their needs.

None

Lack of motivation. Lack of interest in work. Or someone who does not turn in any work in the normal classroom.

behavior (severe), unable to finish class work due to ability not defiance

The ability to understand and accept other peoples ideas. General attitude, and willingness to go the extra mile in school and outside of school.

If they have behaviors or lack of motivation that impede their learning, but even then, I would recommend them to the program and hope that they were successful. They need the chance. So I guess nothing would keep me from recommending, but I would communicate my concerns.

not completing work, doesn't demonstrate understanding outside of a test

behavior

Knowing who to contact within the school building

None, I want students to get the education that will help them the most.

Parents don't want the identification

N/A

Poor attendance

none

Honestly, the only that would keep me from recommending them would be "limited space". We have such limited services at the elementary level. The only thing that would keep me from referring a student would be if there were other students that I felt needed the services more and slots were limited.

Maturity

Not being able to speak to someone about the qualifications

4. What benefits do you see in using teacher referrals to help identify gifted students?

Teachers have a unqiue insight into the way students process and share information, think creatively and solve problems. These avenues can lead to identifying potentially gifted students that may not perform well on the singular day an "aptitude test" is given.

I see great benefit in teacher referral—teacher sees daily effort and performance that a standaesized test may not show.

Could identify students who work hard, but fall a little short on academic/achievement requirements.

Teachers can identify factors not seen in test scores, such as effort, responsibility, determination and interest in learning/becoming a better student

I think that students do not always test well, even if they are gifted. A teacher works with them daily and can identify the way they work and if they are a gifted student. Teachers can see the potential of their gifted students that may not be identified.

The teachers know where their students are. They know who is below, who is on point and who is exceeding that expectation. It would make sense to have teachers refer students.

Teachers see the students more than the AIG teachers. The AIG process is also all based off of EOG scores, and the NNAT. Yet we have many children that could be gifted in social/emotional years.

Many teachers not only understand the scholastic ability but also observes the student behavior and willingness to put in the extra the AIG program requires to excel in an advanced program.

There are many students who do not test well. You see their potential in other ways.

It gives different perspective than a test, it offers nontest takers a chance to be in AIG, it gives another data point that may be truer than a test

Sometimes, students might not be the best at taking a test so when they take the AIG qualifying test, they might not pass, but they can show great ability in the classroom.

teachers spend the most amount of time with the kids and can see if they can apply what they know in the classroom

We work with the students all day so we see their strengths and weaknesses.

Teachers know their students best.

Helps to get students identified who are not good test takers

They know students

N/A

Teachers should be well qualified to identify which students are gifted, and through connecting with their students can see intelligence in spite of classroom performance.

Sometimes they might have test anxiety or not currently be pushed hard enough.

Teachers know the students best.

Quicker response than waiting on test results

I think this is very helpful because the teacher can provide a holistic view on students academics.

5. What disadvantages do you see in using teacher referrals to help identify gifted students?

N/A (2)

Favoritism, excellent behavior and good performance being mistaken for academically gifted.

Teachers referring the highest student or smartest student in their class. They may be the highest in that particular classroom, but it does not mean they are gifted.

There can be bias in teacher referrals

Teachers may select students who are above grade level but not necessarily gifted.

I could see how a teach might mistake a child to be gifted just because he or she makes good grades.

Many times teachers will just look at "how high" a different child is compared to others yet the others might be a lower group.

I think the teacher referral is one of the most important factors of the program, this person or people see the day to day instruction of the child. Many students are able to perform on a test or group of test very well. The most important factor is how does this student perform on an ongoing basis. How does the student excel on a regular basis. Some students that I have observed have no problems with taken written exams, however have problems communicating in the classroom with others.

Teacher judgment can be flawed. Personal experience: My daughter was in the nurturing group in K-1. When she got to 2nd grade she no longer was allowed to go. I was never contacted about this. I went to her teacher and asked why and asked for her to be put back

in AIG nurturing. I did not get a response and the teacher left at Christmas. So I asked the new teacher again. Still, I never was given a reason. My daughter loved to go to AIG. It was very disappointing.

Sometimes data does not back it up, it's subjective

While you might think they are advanced, they might not be able to keep up with the other students in AIG.

teacher bias

I am not fully trained in identifying students or knowing how to meet their needs.

Sometimes teachers do not see students' potential if other factors (disability, behavior) get in the way.

Students don't always want to be part of the program, don't want the extra work, don't come from a home where education is support enough to push the student to complete the extra work

Biased

Some teachers may simply focus on reading or math levels, and discredit students with poor behavior. Many gifted students have poor classroom behavior because they are not challenged enough.

Case overload so those truly AIG will not receive proper services.

Bias for or against a certain student based on behavior, motivation,etc

Some teachers may not be aware of the lesser known traits of gifted individuals and that may result in the teacher not recognizing the student as gifted.

6. What is does it mean to you to implement multicultural education?

Teach in such way that all cultures and walks of life feel accepted in the classroom.

Teaching students about all cultures - similarities/differences. Celebrate differences and teach acceptance.

We don't try to force students to conform to the majority way of thinking, behaving or learning. We accepts students for who they are and help them achieve to the best of their potential.

Presenting students with opportunities to see how they can succeed and using people from all cultures as models of success.

