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Making the Invisible Visible: Redefining Giftedness to Include ELL Students' Community Cultural Wealth and Funds of Knowledge

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Molly I. Pargas

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Chapter One: Introduction

English Language Learner (ELL) students are a growing population in schools throughout the United States (NCS, 2020; United States Department of Education, 2020). Students identified as ELL have been the subject of much legislation, case law, and most recently were an important sub-group that was included as part of the No Child Left Behind (NCLB) Act (2002-2015) (USDE, 2020). Title III of NCLB provided provisions for ELL students to receive quality education in English and access to grade level content. It further stated that ELL students had to be tested to determine English proficiency at least once per year using an English proficiency test administered by the district. Test scores must also show that schools meet adequate yearly progress in this area as well as in math and reading.

Federal Legislation

NCLB was the first time U.S. federal policy delved into disaggregating standardized scores based on subgroup populations. As a result, the data were revealing as they painted a dismal picture for minoritized subgroups, placing the achievement scores of African American and Latinx children well below the scores attained by their White counterparts. However, beyond this disaggregation of data, nothing was offered to schools and educators regarding direction to help close these identified gaps (Columbo et al., 2013). Instead of addressing the fact that standardized testing unfairly disadvantages students identified as ELL, the focus of efforts remained mainly on the test scores

themselves. The priority placed on test scores leaves ELL students in the position of being judged as less intelligent and underachieving, when the issue really is that they are learning English and content knowledge concurrently (Pereira & Oliveira, 2015).

Through this large-scale federal legislative action, the light was shined on achievement gaps between minority subgroups as evidenced by standardized test scores. This phenomenon often referred to as the *achievement gap* is also thought of as an *opportunity gap* suggesting that schools and educators are providing inequitable access to learning, leading to gaps in achievement (Milner, 2012). Ladson-Billings (2006) refers to this phenomenon as an *education debt* since the failure is in the education systems ability to provide necessary services to subgroups, such as ELL students, leaving them in *debt.*

In 2015, NCLB federal legislation was reauthorized as Every Student Succeeds Act (ESSA). This reauthorization required entrance and exit requirements to be standardized throughout the state. It also required the state further disaggregate data for students identified as ELL, separating out the data for ELL students and ELL students who are dual identified for special education. ESSA also provided some requirements for teacher preparation and education. Most of the discretion for how this federal policy was to be enacted was left to the state level education departments. While NCLB was focused on accountability and achievement gaps, ESSA was aimed at streamlining the ELL identification process by standardizing the tracking of and testing procedures for ELL students. It also extended the monitoring process (which takes place once English proficiency is gained) for ELL students from two years to four years. With this focus on ELL entrance and exit requirements, test scores, and gaps, there was little attention paid

to the underrepresentation of ELL students in the gifted and talented (GT) programs (Coronado & Lewis, 2017; Esquierdo & Arreguin-Anderson, 2012; Ford, 2014; Lohman et al., 2008; Lakin & Lohman, 2011; Plucker et al., 2013; Siegle et al., 2015; Siegle et al., 2016).

ELL students, along with other minoritized groups, have been underrepresented in GT programs since the inception of GT education in 1988. The Jacob Javits Gifted and Talented Act was passed in 1988, and gifted and talented programs in the United States became officially protected programs set up to serve the needs of gifted and talented children. Since then, the most identified subgroup for gifted services are White children. According to Siegle et al. (2015) White children are more likely to be identified as gifted than any other group. Conversely, the underrepresentation of ELL students in gifted and talented programs throughout the United States persists (Coronado & Lewis, 2017; Esquierdo & Arreguin-Anderson, 2012; Ford, 2014; Lohman et al., 2008; Lakin & Lohman, 2011; Plucker et al., 2013; Siegle et al., 2015; Siegle et al., 2016).

Underrepresentation

There are several underlying reasons that students identified as ELL are not often identified as GT. First, entrance into gifted and talented programs has traditionally been dependent on standardized test scores (Allen, 2017; Harris et al., 2007; Lakin & Lohman, 2011; Lohman et al., 2008; Loman & Gambrell, 2012; Naglieri & Ford, 2003; Pfeiffer & Blei, 2008; Plucker et al., 2013; Siegle et al., 2016). While there has been a change in policy so that standardized test scores are not the main source of gifted identification anymore, the use of standardized test scores persists as a practice within many schools

(Callahan et al., 2013). This exacerbates under-identification of ELL students because according to the research, standardized test scores lead to less identification of culturally and linguistically diverse children in gifted and talented programs (Allen, 2017; Harris et al., 2007; Lakin & Lohman, 2011; Lohman et al., 2008; Loman & Gambrell, 2012; Naglieri & Ford, 2003; Pfeiffer & Blei, 2008; Plucker et al., 2013; Siegle et al., 2016). Students identified as ELL score lower on standardized tests for a variety of reasons. Polat, et al., (2016) noted that often English proficiency affects ELL students' scores on traditional measures of achievement. Further, the use of standardized test scores that are nationally normed, pits them against every other child in the nation whose native language is English. This is akin to putting an U.S., monolingual child in school in Japan and then judging them against every other student in Japan that already speaks Japanese!

In Colorado, the Assessing Comprehension and Communication in English State to State for English Language Learners test, or ACCESS for ELLs, has been made available as a measure to identify ELL children for gifted and talented services (Colorado Department of Education, 2021a). The ACCESS is the statewide, standardized test for English proficiency taken once a year to track English proficiency for identified ELL students. This assessment includes both ELL students receiving services, as well as ELL students whose parents have elected to not receive services. Based upon a passing score, students are released from active support for English proficiency to a monitor status. However, if a student in Colorado gains language proficiency very quickly, the schools may choose to use this quicker language acquisition as a measure of giftedness (CDE,

2021a). While this is a new avenue for ELL students to be identified, it is once again based on a standardized test score.

Another method for gifted identification is teacher referral. This method is often closed to students identified as ELL, as teachers may not recognize giftedness in ELL children. Instead, teachers often focus solely on English proficiency and what ELL students *cannot* do. Pettit (2011) found that a general education teacher generally lacks the knowledge of how ELL programs work, what the entrance and exit requirements are, how to serve their ELL students, and what the language levels indicate. School districts seldom provide professional development in this area but instead rely on ELL teachers to fill the gap. The issue of teachers assisting in the referral process for students identified as ELL to gifted programs is further exacerbated by general education teachers' lack of knowledge of gifted identification in general (Bianco, 2010; Spiers Neumeister et al., 2007). These researchers found that teachers have little (if any) training related to gifted and talented students, districts often leave it to the GT teacher to help close gaps in knowledge. As gifted and talented programs are one of the most underfunded initiatives in education (NAGC, 2021b), this process does not bode well for anyone who is involved. Teachers who are placed in this position, are often unable to support their ELL students and families based upon the supports teachers are offered. This lack of training often manifests itself to a teacher deficit view as they become disillusioned with their inability to support students (Allen, 2017; Ford & Grantham, 2003; McKenzie et al., 2004; Valencia, 1997).

To make matters worse, there is often a cultural mismatch between the mostly White teacher workforce and their more culturally and linguistically diverse students. In Colorado there is a clear cultural mismatch between students and teachers. Of the 55,842 Colorado teachers, 48,355 are White (CDE, 2021c). This means that 87 percent of teachers are White, and often face a cultural mismatch with their more diverse students, of which 14.3% are identified as ELL (CDE, 2021c). This mismatch causes tension between the population of teachers and students that often lead to deficit views on the part of the teacher and a lack of trust on the part of the ELL students and families (Ford, 2014). Further, teacher preparation programs are not adequately preparing teachers to meet the needs of students identified as ELL (Columbo et al. 2013; Greene, 2017).

Finally, the continued emphasis on test scores has driven many teachers to hold deficit views of their ELL students. When teachers become focused on how to make a child achieve on a high-stakes, standardized test, and that child cannot do so because of a language barrier, teachers often resort to creating a negative narrative regarding ELL students and their families (Allen, 2017; Ford, 2010; Ford, 2014; Ford & Grantham, 2003). In fact, teachers become so wrapped up in what ELL students *cannot* do, that if ELL students do get identified as GT or if someone requests a guest in approach to gifted programming, which allows students access to enrichment without the requisite scores, teachers are often shocked and will ask for additional evidence or clarification of giftedness (Allen, 2017; de Wet & Gubbins, 2011; Spiers Neumeister et al., 2007).

Allen (2017) found that teachers often blocked referrals of students with a lack of English proficiency and that teachers needed additional professional development in

identifying giftedness in underrepresented populations. Spiers Neumeister et al. (2007) found that teachers held traditional views of giftedness based upon a narrow and exclusive definition of giftedness. Teachers in the study were focused on gifted characteristics such as, self-motivation, learning faster or more easily than others, and higher achievement levels. A focus on these characteristics is short-sighted as it is not inclusive of characteristics of giftedness that may appear differently in minoritized students and students from limited-income households. One such characteristic that goes unnoticed is oral communication skills. This focus on a white-normed characteristics of giftedness suggests, according to Spiers Neumeister et al. (2007), means that, "teachers may not take into account that giftedness is culturally defined" (p. 492). Additionally, in this same study, Spiers Neumeister et al. found that teachers would often question the identification of gifted students based upon learning behaviors and family situation, as well as being reluctant to identify these students in the first place.

As a further barrier to the process, Allen (2018) found that teachers often held a misconception that students identified as ELL needed to become English proficient prior to being identified as gifted. de Wet and Gubbins (2011) surveyed teachers regarding their beliefs in the ability of students identified as ELL. Teachers were asked to agree, disagree, or chose a neutral position to each statement. For the statement: "Because of gaps in prior learning, gifted CLDE students do not qualify for gifted services…37% indicated disagreement, 23% were neutral, and 39% agreed" (p. 102). These studies show one of the obvious barriers to GT identification for ELL students: teacher deficit view.

There are many obvious barriers to the identification of ELL students in gifted and talented programs. However, there are some, less obvious barriers in place. The use of several universal screeners such as Ravens, the Naglieri Non-Verbal Ability Test (NNAT) and the Cognitive Abilities Test (CogAT) have been shown to help with identifying diverse learners as gifted as they are nonverbal tests that do not require proficiency in English (Card et al., 2016). However, according to Lohman et al. (2008) none of these assessments work well for students identified as ELL. While these nonverbal assessments are often touted to level the playing field based upon the non-verbal nature of the testing, there is research that questions the validity of this claim (Erwin & Worrell, 2012; Lohman et al., 2008; Lohman & Gambrell, 2012; Naglieri & Ford, 2003; Peters & Engerrand, 2016; Pfeiffer & Blei, 2008). Lohman et al. (2008) mention that most research regarding the usefulness of non-verbal tests for gifted identification focus not on the ELL versus non-ELL student, but on White versus minority students. Lohman et al. (2008), found that the length of time in United States schools positively affects the test scores of ELL students on the Raven, CogAT, and NNAT. The inference to be made here, is that these tests, while non-verbal in nature, are heavily influenced by the level of acculturation achieved by students identified as ELL prior to taking the test. Further, the NNAT's shortened directions, intended to provide less confusion have led to students' achieving lower on that test as they do not understand what is required of them (Lohman, et al. 2008). There are several issues surrounding the use of these non-verbal measures to help with the identification of ELL students.

Gifted and Talented in Colorado

Colorado uses a variety of pathways to identify students as gifted. The first pathway is achieved when a student scores a 95 percent or higher on a cognitive test, combined with two other measures, either a criterion or norm-referenced achievement test where the student scores 95 percent or more, a norm-references observation scale for a particular area, and/or a performance evaluation to a team of experts wherein the student is judged to be advanced or above grade level. The second pathway for a student to be identified is chosen if a student does not score a 95 percent on the cognitive test. In this pathway, three or more measures must be compiled from the measures listed above. A third pathway is available for students who score a 95 percent on the cognitive assessment, but do not have the other two measures required by the first pathway. In this pathway, it is explicitly explained that this may be the case for students from underrepresented populations as they often do not have the standardized test scores to support their cognitive score. In this instance, the student may be identified under a "general intellectual ability" category, which is academic in nature, but is not a specific area of aptitude listed under the types of giftedness identified. It is under this CDE policy that students may be identified as gifted (CDE, 2021a).

However, the practice of the above policy is left up to each district since Colorado is a local control state. Each district determines the testing opportunities available and when tests are offered. Some districts offer cognitive testing in kindergarten, while others offer testing in a different grade level. This unevenly applied approach to administering the universal screener testing can lead to an additional barrier to gifted identification and

entrance into gifted programming. For example, if given in kindergarten, ELL students may not have had much exposure to English and will not have had time to develop any test taking skills. In addition, as with all universal screeners, it is often an issue of access and advocacy. It is quite popular among affluent, White families to train their children to take the CogAT While test preparation and access to GT programs is on the radar of affluent families, families of students identified as ELL are often not even aware of the programming itself, let alone the testing and test preparation that they can access for a fee. This lack of knowledge of the United States school system, and its focus on providing more educational access and opportunity to gifted students, leads to less advocacy on the part of ELL parents (Harris et al., 2007).

Amid all these barriers and issues surrounding gifted education, Colorado has a very inclusive definition of giftedness (CDE, 2021a). According to the definition noted in the *Gifted Identification Handbook* (CDE, 2021a) students, "whose aptitude or competence in abilities, talents, and potential for accomplishment in one or more domains are so exceptional or developmentally advanced that they require special provisions to meet their educational programming needs" (para 1). There are several areas that students may be identified for gifted programming. They can be identified for general or specific intellectual ability, specific academic aptitude, visual arts/performing arts/musical/dance/psychomotor abilities, leadership, or creativity. While these areas of identification are available, most schools do not have measures in place to identify for all these areas.

The official pathways of identification for the state of Colorado are explained in the *Gifted Identification Handbook* (CDE, 2021a). While the CDE states that students must reach the 95th percentile on a cognitive test (such as the CogAT) for automatic inclusion into gifted programming, the CDE does not preclude students who do not score in the 95th percentile. The *Gifted Identification Handbook* specifically states that the 95th percentile is not a cut point. Instead, if a student does not reach the 95th percentile, they may still be identified gifted and/or talented through a body of evidence (BOE) consisting of achievement tests, behavior observation scales, performance evaluations, parent input, and additional data, including a portfolio. While none of these measures can be used as a stand-alone score proper for identification of giftedness, they may be combined to determine if a student should enter a talent pool or later be identified as gifted. For example, if a student performs at the "*exceeds expectations"* level on CMAS they are eligible for gifted services for the area(s) in which they receive that score. Further, if a student shows academic aptitude on criterion-referenced tests over a period of years, they may also be tapped for a talent pool and/or gifted services.

While the CDE outlines the pathways for identification, school districts are left to implement the practices of identification. The CDE encourages school districts to use nationally normed and criterion referenced assessments so that portability may be obtained when switching between districts. The CDE uses a *Matrix of Commonly Used Assessments for Gifted Identification* to provide the districts with state approved assessments. This is merely a guide however, and each district makes its own decisions regarding which assessments to use. The most used assessments in Colorado are the

CogAT and Naglieri's Nonverbal Ability Test (NNAT) (CDE, 2021b). Further, Colorado encourages the use of a universal screener to help identify students that are traditionally underrepresented. Within their *Matrix of Commonly Used Assessments* (CDE, 2021b) the CDE encourages the use of the CogAT as it states that, "research studies show sensitivity to ELL and minority students; the new Form (7) will include a Spanish Form", (p. 3) or the NNAT, as it is a "reliable tool for screening individuals from diverse cultural and linguistic backgrounds" (p. 4). While these are commonly used as universal screeners, the problem of underrepresentation of students identified as ELL in gifted and talented programming in Colorado persists (CDE, 2021c).

For the district in the current study, the process of identification in elementary schools is based upon test scores. Students are given a universal screener (i.e., the CogAT) in second grade. Based upon those scores students are included in gifted and talented programming, with students being served as part of the talent pool if they receive a score between 85 percent and 94 percent and being served as part of the gifted population if they receive a score above 95 percent. While the district encourages a guest in approach, where students who do not have the required scores for giftedness can still receive access to GT programming, it is up to the gifted resource teacher to determine the programming at each elementary school location. Due to the large discretionary power of the gifted resource teachers, the programming looks different at different locations. At one elementary school a gifted resource teacher may be amenable to guesting in any student a teacher requests, while at another school the gifted resource teacher may adhere strictly to the scores achieved on the CogAT or other standardized tests.

Statement of the Problem

One of the tenets of Critical Race Theory, Whiteness as property can be clearly observed when ELL and other minority groups attempt to access GT programs. The Whiteness as property tenet specifically addresses the view held that certain properties have historically only been accessible to the White population, and that this right to property is to be protected (Delgado & Stefancic, 2017). While students identified as ELL struggle to pass assessments and other measures that will allow them entrance into gifted programs, White children often still enjoy a level of privilege and access to gifted programs that has gone mostly unchecked (Ford, 2014). White children represent 1.9 million of the 3.2 million children in GT in America (NCES, 2020).

In Colorado, a comparison of the racial demographics of students and their representation in GT programming can be made. Please refer to Table 1 below.

Table 1

Equity Comparison of Racial Demographics and Representation in GT Programming

	Representation in Colorado	Representation in GT
White	53.6%	71%
Latinx	33.4%	16.3
Black	4.5%	1.8%
Asian	3.2%	5.4%
Two or More Races	4.4%	5.1%
Native American	0.7%	0.3%
Pacific Islander	0.3%	0.1%

While the demographics of Colorado students are approximately 54 percent White students, their representation in GT is 71% (CDE, 2021c). This is a clear overrepresentation of White students in GT, while Asian and Two or More Races students are only slightly overrepresented. The Latinx, African American, Native American, and Pacific Islander children all remain underrepresented.

In Colorado, students identified as ELL make up 14.3% of all students, while making up only 1.8% of the gifted population (CDE, 2021c). One reason for the dearth of ELL students in gifted education can be explained by the fact that Colorado is an English-only state when it comes to ELL education. This practice is reminiscent of issues brought up in the *Lau v. Nicols, 1974* Supreme Court case, where the justices found that teaching non-English speaking students as though they spoke English effectively cut them off from an effective educational experience. It was in this case that precedent was established to require that students be taught English as part of their educational experience to help them better access the curricular content. While there are very few bilingual schools, which are often situated in affluent areas, the most common approach to ELL education is English-only instruction, with support offered from a supplemental services teacher. This support comes in the form of push in services within the general education classroom or students are pulled out of the general education classroom to receive services in a small group. With the rising ELL population in Colorado, this model offers minimal support for students gaining English proficiency while also trying to access grade level content.

This situation must be addressed to ensure students identified as ELL have equitable access to gifted and talented programs. The significance of this issue is that if ELL students are not identified as gifted sometime during their educational career, their access to better curriculum, better teachers, and better opportunity will be blocked. The advantages with being identified as gifted are numerous. First, when given a positive label and put into a gifted program, children will rise to the occasion, learning more and demonstrating more effective learning behaviors (Gubbins, 2013). Second, teachers' view of gifted children are often positive and teaching assignments for gifted classes are sought after. Teachers in higher level classes are often more educated, more experienced, and provide higher order thinking activities for the GT students (Kalogrides et al., 2012; Worthy, 2010). Therefore, lack of access to gifted education often leads to lack of access to the best teachers. Further, teachers in higher level courses are often provided with a curriculum that is enriching and interesting as opposed to teachers that have the remedial classes, which offer watered-down curriculum. These factors combine to track students identified as ELL into lower academic tracks and less opportunity.

Gifted and talented programs are used throughout Colorado to address the gifted and talented needs of students. Gifted and talented programs allow students access to enrichment and extensions beyond the regular classroom curriculum. Unfortunately, there is a clear underrepresentation of ELL children in these programs. Students identified as ELL are often relegated to intervention programs based on their lack of English proficiency. Further, White, well-resourced students are overrepresented in these

groupings. Consequently, this inequitable access to GT programming is harming children by hindering their ability to grow as learners.

Gifted identification should be more inclusive (Bernal, 2009; Matthews et al., 2012) allowing more students to access an enriching curriculum with the best teachers. In this dissertation in practice, I explore ways that students identified as ELL can be assisted in being identified as gifted and/or talented through a more inclusive definition of giftedness and through building teacher capacity to help identify ELL students as gifted. One study that informs my research is that of Bianco and Harris (2014). Bianco and Harris presented their idea of developing a strength-based Response to Intervention (RTI) program along with culturally affirming education (Ford, 2010) as a method of improving representation of ELL students among GT. The researchers outline an upside-down model of the traditional RTI process. The traditional RTI process focuses on leveled tiers of support that allow educators to intervene and help problem solve for struggling learners. The strength based RTI model allows educators to intervene on the behalf of high achieving learners and work with them to introduce them to gifted programming. One very important part of the Bianco and Harris research, culturally responsive pedagogy, is well-supported in the research as it increases opportunity for ELL students to thrive in their school atmosphere (Ford, & Grantham, 2003; Hammond, 2015; Khalifa, 2018).

Purpose of the Study

The purpose of this study is to create a cycle of improvement aimed at helping to identify ELL students for gifted programming at the elementary level. I would like to

broaden teachers' definitions of giftedness to be more inclusive for culturally diverse students, in particular students identified as ELL. The purpose of this study will be addressed using the following research question.

Research Question

This study will address one research question in an effort to address the purpose of this study. The research question is: How can more inclusive definitions of giftedness be developed to provide ELL students better access to GT programming at Mountain View Elementary School? The study process that follows is designed to gather the information necessary to answer the research question.

Study Process

Using improvement science with a critical lens, I aim to help teachers develop their definitions of giftedness which can lead to helping to identify ELL students for gifted education. Improvement science is a method that allows a lot of stakeholder input and involvement. This will lead to having a study that is both for a dissertation, as well as being useful for the participants as well. Through the data collection procedures, I hope to show that there have been benefits to the knowledge base of the participants. Through this study, I will create an improvement science model that will add to the literature in this area and provide a starting point for other researchers interested in this topic. I will gather a grade level group of teachers who are willing to help identify a problem of practice centered around this issue. A causal systems analysis will be completed using a fishbone diagram, which will be used to create a system improvement map. The system

improvement map will be used, along with a driver diagram, to create a working theory. Using this working theory, the researcher will use iterative Plan-Do-Study-Acts (PDSAs).