To take moments during the day and implement information found all over the globe pertaining to that topic making sure it provides new insights and ideas to the given subject.

Using different texts, and incorporating multi-culture into the classroom.

It means that we are open to including and promoting ideas from people and groups from a wide variety of students. These groups come with different ideas, day to day experiences and histories which can help other student understand the whole world around them.

To know what is culture and to explore your own. To understand that there are many factors in a person's culture. To make great effort to make sure that you are showing many cultures in many different ways through your instruction. To help them to explore other cultures without judgement and to be free ask questions.

Incorporating my students interests and background into my class instruction.

Approaching my students in a way they relate to. Getting to know all my students personally and finding ways to relate to them and connect them to our content.

I know the students in my class and teach in ways that they will understand. Also going into my students' neighborhoods and seeing how they live and making learning appeal to their needs. Also making sure that the books that we share show more than 1 culture.

Understanding the home environments of different cultures, the job expectations from different cultures, and matching those expectations to our education system - understanding that gifted kids can do very well in life with a welding degree.

More knowledge

N/A

Reaching your students in a manner that they are able to relate with, by considering their individual environments, and the cultures to which they have been exposed.

Being aware of cultural biases, checking literature and testing materials to ensure a cultural difference is not going to affect their answers.

Teaching that is sensitive to students' backgrounds and experiences, teaching that incorporates books, music etc that reflect different kinds of families, different cultures, etc

Including mentor texts from several different cultures as well as giving students opportunities to show their culture through their work.

Multicultural education is validating students culture and background in the classroom.

Appendix K

Teacher Survey–Preintervention Treatment Group

Teacher Survey Questions

Please answer the following questions both honestly and to the best of your knowledge. All responses will remain anonymous.

The following questions are Likert response questions:

	Question	Strongly Agree	Agree	Disagree	Strongly Disagree
Defining Giftedness					
1	All students have potential to achieve at higher levels.	63% (17)	33.3% (9)	3.7% (1)	0
2	I have a clear understanding of gifted characteristics.	25.9% (7)	66.7% (18)	7.4% (2)	0
3	I have a clear understanding of the components of a gifted education curriculum.	25.9% (7)	55.6% (15)	18.5% (5)	0
4	The district provides a clear definition of what giftedness means.	18.5% (5)	59.3% (16)	22.2% (5)	0
Support of Parents, Teachers, and Students					
5	Parents are made aware of the gifted program in the district.	22.2% (6)	63% (17)	14.8% (4)	0
6	The district provides adequate support for teachers regarding academic needs of gifted students in the regular classroom.	14.8% (4)	59.3% (16)	22.2% (6)	3.7% (1)
7	The district provides adequate support for teachers regarding social-emotional needs of gifted students.	14.8% (4)	25.9% (7)	55.6% (15)	3.7% (1)
8	The district provides adequate support for students receiving gifted services who are struggling to meet program expectations.	11.5% (3)	57.7% (15)	26.9% (7)	3.7% (1)
Gifted Identification					
9	The district has multiple pathways for students to be enrolled into the gifted program.	14.8% (4)	70.4% (19)	14.8% (4)	0
10	The district's gifted referral pathways adequately identify students who need gifted services.	14.8% (4)	66.7% (18)	18.5% (5)	0

11	Gifted referral procedures fairly apply to all students.	19.2% (5)	73.1% (19)	3.8% (1)	3.8% (1)
12	The district adequately enrolls minority students in the gifted program.	18.5% (5)	70.4% (19)	7.4% (2)	3.7% (1)
	Question	Strongly Disagree	Disagree	Agree	Strongly Agree
Multi-Cultural Understanding					
13	I have a clear understanding of multicultural education.	44.4% (12)	51.9% (14)	3.7% (1)	0
14	I implement multicultural education in my classroom on a regular basis.	25.9% (7)	48.1% (13)	25.9% (7)	0
15	I have a clear understanding of gifted traits in cultures different than my own.	14.8 % (4)	37% (10)	48.1% (13)	0
16	I am aware of cultural/socioeconomic biases I have.	37% (10)	63% (17)	0	0
17	I look at all subgroups of students in a fair and equitable way.	40.7% (11)	59.3% (16)	0	0

The following questions require a short answer:

1. How do you define the word gifted?

Students who have exceptional abilities in any areas that go beyond the curriculum for a grade level.

A student who is very intelligent and goes above and beyond. They could be creative, and excell in an area.

Talent that goes above and beyond normal standards

Students who have the ability to perform significantly higher than their peers and need need specially designed instruction in order to reach their potential.

Having exceptional talent and natural ability

Able to think outside the realm of what is expected.

Students who use critical thinking skills, thinking outside the box, high aptitude and/or achievement, goes above and beyond

Gifted are students that look at problems in a way that is not always typical. They can be gifted in multiple areas; however, struggle greatly in others. Students who are gifted may not necessarily perform well on academic task based on interest and giftedness.

Excelling in a certain area, could be academic or social

A student who has a higher and deeper level thinking and can discuss and apply their thinking.

Having an ability naturally that is above the average population

The level of academic understanding, emotional status, and whole child being.

over achieving child who can work above grade level consistently, independently and consistently

A student who may perform better in one or more subjects than their peers.

The ability to perform above grade level or in a unique way. Giftedness extends beyond typical academic subjects (reading, writing, math, science) to include speaking and the arts.

Students who perform above grade level expectations as well as students who use creative reasoning or problem solving more developed than their average peer(s).

Having an exceptional ability that requires unique opportunities to grow.

Academically Able, they are able to do and understand more than other students their age.

Thinking outside the box, great critical thinking and logic skills, thinking beyond students who are academically advanced with special skills in one or more areas

Children are gifted when their ability is above the norm for their age. Intellectual, creative, artistic, leadership, or in a specific subject such as English language arts, math or science are all places where a student can demonstrate that they are gifted.

Talent or natural ability in an area or areas

displays high performance in academically and intellectually

Shows high performance capability in many areas that are above the norm for their age.

2. What traits do you look for when recommending students for the AIG program?

s

Consistent work, reasoning and problem solving beyond grade level standards.

A student who works hard, needs a challenge and has the AIG characteristics.

positive, caring and willing to learn

In my position, I collaborate with the teachers who make the recommendations.

There are too many to mention since the students could exhibit different traits based on what they are feeling at the moment.

Able to think critically.

critical thinking skills, going above and beyond, thinking outside the box

The way they look at problems and solve them. How they perform on multiple tasks and how they solve them. Their assessment data as well as their work samples. Their responses both verbal and in writing. I also consider their home lives as those might be a negative impact as well as they may just be smart students with a good home life.

Students who show extra interest and thinking/problem solving skills in certain areas higher level thinking, finishing work quickly with good quality.

above average/grade level intelligence or performance with grade level work

Motivation, Openness, Quick Grasp of Skills, Higher Level Thinking, Emotional balance high achievement on a regular basis

Performance and potential

I look for self-starters who are inquisitive as well as the typical academic requirements (above grade level).

Students who not only meet "E" requirements in grade level assignments but also students who solve problem or approach tasks in creative ways.

ability to naturally exceed what is typical

Students who are above the average and excel in a subject.

good critical thinking skills, students who think differently or beyond what others think high test scores (but not always), students that need to be challenged, areas of strengths, performance in the classroom

Some traits that I would look for are quick learners, strong understanding of advanced concepts and ideas, enjoys working with and solving problems, highly sensitive and has intense and strong reactions, both emotionally and intellectually, extreme focus in one area or wide range of interests and asks lots of questions.

students eagerness to learn, high level vocabulary, problem solving skills beyond grade level expectations

deep thinking, creative thinker, self starter, logic and reason

Students who think outside the box, extend their thinking, are going beyond what I teach them to do.

3. If a student has gifted potential, what factors might keep you from recommending them for the AIG program?

none (2)

Because some AIG teachers in our district only want to work with students who fit a perfect mold. So if they have any behavior, or other twice exceptional issues, they are kicked out. So knowing this may happen, it would keep me from recommending them.

Poor grades, not organized, or does not complete the class work on time.

ability or thirst to learn

N/A

Behavior. I know that might sound awful but what I mean by that is I want them to take the best advantage of the time in the program. If they are constantly acting out I would be cautious in recommending him/her. However, ultimately, if I really thought they would qualify, I would recommend and give my AIG coworker a heads up.

Not being consistent.

behavior, problems with focus (ADHD, ADD), immaturity

I may not recommend a student whom is not consistently performing well. I also might not pick a student that is extremely shy and does not handle change well.

Behavior

extended assignments and independent literature studies.

extremely poor standardized test scores or classroom performance

Spots available to serve, parents

Behavior, even though I know that some students may act out because they are bored with the normal class work.

I will ALWAYS recommend a child to the gifted program if they meet my or the district's requirements. I believe that it is up to the child to decide if they are interested in continuing with the program.

Student's work ethic and focus are the main reasons, in my experience, why I would keep a student from being an active participant in AIG. Students who are intellectually or academically gifted but don't have the stamina or consistency to be successful.

AIG students receive such minimal time with those certified to work with them.

Behaviors may be a factor

such a small margin and range, qualify

poor focus, bad behavior, low assessment scores, anxiousness and stress level of the student

inconsistency in the classroom

If a student has the capacity and potential to be gifted but demonstrates a lack of effort and pride in their learning, turns in incomplete or missing work on a regular basis, impatient in solving problems, and just has a general disinterest in school, I would be hesitant in referring that student to the AIG program.

nothing, I would rather recommend them

Work Ethic.

4. What benefits do you see in using teacher referrals to help identify gifted students?

Teachers know the entire student and know if they work above and beyond a simple standardized test. They know the whole child. A standardized test does not.

The teacher works with these students each day and knows their strengths and weaknesses.

shows different thoughts from teachers in all areas

I feel that test scores are a poor indicator of potential in some students.

Not all students show what they know and how they think on tests. Teacher observations and notes is important for these students.

Student being identified

another opinion, the teacher may see something more often than the gifted teacher

I think this helps us identify students who have great potential that might not be looked at because their scores do not meet the typical criteria. It also takes in account what teachers see and how they think their students can perform.

Students that may not perform well on State assessments, or look 'good' on paper may still show excelling potential in certain areas. It gives the teacher the opportunity to offer insight on the whole child, not just what they do on an assessment

Students that do not "test well" but are extremely intelligent can become identified.