Conceptual Framework

The underlying theories that will be used to support this work will be community cultural wealth (Yosso, 2005) and funds of knowledge (Moll et al., 1992). Yosso's community cultural wealth is a framework that proposes a counternarrative to the idea of traditional forms of capital. Instead of focusing on a white-normed view of social or cultural capital, she presents the view that cultures outside of the majority also have valuable, unrecognized forms of capital to contribute. Yosso introduces these forms of capital as: aspirational, navigational, social, linguistic, familial, and resistant capitals. Moll et al. (1992) explained that cultures and people have funds of knowledge that they nurture and develop in their communities. These two frameworks intersect, with community cultural wealth being centered within the funds of knowledge framework. These frameworks advocate an asset-based view that would include these funds of knowledge in the narrative.

Once a problem of practice has been identified, I will combine these two frameworks to help educate teachers regarding how gifted behaviors may be identified outside of their regular routines and procedures for identification. These two frameworks are powerful theories that provide a counter-narrative to the more traditional white-normed frameworks of knowledge with which teachers are more familiar.

Significance of the Study

One of the goals of this research will be to deconstruct and reconstruct knowledge frameworks to help develop more equity-oriented practices (Shields, 2018). Using this research, I will create a model that can be used to help teachers within my school to deconstruct and reconstruct their knowledge frameworks regarding their definitions of giftedness, creating more inclusive definitions of giftedness, to help them to better support students identified as ELL in general and to get more ELL students referred to gifted programs. From this research I would like to provide a procedure that could be utilized in other contexts so that the development of equity can continue beyond my research site. I believe that this research could be used to develop knowledge in the field and provide an applicable model for gifted identification for ELL students.

Limitations

There are some limitations for this study. One limitation is the small sample size built using purposive sampling. Another limitation is the lack of student voice in the study. While I interview teachers and parents, student voice would add to the study. Another limitation that I can foresee is the language barrier between the researcher and parents. While an interpreter will be used to conduct interviews, having a researcher that speaks the home language of the families has potential for better rapport.

Delimitations

There are some delimitations for this study. First, as an improvement science study, this study will take place in a limited context, serving only one school site. It will involve a limited number of participants, including a grade level team of teachers and parents of

ELL students. I will also include the GT teacher and the ELL teacher in the research process as sources of information and interested parties. The principal and Teaching and Learning Coach will also be involved peripherally as sources of data and support for the process.

I will develop a model that may be used to help school leaders better understand processes of gifted identification for ELL students but, the school context and stakeholder input must be considered when informing the improvement science process. Further, by implementing improvement science, the problem of practice developed will likely be different for each school context. Therefore, the research will only transferable, but not generalizable.

Positionality

As a White researcher, I am also a former ELL teacher. During my seven years of teaching students identified as ELL, I witnessed the deficit views held by many teachers and the gatekeeping that takes place when the subject of gifted and talented access for ELL students comes up. My work with students identified as ELL has been a labor of love as I grew up in a mostly Latinx neighborhood and my best friend growing up was dual identified as ELL and received special education services for dyslexia. Seeing the inequity of how students identified ELL were (and still are) treated encourages me to advocate for ELL students whenever possible. Furthermore, my own children's introduction to gifted programs informs my process. All three of my children have been identified as gifted. However, my oldest and youngest, who both present as Latinx, are constantly questioned and not noticed for being GT, while my middle child, who presents

as White, is often lauded for his mathematical abilities- by everyone including the principal, teachers, staff, and students. My introduction to the use of a critical lens further influences my work in this research as a move toward equity that can only be achieved through a recognition and dismantling of the inequitable system that disallows achievement for students identified as ELL. Further, I am aiming to increase equity in a system for my own three children as well, who are Latinx, and will move into the future facing an archaic, inequitable system that does not meet their needs.

Conclusion and Overview of the Study

Using the underlying frameworks of community cultural wealth (Yosso, 2005) and funds of knowledge (Moll et al, 1992), as well as the view from a critical lens, I aim to help teachers develop better knowledge frameworks and strategies to serve their students identified as ELL more equitably. This process will focus more specifically on creating more inclusive definitions of giftedness which can create better access by students identified as ELL to gifted programming and will also add to the teachers' knowledge base surrounding their ELL communities.

In the next chapter, I will continue to review the literature surrounding the underrepresentation of students identified as ELL in gifted programming. I will trace how current measures, a teacher deficit view, and the use of knowledge frameworks that do not recognize non-white forms of capital combine to create the persistent problem of underrepresentation of ELL students in gifted education. I will then delve into the literature concerning studies (often grant funded) that have aimed at trying to find solutions to this problem. Following the review of these studies, I will introduce my

conceptual framework, a combination of Yosso's community cultural wealth (2005) and Moll et al.'s funds of knowledge (1992). Once the conceptual framework is established, I will outline improvement science as the appropriate mode of research for the current study. Finally, I will explain to the reader how all of this combines to create the current study.

Chapter 2: Literature Review

The under identification of ELL students in gifted programming is a persistent problem in the United States (Coronado & Lewis, 2017; Esquierdo & Arreguin-Anderson, 2012; Ford, 2014; Lohman et al., 2008; Lakin & Lohman, 2011; Plucker et al., 2013; Siegle et al., 2015; Siegle et al., 2016). This literature review will begin by discussing the differing conceptions and definitions of giftedness. Then I will focus on the barriers associated with gifted identification for students identified as ELL. Specifically, I will examine the measures used for identification, how teachers' beliefs and views affect the referral process, and the current knowledge frameworks surrounding giftedness. This literature review is also focused on what work has been done toward increasing representation of students identified as ELL in gifted programming. However, while there are several different studies that attempt to address this important issue in the literature, the effects of the findings and recommendations are not widespread. Finally, to examine the issue of gifted identification through an asset-based lens, I will introduce a conceptual framework consisting of community cultural wealth (Yosso, 2005) and funds of knowledge (Moll et al., 1992) as a framework for the current improvement science study.

Giftedness

Prior to discussion regarding the issues surrounding identification of ELL students as gifted, I will define and explore giftedness. The Colorado Department of Education (2021d) defines giftedness as:

> Those persons between the ages of four and twenty-one whose aptitude or competence in abilities, talents, and potential for accomplishment in one or more domains are so exceptional or developmentally advanced that they require special provisions to meet their educational programming needs…Gifted students include gifted students with disabilities…and students with exceptional abilities or potential from all socio-economic, ethnic, and cultural populations. Gifted students are capable of high performance, exceptional production, or exceptional learning behavior by virtue of any or a combination of these areas of giftedness: general or specific intellectual ability, specific academic aptitude, creative or productive thinking, leadership abilities, visual arts, performing arts, musical or psychomotor abilities. (Para 1).

This is the definition of giftedness that is used by the school district under the current study.

Intertwined with the definition of giftedness is the question of whether giftedness is innate or rather socially constructed. Within the gifted community there is much discussion surrounding this issue. For example, Dai and Chen (2013) discussed the three paradigms of giftedness. According to Dai and Chen (2013) the "concept of giftedness is fundamentally value laden" (p. 150). The authors detail three paradigms of giftedness: as innate and static, as a talent development paradigm which focuses instead on developing strengths, and as a differentiation paradigm which works on the individual level to address all children's needs. In contrast, Borland's (2004) research focused on the belief that giftedness is a social construct and that the ideas surrounding giftedness come from the dominant group. Borland noted that this reflection of the values of the dominant

culture in the United States sets up those outside the dominant culture for failure. This emphasis on white norms in giftedness preserves the status quo, allowing those who have more to have better access to GT. While the field of giftedness has yet to come to an agreement about whether giftedness is innate or socially constructed, Dai (2020), somewhat supports Borland's positions, stating, "along with a pluralist view of giftedness, scholars increasingly view giftedness as a dynamic rather than static concept, developmentally shared rather than innately determined" (p. 1520).

In addition to the question of whether giftedness is innate versus socially constructed, there is the underlying issue of how culture and cultural definitions of giftedness interact. Pfeiffer (2013) found that, "historically, each society has used the conception of giftedness as a label to explain and recognize those individuals who perform exceptionally well in culturally valued domains" (p. 89). Additionally, Sternberg (2007) explored the cultural contexts of ways of being and acting intelligent. Sternberg begins with the idea that giftedness is culturally defined based upon the ways intelligence is identified by the specific culture. Sternberg noted that intelligence tests measure knowledge that is culture specific and based upon the dominant culture which can lead to under identification of gifted children outside of the dominant culture.

To add to the confusion there is not a consistent definition of giftedness. In the current study, I decided to utilize the definition of giftedness from the Exceptional Children Education Act because it is the definition utilized by the state of Colorado (CDE, 2021d). The *Colorado Rules for the Exceptional Children Education Act* was passed in 2015 and provides a legal framework for Colorado's treatment of gifted

children (CDE, 2021e). However, this is not the only definition of giftedness. The National Association of Gifted Children (2021c), defines giftedness as:

> Students with gifted and talents- or have the capability to perform- at higher levels compared to other of the same age, experience, and environment in one or more domains. They require modification(s) to their educational experience(s) to learn and realize their potential. Students with gifts and talents: Come from all racial, ethnic, and cultural populations as well as all economic strata. Require sufficient access to appropriate learning opportunities to realize their potential. Can have learning and processing disorders and require specialized intervention and accommodation. Need support and guidance to develop socially and emotionally as well as in their areas of talent. Require varied services based upon their changing needs. (para 2)

This definition of giftedness is more inclusive and provides a clarity that is not found in the ECEA definition that is used by the state of Colorado. It is important to note that the NAGC is an organization that is geared towards assisting parents, educators, administrators, etc. in helping to identify and serve gifted children. The NAGC definition provides more direction regarding who may be gifted and how to serve these students. The ECEA definition focuses more on providing an inclusion criterion that can be used as by a state education department to provide parameters for gifted education. Even within the use of just these two definitions there is a different focus.

The different conceptions of giftedness and definitions of giftedness lie at the heart of the problem of practice for this study. It is impossible to discuss gifted education without mentioning the divide that persists in the field. As this confusion persists, the underrepresentation of students identified as ELL in gifted programming persists.

The Underrepresentation Problem

The issue of identification of giftedness is one that is present throughout the literature of gifted education in the United States. There are various tests that may or may

not be utilized for the identification process. Without a policy or practice that is well-defined and standardized, the variety of testing instruments leaves much room for subjectivity. This means that depending on what instrument is used (as well as how and when), identification issues and concerns abound. The underrepresentation of students identified as ELL based on the problems surrounding identification is one that persists. According to Plucker et al., (2013) "the largest, fastest-growing segments of our K-12 student population have almost no students performing at advanced levels academically" (p. 29). In this environment, the question becomes whether students are really underperforming or whether teachers are unable to recognize giftedness in ELL students. Further, Worrell (2014) found that "ethnically diverse students continue to be underrepresented in GATE (gifted and talented education) programs" (p. 244). As under identification of children of color has continued, the Javits program has been developed to help with identification procedures for underrepresented groups (Harris et al., 2009). Universities have used the Javits grants to attempt to address the underrepresentation issues surrounding gifted programming. The underrepresentation of children of color in gifted programming has been studied multiple times due to the Javits grants as they specifically identify "low income and at-risk students" as a target population (US Department of Education, 2021).

While identification procedures continue to exclude children identified as ELL from gifted programs, there have been suggestions within the field to change the narrative. For example, Matthews et al. (2012) suggested removing identification procedures as a barrier to gifted education, and instead argued for using the identification

process to locate more children who could be exposed to gifted and talented curriculum. This would mean that children would not need to be identified as gifted as a prerequisite to being eligible for gifted programming. This would mean that students could be exposed to differentiation of instruction towards the higher range of the educational spectrum. This would expose more children to gifted programming rather than having the traditional RTI focus on remediation. According to Plucker et al., (2014) teacher differentiation efforts are typically aimed towards the lower achieving students rather than focusing on the acceleration and rigor found in gifted programs. The researchers further recognized that *excellence gaps* for children of color have continued to grow. According to the authors *excellence gaps* refer to the number of underrepresented groups that have not been identified as gifted. Further, if children continue to be ability grouped, this can lead to de facto segregation.

Based upon policies or practices in schools, students often become segregated along racial lines. In gifted programs, White and Asian children remain overrepresented in gifted programming, while every other minoritized group remains underrepresented (NCES, 2020). Ford, (2014) noted that the gifted identification procedures promote inequity and are responsible for the de facto segregation in gifted programming. The researcher further noted that there is a clear cultural mismatch between White teachers and their more diverse students. Ford (2014) identified a triple threat faced by minority students: social inequality, deficit thinking, and colorblindness. While these threats remain, students of color will be shut out of the areas historically reserved for White

students. Ford (2014) stated that, "underrepresentation persists because decision makers acquiesce to the status quo" (p. 149).

Students identified as ELL will remain underrepresented unless something is changed. For example, Gubbins et al. (2020) found that White children who did not receive free/reduced lunch (FRL) were overrepresented in GT. Further, while Black students and students from limited income households face racial, cultural, and economic barriers, ELL students face the additional barrier of language proficiency. Testing procedures often require that a student be English proficient prior to gaining the scores necessary for gifted identification (Siegle et al, 2016). Esquierdo et al. (2012) blamed these assessment procedures for the under-identification of bilingual students and called for a focus on how to better identify ELL students for gifted programs. Valdes (2003) wrote about expanding the definition of giftedness to include bilingual children that can translate for their parents in various contexts. If the definition of giftedness was expanded to include bilingualism, this would recognize the navigational capital of bilingual students as giftedness, moving beyond the traditional white-normed identification structures. However, bilingualism has been recognized in few school districts and is not viewed as an avenue to identify giftedness as the United States struggles with its traditional monolingualism and ethnocentrism (Ford, 2010). The problem of under-identification leads to students identified as ELL not being adequately challenged in their schools, leading to more significant gaps (Coronado & Lewis, 2017). Change to these procedures must happen to ensure a better future for students identified as ELL in gifted programming. According to Siegle et al. (2016),

> A comprehensive, inclusive system for identifying gifted students from all populations requires a holistic approach of broadened identification. In addition to using multiple criteria, consideration should be made for students with high potential who may not have the necessary background knowledge to be immediately successful with gifted services, but who can flourish if provided sufficient scaffolding. (p. 122)

Using more inclusive definitions of giftedness and more inclusive identification procedures will assist with getting more ELL students identified as gifted, but many barriers must be addressed in addition to that of identification. While many issues are affecting the identification of ELL students for gifted programs, one of the most consistent and covert issues is the ineffective measures used to identify ELL students as gifted.

Measures to Identify Giftedness

The identification measures for giftedness have contributed greatly to the issue of the underrepresentation of ELL students in gifted programs (Lohman & Gambrell, 2012; Lakin & Lohman, 2011; Naglieri & Ford, 2003). There are multiple measures available to schools to identify students as gifted. Among them are IQ test scores, standardized test scores, nationally normed criterion-based measures, and universal screeners. According to the National Association of Gifted Children (2021), IQ testing is considered an ability test and can be measured by using the Stanford Binet, Wechsler Intelligence Scale or Woodcock Johnson assessments. Standardized test scores are gained from a specific content area. State standardized tests are designed to measure a particular academic area. Nationally normed criterion-based measures, such as AIMS Web can also be a source that provides achievement data. Criterion-based measures compare a person's scores to a set standard or cut score. The set standard in this case is a national norm. Finally, a

universal screener is a test that measures ability. Examples of universal screeners can include the CogAT or Ravens Progressive Matrices (NAGC, 2021a). Although the research largely encourages the use of multiple measures be used in the identification of giftedness, this is rarely the practice followed by educators in charge of the identification process (Callahan et al., 2013).

Standardized Test Scores

Standardized test scores contribute to the issue of underrepresentation of children of color (Allen, 2017; Harris et al., 2007; Lakin & Lohman, 2011; Lohman et al., 2008; Loman & Gambrell, 2012; Naglieri & Ford, 2003; Pfeiffer & Blei, 2008; Plucker et al., 2013; Siegle et al., 2016). To do well on standardized testing, students identified as ELL must first gain English proficiency. Until students gain English proficiency their standardized test scores will not meet the required thresholds for GT identification. Costello (2017) emphasized that language proficiency and verbal skills continue to block students identified as ELL from being in gifted programming.

Non-Verbal Assessments

With this barrier in mind, Naglieri and Ford (2003) suggested that schools utilize nonverbal tests such as the Naglieri Nonverbal Ability Test (NNAT) or Ravens, as they do not require English proficiency. However, unsurprisingly, the researchers found issues with the psychometric quality of Ravens and instead recommended the NNAT as it was normed on a large sample population of 20,270 children who took the NNAT in the fall of 1995. The psychometric properties were well documented. After the research of Naglieri and Ford, several other researchers began to enter the into the discussion

surrounding nonverbal tests. Lohman and Lakin (2008) conducted a study based upon the Ravens, the NNAT, and CogAT. The researchers wanted to examine whether minority children gained more access to GT using nonverbal measures. The researchers found issues surrounding the use of Ravens (Lohman et al., 2008). They found that Ravens norms were outdated as they were based upon 1986 norms and were set too low when compared with the other two measures. In fact, the norms for Ravens were not national norms at all, but rather based upon a convenience sample of assessment scores from only a handful of schools. In addition, Lohman and Lakin found that for all three measures (Ravens, NNAT, and CogAT), norming, reliability, and identification varied widely. For these nonverbal measures, instead of being able to identify ELL students more effectively, these measures were found to be more effective with the identification of students not identified as ELL. These scholars noted that "surprisingly, nonverbal tests not only led to more classification errors but also failed to identify more English Language learners and minority students" (p. 595).

Lohman and Gambrell (2012) found that nonverbal testing measures may identify children with high fluid reasoning ability. However, there are issues with the way these tests are administered. Group administration is cheaper and more efficient, but not equitable. Instead, the researchers found that students should be tested individually and offered multiple opportunities to test. Further, they found that while these tests are often touted as culture free, there is no evidence that culture can be controlled for and eliminated from the testing process (Lohman & Gambrell, 2012). In addition to issues surrounding the administration of the test, the question of opportunity to learn comes up.

Peters et al. (2016) found that while schools tend to test grade level peers together, students' different backgrounds play a part in the process. The test and school are attempting to treat all similar aged peers as if there is not an issue of access to opportunity to learn. The researchers in this study find that the issue of access to opportunity to learn must be addressed, otherwise access to gifted programming is tied to who has the affluence, knowledge, and advocacy to get their children identified as gifted and into gifted programming.

Other Assessments for Identification

There are other assessments that may be used to aid in the identification of giftedness. One assessment is the Gifted Rating Scales (GRS). Pfeiffer and Blei (2008) stated that there is a need for additional evidence and assessments to help identify gifted students. Pfeiffer and Blei (2008) direct their readers to gifted rating scales. Pfeiffer et al. (2006) explained that the GRS is an assessment that is given that can supplement IQ testing or other identification measures. The scales include intellectual ability, academic ability, creativity, artistic talent, leadership, and motivation. These scales are rated and then given a score. The researchers noted that these scales can provide additional information to help identify children as gifted. Additionally, Scott and Delgado (2005) argued that simple cognitive tasks given in preschool can help to identify gifted students from minority subgroups. The researchers administered their nine-task assessment to 395 students in Florida and found that students who performed well on their screener later excelled in first grade. While this finding was encouraging, it is based on a small sample

size in one area of the country and researchers suggested it's usage should be used for identifying academic talent- not gifted students.

The use of multiple assessments may however lead to matrices that could represent additional hurdles for students. To meet the requirements of a matrix, students would have to have certain cutoff scores, teacher survey results, etc. prior to being assessed for giftedness (Callahan et al., 2013). For example, Callahan et al. (2013) surveyed 1,566 participants throughout the nation and found that many identified students based upon test scores, or on a portfolio complete with a nomination. In some instances, in the study, schools became bogged down with a matrix filled with multiple points and selection committees were appointed to decide whether a child was identified gifted. The researchers found little uniformity in procedures from district to district. This confusion exacerbates the inequity found in gifted programs throughout the United States.

The Achievement Gap

A discussion of how ineffective measures block students identified as ELL from gifted programming would not be complete without a review of the overall achievement gap in the United States. Erwin and Worrell (2012) proposed that the achievement gap itself is to blame for the underrepresentation of students identified as ELL in gifted programs, and these researchers do not believe that instrumentation is to blame in an environment that is readily recognizable by the achievement gaps between students of color and their White counterparts. Instead of focusing on achievement scores alone, the researchers found that the best way to get students identified as gifted is to create performance tasks and include test scores from multiple measures. Erwin and Worrell

also argued against the use of nonverbal testing and notes that is until the achievement gap is closed, equity in gifted education cannot be found.

Ineffective measures continue to be an issue for students identified as ELL who are striving to attain gifted status. While policy has become more inclusive by allowing additional pathways to being defined and identified as gifted, practices within many schools/districts continue to rely heavily on standardized test scores. Nonverbal testing, while touted as way to level the playing field does not pan out for students identified as ELL. The researchers in the field seem to agree that multiple measures are needed to help identify students for gifted programs, however, this is not what is happening. Until the status quo of accepting or rejecting students based upon test scores is challenged, students identified as ELL will continue to be underrepresented in GT programming.

The Role of Teacher Deficit View

Teacher deficit view is another issue that plagues the gifted community and affects the number of students referred for gifted services. Valencia (1997) defined deficit view as a

> theory that posits that the student who fails in school does so principally because of internal deficits or deficiencies. Such deficiencies manifest, it is alleged, in limited intellectual abilities, linguistic shortcomings, lack of motivation to learn and immoral behavior (p. 2)

This viewpoint, held by many teachers, can really impact students that are culturally, linguistically, and/or racially different from their mostly White, female teachers. This cultural mismatch often causes what was characterized as an equity trap by McKenzie and Scheurich (2004). McKenzie and Scheurich identified teacher deficit view as an equity trap for students of color. The idea held by teachers in this equity trap is that

students of color do not value education, that the students are unmotivated, low achieving, and do not know how to behave. The researchers recommended that for a leader who wants to lead diverse students successfully, the deficit view must be combatted with an asset-based view of students. Until this happens, students of color will be underrepresented in GT programs.