Teachers see more of day to day interactions and behaviors

Teachers see the student on a daily basis and have a clear understanding of the child and their abilities and needs

That testing doesn't always show what a kid does or doesn't know.

Teachers know the students beyond the paper/pencil assessments. Many gifted students perform badly on tests due to anxiety.

Since kids are "more than just test scores" AIG qualities can show through more than just tests. Teachers who spend more time with these students have a different perspective on their abilities.

Teachers can identify non-academically measured areas of giftedness

It gives them extra support that the teacher may not be able to provide in the classroom daily.

teachers should have a deep understanding of their students and their abilities

The teachers see the students more often - on a daily basis - and may see certain characteristics more than the gifted teachers.

teachers have first hand experience with the student and can see the potential

The benefits of teacher referrals in helping identifying gifted students is mainly in adding the qualitative data to the quantitative data that is used for placement. Numbers can only tell you so much. If a student excels at test taking but has difficulty in managing the day to day responsibilities of a student, I would have a hard time recommending him or her. However, if my observations inform and corroborate my judgment that the student, in the classroom, demonstrates the traits of a gifted student but his or her data don't meet the criteria or is on the fence, then I would advocate for the student to be considered.

teachers see different talents and abilities a student may have other than just using a test to determine

the teacher sees the student involved in a variety of activities throughout the day that would potentially show qualities of giftedness

Teachers know their students better than anyone else. Hear and see everything

5. What disadvantages do you see in using teacher referrals to help identify gifted students?

none (3)

Some teachers do not assess using rigor. So a simple classroom assessment is not always the best data. Also, not every teacher keeps good data and just looks and says that is a great kid. That doesn't make them AIG.

Maybe some teachers might have favorites and not choose the students that really need to be in the program.

N/A

Bias. I would be worried that a teacher may be biased toward a "good kid" and recommend only those students instead of someone who is truly deserving.

n/a

Teachers may not have gifted training or understand giftedness

This can be subjective.

There are SO many more referrals that could be made, because all students excel at something!

If a student is gifted but does not perform well for a teacher or the parents pressure a teacher into identifying a student

They might think the student qualifies based on comparison of other students' achievements, but in the whole spectrum they do not.

teacher biases and parental pressure

If they like a student or not.

Teachers might only recommend the well-behaved, quiet students.

Kids that have challenging behaviors might be overlooked when teachers are recommending students. Also, vice versa. Students that "mean well" or that try really hard and are pretty successful in class might be recommended but unable to perform at the AIG level.

Teacher bias and focus only on scores and not a more holistic view.

the teachers may not all refer their students.

Not all students test well, but could still be gifted

Some teachers may not understand the characteristics of gifted students.

over representation of students in program that have parents as teachers or higher income levels...sometimes these students go to other districts and are no longer gifted and are just average students. The poverty level in Kannapolis can make it difficult for teachers to truly identify the gifted and not the advanced kids.

As a teacher spending as much time as i do with a student during the school day, I could develop biases that might color my justification for recommending the student.

Personal relationships could get in the way.

6. What is does it mean to you to implement multicultural education?

Differentiating with cultures, not just standards. Exposing to a variety of cultures and more than just reading various texts in English class.

An education that meets the needs of all students of any race or background.

education for all no matter cultural background

I believe that my job is to teach a love of and a respect for all people especially those who are different from us.

Support, showcase, understand and be empathetic to all cultures within your room.

Implement and emerging cultures within the classroom into everyday teaching.

Use a variety of curriculum that addresses different cultures and the way they learn, learning about different cultures, including children of all cultures and making sure that they are valued and feel valued.

I think that means looking at students who they are as individuals and teaching them as such. I also think it means teaching students using text written by varying cultures.

Giving multiple perspectives in lessons and understanding the advantages/disadvantages particular cultures face

Creating a classroom environment that is inclusive and diversity is welcomed

Expose students to other cultures, methods, life, and understandings outside of what they personally live day to day and their own opinions

include all students and their native language and cultures in your class, along with reaching out to parents and family members Teach all students' perspectives nd about differences within cultures and races

Not sure

Multi-cultural education means taking the time to acknowledge the cultural aspect of the subject matter. For example, when exploring the ancient pyramids in Egypt, it is important for students to be aware that other civilisations created pyramids as well.

Use methods and strategies that involve students and motivate them based on their personal desires/needs. Using relevant topics, activities and advice to help students based on what matter to them personally based on their background.

Using people and technology to connect or come together to discuss or share experiences and information.

awareness of others cultures and traits

Acceptance of different cultures, and exposing different cultures through work samples, literature, and social awareness

To treat all people fairly, to teach about other cultures, to show students that you appreciate and value all cultures.

Providing a diverse rich education in the classroom highlighting cultures represented in our community and globally. Making sure students are seeing wide examples of characters in books with different cultures. Making sure videos shown are diverse in nature. Using multicultural crayons in the classroom for skin tones.

I can modify or incorporate lessons to reflect the cultural diversity of the students in my class.

embracing the different cultures and being sensitive to how children from every background learn and express themselves as well as the impact family has on learning.

Using a variety of teaching/learning styles to reach every learner

use resources so all students can make connections to the content and relate similar events in cultures to the content that is being taught

Implementing learning that addresses many different cultural norms.

Appendix L

Teacher Survey–Postintervention Comparison Group

Teacher Survey Questions

Please answer the following questions both honestly and to the best of your knowledge. All responses will remain anonymous.

The following questions are Likert response questions:

	Question	Strongly Agree	Agree	Disagree	Strongly Disagree
Defining Giftedness					
1	All students have potential to achieve at higher levels.	45% (9)	55% (11)	0	0
2	I have a clear understanding of gifted characteristics.	30% (6)	55% (11)	15% (3)	0
3	I have a clear understanding of the components of a gifted education curriculum.	15% (3)	35% (7)	50% (10)	0
4	The district provides a clear definition of what giftedness means.	10.5% (2)	42.1 (8)	47.4% (9)	0
Support of Parents, Teachers, and Students					
5	Parents are made aware of the gifted program in the district.	20% (4)	55% (11)	20% (4)	5% (1)
6	The district provides adequate support for teachers regarding academic needs of gifted students in the regular classroom.	10.5% (2)	31.6% (6)	57.9% (11)	0
7	The district provides adequate support for teachers regarding social-emotional needs of gifted students.	5.3% (1)	26.3% (5)	68.4% (13)	0
8	The district provides adequate support for students receiving gifted services who are struggling to meet program expectations.	5.3% (1)	63.2% (12)	31.6% (6)	0
Gifted Identification					
9	The district has multiple pathways for students to be enrolled into the gifted program.	20% (4)	55% (11)	20% (4)	5% (1)
10	The district's gifted referral pathways adequately identify students who need gifted services.	11.1% (2)	55.6% (10)	27.8% (5)	5.6% (1)

11	Gifted referral procedures fairly apply to all students.	15.8% (3)	68.4% (13)	10.5% (2)	5.3% (1)
12	The district adequately enrolls minority students in the gifted program.	21.1% (4)	57.9% (11)	21.1% (4)	0
	Question	Strongly Disagree	Disagree	Agree	Strongly Agree
Multi-Cultural Understanding					
13	I have a clear understanding of multicultural education.	20% (4)	65% (13)	15% (3)	0
14	I implement multicultural education in my classroom on a regular basis.	20% (4)	65% (13)	15% (3)	0
15	I have a clear understanding of gifted traits in cultures different than my own.	15.8% (3)	47.4% (9)	36.8% (7)	0
16	I am aware of cultural/socioeconomic biases I have.	26.3% (5)	73.7% (14)	0	0
17	I look at all subgroups of students in a fair and equitable way.	31.6% (6)	68.4% (13)	0	0

The following questions require a short answer:

1. How do you define the word gifted?

able to think outside the box with verbal intelligence

Seeing solutions to problems in multiple ways, that may or may not be the "normal" way of seeing a solution

People who are above average in one or several areas.

Performing independently significantly above grade level

Someone who has a higher performance capability than peers in their age group.

Students who excel in the curriculum, stand out from others, think outside the box, may have high test scores, being curious, sometimes different

Having a natural ability or reaching mastery in a particular area.

Students who are able to apply learning in different ways and see connections across content areas.

Being able to achieve skills higher than expected at the student's age.

Above average talent in some form or another.

Students who are performing at a higher level academically than their peers.

To think and process above the societal norm

Someone who thinks above and beyond what is asked of them

Academically or intellectually gifted students perform or show the potential to perform at high levels of accomplishment when compared with others of their age, experience, or environment.

A child who does well in academic areas, but also can think critically and outside the box; able to problem solve and does not shy away from a challenge.

A person who exceeds the norm for students in an academic and social atmosphere which takes a maturity level above students at a given level.

2. What traits do you look for when recommending students for the AIG program?

personality, verbal and mental abilities

Creativity, logic and reasoning, critical thinking, deeper explanations

Students who show academic achievement above the expectation in one or several areas and are motivated to learn.

Reasoning skills, mastery of above grade level work

Inquisitive, creative, risk taker, has an open mind

thinking outside the box, creative, critical thinking skills, high test scores, being curious, high level vocabulary

Being in the EC department, I feel as if this survey does not apply to the area of which I'm gifted.

Creative thinking, high reading and math scores, critical thinking skills.

Ability to read and interpret what was read to a higher level and make references to other learning.

Behavior, work ethic, and motivation.

A student who is performing significantly higher than their peers.

processing of multi-layered information and question strands, high proficiency

Students who tend to have a deeper understanding in literacy and can easily relate old concepts to new concepts in math and implement different strategies for problems they have never seen before.

performing 2 grade levels ahead of peers.

High EOG scores, high IQ, excellent performance in the classroom.

A maturity level in which the student is self motivated and looks for opportunities to advance his academic and social growth associated with the given norms of other students in a like atmosphere.

3. If a student has gifted potential, what factors might keep you from recommending them for the AIG program?

behavior (2)

poor behavior, poor attitude

Extreme behaviors that would impede the learning of others. Lack of willingness to participate.