The lack of training for teachers regarding how to work with diverse students and how to identify gifted students of color provides an additional barrier to access to gifted identification. According to Speirs Neumeister, et al. (2007) teachers will often focus on traditional definitions of giftedness and gifted behaviors. The teachers are untrained and unable to identify how children who are culturally different from them may manifest giftedness outside of their own narrow definition of GT. The researchers in this study interviewed 27 teachers as part of a Javits grant funded project called "CLUE" or Clustering Learning Unlocks Equity. Speirs Neumeister et al. found that teachers often did not know how to identify culturally or linguistically diverse children for GT and would instead focus on work habits or behavior related issues. The researchers recommended some strong professional development options including the definition of giftedness and how giftedness may manifest in underrepresented populations. Further, the researchers believed that teacher awareness of how their referral practices affect underrepresented populations and giving teachers time for reflection regarding their own beliefs surrounding giftedness are important for teachers so that they may gain a solid understanding of GT, learn that giftedness is culturally defined, learn about multicultural education, and culturally responsive education. Speirs Neumeister et al. also noted that

teachers should immerse themselves in their communities and that more minority teachers needed to be recruited.

The issue of deficit view impeding gifted identification is exacerbated the more different a child is from their teachers. ELL students are often viewed by their teachers as deficient because they are learning English as their second language. Rather than viewing these students as emerging bilingual students, they were viewed through the lens of needing to gain English proficiency as quickly as possible so they can pass standardized tests. de Wet and Gubbins (2011) surveyed 308 teachers regarding how to service students identified as ELL in GT programs. One of statements posed to teachers for response was: "because of gaps in prior learning, gifted CLDE students do not qualify for gifted services" (p. 102). Of the teachers surveyed, 39% agreed with this statement and 23% chose neutral. Only 37% of the teachers disagreed with this basic statement regarding inclusion of ELL students into gifted education. Similarly, Allen (2017) found the same situation in their study seven years later. Allen conducted a study to review the role teacher perceptions play in the underrepresentation of students identified as ELL in GT services. The researcher conducted a qualitative study using two semi-structured interviews with six teachers. The researcher found that teachers were under the misconception that students identified as ELL cannot be identified as gifted as well. The focus of teachers was instead on the language barrier experienced by students identified as ELL and their inability to pass standardized tests in English. Teachers focused on how to remediate ELL students so that they become English proficient. Rather than

acknowledging another culture's definition of giftedness, they clung to the white norm and English centric definition and ideas of giftedness.

The deficit view of students of color in GT programming can be traced back to the white norms established for gifted identification and education. Ford and Grantham (2003) discussed the historical, outright exclusion of students of color from educational opportunity and how this has evolved into excluding children based upon standardized test scores. Using standardized test scores and ignoring children's other avenues of giftedness embodies the deficit view. The fact that children of color are often found to achieve at a lower rate on white normed standardized tests only reinforces the deficit-based view many teachers hold regarding children of color. Teacher expectations can often be lower for students that are racially or linguistically different based upon the white norming inherent gifted education. Tenenbaum and Ruck (2007) found "significant effects suggesting that teachers held more positive expectations, made more positive referrals, and fewer negative referrals, and provided more positive and neutral speech patterns for European American children" (p. 266-267). This continuation of white norming and othering that is taking place in schools across the United States leads to the continued underrepresentation of students identified as ELL in GT programming.

To recap, the deficit view can lead to an equity trap for children of color, barring them from educational opportunity. The lack of cultural awareness and training for teachers regarding how to help identify children of color as gifted is an issue. Teachers must be made to be culturally aware and relevant when they are working with their most diverse students. Further, the white norming present in the testing and referral process

makes the task of identifying students of color, particularly students identified as ELL, very difficult. While teacher deficit view in the referral process is an issue within the literature, the lack of cultural awareness and knowledge regarding the identification of students of color for GT programs is another barrier faced by students identified as ELL.

Current Knowledge Frameworks

As introduced by Ford and Grantham (2003) and Tenenbaum and Ruck (2007) in the last section of this literature review, the current knowledge frameworks for GT education center white norms. Teachers often fail to recognize, refer, or serve ELL students in gifted programs based upon this adherence to the white normed, current knowledge framework; or more simply put: the way we do things around here. Siegle et al (2016) discussed the various barriers for underrepresented populations to gain access to talent development and opportunities, stating:

> Gifted students from underserved populations may have experienced fewer opportunities to acquire the background knowledge and academic skills necessary to be recognized as gifted. They may also be demonstrating their giftedness in ways that are fundamentally different from stereotypical gifted characteristics. (p. 115)

These knowledge frameworks often provide teachers with a narrow view of what giftedness is or can be. The current knowledge frameworks allow teachers to easily identify White students based upon their learning behaviors or test scores, while providing no guidance regarding how to identify their non-White, ELL counterparts. According to Ford (2010) the "social and cultural capital (e.g., language, values, customs, and traditions) of White Americans is valued and held as normal, normative, and

standard" (p. 33). This knowledge framework excludes children of color and their contributions from the discussion of talent development or GT programming.

These current knowledge frameworks are based upon both the myth of meritocracy (McNamee & Miller, 2004) and the acculturation of students identified as ELL (Santa Ana, 2004). According to McNamee and Miller (2004), the myth of meritocracy posits that while people believe that with the *American Dream*, anyone should be able to experience social mobility based upon their innate abilities, hard work, and high moral character, this is just not the case. Instead, unequal distribution of wealth and income means different starting points for people. The researchers define *social gravity* as factors that work to keep people in their current social positions. First, comes the belief that wealth is based upon merit and hard work equals success. The researchers noted that playing by the rules actually works against people who do not have advantages starting out. The researchers discuss the statements surrounding the culture of poverty, and how deviant behavior and the inability to delay gratification is often a label that poor people must work against in addition to starting out with less advantages. Other barriers to social mobility include bad luck, discrimination, and the fact that access to better opportunity is based upon inheritance rather than merit. Also, inherent in the myth of meritocracy and important to this research study is the inheritance of social and cultural capitals by advantaged individuals and how they can use these capitals to get ahead. While ELL students and families' cultural capitals go unrecognized, their lack of the white-normed, social and cultural capitals necessary to *get ahead* are noted.

Similarly, Littler (2018) points out several problems with the myth of meritocracy. First, Littler explains that the whole system is based upon some people being at the top and some at the bottom, while positioning white upper-class norms as the standard that all should aspire to. Second, Littler points out that in meritocracy, abilities and talents are seen as innate rather than acquired. Further, meritocracy tends to ignore that the starting positions of people does play a part in their ability to be upwardly mobile. Finally, the underlying issue with meritocracy is that it extends the social injustice while simultaneously claiming that everyone has the same opportunity and access if they would just work hard enough.

In addition to the myth of meritocracy, the current knowledge frameworks are based upon the acculturation of ELL students and families into the United States school system. According to Santa Ana (2004), ELL students' language and cultures are often obliterated in an effort to Americanize them. The current knowledge frameworks used are based upon English only policies that have been part and parcel of the American public education since World War Two. These policies remain in place in Colorado, with very little access to bilingual education, and a focus on attainment of English proficiency to the exclusion of all else.

Teachers and schools often struggle with the issue of how to identify more ELL students for GT programming based on their traditional knowledge frameworks (Ford & Grantham, 2003). This struggle is evident in the study conducted by Pereira and Gentry (2013). In this phenomenological study of four Midwestern schools, the researchers interviewed 22 students, 20 parents, and 22 teachers about the experiences of ELL

students at school. Pereira and Gentry found that teachers working with high-potential ELL students in a Midwest school decided the best way to help ELL students was to treat them the same as everyone else. This ill-conceived attempt at colorblindness demonstrates a poor understanding of how to assist ELL students in general, let alone with gaining access to GT programming. This lack of access to challenging educational opportunities leads to more gaps for students identified as ELL (Coronado, & Lewis, 2017). To remedy this situation, many have turned to universal screeners. Card and Giuliano (2016) found that the persistent gap between students identified as ELL and their counterparts was based upon the inability of teachers to identify ELL students as gifted. The researchers' study found that using a universal screener instead of teacher referral helped get additional students of color identified as gifted. While this study shows an increase in identification, universal screeners have been questioned in the literature. All these problematic efforts and attempts are being made within the traditional knowledge frameworks, making it necessary to deconstruct and reconstruct the current knowledge framework (Shields, 2018).

The current knowledge frameworks do not recognize the contributions of students identified as ELL to their schools and communities. In place of the current ideas regarding giftedness, Bernal (2009) suggested that teachers' notion of giftedness must be widened to include a multicultural approach to identifying ELL students for GT programming. Bernal found that teachers would only refer the most acculturated ELL students for GT programming. The researcher believed that talent pools and the revolving door of identification were the best practices for including more ELL students in GT

services. Similarly, Valdes (2003) encouraged expanding the definition of giftedness to include students responsible for translating for their parents. The use of children's knowledge and efficiency in translation utilized by parents and the school alike is one that goes unnoticed as a valuable skill and asset. Valdes stated that until bilingualism is included to expand the definition of giftedness, it will continue to be brushed aside. The current knowledge frameworks are based upon white norms, a deficit view, and the myth of meritocracy. These knowledge frameworks do not recognize the contributions made by students identified as ELL and do not place value upon their talents, as they are outside of the white norms. Building new knowledge frameworks is necessary if all are to be included in gifted education.

As evidenced in the literature above, knowledge frameworks continue to be a barrier to identification of ELL students as gifted. The reliance on white norms as the standard for identification and teacher referral hinder students identified as ELL as they attempt to gain access to GT programming. Many studies show the problems created based upon the adherence to white normed theories of giftedness based upon intelligence testing in the form of IQ tests or standardized test. Knowledge frameworks should be modified to include more culturally relevant ideas of giftedness, including bilingualism.

Pathways to Increase Representation

In this literature review, I have described many studies that aim to increase representation of students identified as ELL in GT programs. Some research focuses specifically on the identification process for ELL students. Other research aims to use a response to intervention model to develop talent. Other research focuses on strategies to

promote better representation. The research studies highlight a common thread- the fact that underrepresentation is a problem. Most offer a solution. However, these studies have not presented a widespread solution to the underrepresentation problem.

Identification

Identifying ELL students as gifted can be problematic based upon their lack of English proficiency, lower standardized test scores, and how the teacher deficit view frames them into an area of lower expectations. To better identify ELL students as gifted these issues must be addressed. Brown and Abernathy (2009) found that changing the way students who are identified as ELL are assessed will make a difference. The researchers stated that assessments should be offered in students' native language, that they should have access to above grade level screening, and that there should be some nontraditional measures in place that grant ELL students access to GT programs. Brown and Abernathy advocated for the use of dynamic assessments as well as using work samples to help combat the language barrier in the identification process. Similarly, Harris et al. (2007) seemed to agree with the belief that assessments should be authentic in nature and include multiple criteria. The researchers developed the DISCOVER assessment, which is a nonverbal assessment that measures multiple intelligences and is read to students in their native language (Harris et al., 2007). This assessment was created as part of the Javits grant but has not been used in many studies. Harris et al. (2007) went on to provide a three-tiered approach to identifying ELL students as gifted. First, they advocate using a general screener, conducted multiple times, and using multiple sources. Following this process, a team should be formed to review students for eligibility based

upon an inclusion criterion. The team reviews the evidence and makes the determination whether to wait and see or refer students for GT services.

Most public schools use test scores to identify students for GT services. This is problematic for students identified as ELL as their test scores are often affected by their level of English proficiency. For example, Pierce et al. (2007) conducted a study based upon a model, CLUE or Clustering Learners to Unlock Equity program. This was a large study of Indianapolis Public Schools, including approximately 41,000 students. In this high poverty, struggling district the focus became on developing criteria that can be used to help identify ELL students as gifted. The first two indicators of giftedness were based upon existing test scores. The third criterion included was an assessment used to measure fluid intelligence. The final criterion was an inventory of questions for teacher and parents to fill out. The researchers found that most students identified as gifted were identified using test scores. The fluid reasoning test and the inventory accounted for only a very small percentage of students identified. During this study, teachers received a five-day training to help them learn about gifted education and the identification of students. However, regardless of this training, teachers still tended to focus on deficits rather than assets.

Identifying ELLs as gifted continues to be a challenging issue. The studies reviewed offered some possible solutions to the problem such as dynamic and authentic assessments, a proposed procedure for identification, and criteria which can be used in the identification process. While these studies provided mostly favorable results, their methods and ideas have not become widespread. To extend past the idea of identification,

other studies have focused on an RTI model designed to develop talent and help students identified as ELL to enter GT programs.

Response to Intervention Based Studies

Many studies in the literature focus on how RTI, which is traditionally used for remediation, can be used for talent development models as well. One model that is present in the literature is based upon Renzulli and Renzulli's (2010) schoolwide enrichment model (SEM). This is a model that creates two regular talent pools of all students without any qualifying criteria. From these two talent pools students are moved through to a higher talent pool if aptitude is shown. This model allows all students access to GT programming in an RTI model. Allen et al. (2016) presented SEM as a way for traditionally underserved populations to gain access to GT programming. Using enrichment clusters students are provided opportunities for GT programming and later for identification. There are three types of experiences. Type One includes exploratory experiences which are offered to all students. Type Two includes group training, with the teacher posing a real-world problem and students working to solve it. This experience is also available to all students in the school. From these two experiences, students are chosen to participate in a Type Three experience in which a small group of children investigate authentic programs to develop experience in an enrichment area. The researchers firmly believe that this model increases equity as all students are involved in the first two experiences available. The researchers were able to demonstrate a small increase in gifted identification for underserved populations over a period of five years. However, they also found that this was an expensive, time-consuming process to

maintain enrichment clusters schoolwide. In addition to these enrichment clusters, Allen et al. (2016) stated that the "foundation of Tier 1 must be on culturally responsive, high-quality curriculum and instruction that nurture's all children's capacity to learn and excel" (p. 325).

Bianco and Harris (2014) offered a strength based RTI model for helping to better serve ELL students in their school communities. They take Allen et al.'s (2016) statement about Tier 1 instruction a step further, stating that, "Tier 1, a school's core curriculum, *must* provide a culturally and linguistically responsive, high-quality curriculum and instruction that allows ELLs' gifted potential to emerge" (p. 172). Instead of focusing on providing enrichment clusters to all students as a rule, the researchers were specifically focused on students identified as ELL and their talent development. They focused on how culture, interests, native language (L1) and new language (L2), and strengths can be used to help develop talent in students identified as ELL. Through this process they have placed added emphasis on the use of L1 to support higher level thinking and focus on linguistic flexibility as a strength.

Similarly, Horn (2015) created a talent development model used with elementary schools call Young Scholars. Horn stated that talent can be developed and nurtured in underserved populations of students. The plan included four levels. The first level is where the general education teacher works with students using strategies taught by the GT teacher. The second level is for the general education teacher and the GT teacher to collaboratively present lessons to students. The third level takes place when a school committee reviews students' progress and recommends them for part time gifted services.

The final level includes a full-time placement in a GT program. Following the implementation of this program the numbers of students identified as gifted increased dramatically. The findings for this study included an overall increase in all GT students from 3,398 in 2000 to 19,157 in 2014. Underrepresented populations of students also experienced a dramatic increase. Black student representation went from 76 students in 2000 to 928 students in 2014, Latinx representation went from 66 students in 2000 to 1,419 in 2014, and multiracial representation jumped from 95 in 2000 to 1,222 in 2014. These results are encouraging.

An RTI model approach may offer solutions to the underrepresentation of students identified as ELL in GT programs. The SEM model, the strength based RTI model, and the Young Scholars model all offer possible avenues to increase representation for students identified as ELL. While these studies highlight some possible solutions, there is other literature that offer more strategies.

Strategies to Increase Representation

While identification procedures and RTI models may offer partial solutions to the issue of underrepresentation, other strategies can be found in the literature as well. Ecker-Lyster and Niileksela (2017) advocated for using multicultural education, mentoring, and noncognitive skill development to increase representation. The researchers stated that culturally responsive teaching must be used to reach all kids and that they need to develop this model in the gifted spaces. The researchers found that mentors can be paired with underachieving gifted students to help them focus on their strengths. Finally, they focused on noncognitive factors such as grit, motivation, and persistence as ways to help

overcome barriers and provide access to GT programs for underserved students. Similarly, Lockhart and Mun (2020) found that to increase identification of underserved students in GT programs, families should be involved in the process. While the researchers acknowledged that many teachers hold a deficit view of culturally and linguistically different students, this can be remedied by training teachers in culturally responsive teaching. Lockhart and Mun stated that through the use culturally responsive teaching, students identified as ELL will have better access to GT programming.

Many strategies have been suggested and used to help mediate the issue of lack of ELL representation in GT programs. It is important to note that researchers have been spending time and effort trying to find remedies to the current issues. However, their efforts and findings have gone mostly unheeded, as many schools continue the status quo when identifying and serving students in GT programming.

An Asset Based Conceptual Framework

The combination of ineffective measures, the deficit view, and white-normed knowledge frameworks have resulted in the underrepresentation of students identified as ELL in GT programs. While researchers have been attempting to address this issue, their efforts have only been effective on a small scale. The need for an upheaval of current practices and frameworks remains. I propose an asset-based conceptual framework that combines community cultural wealth (Yosso, 2005) and funds of knowledge (Moll et al, 1992) to change the narrative regarding ELL students in GT programming.

Community Cultural Wealth

Community cultural wealth is a framework proposed by Yosso (2005). This framework presents a critical counternarrative to the traditional definition of capital provided by Bourdieu and Passerson (1970). Bourdieu and Passerson (1970) explained that capital is based upon the dominant culture. While their position was that dominant groups determine the capital, it has led to the assumption that many groups are deprived of capital and need to learn the capital of the dominant culture to advance. This gives way to a deficit-based view that people lack capital and need to be filled up using the banking method of education (Freire, 1970). According to Freire (1970), the banking method of education views the student as a passive vessel waiting to be filled up with the teacher's ideas, beliefs, and culture.

Yosso (2005) challenged this traditional definition of capital as it positions a white-normed version of capital and leaves no room for communities of color and their forms of capital. The goal of community cultural wealth is to start surfacing the capitals of communities of color that go unrecognized in the dominant narrative. In this theoretical framework, six forms of capital are named and explained. The types of capital are aspirational, linguistic, navigational, social, familial, and resistant. Aspirational capital refers to maintaining hopes and dreams for the future despite barriers. Linguistic capital discusses the skills obtained by being bilingual, improved communication skills, and can include traditional storytelling. Navigational capital is explained as the skills obtained by maneuvering through areas that have historically excluded people of color. This pairs well with the idea of resistant capital, which refers to developing skills that

challenge the dominant narrative and inequality. The last two forms of capital, familial and social capital, also tend to be paired together in further research studies. Familial capital is the cultural knowledge held by families and extended families that carry the history, memory, and culture of the group. Social capital refers to the extended network of community and resources that can be gained by being part of that community. Instead of viewing communities of color as deficient in the areas of dominant capitals, Yosso's (2005) framework provides a powerful counternarrative.

Community cultural wealth has been used in multiple research studies that aim to surface communities of color's cultural wealth. Researchers have used community cultural wealth to highlight the different forms of capital from the parent perspective, from the student perspective, and from the teacher perspective. I will review these studies in more depth below.

Various studies in the literature help present community cultural wealth regarding the parent perspective. For example, Guzman et al (2018) cited Yosso (2005) for providing them with a culturally rich definition of capital. These researchers conducted a qualitative study using focus groups that included 22 parents of Latino students who were asked about how they help their children succeed. The researchers found all six forms of capital from community cultural wealth were present in their study. They found that parents held high aspirations for their children, wanting their children to have all opportunities available. Parents understood that home language must be maintained as bilingualism is an important skill that will be useful in their children's futures. These researchers paired familial and social capitals together as they surfaced the intricate

networks available with the families and communities. Finally, the authors found that parents possessed navigational and resistance capitals as they negotiated sometimes hostile school environments and advocated for their children.

Lopez-Robertson (2017) conducted a study that used community cultural wealth to highlight the parent perspective. The researcher worked with four Latinx mothers to present Latino children's literature. Through this process the researcher was able to interview each mother several times, building *confianza* between them. The researcher found that these mothers demonstrated all six forms of capital. The mothers showed aspirational capital as they discussed extra enrichment classes for their children, regardless of whether they were able to afford these classes. The mothers demonstrated familial capital by helping each other out during hostile encounters in the community. Both linguistic and social capital were found in this study when the mothers used the power of languages to avoid scams and then helped the rest of community by spreading the word. Finally, the Latinx mothers demonstrated navigational and resistance capital when they were advocating for their children and trying to preserve their home languages regardless of the messages they were receiving from the school. Lopez-Robertson worked extensively with these mothers during this study and provides a rich view of community cultural wealth from a parent perspective.

Examples of studies where the authors utilized community cultural wealth from a student perspective included the work of DiNicolo et al. (2015) and Salisbury (2020). DiNicolo et al. (2015) utilized community cultural wealth as their theoretical framework in a study of third grade students in a bilingual classroom. The researchers directed the

students to create *testimonios*. *Testimonios* are powerful collective narratives that provide a counternarrative. The researchers found several of the forms of capital present in these testimonios. The testimonios included aspirational capital, linguistic capital, and navigational capital. Aspirational capital was found when students discussed learning English and being bilingual in the future. Linguistic capital was found in students' ability to translate for their families. Navigational capital was found as students were navigating the school space. The researchers found that connecting students' forms of capital to the school environment should be explicitly taught as their forms of capital are traditionally excluded from the narrative. Salisbury (2020) used community cultural wealth to help students combat the dominant view of school leadership during a youth participatory (YPAR) study. Salisbury worked with two groups of students to help them use their forms of capital to help develop a parent night for ELL students and to create a code of conduct for teachers working with diverse populations. Through this study, students identified and developed all six forms of capital. They discussed aspirational capital and how they wished to increase opportunities for their younger siblings. They used familial capital to draw on the community experiences to help make changes. The students used linguistic capital to ensure that Spanish versions of the fliers promoting family night were available throughout the community. Students demonstrated social capital when they worked within their YPAR group and with the school to develop their potential. Students developed their navigational capital and resistant capital by pushing for change and serving as interpreters at the family night. They recognized their ability to make changes by drawing on their community cultural wealth. These two studies highlight some

different ways community cultural wealth has been used by researchers to explore the student perspective.