Many of my identified AIG students have trouble thinking for themselves and are not willing to try new things.

severe behavior problems, unable to focus, laziness, not motivated

Severe behaviors

Behavior

none

Behavior, motivation

Maturity

sometimes-behavior limits

None

In the past I would say behavior but I have learned that their gifted potential may be a factor in the behavior and they need the gifted services.

behavior and work habits

Personal maturity and a willingness to seek out other opportunities available.

4. What benefits do you see in using teacher referrals to help identify gifted students?

strongly ...they know the student better than anyone

It helps you to set aside those factors that keep you from recommending a student

There are lots of factors that should go into identification of students and data does not always show.

teachers spend the majority of their day with these students and see their work across all subject areas

Teachers work with their students every day and can see the process they use on a variety of assignments and tasks. They see how they interact with their peers and how they tackle new problems. Just seeing numbers on paper does not justify accepting/denying AIG services.

Teachers see students more often than gifted teachers, so they can give more insight the student

Teachers are able to identify first-hand the work of gifted students.

We are with them every day

I never have, I have only spoke to the AIG teacher about placing a student in. I had no clue there was a referral process, I was never instructed on this.

More than just a test score, teachers see the full picture.

Teachers work with their students everyday and know them best.

you are able to process a wide range of gifted students in this fashion

Not all gifted students are great at test taking.

Testing is not always accurate.

I feel teacher referral is very important since he/she truly knows the potential of a given student.

many students are not strong test takers but very well may be quite gifted

Many students excel at test taking ability however, do not show the day to day drive necessary to continue in an intense program necessary for a student to keep up with an intense program.

5. What disadvantages do you see in using teacher referrals to help identify gifted students?

bias

Not all students fit the same criteria for being gifted

Teachers may favor students they know outside of school or teacher's kids.

teacher bias

Some teachers may not care for the learning styles of certain students, therefore not giving them a fair chance to show their potential in the AIG program.

Sometimes people's opinions may not be accurate.

Many gifted students are not challenged in the regular classroom, and their teacher may think that child is simply defiant or distracted.

Teachers not knowing the process or what the requirements are

Coming from other schools, I have one student that I believe should not be in the program according to class assessments and work.

Bias

A teacher may have bias towards a student due to behavior and may not recommend them based on behavior alone.

favorites among teachers always surface

Not all teachers understand what gifted is.

Teacher bias

personality conflicts

Teacher referrals is most important because the teacher she the habits on a day to day basis and can identify a true AIG potential candidate.

6. What is does it mean to you to implement multicultural education?

na

To know and understand your own culture and make sure that you show multiple cultures when you are teaching lessons. Students need to see themselves in the lesson. It's also great to explore other cultures and beliefs to increase understanding of how other people live.

recognizing differences of students of different cultures and respecting their unique needs

Teaching to individual students' learning styles and embracing their differences. Creating a safe learning environment for all learners.

Consider all cultures, being sensitive to and value all people, teach empathy and respect, using global books, lessons, projects, activities, etc.

To reach students in the ways that are most familiar to their cultural environment and expose other students to them.

Incorporating what your class in interested in or what supports their background knowledge.

Bringing in other cultures experiences and believes into what is being taught.

To teach other cultures and norms that are different then my own.

Including students' different cultures in conversations and lessons

implementing cultural education other than my own

Incorporating instruction that relates to students from all backgrounds and students see others as equal no matter where they come from or what they look like.

I think it is important for students to see and experience other cultures. Exposing students to multicultural education helps students to see things in other perspectives.

Do and say what is acceptable to all cultures, and be mindful that all students are different and come from all backgrounds.

Appendix M

Teacher Survey–Postintervention Treatment Group

Teacher Survey Questions

Please answer the following questions both honestly and to the best of your knowledge. All responses will remain anonymous.

The following questions are Likert response questions:

	Question	Strongly Agree	Agree	Disagree	Strongly Disagree
Defining Giftedness					
1	All students have potential to achieve at higher levels.	73.3% (11)	26.7% (4)	0	0
2	I have a clear understanding of gifted characteristics.	40% (6)	60% (9)	0	0
3	I have a clear understanding of the components of a gifted education curriculum.	28.6 % (4)	64.3% (9)	7.1% (1)	0
4	The district provides a clear definition of what giftedness means.	42.9% (6)	50% (7)	7.1% (1)	0
Support of Parents, Teachers, and Students					
5	Parents are made aware of the gifted program in the district.	26.7% (4)	60% (9)	13.3% (2)	0
6	The district provides adequate support for teachers regarding academic needs of gifted students in the regular classroom.	20% (3)	60% (9)	20% (3)	0
7	The district provides adequate support for teachers regarding social-emotional needs of gifted students.	13.3% (2)	53.3% (8)	33.3% (5)	0
8	The district provides adequate support for students receiving gifted services who are struggling to meet program expectations.	20% (3)	60% (9)	20% (3)	0
Gifted Identification					
9	The district has multiple pathways for students to be enrolled into the gifted program.	28.6% (4)	71.4% (10)	0	0
10	The district's gifted referral pathways adequately identify students who need gifted services.	13.3% (2)	66.7% (10)	20% (3)	0