The literature on this topic also includes studies that highlight the teacher perspective of community cultural wealth. For example, Zoch and He (2019) used community cultural wealth in the preparation and teaching of a teacher preparation course. The assignments were used as a data source as well as interviews with the pre-service teachers. The researchers worked hard to make assignments that would help teachers realize the capitals of community cultural wealth. They require reading dialogues, stories from their own home lives, a learning from the community project, and a language exchange project. The learning from the community project required teachers to go into the community and learn about one of the most popular community places and then visit that place a minimum of three times. The language exchange project required teachers to try to learn as much of the home language of a student they were teaching as possible in the duration of the course. These requirements made teachers begin to challenge their assumptions and recognize other forms of capital. The most readily recognizable forms of capital for teachers were linguistic, familial, aspirational, and social capital. It was harder for them to recognize and identify navigational and resistant capital as they did not have long term relationships with the community and those capitals tend to surface more once *confianza* is built.

Liou et al (2015) conducted a study that discusses community cultural wealth from both a teacher and student perspective. The study was developed to build capacity for teachers to become critical mentors for failing high school students. The researchers

were able to identify aspirational capital for students regardless of grades or failing/passing status. However, teachers were often found to lower their expectations for the same children exhibiting this aspirational capital. A powerful quote from a student that demonstrated aspirational capital was, "Teachers often like to help those who are already doing well in school, and not even notice people like me do exists in their classroom…I have goals in life too and I only wished my teachers could see that" (p. 118). This quote showcased the need for teachers to understand the aspirational capital of their students regardless of failing grades and help them develop the navigational capital to realize their dreams of higher achievement and better access to college. This study used community cultural wealth to highlight the disconnect between the traditional forms of capital and how important it is for community cultural wealth to be recognized by teachers working with diverse students.

Community cultural wealth has been used in the literature often to categorize findings or discuss how capital can be identified once the data has been collected. In my study, I plan to use it in a similar way. I will gather my interview information and then use community cultural wealth to help code the data in my study. This will be discussed in more detail in the methods section below. For now, we will turn to Funds o Knowledge (Moll et al., 1992) and how it will readily combine with community cultural wealth to help form the analytical framework for this study.

Funds of Knowledge

Funds of knowledge was developed as an anthropological theory that has been utilized in the educational context in research studies. Funds of knowledge first appeared

in the literature in in 1992. According to Moll et al. (1992), its purpose was to "develop innovations in teaching that draw upon knowledge and skills found in local households" (p.132). The researchers planned to work with teachers to complete home visits and to use that information to transform classroom practices. Moll et al, defined funds of knowledge "to refer to these historically accumulated and culturally developed bodies of knowledge and skills essential for household or individual functioning and well-being" (p. 133). The goal of this study was for teachers to become the learners and learn about their students in a way that went beyond stereotypes. The researchers worked with teachers to conduct home visits to see how families have developed social networks independent of the schools, and how schools have become isolated from the student populations they serve.

Following this study, Gonzalez et al. (2005) continued the research on funds of knowledge. The researchers continue to believe that home visits are an effective method for bridging the gap between home and schools. They believe that *confianza* can be built if teachers visit their students' homes in the role of learner rather than student. So often, teachers who work with diverse children have developed a deficit view as the educational system has stripped away acknowledgement of the assets held by minority children. The researchers' goal was offer teachers a platform to analyze their teaching through the lens of funds of knowledge and transform teaching in positive ways. The model provided by funds of knowledge transforms the power dynamics between teachers and students/families because the teacher becomes the learner, working with families to develop their ideas. This study was qualitative in nature, working with four teachers,

forming after school study groups to work on using knowledge gained from home visits to transform pedagogy. The use of after school labs helped to define the transformative effects of funds of knowledge. Funds of knowledge shifts how culture is defined, from a narrow, white-normed version to a more open definition. This theory also debunks the idea that minority households are lacking in knowledge and experiences, and it helps to redefine teachers as thinkers and practitioners. Gonzalez et al, added to the definition of funds of knowledge, stating, "Funds of knowledge refers to those historically developed and accumulated strategies (skills, abilities, ideas, practices) or bodies of knowledge that are essential to a household's functioning and well-being" (p. 446-447). Funds of knowledge is an asset-based framework that focuses on how families' cultural knowledge can contribute to the classroom.

Funds of knowledge has been utilized by many researchers in their studies regarding culture and education. Several studies address funds of knowledge and how it can be used to breakdown the hierarchical systems in education. Other studies highlight how funds of knowledge exposes the cultural richness of minority households and how that can be used in counternarratives.

Coles-Richie et al (2015) examined how minoritized children can express their funds of knowledge through a photography project. Students were allowed to borrow cameras and take photos of the most important things in their households. In this study teacher deficit views and assumptions were exposed and examined. Teachers were found to have a narrow view of minority children and their families. Through these photographs and discussions, teachers took on the role of learners and students got the opportunity to

share their cultures at the school. This study showed how use of funds of knowledge can help transform the deficit view held by the teachers to an asset-based view, which challenges the existing narrative.

Conteh and Riasat (2014) studied a complementary, bilingual Saturday school in northern England. The teachers worked with students to help them learn in their home languages. Teachers in England were struggling with an influx of refugee learners and researchers believed that complementary schools provided an answer. Like the United States, English educators were concerned about testing and were consumed by "external, monlingualising assessment regimes" (p. 619). The complementary school gave the students and families the chance to utilize their funds of knowledge and preserve their home languages. This structure, while outside of the traditional school system, allowed for students to experience their own culture and language in a meaningful way.

Whyte and Karabon (2016) used the funds of knowledge framework to help structure and use home visits to place teachers in the role of learner. This study took place in pre-K classrooms. Teachers were asked to become researchers by developing protocols and completing home visits. While teachers all expressed the desire to adopt an asset view of all their families, there were several stumbling blocks that presented barriers. First, teachers must be able to shift their role from teacher to learner. Often this is hard for both the teacher and the families as traditional power dynamics dictate that teachers are there to teach and not learn. Further, teachers must be aware of their own intersectionality and biases and be willing to be reflective during their research. Finally,

both parties ended up mostly uncomfortable in the process as it was a novel experience for both.

Funds of knowledge has also been used by researchers to expose the cultural richness of minority communities and counter the deficit narrative. Hedges (2015) found in the researcher's study of funds of knowledge in early education classrooms that teachers must work hard to recognize where children are coming from in a changing, global world. The researcher worked with teachers to help them understand and reflect upon their conversations with young children. This case study took place in New Zealand, with a population of Chinese ELL students and their ECE teachers. The finding in this study was that funds of knowledge is a useful frame for learning about children, their families, and communities. The researchers stated that, "the construct of funds of knowledge was founded on credit-based views of families to counteract previous deficit thinking and consequent dominant culture approaches to education" (p. 91).

Kiyama (2010, 2011) used funds of knowledge to showcase the cultural richness and support for education that is present in the Mexican American community. The researcher conducted a qualitative study, using funds of knowledge as a framework to challenge educational stereotypes about Mexican families. In the 2010 study, Kiyama interviewed 27 parents who were part of a parent outreach center designed to help them get their children college ready. In addition to the interviews, the researcher also completed case studies and oral histories of six of the families. Kiyama (2010) found that the Mexican parents placed a high value on education and family influence was positive in nature. Families constructed their knowledge of colleges in non-traditional ways that

led to some gaps in knowledge, making it more difficult to obtain access to college. The researcher also found that parents lacked knowledge about how to finance college and where to go to college. In 2011, Kiyama conducted a study based upon a multiple case study design of the same participants. In this 2011 study Kiyama found that funds of knowledge is a process that incorporates resources, interests, and values of families to create a meaningful learning environment. The researcher found that families that had any pre-existing knowledge of the college process were positioned for better access to higher education. The use of funds of knowledge allowed the parents to help build their capacity to assist their children in gaining access to higher education.

Sebolt (2018) used funds of knowledge to help redefine parental involvement in the school. The traditional forms of parental involvement, conferences, parent nights, and volunteering are often not practiced by minority families, which can lead to a deficit view of them by school personnel. The researcher emphasized that other types of parental involvement are just as relevant but go unrecognized by the school, including teaching children manners, respect, giving *consejos*, attending church, etc. Funds of knowledge can be used to help invite parents to the school to share their skills. This is a more meaningful way to involve parents rather than the more traditional models often used by schools. By expanding the definition of parental involvement, Sebolt challenges the deficit views held by schools that believe parents are uninvolved due to their lack of attendance at school events.

Funds of knowledge proposes utilizing the knowledge and culture of diverse families to transform the traditional educational structure. As a teacher takes on a role of

learner, their lens is widened to include the ways of knowing and being that take place outside of the dominant narrative. The use of this knowledge is crucial to forge a connection between diverse students and their teachers. Funds of knowledge will be used in the conceptual framework to center families' funds of knowledge in the data gathering analysis process by providing teachers involved the study, a view into diverse families' funds of knowledge. Both funds of knowledge and community cultural wealth will be used to help code data and will also be used to help educate teachers in the present study, building their capacity to help ELL students gain access to GT.

Chapter Summary

This review of the literature above provides an overview of the current definitions of giftedness and the underrepresentation of culturally and linguistically diverse students in gifted programs. Students identified as ELL are subject to ineffective assessment measures, teacher deficit view, and white-normed frameworks that all contribute to their under-representation in GT programs. While some researchers have attempted to address this problem, the findings have not met with widespread acceptance or adoption, and the issue of under-representation remains. In addition, I have presented an asset-based conceptual framework combining community cultural wealth (Yosso, 2005) and funds of knowledge (Moll et al, 1992) that will be used in the current study. In the methods section, will further outline how the conceptual framework will be used as both a theoretical and analytical framework for this study. The gap in the literature that I will address with my study is that of how underlying beliefs regarding giftedness and the definition of giftedness influences teachers' referral of underrepresented students to GT

programming. Combining this issue with stakeholder input during the creation of the problem of practice, I will develop change ideas to run this improvement science study.

Chapter 3: Methodology

The purpose of this study was to engage in a cycle of improvement aimed at helping to identify ELL students for GT programming at the elementary level. Using improvement science, I attempted to improve access to GT programming for ELL students. The following research question guided the study: How can more inclusive definitions of giftedness be developed to provide ELL students better access to GT programming at Mountain View Elementary School?

In this chapter, I open with the problem of practice. Then, I present my methodology of improvement science and describe the principles of improvement science. The conceptual framework is reviewed, and the research site background presented. I explain my sampling techniques and inclusion criteria for participants to be part of the study. Following that, the research design is presented. Finally, I review the limitations of the study and the IRB process for the study.

Problem of Practice

The problem of practice is one that has been a persistent presence in the literature reviewed regarding giftedness. Researchers have consistently attempted to address this problem as outlined in the literature review. However, the problem of underrepresentation remains. For this study, the problem of practice is the underrepresentation of students identified as ELL in GT programs at an elementary school in western Colorado.

Improvement Science

This was an improvement science study. While quantitative results, such as the information from the Plan-Do-Study-Act (PDSA) forms provided part of the results, most of the results were based upon qualitative data collection methods, such as interviews, observations, and document reviews. This approach allowed for a more complete view of the problem of practice, the cycle of improvement, study findings, and conclusions. Data gathered solely from quantitative measure often leaves out a large part of the story (Merriam et al., 2016). I addressed this limitation by providing both the qualitative and quantitative parts of the study. Improvement science was chosen as the approach for this study as it allows for stakeholder input and focuses on a continuous cycle of improvement (Bryk et al., 2017). By using improvement science, a practitioner can make changes within their sphere of influence (Bryk et al., 2017).

While this study focused on one elementary school within a mid-sized mountain district, the findings could be used throughout the district to begin improvement efforts in this area at other schools in the district. This research could possibly lead to systems change within the district. This process is referred to as a developmental continuum for reliable change, created by Bryk, et al. (2017). This study is being performed from a critical lens which allowed me to focus on what elements of race, language, and culture may be working against the process of getting ELL students identified as GT (Esquierdo & Arreguin-Anderson, 2012; Ford, 2014; Lakin & Lohman, 2011; Lohman et al., 2008; Plucker et al, 2013). It is through this critical lens that equity can be analyzed and achieved.

Principles of Improvement Science

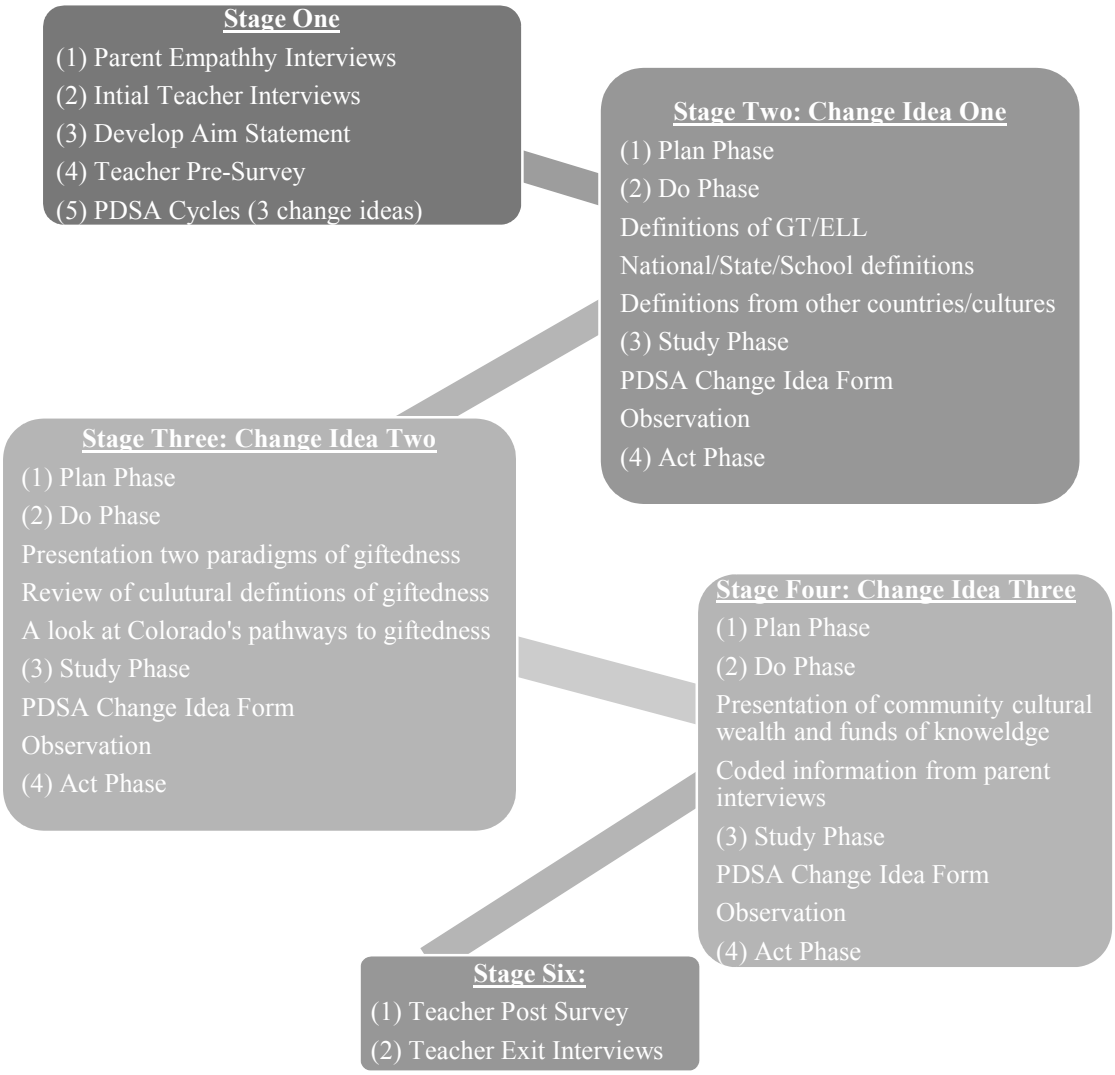
To begin this study, I presented a statement of the data to stakeholders so that we could develop the problem of practice and develop an aim statement. The data statement was*: In Colorado, ELL students make up 14.3% of all students, while making up only 1.8% of the GT population* (CDE, 2021c). I then attended to variability by reviewing the context of the school environment, including demographics, ELL representation, GT representation, and the intersectionality between ELL and GT identities. I also reviewed what is working for whom. I shared the results of my empathy interviews with parents. Following that, I presented the barriers listed in my literature review to the stakeholders. The barriers I focused on are the measures used for GT identification, the deficit view faced by students identified as ELL, and how current knowledge frameworks often exclude ELL students from the GT narrative. From there, I guided the stakeholders in seeing the system. Seeing the system refers to seeing the different parts of the system and how they work well together or, do not work well together. This refers to how the stakeholders see the system that created the problem and their part in it. The stakeholders and I conducted a root-cause analysis, including both a fishbone diagram and the Five Why's protocol (Bryk at al., 2017).

Once these improvement science tools were utilized, the teachers and I selected a unit of measurement. To select a unit of measurement, the teachers and I created a driver diagram, held a group discussion, then selected a driver to focus on from the diagram. This led to the development of an aim statement that guided the planning throughout the rest of the study. Following the development of an aim statement, I created three mini-

lessons based upon my interviews and literature review to share with stakeholders. After each mini-lesson, I had the teachers complete a PDSA cycle form to indicate what they have gained from the information presented. After each PDSA cycle, I adjusted my instruction to better meet the needs of stakeholders. Finally, I included stakeholders in the sharing of results with the school leader, district leaders, and superintendent. Through this networking move, the stakeholders were empowered to share their experiences, knowledge and capacity while providing information to the school and district leadership. This is represented by Figure 2 below:

Figure 1

The Improvement Science Model (Bryk et al., 2017)



Conceptual Framework

The conceptual framework for this research was a combination of funds of knowledge (Moll et al., 1992) and community cultural wealth (Yosso, 2005). These two frameworks provided stakeholders with an asset-based lens during this research study.

The framework was used to help design the study to deconstruct and reconstruct frameworks of knowledge during the PDSA process (Shields, 2018). The frameworks were combined using community cultural wealth's six forms of capital and funds of knowledge to capture all the ways that diverse families could contribute to their child's education if given the chance. The data for this study was viewed first through the lens of community cultural wealth to see where data would fit, and then through the funds of knowledge framework to capture any other data that could be viewed through that lens.

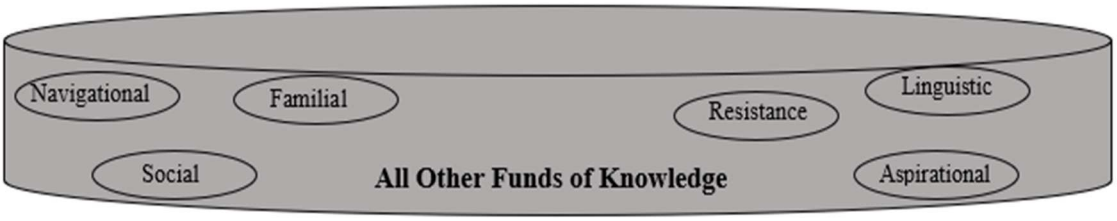
This study focused on building teachers' capacity to identify ELL students as gifted and talented, as well as help to teachers have an asset-based view of students identified as ELL through the deconstruction and reconstruction of knowledge frameworks regarding their definitions of giftedness. Using these frameworks, I created a more asset-based view of ELL students, as well as working with teachers to create a better understanding of the system for identification of ELL students as gifted.

I used the community cultural wealth (Yosso, 2005) and funds of knowledge (Moll et al, 1992) frameworks to construct the interview questions and as an analytical lens to analyze the data from the empathy interviews during the coding process. Prior to the PDSA process I categorized the data into the six forms of community cultural wealth and funds of knowledge of Mexican and Guatemalan families. During the PDSA process, I taught the participants about community cultural wealth and funds of knowledge. Then I shared with them the categorized data from empathy interviews. This allowed participants to connect the capitals and funds of knowledge to the families they work with every day. These two frameworks line up well in that they help provide the teacher as a

researcher with an asset-based view of students identified as ELL. In community cultural wealth framework, Yosso's (2005) six forms of capital encapsulate most of the information and data analyzed throughout the study, while the funds of knowledge (Moll et al, 1992) part of the framework served as a catchall for any additional cultural information that does not fit with the six forms of capital. This can be represented by Figure 2 below:

Figure 2

Community Cultural Wealth and Funds of Knowledge



The two frameworks combine and create a way to view families through an asset-based lens. Funds of knowledge highlights the background knowledge that students and their families bring from their communities. Community cultural wealth emphasizes how this knowledge can be turned into capitals that can be recognized as valuable.

Research Site Background

Mountain View Elementary is a one of 35 mid-sized elementary schools in an urban district serving approximately 11,000 students, located in the Rocky Mountain West (CDE, 2021). Mountain View Elementary's mission statement (Keller, 2021) is that: "We dare to empower the whole student to profoundly impact our world" (para 2). The vision statement of the school is that: "We are a dynamic, collaborative community

of energized educators, engaged students, and supportive partners with a passion for continuous learning" (para 3).

This school currently serves 334 students. During the 2021-2022 school year, this school has witnessed a decline in enrollment for the entire district as parents chose to move their children to other districts during the pandemic due to this school district's lack of accountability to the community. District decisions to open and close school, while not providing a true online option for families and schools, led to parents moving their children out of the district. Many parents, upset by the mask mandates and on-again off-again online learning options decided to move their children to other districts where there is not a mask mandate or to homeschool. As such, Mountain View suffered a drop in enrollment going from 378 to 334 for the 2020-21 school year. As of the 2021-2022 school year, the students enrolled at Mountain View are: 1.7% Asian, 44.15% White, 6.91% Black, 41.49% Latinx, 5.05% two or more races, and 0.01% Hawaiian and Pacific Islander or American Indian (CDE, 2021c). Of these students, 57.45% qualify for Free and Reduced Lunch (FRL), 3.19% are GT, and 11.7% are ELL.

The current ELL population is mostly Latinx, with a large population of Guatemalan and Mexican students. The current GT population is below the 7.33% state average (NAGC, 2021b). The GT population at Mountain View is comprised of 31 students. These 31 students include students who have officially been identified and students who are part of the talent pool. Of the 31 students, five of them were identified as ELLs, but have since achieved monitor status, meaning they no longer receive ELL services.

Population and Sampling

There were two populations sampled for this study, the parents of gifted ELL students and the teachers of Mountain View Elementary. The first population sampled were the parents of students identified as both ELL and gifted from Mountain View. The second population sampled were teachers involved in working with students identified as ELL at Mountain View. The inclusion criteria for the study were separated into inclusion criteria for each population to be sampled. There were inclusion criteria for parents of gifted ELL children. There were inclusion criteria for the teachers at Mountain View Elementary. The inclusion criteria process was an important part of the improvement science model because it effectively narrows the population to participants that can answer the research question (Merriam et al., 2016).

Parent Population and Sampling

The population for this study included parents of ELLs and teachers from Mountain View Elementary School. I used purposive sampling to engage with the stakeholders that were best able to provide information regarding the problem of practice (Merriam et al., 2016). Four of the five parents of ELL students identified as gifted and talented were interviewed. The sample of parents was based upon the parent inclusion criteria below.

Parent Inclusion Criteria

The parent inclusion criteria were designed to gather participants who would provide information regarding the parent of ELLs experience. The parent inclusion criteria were as follows:

a. Parents will have had their child(ren) at the school for at least one year.
b. Parents will have children who have been tested for English proficiency.
c. Parents will have a child who has been identified gifted or is receiving gifted services.
d. Parents will be willing to talk with the researcher through an interpreter.

This inclusion criteria were developed to help gather a sample of parents who could provide pertinent information for this study.

Teacher Population and Sampling

I utilized purposive sampling for the teacher population. The sample selected to participate in the study were stakeholders that work with students identified as ELL as well as students identified as gifted. The teachers interviewed were the ELL teacher, a GT teacher, and five general education teachers. These seven teachers were interviewed and were stakeholders in the improvement science PDSA cycles. The sample was based upon the inclusion criteria outlined below.

Teacher Inclusion Criteria

The teacher inclusion criteria were designed to select teacher participants as stakeholders that could provide important information to the study, while also benefiting from the improvement science process. The inclusion criteria for teachers were as follows:

a. Teachers will have at least one year teaching experience.
b. Teachers will be based at Mountain View Elementary.
c. Teachers will be from kindergarten to fifth grade.

d. Teachers will commit to meet four times during the study.

These criteria were able to include teacher participants who were able to provide valuable information to the improvement science process.

Empathy Interviews

Empathy interviews were used to help build background and begin addressing the research question: How can more inclusive definitions of giftedness be developed to provide ELL students better access to GT programming at Mountain View Elementary School? Two types of empathy interviews were held. The first round of empathy interviews included parents of ELLs. Parents of ELLs were interviewed regarding their knowledge of GT programming, their funds of knowledge, and how their community cultural wealth can be used to inform this process. The second round of empathy interviews included teachers and their insights into the current system regarding ELLs in GT programming.

I obtained informed consent for the empathy interviews and gained permission to record them (See Appendix A). I utilized an interpreter for these interviews as the parents are native Spanish speakers, and the I only speak some conversational Spanish. The interviews were 30-minute long, semi-structured interviews and utilized a protocol to facilitate the interview (See Appendix C). The interviews were transcribed using a program called gotranscript.com. The researcher kept all files confidential.

Protocol for Parent Empathy Interviews

The protocol for the empathy interviews addressed three areas. First, the questions tapped into parents' funds of knowledge. Then, the protocol addressed parts of the

framework of community cultural wealth including aspirational, navigational, linguistic, familial, resistance, and social forms of capital. Finally, the protocol was designed to gather general information regarding their knowledge and experiences with GT.

Funds of Knowledge Questions

Funds of knowledge questions were designed to gather information from the families' cultural norms and backgrounds. The questions asked were: How do you define giftedness?

How is giftedness defined/treated in your community? Is there anything in your culture that is valued as gifted that is not recognized here in the U.S.? In (country of origin) how does the school and community help gifted children? What opportunities are available?

Community Cultural Wealth Questions

The questions for community cultural wealth were designed to gather information from the families regarding their different forms of cultural capital. The question used were: Your child has been identified as gifted, is there anyone else in your family that you also consider to be gifted? Tell me what you know about our gifted and talented program at Mountain View Elementary? (How did you find out about it? Did anyone help you?) Do you think being bilingual has helped your child to be identified GT? Do you think knowing two or three languages should be a way for children to be identified as GT? How do you and your family support your child with their giftedness at home? Tell me about any gifted and talented opportunities you have found for your child outside of school? (How did you find out about it? Have you had any challenges in getting access to

them?) How do you think being identified gifted will help your child in the future? What hopes and dreams do they have?

General Experiences with GT

The general experiences questions were designed to gather information for use in the PDSA cycles to help better inform teachers of ELL families experiences in dealing with the GT program at the school. The question utilized were: Can you tell me what positive experiences you have had with the gifted and talented program? Can you tell me about any challenges you have had with the gifted and talented program? How can we better support your child in the school GT programs? What other opportunities in GT would help your child? (Art, science, language) Any recommendations?

This protocol was developed and piloted using a test protocol with a critical friend to determine whether the questions created were sufficient to gather data to answer the research question. During the process it was noted that several of the questions may gather information in multiple categories. The placement of the questions into sections based upon funds of knowledge, community cultural wealth and general experiences with GT programming were a decision made based upon which category each question fits best or most.

Protocol for Teacher Empathy Interviews

The second set of empathy interviews were with teachers. The teachers included were five grade level teachers (between grades K-5), a GT teacher, and the ELL teacher. These interviews were used to gather background information from teachers regarding their knowledge of the intersectionality of ELL and GT. The questions asked were: How

do you define giftedness? Can you tell me about your knowledge of the GT program at Mountain View? Can you tell me about your knowledge of GT identification at Mountain View? Can you tell me about what you know about ELL students in GT at Mountain View? Can you tell me about any situations where you have had students that were both ELL and GT? Have you ever had to advocate for your ELL students to have access to GT? What are your thoughts about ELL students being identified as GT? How can we better support you with ELL students with regard to GT? Any recommendations? This protocol was also developed and piloted using a critical friend prior to using them in the study. These questions were designed to determine teacher's level of knowledge prior to and after participating in the study.

I obtained informed consent for the interview process with teachers as well (See Appendix B). Teachers' identities were kept anonymous using pseudonyms. The protocol for these interviews focused on teacher knowledge regarding ELL students and GT identification as well as teachers' beliefs and perceptions of giftedness (See Appendix D). These interviews were 30-minute, semi-structured interviews that were recorded and transcribed. The transcriptions were kept for the duration of the study and used in the data analysis portion of the study.

The purpose of empathy interviews was to gather information to inform the improvement science process. The parent empathy interviews were used to inform the root cause analysis and driver diagram process. The teacher empathy interviews were used to gather background knowledge of teachers as to the problem of practice and the intersection of English Language Learners and gifted and talented programs in general to

help inform the improvement science process. These data were coded using the coding cycles described in the next section.

Coding Cycles

The interviews were coded manually, moving from open, emergent codes to an a priori coding, closed coding structure. I used descriptive coding for the first cycle of coding, looking for emerging codes. I then used axial coding for the second cycle of coding to help organize the codes using parts of the conceptual framework (Saldaña, 2012). Between cycle one and cycle two, I used code mapping to assist in the process (see Appendix E). According to Saldaña (2012), descriptive coding is a method used by newer qualitative researchers that identifies similarities in the data using a noun or short phrase. Following descriptive coding, axial coding allowed me to review the codes and see where they could be combined or refined into categories. The in between cycle process allows the researcher to work with the codes prior to a *re-coding* of the data (Saldaña, 2012). These codes were also the basis for the findings and recommendations in this study.

PDSA Meetings

PDSA stands for Plan-Do-Study-Act (Bryk et al., 2017). The PDSA cycles in this study were based upon the information presented at each meeting. I planned for each meeting using the information gathered to effectively inform stakeholders regarding the problem of practice. Following each informational meeting and subsequent discussion, I gathered the stakeholder input for the study and act portions of the PDSA.

PDSA meetings took place in two separate sessions. The first took place on March 17, 2022 and consisted of the root cause analysis portion of the study. The purpose of the first meeting was to conduct a root cause analysis using a fishbone diagram and Five Whys Protocol (Bryk et al., 2017). From this information, the teachers and I created a driver diagram and chose a driver to address based upon stakeholder interest and input. I worked with the stakeholders to complete the root cause analysis and then helped them choose a driver based upon what they thought could assist in solving the problem of practice. From this driver we created an aim statement. During this session, the researcher also asked each participant to begin their individual construct regarding giftedness. The second session was a one-day session, on April 2, 2022 and consisted of the PDSA cycles addressing Change Idea One, Two, and Three. The meetings were recorded, after gaining consent of participants (see Appendix I). The second, third and fourth meetings included mini lessons given by the researcher, a discussion period to digest information and offer insights, and a PDSA exit ticket, which allowed participants to note their learning points, offer recommendations, and rate their learning regarding their definitions and beliefs surrounding giftedness (see Appendix J). The fourth meeting also offered an opportunity for group closure on the topic and time and space for discussion of learning during this process. During the fourth meeting, teachers completed their individual construct of giftedness that they started during the first informational meeting.

Root Cause Analysis Meeting

This first meeting took place on March 17, 2022. A root cause analysis protocol is one that is used to determine what the underlying causes to a problem of practice may

be. During this meeting, I shared the problem of practice, the resulting themes from the coding, and the statistic that while ELL students make up 14.3% of students in Colorado, they represent only 1.8% of the GT population. In addition, I shared the school level statistics as well. At the school level, only 31 students are identified as gifted or talented and receiving GT services. Of those students there are five students formerly identified as ELL who are on monitor status, meaning they have tested English proficient. Using this information, I worked with the team to complete a fishbone diagram (see Appendix F) and the Five Why's protocol (See Appendix G) and to diagnose the root causes for the problem of practice. Then we reviewed the data collected and the analysis of the root causes of the problem, created a driver diagram and identified which driver the teachers viewed as the most important to address (see Appendix H). Once the driver was identified, we created an aim statement as a guide for the subsequent meetings. The aim statement developed was: Through our work of looking at definitions and beliefs surrounding giftedness in the United States and other countries, 100% of us will be able to add to our current knowledge frameworks. Using this aim statement, I created three informational sessions to educate teachers on the aspects they have identified that they believe have created the problem of practice.

Informational Meetings

The additional meetings held in this study included a quick review of the topic and how it related to the selected driver and aim statement. The meeting included a 30-minute presentation of the research on the change idea, followed by a 30-minute discussion period to create buy-in. Participants were asked to fill out a PDSA exit ticket

that included a way to document learning, and an opportunity to give feedback, make recommendations, or ask questions. It also allowed participants to rate the topics and whether they felt they learned from the information presented. The last session included a 15 minute debrief session, which allowed teachers time to discuss and reflect upon their learning during this process and gave them time to complete and add to their constructs of giftedness. Three change ideas drawn from the literature review were addressed in the informational meetings.

Change Ideas

Change ideas are at the heart of improvement science. The efforts at intervening are built around the change ideas. In this study, the change ideas were developed using the information from the literature review and empathy interviews. The purpose of these change ideas was to address how definitions of giftedness can be changed to become more inclusive of ELL students.

Change Idea One

Change Idea One consisted of providing teachers with data and definitions of ELL students and gifted and talented students. I reviewed the definitions from the national, state, and school level. I then provided information about different countries' school systems and definitions of giftedness, including Mexico, Guatemala, and India (as these are the populations most represented at Mountain View). Then we looked at the role of culture in defining giftedness, which included reviewing how some cultures are individualistic, while others are more collectivist in nature.

Change Idea Two

Change Idea Two was based upon the literature review collected for this study. We started with the literature that supports that students identified as ELL are underrepresented based upon current identification procedures. We reviewed the two most popular paradigms of giftedness, giftedness as innate or giftedness as socially constructed. Then we revisited the idea that culture interacts with the definition of giftedness and how we can look at other cultures' ideas to help expand our own definition of giftedness. Finally, we circled back to Colorado's inclusive pathways to giftedness that are ignored under the current district policy which contributes to the under-identification problem ELL students in GT programs.

Change Idea Three

Change Idea Three was to educate teachers regarding community cultural wealth and the funds of knowledge framework and how they can be used to reframe views regarding communities of color. Following this, parent empathy interview data was utilized to further illustrate the funds of knowledge of the ELL families. Finally, we revisited the definition of giftedness, and the teachers completed their individual construct of giftedness.

Exit Interviews

Exit interviews were conducted with the teacher participants only. These interviews gave the researcher a chance to gain insights regarding their thoughts on the process as well as obtained their ideas for a more inclusive definition of giftedness, which will assist students identified as ELL in getting access to GT programming. These exit

interviews followed the same format as the initial interviews. A protocol was used (see Appendix K). The interviews were semi-structured in nature and coded using the coding structure outlined above.

Limitations

There were few foreseeable limitations to this study. The sample size was a limitation. While the sample size was sufficient to answer the research question, other groups could be included in the future. In a future study, a researcher may choose to include student voice or to include parents of ELLs who have high performing, yet not GT identified students.

Another limitation was the need to use an interpreter to speak with parents. Parents may not have been as comfortable speaking through an interpreter as they would with the researcher one-on-one. Further, this study was based upon volunteering by teachers to participate in the process. While this can be viewed as a limitation, it could also be an advantage as teachers who volunteer were genuinely interested in the process and provided valuable stakeholder information for the study.

A final limitation that must be called out is the lack of student voice in this study. While the students in this study were elementary age, there would still be an advantage to allow them to be part of the process, rather than relying on their parents' participation only.

Institutional Review Board Process (IRB)

This proposal was approved by the Dissertation in Practice Committee on November 30, 2021 and submitted to the Institutional Review Board (IRB) for University

of Denver. The university IRB determination was made on December 22, 2021. I then gained IRB approval from my school district on February 17, 2022. This process included a lengthy application process and review period by the school district.

There was much benefit to be gained through this study with little risk to the participants. The participants' identity was held in anonymity by the researcher and no identifiable information was put into the final study. The participants provided valuable stakeholder input and were part of a process of improvement. This process produced a usable improvement model that can be used throughout the district to help schools improve their beliefs surrounding giftedness and the creation of a more inclusive definition of giftedness that would benefit students identified as ELL in gaining access to GT programs. I provided the districts' schools with the tools they need to solve the problem of practice: the underrepresentation of ELL students in GT programs. Through this process equity and social justice could be obtained.

The researcher worked to ensure that the study was valid. Accuracy issues were minimized using member checking with participants and using critical friends throughout the process. The researcher also kept a reflective journal to help mitigate researcher bias. There were few ethical concerns as the risk to human subjects was minimal and the benefits could be exponential, allowing teachers to become researchers empowered to improve the space around them, allowing teachers to become informed regarding the intersectionality of gifted and talented and ELL, and creating knowledge regarding definitions of giftedness and GT identification for ELL students.

Chapter Summary

For this study, I aimed to mitigate the underrepresentation of students identified as ELL in GT programming by redefining giftedness at one elementary school. The research question: How can more inclusive definitions of giftedness be developed to provide ELL students better access to GT programming at Mountain View Elementary School? will be answered. I utilized empathy interviews and the literature review to provide mini lessons to teachers, collected data, and asked teachers how their view of giftedness (and definition of giftedness) has evolved during this study. The final product of this research was a usable model of improvement that can be used throughout the district, as well as other schools throughout the state.

Chapter 4: Findings

This study focused on teachers' underlying beliefs and attitudes regarding giftedness. I studied how these beliefs and attitudes may affect ELL students' access to GT programming. The study was designed to address the research question: How can more inclusive definitions of giftedness be developed to provide ELL students better access to GT programming at Mountain View Elementary School? The problem of practice was the underrepresentation of students identified as ELL in GT programs at an elementary school in western Colorado.

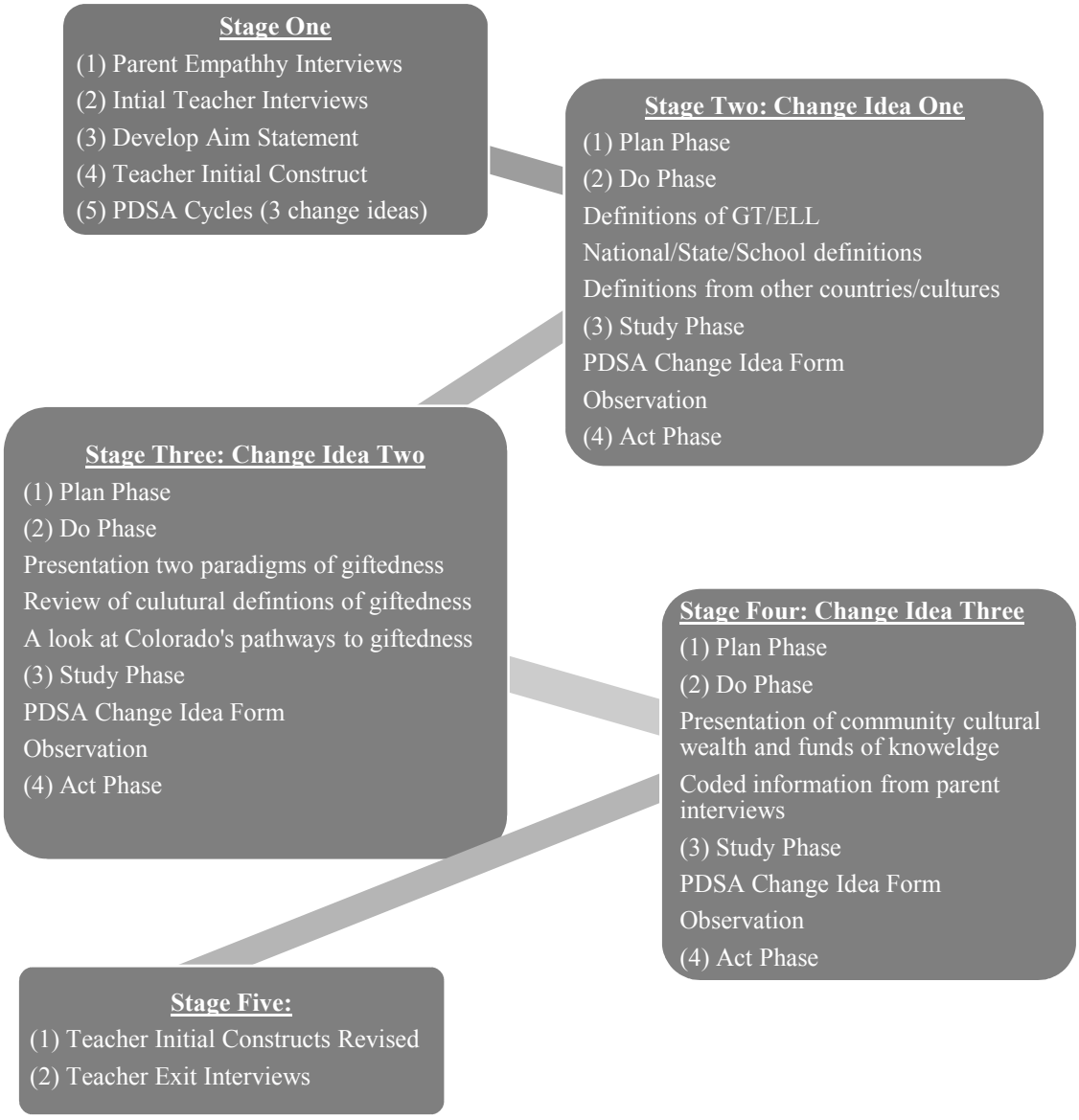
This study included empathy interviews of parents and teachers, the use of improvement science tools to help create the problem of practice and aim statement, and three PDSA cycles. Prior to the PDSA cycles teachers were asked to write about their individual construct of giftedness. Then, PDSA cycles one through three were conducted. After each PDSA cycle a written reflection was collected and teachers were asked to rate their learning experiences using a Likert scale. Following the completion of the PDSA cycles, teachers were asked to add to their initial constructs of giftedness. I closed the study by conducting exit interviews with the teachers to gain further insight into their learning.

I organized this research according to improvement science principles. As such, a five-stage research plan was developed. Stage One was the *before implementation stage*.

Stages Two, Three, and Four followed the change ideas through the PDSA cycle process. Stage Five included the final data collection. This research plan gave the study a structure in which to present the findings of this study. Figure 3 details the research plan for this study.

Figure 3

Research Plan



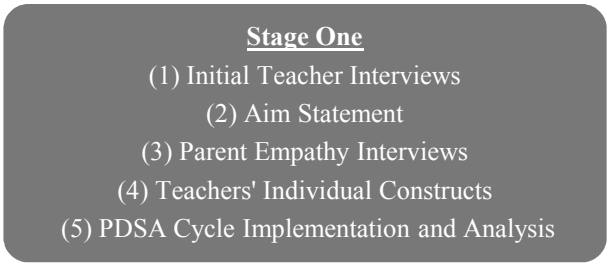
Note. The five parts will be presented in detail in the following sections.

Stage One: Before Implementation

Stage One of this study included five separate components. The components were: initial teacher interviews, the creation of the aim statement, parent empathy interviews, the beginning of the teachers' individual construct of giftedness, and finally, the PDSA cycle implementation and analysis. Each of these components will be detailed within this section.

Figure 4

Stage One: Before Implementation



Initial Teacher Interviews

Initial teacher interviews were conducted to gather teachers' beliefs about giftedness. I was interested in teachers' experiences with students identified as ELL and helping them to access GT programming. The seven teachers interviewed included an ELL teacher (Mr. Alas), a teaching and learning coach (formerly the gifted resource teacher for the building) (Mrs. Tapia), a kindergarten teacher (Mrs. Devlin), two second grade teachers (Mrs. Jaret and Mrs. Moore), one fourth grade teacher (Mrs. Gomme), and one fifth grade teacher (Mrs. Earle). The initial interviews took place prior to the implementation of the PDSA cycles. These interviews were a way to ensure that

information presented in the study was not redundant and would be relevant to the teachers' learning needs and desires.

After analyzing the data, a common theme emerged regarding what teachers believed to be learning behaviors of gifted students. Mrs. Jaret noted that students' aptitude and ability to think outside the box were the key factors of giftedness. Mr. Alas stated that giftedness was made up and that the learning behaviors of gifted kids were based on the dominant class. Mrs. Tapia shared that giftedness was a different way of thinking or a different perspective or approach to problem solving. Mrs. Moore stated that giftedness is shown with a child can share ideas that are outside of the box and more focused. She further shared that she might have a discussion with a gifted student and that student may take the discussion in a completely different direction. Mrs. Devlin said giftedness is when a student thinks differently or understands things much more quickly than normal. She went on to add that gifted kids are higher level thinkers and that just because students may not speak English does not mean that they are not higher-level thinkers. Mrs. Gomme said that giftedness is outside of the box thinking that does not necessarily work with mainstream education. Finally, Mrs. Earle stated that gifted students are ones who find alternative solutions to problems using different approaches. She added that giftedness is not just academic, but also creative.