11	Gifted referral procedures fairly apply to all students.	13.3% (2)	73.3% (11)	13.3% (2)	0
12	The district adequately enrolls minority students in the gifted program.	35.7% (2)	50% (5)	14.3% (7)	0
	Question	Strongly Disagree	Disagree	Agree	Strongly Agree
Multi-Cultural Understanding					
13	I have a clear understanding of multicultural education.	13.3% (2)	80% (12)	6.7% (1)	0
14	I implement multicultural education in my classroom on a regular basis.	20% (3)	66.7% (10)	13.3% (2)	0
15	I have a clear understanding of gifted traits in cultures different than my own.	6.7% (1)	73.3% (11)	20% (3)	0
16	I am aware of cultural/socioeconomic biases I have.	33.3% (5)	66.7% (10)	0	0
17	I look at all subgroups of students in a fair and equitable way.	33.3% (5)	60% (9)	6.7% (1)	0

The following questions require a short answer:

1. How do you define the word gifted?

Being able to answer higher level thinking questions. Being able to think through my answers with prior knowledge

having strong strengths and academic characteristics in 1 or more area at a high level

Students with high intellectual, creative, artistic or other abilities that are a diverse group of students with high potential and abilities.

A students who can excel and reach higher goals than their peers.

having a unique strength in an area academically, socially, creatively, and or mechanically

To be gifted means that students have academic or intellectual skills and abilities that are more advanced in some aspect than an "average" peer.

Gifted is when a student has the ability to perform at a higher academic level than his/her peers

Students who have abilities above the typical student. All students have talents but not all students are gifted. Gifted students usually see the world and problems differently.

Any special characteristics that a student exhibits.

Areas that need further challenging and are ready for pushing forward

Significantly above average performance in one or more areas.

Excelling in any academic/creative area

A student who shows the ability to move deeper into or across the curriculum.

2. What traits do you look for when recommending students for the AIG program?

Students who understand a concept easily, who want more challenging assignments. Who someone's seem bored or don't want to do the work.

high test scores, boredom, students need to be challenged, students that work comes easy for, students with growth mindset, academic skills that come easy with minimal or no teaching needed, high retention rates, possible EC students

problem solving, thinking and reasoning that goes beyond the norm in an area/skill level above average work in the classroom, higher level thinking

creative thinking, higher vocabulary, makes connections to things not usually found among others Students' creativity, problem solving skills, and ability to persevere through challenges.

Problem solving skills, academic performance, growth

Students who look at problems in unique ways. I look for students who look to power through problems and do not give up.

Hard working, creative, smart, organized etc.

Students that have traits to require more rigorous attention academics or emotional with higher levels than an average student

Drive and potential to succeed

Students that excel in a particular area

The willingness or eagerness to do more or go above & beyond what the lesson requires. I also look for other characteristics that fit other gifted profiles that may not appear as positive or where a student may be more withdrawn.

3. If a student has gifted potential, what factors might keep you from recommending them for the AIG program?

Behavior

low work ethic, non-growth mindset attitude

none, if a student has gifted potential then as the teacher you are denying services if you do not recommend them.

behavior

none, other than if the giftedness cannot be measured to qualify him or her

If students are not able to work independently or be responsible enough to handle the challenges of AIG's academics but also organizational needs.

Behavior and/or ability to handle that program emotionally

If the student is incapable of applying themselves or giving their best

If they are a behavior problem. That time is limited and you don't want behavior problem to waste the time of all the other students.

Some students have parents that do not want them involved, behavior tendencies, inconsistency in performance

Nothing that I can think of.

none

Parent input, academic performance/effort

4. What benefits do you see in using teacher referrals to help identify gifted students?

A teachers sees on a daily basis what a test can I show... determination and persistence

It gives students who may not be able to pass the test (because of language barriers) another chance at being in the program for subjects like math.

teachers know students the best and can see potential where others can not see it

The teacher knows the whole student and their background and experiences. It gives a better picture as to the whole student.

It would add another personal layer of information and allow for their to be documentation of the interventions for those students.

see more of a whole child perspective or more information on observable behavior

Students who do not "test well" but show creative problem solving, or "think outside of the box" have an opportunity to receive services.

Some students perform differently for their teachers and in certain settings than on standardized tests

I think that teacher referrals would aid in seeing students that might not otherwise be identified

Teachers work with the students on a daily basis.

It gives another aspect and input of the child's overall day and performance

We often see what tests do not.

teachers know the 'whole' child that some tests may not show their potential

The teachers see students in many situations where gifted characteristics may present themselves.

5. What disadvantages do you see in using teacher referrals to help identify gifted students?

More children are identified

minority students may be over looked, high poverty students may be assumed to not be gifted, teacher biases to students.

If a teacher doesn't teach to a rigorous standard then they might assume a child is gifted when he/she is just doing well at basic level work.

lack of participation on the teachers part

labels

Teacher bias, especially when it comes to selecting students who have behavior challenges.

Some students may not be emotionally ready to handle the program

We may miss some students and therefore more data and insight can be helpful

If they favor another student over another one.

The student might seem to meet requirements because of the population within the classroom, but for an overall requirement might not meet the requirements.

We can be biased about our students. We only see them in one situation with one group of students.

too many students referred

Sometimes the teachers aren't aware of the varying gifted characteristics.