Except for Mr. Alas who stated he thinks giftedness is made up by the dominant class, the other teachers tended to have similar definitions of giftedness. All of the teachers discussed giftedness as a unique way of thinking and learning. However, the majority of the descriptions given by teachers covertly assumed English proficiency.

Several of the teachers talked about having gifted students explain or demonstrate their thinking, interesting conversations they have had with gifted kids, or having gifted kids explain concepts to other students.

The initial teacher interviews gave me a starting point to see what teachers might need or want to learn regarding giftedness. By analyzing the data, I was able to see some similarities in teachers' definitions of giftedness, as well as note a few differences. I used this information to help inform the PDSA cycles.

Aim Statement

The aim statement was developed by the teachers and the researcher using improvement science tools. First, we reviewed the data regarding the representation of students identified as ELL in gifted education in Colorado. We reviewed the data regarding ELL students' representation in GT programs in our school building. Second, we used a fishbone diagram to determine some reasons why students identified as ELL are so underrepresented in GT programming. From there, we reviewed the 5 Whys Protocol and how it is used. This was a tricky process as deficit views had to be addressed as teachers' beliefs came up in the process. We were able to identify the root cause as a lack of understanding of GT programming and how to better serve students identified as ELL. From this process, we identified the driver as building awareness of the giftedness of ELL students. Using this driver, we created the aim statement: By looking at definitions and beliefs about giftedness in the United States and other countries, 100% of us will be able to add to our current knowledge frameworks. Following this process, I developed the three change ideas used in the study.

Parent Empathy Interviews

I conducted interviews with four parents of ELL students who been identified as gifted. The participants included two Mexican mothers and two Guatemalan mothers. This is a good representation of the population for our school, as only six parents fit the inclusion criteria. Hence, I was able to interview two-thirds of the population. During the coding process, I assigned pseudonyms for each of the mothers which will be used throughout the remainder of this section. The Guatemalan mothers will be referred to as Sra. Catan and Sra. Xoco, which are names of Mayan origin. The Mexican mothers will be referred to as Sra. Navarro and Sra. Ramos. Through this empathy interview process, the community cultural wealth and funds of knowledge of these ELL families were revealed. I will begin with the themes that emerged regarding community cultural wealth and follow with the themes regarding funds of knowledge.

Community Cultural Wealth

The researcher developed the protocol for the parent empathy interviews specifically to gather information from participants regarding their community cultural wealth. Each of the six types of capital were found during the coding process and findings were made regarding the six forms of capital: aspirational, navigational, linguistic, social, familial, and resistance.

Aspirational Capital

Aspirational capital refers to maintaining hopes and dreams for the future despite barriers. The parents interviewed for this study shared that all came from limited economic backgrounds with few years of education (i.e., zero to 10 years of schooling).

The parents were currently working to support their children to get an education as they viewed this as a means to a better future. The analysis of the data yielded three themes. The first is that parents had high hopes and dreams for their children. A second theme that emerged was that the parents wished for and sought a better future for their children. The final theme that emerged was that the parents viewed their children as college bound.

When discussing their children, the Guatemalan parents were adamant that their children achieve and succeed. Sra. Catan mother shared,

> What I want is for them to be better than us. I never graduated from any school--I didn't finish elementary school, I only studied up to fourth grade. What I want for them is that they complete all their studies, but something that they like, that they graduate from what they like the most, but if they have their diploma, that they do much better than me.

When discussing her children further (she has three girls in gifted and talented programming, and a total of seven children), she talked about her oldest daughter attending college in Denver and wanting to start her own tech company. She also shared that her other two daughters want to be doctors. Sra. Xoco shared that her daughter also wants to be a doctor.

The Mexican mothers also held high aspirations for their children. Sra. Navarro shared that her son is always looking to the future and is considering several different careers. He would like to be an astronaut, a doctor to help poor people in other countries, and an inventor. He thinks deeply on subjects that he considers important. Sra. Navarro shared a story about his latest aspiration:

> He always talks about the future. This week he told me that he wanted to study--create, because I don't know how many years, I don't remember, he told me that the sun is going to explode. He is going to make a house so that people are well. Right now, after the war, he says "when I am, I am going to be---" I don't know how to say it but invent things to help people.

When speaking of her son, Sra. Navarro clearly has high hopes for him. Sra. Ramos also has high hopes for her son. She shared that he would like to attend college for three things: art, architecture, and engineering. She believed that he would be able to achieve all of these career paths and was supporting him all the way.

The parents interviewed in this study shared many examples of aspirational capital with the researcher. They all held high hopes and dreams for their children. The parents shared that these dreams for a better future included going to college.

Navigational Capital

Navigational capital is explained as the skills obtained by maneuvering through areas that have historically excluded people of color. Through the parent interviews, three types of navigational capital were identified. We explored how parents are helping their children prepare for schooling, the challenges they are facing working through the school system, and the opportunities parents have pursued for their children outside of regular school opportunities.

Sra. Catan shared that she accessed GT opportunities for her older gifted daughter. Her oldest is enrolled at a high school that allows her to earn an associate

degree prior to graduation from high school. She explained that through this opportunity her daughter is learning how to navigate extended spaces:

> She had some classes where she had to look for information. She searches for them online but starts to investigate. Last week she had a job where---She wants to study business, and they told her to call restaurant managers to get information on how they worked, and she did.

In addition to extended learning opportunities, Sra. Catan realized that she is facing some navigational challenges. She shared that while trying to navigate the additional opportunities for her children, such as GT art classes, she was unable to do so because of all the different release times for picking up her children at the elementary, middle, and high school levels. Further, she shared that not a lot of information about elementary school gifted and talented programs was shared with her as a parent, and although she tried attending the district level GT parent meetings, the district does not offer interpreters for families to participate so while she can understand English, she does not feel comfortable asking questions.

Sra. Navarro worked to ensure that her sons were able to navigate schooling by ensuring they were ready for school. She shared that although she does not speak English, she learned of the minimum requirements for kindergarten and ensured that her sons could both exceed these requirements prior to entering school. In addition, she stated that her gifted son has already established great work habits and always does everything the school requires. Sra. Navarro also sought out opportunities for her son to participate in outside of his regular GT programming. He participated in the summer GT program at

Colorado College several times and now that COVID has calmed down, she intends to get him enrolled once again.

Sra. Ramos also exposed her son to gifted opportunities outside of school as well. He was entered into and has won several art contests, winning first place. He attended the summer gifted classes at Colorado College. Sra. Ramos shared that one of the navigational challenges she faced is that she has not been given much information regarding GT programming at the schools, including what level gifted status her son attained. She was unaware that there were levels until she was registering her son for the gifted and talented summer program, and the program registrars asked her for his specific level. She also tried attending the GT parent meetings at the district level but has not had access to an interpreter for these meetings.

The parents interviewed for this study worked hard to navigate spaces from which they have been historically excluded. Although, they made good progress, by making sure their children were school ready and accessing additional opportunities, they faced challenges.

Linguistic Capital

Linguistic capital refers to the skills obtained by being bilingual, improved communication skills, and traditional storytelling. The parents interviewed for the study shared examples of linguistic capital that fell into three categories. The first category was maintenance of the Spanish language. The second category was learning more languages. The third category was the language capacity of their children.

Sra. Catan shared that her daughters had a good vocabulary and could write in Spanish, and that they would like to learn another language as well. Sra. Xoco talked about how they speak some Mam at home. She stated that her daughter was learning English very quickly and expressed an interest in learning more languages. She recommended that the GT program offer more opportunities for children to learn more languages.

Sra. Navarro shared that her son learned to read and write in Spanish, better than she does. She also stated that he would like to learn another language as well. She shared, "I had a nephew like that (who spoke Spanish) and I told him 'don't be embarrassed. On the contrary, you will have more opportunities for your future.'" From this statement it was clear that she appreciated the value of being bilingual.

Sra. Ramos had a lot to say about linguistic capital. She stated that being bilingual will help her son in the future, but that right now it is not valued as part of his schooling. She stated that GT students should be exposed to multiple language learning opportunities as they have a large capacity to learn. She said, "That is a good idea, because they are very talented, they have a lot of capacity in their brains, I think that yes, that is a very good idea, an extra class of another language. Can be." She also shared that her son is often approached by his peers wanting him to help them learn Spanish. She was fiercely proud of her son and his linguistic capital.

All four of the mothers shared examples of linguistic capital. The three types of linguistic capital that emerged were the maintenance of Spanish, the requests to learn a third language, and the learning capacity of the children.

Social Capital

Social capital refers to the extended network of community and resources that can be gained by being part of that community. During the analysis of parent empathy interviews, three categories emerged. First, there is a networking that takes place between Spanish-speaking GT parents. Second, the connections parents have found with Spanish speaking teachers within their children's schools are important. Third, the home resources that help support learning are present.

Sra. Catan spoke of her experiences with networking with other Spanish speaking GT parents. She talked of commiserating with other parents regarding the lack of interpreters provided at district meetings. She also spoke of how she and other parents shared what information they obtained. Sra. Navarro spoke of her positive experiences with a bilingual staff member at the school who assisted her with getting her son tested and telling her how to access the summer program at Colorado College for free. Sra. Ramos shared her positive experiences with the only bilingual staff member at her son's school, who was able to help her navigate the issues that have arisen for her. She believes that without this staff member other parents who need help will not get it. She stated, "No one speaks Spanish in that school. I also think [that] my son is going to come out but there are many mothers who do not speak English and who need someone to help them." Finally, Sra. Ramos shared that her son who is very interested in art and architecture will be making a trip to her hometown in San Miguel de Allende, Mexico a town known for their art.

The mothers interviewed shared their experiences that revealed social capital. Sra. Catan networked with other Spanish-speaking GT parents to share information. Sras. Ramos and Navarro worked with Spanish-speaking teachers to help their children. Sra. Ramos supported her son by giving him access to her hometown that was famous for art. Each of these parents exhibited social capital.

Familial Capital

Familial capital is the cultural knowledge held by families and extended families that carry the history, memory, and culture of the group. During the analysis of the interviews, three categories of familial capital were identified. First, that the families held high expectations of their children. Second, that families emotionally supported their gifted children. Third, that educational supports were offered within families.

Sra. Catan shared that she had high expectations for her children, and that her middle school daughter received only A and A+ grades in her advanced classes. She added that although she is unable to help with her children's schoolwork, the oldest of her daughters helps to support the younger siblings. Sra. Catan offered support to her children by providing a strong routine for them and making sure that she was available to transport them to and from school, including picking them up at different schools at 2:30 p.m., 3:30 p.m., 3:40 p.m., and 4:00 p.m. Sra. Catan demonstrated much familial capital in her interview.

Sra. Xoco had many examples of how much she and her husband supported their daughter's giftedness. She shared that they were very excited that she was identified as gifted and wanted to support her in any way. She and her husband started buying many

books so that their daughter could read at home more. Sra. Xoco shared that her husband is probably gifted as well, as he learned English in only six months; everything comes easy to him, and their daughter seems to be the same way. She explained that father and daughter often spend time each evening reading together and learning together. Sra. Xoco wanted to support her daughter's giftedness but just found out about the GT program at Mountain View.

Sra. Navarro worked hard to support her son. She had high expectations of him, ensuring that he has access to as many resources as she could muster. She bought him many books and made a point to explain, "Yes there are some books that are very expensive, but I like to buy them because he reads them all. He forgets everything else, his games and focuses only on reading until he finishes them." In addition to this support, her husband is also very smart, and attended school all the way through high school in Mexico. She shared that even though their son is in advanced classes, her husband was able to help him with his math homework when needed. Finally, Sra. Navarro worked hard to help emotionally support her son. She explained that he is very sensitive and emotional. She stepped out of her comfort zone, attempting to access the district trainings offered to parents on the subject of emotionally supporting gifted kids. However, she met with limited success as there are no interpreters available to help her access the training.

Sra. Ramos demonstrated familial capital as well. She provides a strong routine for her son and has very high expectations. She stated,

> My husband and I demand a lot from him. You have to get B, you have to get A, don't lower your ranking because all you do is study. You're not working, you're not cleaning the house, we don't give you other chores, just study.

Throughout her interview, Sra. Ramos showed she was a strong advocate for her son's education.

All of the parents interviewed demonstrated familial capital. Of the types of capital, this was the one that yielded the most data and examples.

Resistance Capital

Resistant capital refers to developing skills that challenge the dominant narrative and inequality. The three categories of resistance capital identified from the parent interviews were how they dealt with the lack of communication, the gatekeeping they must face down, and the discrimination they must challenge within the school.

Sra. Catan shared that when she attempts to attend events and parent meetings to support her daughter, an interpreter was not provided. This was very uncomfortable for her, because although she understands some English, she was not comfortable speaking it, especially in front of a room full of other parents. However, she persists and attends the meetings anyway, trying to gather whatever information she can from these meetings.

Sta. Navarro shared that she felt some discrimination because her family is Latinx, and she has noticed a preference for other children over her own. She also spoke of trying to attend the parent meetings and wondering if they would ever have someone who could interpret for her.

Sra. Ramos was most vocal during this part of the interview. She told of her son first passing the GT test in second grade, but not being served for two more years. She told of a system that failed to acknowledge her son's giftedness both initially and when he had to change schools and the records were lost. During this process, her son lost approximately three years of gifted services as the new school required him to test for giftedness again. She stated that this is clearly discriminatory, stating,

> If they think that because they are Latino or because of the language, they know less. 'Maybe it was luck that he passed that test' and they want to do it again many times. They did it to Antonio twice and he passed it both times.

In addition to this story, she shared that she has spoken with teachers who told her that if her son cannot keep up with the GT programming, he will have to take regular classes when he gets to middle school. However, Sra. Ramos persists, ensuring her son has access regardless of the language barriers presented. She noted how she advocated for him at every turn.

Resistance capital was clearly found within the parent interviews with the parents interviewed. Parents were able to provide examples of resisting lack of communication, gatekeeping, and discriminatory practices present in their school experiences.

Funds of Knowledge

Funds of knowledge are: "historically accumulated and culturally developed bodies of knowledge and skills essential for household or individual functioning and well-being" (Moll et al, 1992, p. 133). First, I developed the parent empathy interview

protocol to focus specifically on how giftedness is perceived and addressed in ELL families' countries of origin. As two parents were of Mexican descent and two were of Guatemalan descent, I will present their funds of knowledge in the next two sections, beginning with the Mexican families' funds of knowledge and then moving on to the Guatemalan families' funds of knowledge. It is important to note that I did not create additional questions designed to gather more cultural information. This study is limited to the issues surrounding giftedness and the funds of knowledge presented are meant only to demonstrate funds of knowledge regarding giftedness in their country of origin and in the United States.

Mexican Families' Funds of Knowledge

The parents shared their experiences of learning about GT programming here in the United States. Both mothers shared they were unaware the GT programming existed until approached by the GT teacher for testing. While unaware of GT programming. Sra. Navarro spoke of her son's love of reading as a sign of giftedness. She told of how he would pretend to read even before he was able and how he remembers everything he has ever read.

Both mothers shared their experiences regarding what giftedness is in Mexico. They explained that the Mexican system was very different. Instead of separate GT programming, students are kept together in the classroom. However, they explained in detail that continued schooling in Mexico is dependent on passing tests to advance to the next grade level. If a student is able to pass a test with a 9 or 10, they are granted a scholarship to pay for their needs. If they do not pass with a 9 or 10, their parents must

then begin paying for schooling which excludes a lot of students from continuing in school past ninth grade. Sra. Ramos shared,

> When I was there, there was no free (high school). The children who were between 9 and 10 were entitled to a half scholarship or a scholarship. Children who don't pass the exam don't go because their parents don't have the money to pay for school.

Both mothers had knowledge about the *becas* or scholarships that enable students to continue schooling based upon their test scores. They both navigated that system, with some of their family members attending school through college in Mexico.

The two mothers interviewed had funds of knowledge regarding giftedness both in the United States and Mexico. They shared their experiences through the interview process in which their funds of knowledge emerged.

Guatemalan Families' Funds of Knowledge

There was a clear contrast between the Mexican families' and Guatemalan families funds of knowledge. What struck me the most when speaking with the Guatemalan families was their lack of knowledge regarding schooling in general. While the Mexican families' had a fairly consistent description of how schooling works in Mexico, it was not as clear for the Guatemalan parents. Upon additional research, I was able to understand that the school system in Guatemala is in a state of disarray and does not serve its indigenous population very well, of which these parents are part. In fact, both mothers interviewed were of Mayan descent. One mother spoke Mam and one who spoke K'iche. Both parents had very limited contact with the school system in

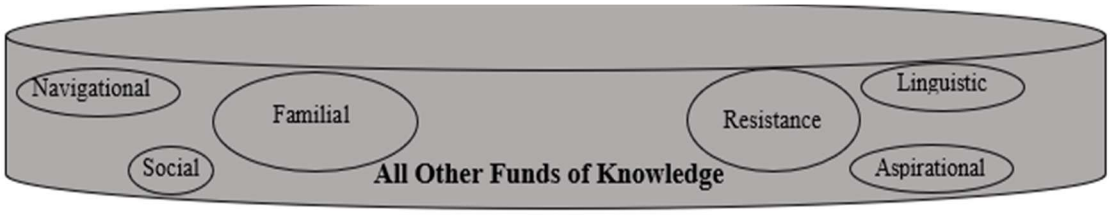
Guatemala. The Mam-speaking mother was able to attend school for only four years, while the K'iche speaking mother had no formal schooling. Therefore, they did not have the background knowledge to answer my questions regarding what happens for gifted children in Guatemala, especially if they are of indigenous descent. Further, when asked about giftedness in the United States, both mothers knew only that their children were receiving services and did not have much information beyond that basic understanding.

The Combined Conceptual Framework

After reviewing all of the examples of funds of knowledge and the six types of capital from community cultural wealth, I used my conceptual framework visual as a way to represent the findings. The most commonly found types of capital were resistance and familial capital and so these bubbles are larger in the picture. The least commonly found were examples of social capital so that bubble is the smallest. Linguistic, aspirational, and navigational capital were found in equal amounts, so those bubbles stayed the same size. Please see the conceptual framework model for the parent empathy interviews in Figure 5 below:

Figure 5

A Combined Conceptual Framework: Parent Empathy Interviews



Teachers' Initial Construct of Giftedness

Prior to the implementation of the change ideas, teachers were asked to write their individual construct of giftedness. Teachers were given two minutes to free write about their definitions and ideas surrounding giftedness. Seven teachers participated in this activity prior to the PDSA cycles. The themes that emerged from the coding of the initial constructs (listed from the most prevalent to the least prevalent) were: 1) teachers believe that gifted children think or learn differently, 2) that giftedness is viewed as a strength, 3) that there are challenges within the field of giftedness, 4) that giftedness can be innate, and 5) there are weaknesses experienced by gifted children.

Of the seven teachers, five mentioned that they thought gifted children think and learn differently. Some examples of statements given are: "unique perspective," "great critical thinkers," and "outside the box thinking." Five of seven teachers also mentioned the typical strengths associated with giftedness. Some examples of strengths mentioned are: "Higher grade level," "significant strength in an area of academics," "exceeds typical or average," and "problem solve efficiently." Three of the five teachers examined the challenges of GT programming, stating things like, "Their needs are often ignored," "Many ELL students are overlooked," and one teacher challenged giftedness as a concept, calling it "subjective" and "made up." One teacher focused on the innate talent of gifted children stating that a gifted student has a "natural inclination for a skill or talent" and that they are someone "with extraordinary or abnormal amount of talent." Finally, one person focused on the weaknesses of giftedness, stating that gifted students

"often expect everything to go easily," that they are often bored and have "common emotional struggles."

The teachers' initial constructs of giftedness were meant to provide a jumping off point for their learning. By listing their thoughts and beliefs about the construct of giftedness prior to the PDSA cycles, the teachers were able to consolidate their thoughts on the topic. Then, when the PDSA cycles were complete the teachers were able to go back and add what they had learned to their constructs.

PDSA Cycle Implementation

I created the PDSA cycles based on the aim statement and the underlying problem of practice/research question. After each PDSA cycle, teachers were asked to make note of important learning, make recommendations, and rate their learning using a Likert scale (see Appendix J). The change ideas were developed into one, longer presentation as this group of teacher participants stated their willingness to participate was based upon this caveat. The teachers had a hard time settling on a way to meet three times during this study. This was a stressful, post-COVID year. The teachers requested that we follow a precedent set by another researcher/doctoral candidate at this school. The participants requested the same extended model of presentation rather than three separate meetings.

The PDSA cycles created were based on three distinct change ideas to help address the lack of knowledge regarding giftedness, and how current definitions of giftedness can be changed to become more inclusive of students identified as ELL. The first change idea dealt with the data and definitions regarding giftedness at all levels, national, state, and district. In addition to the data from the United States, I provided

background information on the school systems of Mexico and Guatemala as well as their countries' definitions of giftedness. I then introduced the idea that culture may affect views of giftedness. Change Idea Two took the participants through the literature regarding the underrepresentation of ELL students in GT. With Change Idea Two we reviewed the idea of giftedness as innate or socially constructed. Using the intersection of culture and giftedness we discussed how to expand our definitions of giftedness using ideas from other cultures. Finally, we addressed the fact that Colorado's inclusive pathways could be used to identify more children for GT programming. The final portion of the presentation dealt with Change Idea Three. Change Idea Three consisted of a background of community cultural wealth (Yosso, 2005) and funds of knowledge (Moll et al, 1992). I then shared portions of the data from the parent empathy interviews with the teachers, preserving the anonymity of the students and families.

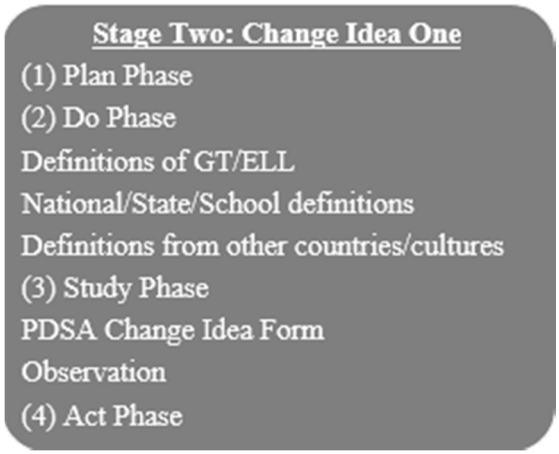
Stage One was the *before implementation* part of this study. It allowed me to conduct parent empathy interviews for the purpose of learning about community cultural wealth and funds of knowledge that can be shared with teacher participants. During this process the researcher and teacher participants were able to use improvement science tools to determine the aim statement for the study. This *before implementation* phase also allowed me to gather initial data on teachers' definitions of giftedness and their beliefs surrounding giftedness through both their initial interviews and their initial constructs of giftedness, they completed prior to the implementation of change ideas. Finally, Stage One included the creation of the PDSA cycles one through three.

Stage Two: Change Idea One

Stage Two for this study was a PDSA cycle for Change Idea One which consisted of providing teachers with data and definitions of ELL students and gifted students. Definitions were drawn from several different sources both nationally and internationally. Cultural definitions and how culture plays a role in giftedness was also discussed. Figure 6 shows the PDSA structure of Stage Two.

Figure 6

Stage Two: Change Idea One



The *plan* portion of the PDSA cycle was to look at definitions of giftedness both here in the United States and around the world to widen our current knowledge frameworks. A PowerPoint presentation was created. This presentation began when I provided definitions of giftedness from the National Association of Gifted Children (2021c) and the Colorado Department of Education (2021d) to the teachers. The latter definition is the one utilized by the district. When creating the presentation I included definitions of giftedness from Mexico, Guatemala, and India as those are the countries of origin of 99% of the students served at the study site. I also included a background of

how the school systems in Mexico and Guatemala worked as well as a brief historical background of Guatemala. Following that information, I created slides that addressed the role of culture in defining giftedness. I included information regarding individualistic versus collective cultures and cultural thought patterns to get the teachers thinking beyond their current knowledge frameworks.

The *do* portion of the PDSA took place when we reviewed the PowerPoint presentation. The PowerPoint presentation introduced the definitions of giftedness in the United States, Colorado, and the district. Then we reviewed the cultural definitions of giftedness, how different cultures view giftedness, and how those definitions intersected with our ideas.

The *study* portion of the PDSA happened as we worked through the presentation and had discussions surrounding the ideas surfaced. The teachers also included several notes for me on their PDSA forms. Five of the seven teachers shared that this portion of the presentation was interesting to them. For some of these five teachers, it was the first time they had seen this information. One of the teachers did not provide notes for this section. The last teacher noted that she had not thought of giftedness as anything beyond academics.

The *act* portion of the study included gathering some ideas teachers found important regarding this portion of the study. One teacher wanted to know how to better help her gifted students and wanted to increase her knowledge in the area. Another teacher stated that a wider net should be cast when trying to identify gifted students.

Another teacher wanted to find an updated model of Kaplan's (1966) cultural thinking patterns.

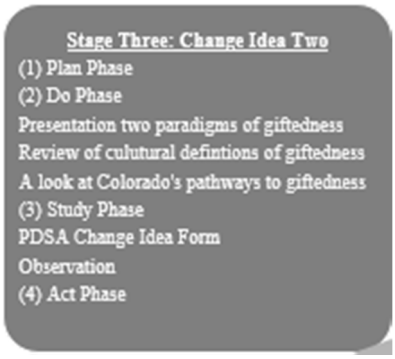
Following the completion of PDSA cycle for Change Idea One, teachers were asked to rate their learning on a Likert scale. The four statements to rate were: 1) The information provided was helpful to me; 2) The information added to my knowledge framework; 3) The information increased my awareness about giftedness and how it relates to ELL students; and 4) The information presented was new to me. All seven teachers answered all four statements with a rating of five, which indicated that teachers found the learning to be both new and useful to them.

Stage Three: Change Idea Two

Stage Three for this study was a PDSA cycle for Change Idea Two which consisted of reviewing the literature regarding the underrepresentation of students identified as ELL in GT programming and looking at the idea of giftedness as innate or socially constructed. Using the intersection of culture and giftedness the teachers and I discussed how to expand our definitions of giftedness using ideas from other cultures. Finally, we looked at Colorado's inclusive pathways to giftedness identification. Stage Three is represented in Figure 7 below:

Figure 7

Stage Three: Change Idea Two



The *plan* phase of the PDSA for Change Idea Two began with looking at the literature regarding giftedness for students identified as ELL and how it may widen some of our knowledge frameworks. I created a PowerPoint presentation for Change Idea Two. The first slides dealt with the research found regarding the under identification of ELL students as gifted. Then I made slides to help aid in the discussion of whether giftedness is innate or socially constructed. Following those slides, I introduced the idea of the cultural nature of giftedness drawn from the literature review. I then moved into the idea that the definition of giftedness could be expanded to be more inclusive. To finish off this portion of the plan, I included slides regarding Colorado's pathways to giftedness, as they are very inclusive in policy, if not in practice. As all the teachers knew the percentiles *needed* for students to be identified as gifted, they were surprised to learn that these percentiles are not cut points meant to exclude students who do not have the scores.

The *do* phase of the PDSA for Change Idea Two was to present the PowerPoint to the teachers. We reviewed the literature regarding under identification, whether

giftedness is socially constructed or innate, the cultural nature of giftedness, and how Colorado's pathways to giftedness can be inclusive.

The *study* phase of the PDSA for Change Idea Two yielded more response from the teachers. Six of the seven teachers made notes regarding their thoughts and extensions of their knowledge. Two of the teachers focused in on the inclusivity of Colorado's identification pathways, making specific notes about the lack of cut points. Four of the seven teachers talked about how teachers need to find better ways to help identify ELL students as gifted. One teacher noted that bilingualism should be included. Another teacher wanted to focus on finding new ways to show higher level thinking. Another teacher looked at teacher differentiation as a way to help scaffold for gifted students. Still another teacher wrote down part of the quote from Ford (2014) that, "underrepresentation persists because decision makers acquiesce to the status quo" (p. 149).

The *act* phase of the PDSA included feedback from five of the seven teachers. One teacher stated that "we clearly need to broaden our opportunities for ELL students to access GT resources and services." Another teacher stated that we needed better awareness of identification for parents and teacher and that we should look at including students in programs even if they do not yet qualify. Another teacher merely stated her enjoyment of the section. One teacher focused on the use of multiple criteria, scaffolding information, and a more holistic approach to giftedness. Finally, the last teacher comment dealt with the idea of giftedness as positive labeling for children and communities.

Following the completion of the PDSA for Change Idea Two, teachers were again asked to rate their learning in this section. The same four questions described above were

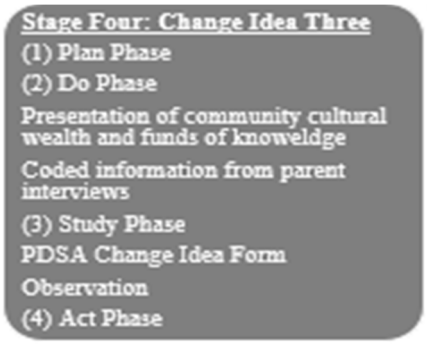
utilized. This time in response to statement one, *This information was helpful to me* changed. Six of the seven teachers rated this statement as a five or a *Strongly Agree,* while one of the teachers rated this as *Agree*. The overall rating for this question therefore was 4.86 on a five-point scale. The remainder of the statements were rated a five which indicated that teachers found the information both new to them and useful to them.

Stage Four: Change Idea Three

Stage Four for this study was the PDSA cycle for Change Idea Three. Change Idea Three consisted of giving a background of the frameworks of community cultural wealth and funds of knowledge. I then shared portions of the data from the parent empathy interviews with the teachers to inform them of the families' funds of knowledge and community cultural wealth. Figure 8 represents the different parts of Stage Four.

Figure 8

Stage Four: Change Idea Three



The *plan* phase of the PDSA cycle for Change Idea Three was that by viewing different cultures' community cultural wealth (Yosso, 2005) and funds of knowledge (Moll et al, 1992) as well as the voices from our families' cultures that will add to our current knowledge framework. For this *plan* phase I created a third PowerPoint to

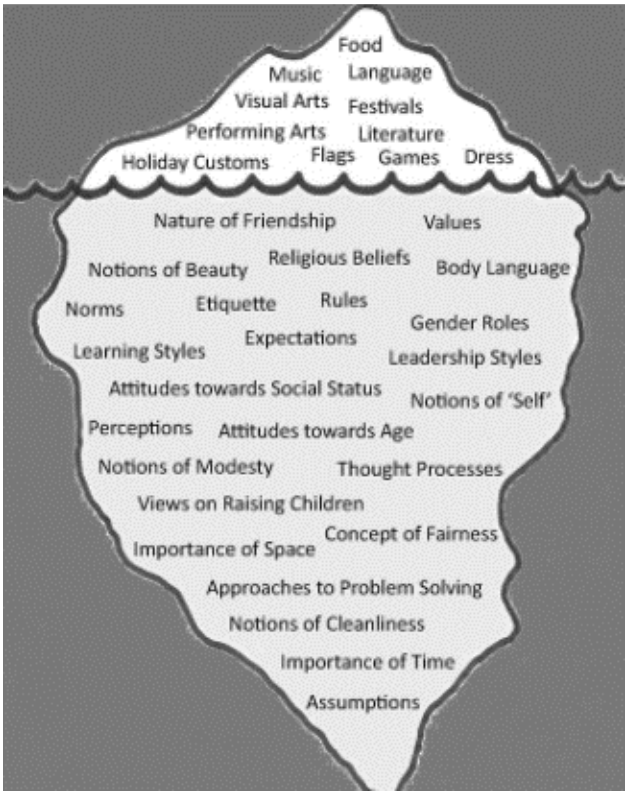
introduce the frameworks of community cultural wealth (Yosso, 2005) and funds of knowledge (Moll et al, 1992) to the teachers. I then prepared a spreadsheet of the data from parent interviews, which were translated so that the teachers could connect with the voices of our families.

For the *do* phase of the PDSA we learned about the frameworks of community cultural wealth and funds of knowledge. Then we looked at the spreadsheet of data organized by types of capital and funds of knowledge. I asked the teachers to choose the parts of data they were most interested in hearing about. We discussed resistance capital, familial capital, and navigational capital. We also reviewed the funds of knowledge regarding giftedness from both the Guatemalan families and Mexican families.

For the *study* phase of Change Idea Three, six out of seven of the teachers provided written notes. There was a wide variety of learning in this phase. One teacher wanted to learn more about funds of knowledge and how that intersects with different cultural ideas. Several teachers connected their learning to the cultural iceberg graphic from the presentation. This graphic is represented in Figure 9.

Figure 9

Cultural Iceberg Graphic



This graphic shows an iceberg with the parts of culture people see, such as food and language. Under the surface of the water are all the parts of culture usually unseen, such as treatment of elders or gender roles. Several of the teachers mentioned resistance capital and how much parents have to advocate for their children if they speak a different language. Finally, one teacher noted the absolute importance of making sure to present everything in both English and native language.

During the *act* phase of the study, four teachers provided recommendations or comments on learning. One teacher stated, "We need to truly understand where our students come from, so we can do what we need to do to make them feel comfortable, welcome and that their culture is accepted and valued*."* Another teacher mentioned the impact of the family interview data on her, and how connecting to our families made a huge impact on her. Many teachers spoke of providing more support to bridge the communication gap. Finally, one teacher indicated that cultural information is important, but that it only goes so far, as it needs to be child/family specific information as well.

Following this PDSA cycle, all seven teachers rated their learning using the Likert scale and the same four questions. All teachers gave ratings of *Strongly Agree* or fives for all four statements. This indicates that the information was new and useful for them.

Stage Five: Post PDSA Cycles

Stage Five for this study consisted of revising the initial construct regarding giftedness and the exit interviews of teachers. Figure 10 gives the steps of the Stage Five below.

Figure 10

Stage Five: Post PDSA Cycles

Revising the Initial Constructs of Giftedness

Following the completion of the PDSA cycles, I had each teacher review their initial construct and make changes. All seven teachers completed this activity. The initial

constructs, additions made, and changes noted can be viewed in Appendix L. Of the teachers, six of them revised their construct of giftedness to include culture in some way. Six of seven teachers also added to their constructs the challenges students identified as ELL faced with regard to giftedness. Several teachers cited the information regarding the under representation of students identified as ELL in gifted programming. Specific challenges mentioned by teachers included the existence of the language barrier, standardized test scores, and how giftedness is exclusive and selective. Three of seven teachers addressed parents of ELL students in their revised constructs. One teacher mentioned how much the parents of ELL students valued education in the United States as their own education growing up in their countries were both *costly and limited*. Two other teachers emphasized the importance of connecting with parents of ELLs so that parents can learn about the process of gifted identification and programming.

Exit Interviews

Once the initial constructs were completed, exit interviews were scheduled. Exit interviews took place approximately two weeks after the completion of the PDSA cycles. There were two goals for the exit interviews. The first was to examine the teachers' definitions of giftedness and how they changed throughout the study. The second goal was to track their learning and recommendations. Of the seven teachers, I was able to secure interviews with only six of them. One teacher, Mrs. Earle, experienced medical issues and was not available for an exit interview.

Definitions of Giftedness

Each of the six teachers were interviewed individually regarding their learning and were asked once more to discuss their definitions of giftedness. The definitions provided in initial interviews, exit interviews, and noted changes are compared in Appendix M. One of the most important findings was that of the six teachers who were interviewed, five out of six had changes to their definitions of giftedness following the PDSA cycles. The only teacher who did not have a change was Mr. Alas, who simply restated his definition as: "Whoever comes up with the test and rules can make it up," Mrs. Jaret added additional areas of giftedness: social, religious, and sports. She stated in her revised definition of giftedness that anyone can be gifted. Mrs. Gomme additionally noted that there are different types of giftedness and stated that we are failing our students identified as ELL because of the language barrier that prohibits their identification under the current district practice. Mrs. Moore added the idea of higher ability itself to her definition of giftedness. Mrs. Devlin changed her definition to include the belief that every student can be gifted. She noted that socioeconomic status, language, and background knowledge play a part in how giftedness is identified. Mrs. Tapia changed her definitions of giftedness by adding different types of giftedness. She stated giftedness could be academics, sports, art, leadership, or any area where talent can be demonstrated.

Learning and Recommendations

The exit interviews were also used to examine the statements of learning from the teachers as well as any recommendations they made. The statements of learning can be

put into two categories: barriers to access to GT and action statements of teachers. I will first discuss the statements of learning and then the recommendations.

Mr. Alas

He started with the barriers he learned about during this study. He noted how uninformed both parents and teachers were in the area of giftedness identification and services. He stated the continued need to advocate for families and not fall back into patterns of convenience that excluded families from the conversation. He also spoke of the backgrounds of the Guatemalan families interviewed and how their lack of access in their home countries puts them at a disadvantage to navigate GT programming. Mr. Alas' action statement was that he was going to research further and that we all need to reach out and engage with ELL families. Finally, he made a couple of recommendations for gifted education. He would like to see gifted education expanded to include multiple languages. He would like for all the English-speaking students to be tested in Spanish against the Spanish-speaking children so that a comparison of percentiles can be made (or another any native language versus English). Finally, he recommended that GT programming be available more than 30 minutes a day a twice a week.

Mrs. Jaret

She discussed the barriers she learned about during the study. She spoke of that fact that students identified as ELL have more barriers than other children. She talked of the lack of GT services, the struggle to identify ELL children as gifted, and the educational barriers faced by parents. She also had several action statements. She plans to think ahead as much as possible to see what she can do to better serve students identified

as ELL and advocate more. She also stated her intention to continue her learning in this area on her own. Finally, she stated that she would like to advocate for more students identified as ELL to also be identified as GT. Her recommendations included better translations and more education about gifted identification and services for students and their families.

Mrs. Gomme

She noted the barriers faced by students identified as ELL. She stated that students identified as ELL are often overlooked and misunderstood. She noted that there is a misconception that if students do not know English, they cannot be gifted. She also discussed the educational barriers faced by our Mexican and Guatemalan families in their access to education in their home countries. She has several action statements. Her first action statement suggests that we need to get past the language barrier and see what students can really do. She would also like to have a meeting with ELL families so that we can listen to them and their needs. She wants to make it more open and accessible for families to interact with their schools and stated that she believes we can do better. Mrs. Gomme's recommendation was that GT teachers be better trained so that they can help classroom teachers with the concepts surrounding giftedness.

Mrs. Devlin

The barriers faced by students who identify as ELL were also noted by Mrs. Devlin. She noted the underrepresentation of students identified as ELL in gifted programs. She also discussed the notions held by some teachers that if a student is ELL and speaks another language, that the student cannot be gifted. Her action statements are

all about advocating. She would like to advocate more for students and plans to act upon this if she notices a need for advocacy. Finally, Mrs. Devlin recommended that the school should provide a full time GT teacher for the building so that students can receive gifted programming daily.

Mrs. Moore

This teacher started with the barriers she noticed. She stated that while she knew that sometimes ELL students were overlooked, she had not realized how much that happened. She also noted that the testing can be a barrier for all non-white children. For her action statements, Mrs. Moore plans change the way she has viewed students and giftedness. She wants to focus on all areas of giftedness and not just math and reading. She also plans to explore alternatives to getting students identified for gifted service. Her recommendation is that more ways of being gifted be recognized so that identification of students can be made easier.

Mrs. Tapia

Mrs. Tapia recognized barriers to access for gifted programs for students who identify as English learners. She spoke of how test data can be used as gatekeeping, keeping out students who if nurtured could/should be included in GT programming. She also talked about how we only focus on a certain demographic, and we do not branch out to include students that represent all of the United States, or the world. For her action item she focused on looking at giftedness with a wider lens and talked about how she would like to give all students what they need. Her recommendations included a need for better district support. She also talked about the necessity of using data inclusively for

identification and stated that as a district we need to be more inclusive of other demographics when it comes to leadership.

Chapter Summary

This chapter reviewed the findings of this study using the improvement science research plan. I reviewed stages one through five of the research plan. In Stage One I included all of the work done before the implementation of the PDSA cycles. In Stage Two, Three, and Four, I reviewed the PDSA cycles one through three. In Stage Five, I reviewed the teachers' constructs for giftedness and the data from their exit interviews. In the next and final chapter, I will answer my research question and address the problem of practice and aim statement. Then, I will review how the findings connect with the literature, the conceptual framework, and the definition of giftedness. I will also write about the implications for policy and practice. I will close with the limitations of the study and recommendations for further research.

Chapter 5: Discussion

The problem of practice addressed in this study was that there was an underrepresentation of students identified as ELL in gifted programs at an elementary school in western Colorado. This underrepresentation is a symptom of a larger, systemic problem in the United States. There is systemic racism that blocks students of color and ELL students from meeting their full potential. By not providing access to GT programming, students are not exposed to the best curriculum, the best teachers, and the best programs. The research question for this study was: How can more inclusive definitions of giftedness be developed to provide ELL students better access to GT programming at Mountain View Elementary School? In this study, I used improvement science to answer this question. The aim statement was: by looking at definitions and beliefs about giftedness in the United States and other countries, 100% of teachers will be able to add to their current knowledge frameworks. The aim statement was clearly met. All the teachers who participated in this study thanked me for including them as stakeholders as they learned a lot and felt more comfortable advocating for students identified as ELL.

In this chapter, I will discuss how my findings connect with the literature and the conceptual framework. I will then discuss how the findings connect to the definitions of giftedness. I will also review the implications for policy, future research, and practice.

Finally, I will close with the limitations of the study, recommendations for further research, and a reflection.

Summary of Findings

The findings for this study connect to the literature in several important ways. Through the use of professional development, more inclusive definitions of giftedness can be created. During the study, I was able to address the teacher deficit view regarding students identified as ELL in GT programming. Also, I was able to tap into current knowledge frameworks and notice that teachers had a lack of recognition of the problems facing students identified as ELL who are attempting to access GT programming.

Providing Inclusive Definitions Through Professional Development

The findings of the study suggest that more inclusive definitions of giftedness may be developed if teachers are given more education on the topic. Throughout the PDSA cycles, the teachers and I learned about several United States-based definitions of giftedness. Although most teachers seemed to be aware of giftedness as a concept, reviewing the definitions helped to broaden what teachers already knew. Looking at definitions of giftedness and how gifted services work in other countries helped teachers to think about how our definition is based upon our culture and location. By taking a look at giftedness through the lens' of Mexico, Guatemala, and India, we all learned far more than if we had stayed in our United States centric frame. Further investigation of how cultures differ in thought patterns, communalism versus collectivism, and cultural norms helped teachers realize that our definitions of giftedness (and everyone else's) are based on what is valued by that culture. According to Sternberg (2007), each culture's value

and definitions of giftedness are based on what is considered valuable in that culture. Finally, by including the parent empathy interview data, it helped teachers to see how important stakeholder input is and what misconceptions teachers may have had about our ELL families and giftedness. This opportunity to include parent voice in this study was invaluable to the outcomes in this research.

Addressing Deficit Views about ELL Students

We were also able to identify and address teacher deficit views in this study. This connects to the study conducted by McKenzie and Scheurich (2004) who identified teacher deficit view as an equity trap for students of color. The idea held by teachers in this equity trap is that students of color do not value education, that the students are unmotivated, low achieving, and do not know how to behave. Through this study we examined the barriers to full representation of students identified as ELL in gifted programming. Teachers identified the language barrier as the main source of underrepresentation of students identified as ELL in gifted education. Allen (2017) identified the language barrier as one of main reasons teachers block referrals for gifted identification. Similarly, Costello (2017) discussed that language proficiency and verbal skills keep students identified as ELL from being referred and identified as gifted. The teachers noted that the testing measures are unfair and unacceptable ways to identify ELL students for gifted identification and services. The practice of using standardized test scores for identification impedes ELL students from accessing gifted programming. The identification measures for giftedness have contributed greatly to the issue of the underrepresentation of ELL students in gifted education (Lohman & Gambrell, 2012;

Lakin & Lohman, 2011; Naglieri & Ford, 2003). It also adds to the deficit narrative surrounding students identified as ELL, as they are almost never identified as gifted. As students identified as ELL learn English in an English only environment, and must learn content at the same time, they are underprepared for standardized testing. This connects to the study by Pereira and Oliveira (2015) which calls out that the underlying issue of access is that students identified as ELL must learn English and content knowledge concurrently. The practice of looking at only test scores and percentiles as the only means of identification leads to teachers believing that students identified as ELL cannot and should not access gifted services. Until students identified as ELL reach the necessary scores, they are not served as gifted. Teachers were quick to share about other teachers who did not believe that ELL students should be in GT programming until they were English proficient. This connects to de Wet and Gubbins' (2011) study that showed that approximately four out of ten teachers did not believe ELL students should be included into gifted programming based upon gaps in prior learning.