6. What is does it mean to you to implement multicultural education?

Teach students about other cultures with our classroom and that are around the world, so they are aware of why and how other families do things.

provide a rich and diverse curriculum showing all cultures to students, providing global studies curriculum

teaching that incorporates beliefs, values, perspectives of various people from various backgrounds/cultures and showing value and empathy to these as well.

Include all types of cultures and learning styles, having sensitivity toward students and parents different than yourself or others in your class, and allow them to share ideas from their culture and learn from them.

bringing experiences and knowledge from different cultures to build awareness and broaden perspective of our students

Making school relevant to each student based on what they value. Using different cultures to help define what it means to be "successful" in a school setting.

Modeling how to accept and include all cultures and exposing children to the different cultures of the world

It means giving options in instruction that can interest students of all cultures to meet their academic needs and interests. We also need to not make assumptions about what students are interested in based on culture. By leaving it up to choice we are creating an opportunity for discovery.

Education that all students benefit from and materials and strategies that meet the needs of all diverse learning styles and cultures.

You expose, education, incorporate different cultures within the daily teachings

To be knowledgeable about how other cultures act in the classroom.

teaching with all cultures in mind, having open discussions that show multiple view points, letting students be proud of their cultures and share when relevant

To allow my instruction to reach and apply to all students. I realize that when implementing multicultural instruction, I must go beyond my own experiences and appeal to those with differing backgrounds, socioeconomic statuses, gender, races, and ethnicity using books, videos and activities.

Appendix N

Panorama Education Survey Results–Fall

Question #	Question	Fall Treatment Positive Responses	Fall Treatment Negative Responses	Fall Comparison Positive Responses	Fall Comparison Negative Responses
1	How excited are you about going to your classes?	67% (36)	33% (18)	73.64% (81)	26.36% (29)
2	How positive or negative is the energy of the school?	93.47% (43)	6.53% (3)	86.73% (85)	13.27% (13)
3	In your classes, how excited are you to participate?	70.37% (38)	29.63% (16)	71.05% (81)	28.95% (33)
4	How fair or unfair are the rules for the students at this school?	82.35% (42)	17.65% (9)	78% (78)	22% (22)
5	At your school, how much does the behavior of other students hurt or help your learning?	65% (26)	35% (14)	48.05% (37)	51.95% (40)
6	When you are not in school, how often do you talk about ideas from your classes?	55.56% (30)	44.44% (24)	49.12% (56)	50.88% (58)
7	How often do your teachers seem excited to be teaching your classes?	77.78% (42)	22.22% (12)	76.32% (87)	23.68% (27)
8	How focused are you on the	84.91% (45)	15.09% (8)	82.30% (93)	17.70% (20)

	activities in your classes?				
9	How interested are you in your classes?	70.37% (38)	29.63% (16)	72.57% (82)	27.43% (31)
10	If you fail at an important goal, how likely are you to try again?	92.59% (50)	7.41% (4)	84.96% (96)	15.04% (17)
11	If you have a problem while working towards an important goal, how well can you keep working?	83.33% (45)	16.67% (9)	82.30% (93)	17.70% (20)
12	When you are working on a project that matters a lot to you, how focused can you stay when there are lots of distractions?	59.26% (32)	40.94% (22)	59.65% (68)	40.35% (46)
13	How often do you stay focused on the same goal for more than 3 months at a time?	61.11% (33)	38.89% (21)	56.64% (64)	43.36% (49)

Appendix O

Panorama Education Survey Results–Spring

Question #	Question	Spring Treatment Positive Responses	Spring Treatment Negative Responses	Spring Comparison Positive Responses	Spring Comparison Negative Responses
1	How excited are you about going to your classes?	54.35% (24)	45.65% (21)	52.68% (59)	47.32% (53)
2	How positive or negative is the energy of the school?	84.21% (32)	15.78% (6)	84.04% (79)	15.96% (15)
3	In your classes, how excited are you to participate?	56.52% (26)	43.48% (20)	56.76% (63)	43.24% (48)
4	How fair or unfair are the rules for the students at this school?	91.67% (33)	8.33% (3)	64.95% (63)	35.05% (34)
5	At your school, how much does the behavior of other students hurt or help your learning?	48.39% (15)	51.61% (16)	32.35% (22)	67.65% (46)
6	When you are not in school, how often do you talk about ideas from your classes?	60.87% (28)	39.13% (18)	64.29% (72)	35.71% (40)
7	How often do your teachers seem excited to be teaching your classes?	73.91% (34)	26.09% (12)	70.27% (78)	29.73% (33)

8	How focused are you on the activities in your classes?	86.67% (39)	13.33% (6)	75.45% (83)	24.55% (27)
9	How interested are you in your classes?	56.52% (26)	43.48% (20)	63.39% (71)	36.61% (41)
10	If you fail at an important goal, how likely are you to try again?	78.26% (36)	21.74% (10)	79.46% (89)	20.54% (23)
11	If you have a problem while working towards an important goal, how well can you keep working?	76.09% (35)	23.91% (11)	65.18% (73)	34.82% (39)
12	When you are working on a project that matters a lot to you, how focused can you stay when there are lots of distractions?	66.67% (30)	33.33% (15)	52.68% (59)	47.32% (53)
13	How often do you stay focused on the same goal for more than 3 months at a time?	58.70% (27)	41.30% (19)	38.39% (43)	61.61% (69)