Several teachers shared that they heard other teachers in the building make the statement that students identified as ELL could not be gifted based upon their lack of English proficiency. While this is fundamentally untrue, access to information regarding gifted identification and services has been denied to teachers. Ford and Grantham (2003) discussed how, in absence of training, the deficit view will determine that access be based on white norms. While this lack of access to information is not intentional in nature, the lack of education and training provided by the district has led to teachers who do not know much about giftedness and/or gifted programming. While several teachers came

into this study with some background knowledge, it was based upon things they had learned piecemeal throughout their teaching careers. One teacher was trained as a gifted resource teacher. This former gifted resource teacher stated that she had never considered other cultural definitions of giftedness in any of her training. The two second grade teachers were responsible for the testing grade for the universal screener. While those two teachers knew more than the average teacher, they were still using their own definitions of giftedness, with a few terms from the universal screener thrown in. However, once teachers had access to definitions of giftedness and how culture and giftedness interact, teachers saw giftedness differently. Borland (2004) noted that giftedness is a social construct that is based upon values of the dominant culture. This construct was challenged as teachers were able to start viewing giftedness as not an innate ability, but as one that can be nurtured and developed. The statements many of the teachers made regarding their learning and plans for advocacy make this study and my equity work worthwhile. The teachers in this study will no longer allow students identified as ELL to be overlooked. The teachers are poised to make changes and advocate more based upon their learning.

Lack of Recognition of the Problem

Teachers in this study began with a certain comfort level with students identified as ELL not being included in gifted services. While some teachers were aware of ELL students being overlooked for gifted identification, they had not realized the magnitude of the problem. Nor had teachers considered that they could do something about it. Teachers were in a position where they had to believe whatever is being expressed by the gifted

resource teacher and the district GT office. Unfortunately, what is commonly expressed through the gifted resource teacher and the district office is that scores are most important and often the only way to get a student qualified for gifted services. The literature shows that use of test scores for identification processes is part of the reason students identified as ELL are underrepresented in GT programming (Allen, 2017; Harris et al., 2007; Lakin & Lohman, 2011; Lohman et al., 2008; Loman & Gambrell, 2012; Naglieri & Ford, 2003; Pfeiffer & Blei, 2008; Plucker et al., 2013; Siegle et al., 2016). Through this lens, the only way students identified as ELL can hope to be identified is by being English proficient. By participating in this study, the teachers were exposed to different cultural ideas regarding giftedness as well as the community cultural wealth (Yosso, 2005) and funds of knowledge (Moll et al, 1992) of the families. Through this connection with families and by providing teachers access to the literature, teachers became more equity minded.

Potential for Change

The findings of this study support that through professional development using improvement science, teachers can make their definitions of giftedness more inclusive. The teachers all added to their definitions of giftedness to address other cultures and to include more areas of giftedness. It is interesting to note that many teachers changed their view about giftedness as exclusive and began thinking about how all children may be gifted in some way. Therefore, based upon the results from this study, I believe that more inclusive definitions of giftedness have been achieved. The findings from this study are

encouraging as they can be used to address the underrepresentation of students identified as ELL in GT programming.

By helping teachers to create their own more inclusive definitions of giftedness, teachers can now move forward as advocates armed with the knowledge to help address the underrepresentation problem. Through improvement science and inclusion of stakeholders, the teachers and I were able to add to our knowledge frameworks and change our definitions of giftedness to be more inclusive. Each teacher added to their definition of giftedness. Several teachers changed their view of giftedness from that of innate to socially constructed.

Connecting to the Framework

In addition, the conceptual framework integrally linked to the findings. The conceptual framework of community cultural wealth (Yosso, 2005) and funds of knowledge (Moll et al, 1992) allowed the teachers to see the students identified as ELL and their families through an asset-based lens. Teachers made the connection that ELL families have a lot of forms of capitals that make them strong, unique, and special. Many teachers did not understand how much aspirational and navigational capital families demonstrated on a daily basis to get their children access to better educational opportunities. Through the use of the parent voice in this study, teachers' opinions of families of ELLs were bolstered. Many teachers also came out of this study with a better understanding of just how valued education is among the families of the ELL families interviewed.

Making this connection changed teachers from a role of just accepting the status quo to advocates who want to make changes so that access to gifted education for students identified as ELL is more equitable. The teachers' funds of knowledge regarding the intersection of giftedness and ELL broadened to be much more inclusive. Teachers who started with basic knowledge of giftedness are now armed with an inclusive definition and a wish for equity. These teachers will no longer remain silent when they see a student identified as ELL that should be included in GT programming. As one teacher stated, we may not prevail, but we will definitely try harder. As the researcher I have also broadened my own definition of giftedness and am beginning to make additional advocacy moves to support my ELL students and families.

Implications

There are many implications that can be drawn from this study. These implications can be categorized into policy implications and practice implications. Policy implications will be district level policy implications. Practice implications will address the implications for teacher and school leader practice.

Policy Implications

The policy implications from this study are based on the lack of knowledge surrounding giftedness and gifted programming in Colorado. Gifted resource teachers and the district office of giftedness currently serve as gatekeepers to giftedness rather than advocates for all. While the GT district leadership position in this study was only recently filled with an equity minded person, there is much to be done. The GT facilitator for the district was interested in equity and getting more children identified, but she was

put into a system that has not changed or functioned equitably in decades. The GT facilitator must adopt a policy that educates her gifted resource teachers regarding a more inclusive definition of giftedness and mandates access to district level trainings regarding giftedness. The current professional development offerings are insufficient for teachers to become advocates for gifted children.

Another policy implication would be mandating professional development for teachers in the areas of ELL and gifted identification and services. Teachers currently have little access to professional development regarding either ELL or GT. There is definitely nothing offered that examines the intersection of ELL and gifted. Teachers are willing to listen, but someone must be willing to step into the gap and share knowledge. Whether that someone is a building leader, a gifted resource teacher, an ELL teacher, or someone from the district level, there must be more access to information regarding students qualified as gifted and students identified as ELL. In order for teachers to be advocates for all students they must have the knowledge to do so.

Another policy implication is the need for district support in the area of communication. The district must make a policy that all communication from schools should be both in the families' primary language as well as English. While this is not specific to the gifted and talented students and their families, it is an ethics and equity issue. Currently, there is no district support for non-English speaking families to access district facilities, schools, or teachers. The only district offering in this area is during conferences and if a teacher contacts the district and requests a translation or interpreter by appointment. There is no instant communication support from the district level. ELL

families have been using their navigational and resistance capital to navigate spaces that continue to exclude them. The district must do better. The district must begin by providing more community liaisons who can advocate for families. The district must begin offering instant translations for teachers so that they may communicate better with ELL families. There is a high level of need in communication. Schools, teachers, and families need the district to support them in communicating so that they feel like valued members of the community.

This study has shown that teachers can change their definitions of giftedness to be more inclusive. It also showed a willingness by teachers to become the advocates that ELL students need. Now the district leadership must step up their efforts to support teachers by providing more professional development and better, more inclusive communication with diverse families by aligning the language of the district vision and mission with action and evidence.

Practice Implications

Including the parent voice in this study allowed teachers access to their ELL families that they are not used to. As there is a language barrier between ELL families and teachers, and no support for bridging the barrier, teachers do not get to talk to the ELL families very much. Currently, the teachers are unable to communicate with the ELL families on a regular basis or in meaningful ways. One implication for practice is that parent voice needs to be included on a more regular basis. Teachers need to sit down with parents more than one time a year. Based on the results of this study, it is my belief that empathy interviews should be conducted by every teacher at the beginning and end

of each school year. Traditional conferences should still take place but should be held twice a year. This would allow teachers and families access to each other four times per year. It would build empathy on both sides. Teachers would know what aspirational capital their ELL families possessed, and ELL families would have further exposure to how to navigate school systems that were not built with them in mind. It would be a win-win for both parties involved.

Teachers in this study were underprepared to help students identified as ELL gain access to gifted programming as teachers may not have the knowledge base necessary to gain leverage. Teachers must attend more professional development offerings regarding giftedness. Both the ELL teacher and the gifted resource teacher should provide two staff trainings per year at the building level to allow teaches access to information about the intersection of GT and ELL. Teachers need access to information to help them become advocates with an understanding of how to be more inclusive practitioners.

A final implication is that ELL families must have a voice in their schools and districts. To be more inclusive, ELL families need to be able to access their school system. Every school should hold town hall meetings for ELL families so that they can have access to information. Every school needs to provide *all* communication in both English and the primary home language. This sounds simple enough but is revolutionary in the district of this study. Of the four district elementary schools that I have had access to, the elementary school in the study is the only one that provides all communication in both English and Spanish. In the other three schools, there is either no language support, they are using children as translators, or there may be one bilingual person in the building

to help ELL families. This needs to change. It makes a difference when parents have access to information in their home language.

Limitations

In setting up this study, I had to make several choices that limited this study. I was not able to include student voice in the current study. I think that adding student voice to this study would make it stronger. Teachers responded so well to the parent voice of the study; I believe that having access to student voice would strengthen the learning opportunities for teachers further.

Another limitation in this study was my lack of knowledge of how the school systems in Mexico and Guatemala functioned. I created my protocols asking parents of ELL students about their countries' definitions of giftedness and how it was treated in their country of origin. What I found in parent empathy interview showed that I had miscalculated in my questions. The parents interviewed had not had extensive contact with their educational systems. The educational systems of Mexico barred parents from participating once they stopped receiving scholarships in high school. The Guatemalan parents had very little contact with schooling, with one going only to fourth grade and the other having never attended school. This lack of access to schooling opportunities did not position my questions about giftedness very well. If I were to conduct this study again, I would instead ask about their experiences with schooling in their countries of origin and if they are aware of options for gifted children in their countries. To address this limitation for the PDSA cycle portion of the study, I did extensive research regarding the school systems and the national definitions of giftedness for Mexico and Guatemala. For

Guatemala, I also learned a lot about the civil war that happened there and how it affected the schooling of indigenous populations. Therefore, I was able to provide some information to teachers about the situations of the countries where most of their ELL populations come from.

Another limitation was that while rapport was judged to be good, I am not fluent in the native language of the parents. I had to use an interpreter which may have limited some of the information that parents would have shared if I was able to perform the interviews exclusively in their native language. While I was able to interact with the information gathered in an effective way, another researcher with better fluency may have been able to collect even more information from the parents. This addition of parent voice was integral to the study and while I was able to gather a great number of examples of the capitals and funds of knowledge of the families, I do question if there would have been more.

Another limitation was the way teacher participants were selected for the study. Teachers were asked to participate based upon my prior knowledge of them from the equity committee that we both serve on. Thus, this audience of teachers was already sympathetic towards matters of equity. This was not a random sample of any teacher in the building, whose learning and/or resistance to learning may have changed the results of this study. However, through the selection of more equity minded individuals, I believe that the results of the study were favorable. The teachers involved in this study have all stated their intention to continue their equity work and advocate for students identified as ELL to access gifted programming whenever possible. The teachers all saw

how students identified as ELL and their families must navigate spaces not designed for them and this built empathy. This empathy will ensure that teachers will no longer be content to *acquiesce to the status quo* (Ford, 2014, p. 149).

The final limitation can be found in the PDSA cycles presentation design. While I would have liked to spread the learning out over four separate meetings, I was only able to secure participation for two meetings. Therefore, teachers met with me one time to analyze the root cause and identify drivers and an aim statement. Then the PDSA cycles were delivered in a three-hour session, one right after the other. While teachers requested this model, some teachers afterwards stated a preference for it to be broken up. Other teachers stated they were well served with the model of delivery. While I judged that everyone was engaged throughout and their statements of learning were great, I think that breaking the presentation up into four, one-hour long meetings would have been ideal. Therefore, if I were to repeat this study under better conditions (lack of a pandemic/post pandemic time period), I would advocate for the four- meeting model.

While there were limitations for this study, I do not judge the limitations as detrimental to the study itself. The study was rich in information and the data that was shared with teachers to increase their learning and make more inclusive definitions of giftedness was sufficient. Parent voice added so much to this study as teachers do not have a lot of access to the parents of students identified as ELL in this district. Therefore, while student voice is desirable, it could definitely be an implication for future research. While limitations were present, I do not believe that they overtly affected the results of the study.

Recommendations for Future Research

As a first recommendation, I would advocate for the use of the funds of knowledge (Moll et al, 1992) and community cultural wealth (Yosso, 2005) framework to be used with culturally diverse communities whenever possible. This asset-based conceptual framework allows teachers to understand communities of color in a very different light. Teachers are often exposed to the deficit-based views of other teachers who are focused on student scores, family participation, and negative beliefs about communities of color. This framework allows teachers access to the positive information that has always been there but is almost never accessed or measured. In this study, this access to positive information changed how teachers stated they view ELL families and subsequently how they viewed giftedness. This framework was integral in combatting any deficit views held by teachers coming into the study. It was powerful and impactful. I would advocate for its use if working with diverse populations, especially if there is a cultural mismatch between teachers and parents.

As a second recommendation for future research, I would advocate for the use of improvement science. Improvement science allowed stakeholders to interact in a way that gave them the power to change their own beliefs and definitions of giftedness. Interacting with the data collected as teacher researchers allowed teachers to dig deeper into the learning than if they were just passive participants. The stakeholder input that is present in the improvement science research design makes it an ideal model for looking at whether systems and the people within systems are working at an optimal level. If systems or people are not working to optimal level, improvement science gives them a chance to assess the

situation and make changes where necessary. It is a model that can be used iteratively to improve systems in infinite ways.

A third recommendation for future research would be to repeat this study with other schools and districts. This study was successful in one research-based setting. I would like to see the study replicated at several different schools so that teachers can begin to have access to better information about giftedness. By providing teachers with better information, they can reconstruct their knowledge frameworks to be more inclusive of their students and families. This inclusiveness can lead to changed behaviors such as more advocacy and gifted referrals. This inclusiveness can also lead to policy and practice changes as teachers advocate for a more inclusive definition of giftedness. This will lead to a more culturally relevant focus for gifted education and will help more children be included in GT programming.

Reflection

Through this study, I learned a lot about improvement science. It is a method that allows the researcher and stakeholders to become active in the improvement effort. Stakeholder input into the process is what ensures that the PDSA is relevant to achieving the aim statement. Stakeholder input also builds buy in to the process or study, allowing for an environment that is less resistant to changes. This is a method that I will definitely use in future research.

I also learned about the educational context and the problem therein. The educational context of this study was one that is based upon a meritocracy based belief system. The students and families are told that if they just work hard and make good

decisions that all will be available and accessible to them. While this is a firmly held belief in the United States, it is not present at Mountain View Elementary School. Instead, students are being denied access to gifted programming and placements based upon their English proficiency and ELL status. While this is not always a readily recognizable problem, once identification procedures for GT are taken into account, the problem becomes clear. Students identified as ELL are not being served until they gain enough English proficiency to pass standardized testing. In addition to this unfair hurdle, ELL students are being taught only in English, with only 30 minutes of language support each day. Students identified as ELL are not getting a fair shot at being identified as gifted at Mountain View.

In addition to this, I also learned about myself as a researcher and a person. Through this study, as I worked hard to gather information and analyze data, I realized that I love working with qualitative data. I think improvement science is a wonderful method to follow as it allows me to see where I have been, where I am, and where I can plan on being next time. As a person, this study has changed me as well. I have always been an advocate for students identified as ELL. However, as I read, and read more, I began to understand that I needed to have as much information as possible on a topic to be a truly effective advocate. I also had to come to terms with the fact that as much as I read and understand, there will always be more information out there, something that I have missed. I must be humble in my seeking to understand and apply what I have learned, until I learn more, and then do better.

In the future, I can see many ways to apply improvement science to other problems of practice. I would like to begin looking into more equitable ways to identify ELL students for GT programming. Using improvement science could help me to see what is working and how it can be improved. I could also see applying improvement science to increase communication between families and schools. We could try out empathy interviews twice a year and then evaluate whether these interviews provide useful information or not. There are endless ways to use improvement science. The limit is only in imagination.

In this study I conducted an improvement science study based on the driver of understanding inclusivity in defining giftedness. I would like to continue my work in the area of assisting students identified as ELL to access GT programming. I would like to look at the identification tests for students and begin coaching students identified as ELL for these tests as a short term solution. I would also consider advocating for more culturally responsive identification processes and services as a long term solution. I think that so much of giftedness identification is based on access to information and the opportunities to learn. It would be interesting to see if working within the system, I can make a difference in representation for students identified as ELL. Another avenue that could be pursued is working with teachers to develop new identification measures for giftedness. While local norms are not widely accepted in districts due to their lack of portability, there is an argument to be made that if the student is in your district, that student should receive services based upon their need level, not that of another district. Creating assessments to help identify giftedness in students identified as ELL would be

such an important endeavor as there is not a lot out there to help with this process. Another way that I would continue forward would be to create avenues of communication between ELL families and their children's teachers. I could try out different translation ideas and provide access to families through modes of communication that make sense to them, rather than whatever may be convenient for schools. Convenience means that more can be piled on in a variety of ways, and it also means that things become more inequitable. For, if we are serving everyone the same exact way, it is only beneficial to some, at a cost to others.

Chapter Summary

This dissertation was an important study that helped teachers examine their underlying beliefs and attitudes towards giftedness. Through the recognition of teachers' knowledge frameworks and additional information provided, teachers were able to build a more inclusive definition of giftedness. Teachers are an amazing resource that can be utilized to advocate for children. This resource remains mostly untapped. As teachers contend with overcrowded classrooms, high stakes test scores, and petulant policy makers, they are not being given what they need to be effective advocates. During this study it became apparent to me that the teachers involved do want equity and what is fair for each child. When asked about giftedness, everyone had a similar, somewhat generic definition they had gathered piecemeal throughout their teaching careers. By exposing teachers to definitions of giftedness here in the United States and Colorado, and then looking at how different countries define giftedness and serve gifted children, it changed teachers' views on giftedness. Exposing teachers to how Mexico, Guatemala, and India

view giftedness and provide services, gave teachers another way of looking at giftedness that they had never even considered. Most teachers had never thought about giftedness outside of the school they serve, let alone outside of the United States. By connecting this knowledge to the voices of families through the lens of community cultural wealth (Yosso, 2005) and funds of knowledge (Moll et al, 1992), it made an impact. Teachers were grateful to have information about the ELL families they serve and were interested in becoming better advocates for their students identified as ELL. By examining the community cultural wealth and funds of knowledge of the ELL families, teachers were able to let go of some of the underlying deficit views that affect most teachers' perceptions of students identified as ELL and their families. Through this study, it was highlighted that a group of overworked, exhausted teachers has what it takes to be effective advocates for students identified as ELL wishing to access GT programming. Through their participation in this study, teachers changed their definitions of giftedness to be more inclusive and became prepared to be better advocates for ELL students and their families. It is through grassroots efforts such as improvement science studies that will lead to real, tangible changes in our process for getting students identified as ELL access to GT programming.

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Appendices

Appendix A

Parent Consent Form

Title of Research Study: Making the Invisible Visible: Redefining Giftedness to Include ELL Students' Community Cultural Wealth and Funds of Knowledge
Researcher(s): Molly Pargas
Faculty Sponsor: Dr. Hesbol
Study Site: Mountain View Elementary

Purpose
You are being asked to participate in a research study. The purpose of this research is to include parent/family voice to better help teachers and school leaders understand your perspective of your ELL student's experiences in GT programs at Mountain View Elementary.

Procedures
If you consent to be part of this research study, you will be invited to participate in an interview. The interview will last approximately 30 minutes.

Voluntary Participation
Participating in this research study is completely voluntary. Even if you decide to participate now, you may change your mind and stop at any time. You may choose not to answer any question during the interview for any reason without penalty or other benefits to which you are entitled.

Risks or Discomforts
The researcher has taken steps to minimize the risks of this study. Even so, as a participant, you may still experience some risks related to feelings that may be evoked from questions being asked in the interview. The study may include other risks that are not known at this time. If, however, you feel embarrassed or uncomfortable at any time to answer a question, you may decline to answer the questions or end the interview. You may also choose to withdraw from the study at any time. There will be no penalty, no negative consequences, and no removal of other benefits to which you are entitled if you decline to answer any question, end the interview, or withdraw from the study.

Benefits
A major benefit of this study is to better inform teachers and school leaders regarding the experiences of ELL students in GT. I am looking for any information that will help me explore and reflect on current practices.

Incentives to Participate

You will receive $25.00 for participating in this research project.

Study Costs

You will not be expected to pay any costs associated with the study.

Confidentiality

The researcher will make all efforts to keep your information private. There will be no identifiers linking you to this study and a pseudonym will be used to keep your information safe throughout the study. The name of the school district will also be kept confidential and a pseudonym for your school district will be used. The researcher will destroy the original data once it has been transcribed and the study is completed. The results from this research will be used for learning purposes only. Information about you will be kept confidential to the extent permitted or required by law.

Transcription Checking:

Your transcribed interview will be sent to you as a follow-up to ensure that your responses were recorded accurately. All transcriptions will be kept in Spanish. If you do not agree with any parts of the written transcription or feel that your responses were not accurately recorded, please let the researcher know.

Questions

You can contact Molly Pargas at molly.pargas@du.edu at any time. You can also reach me through text or call me at 719-406-3193.

Options for Participation

Please initial your choice for the options below:

___The researchers may audio record me during this study.

___The researchers may **NOT** audio record me during this study.

Please take all the time you need to read through this document and decide whether you would like to participate in this research study.

If you agree to participate in this research study, please sign below. You will be given a copy of this form for your records.

_____ _____

Participant Signature **Date**

Formulario De Consentimiento Para Los Padres

Título del estudio de investigación: Hacer visible lo invisible: redefinir la superdotación para incluir la riqueza cultural y los fondos de conocimiento de la comunidad de los estudiantes ELL

Investigador(es): Molly Pargas
Patrocinador de la Facultad: Dr. Hesbol
Lugar del Estudio: Mountain View Elementary

Propósito

Se le solicita participar en el estudio de investigación. El propósito de esta investigación es incluir la voz de los padres/familia para ayudar mejor a los maestros y líderes escolares a comprender su perspectiva de las experiencias de su estudiante ELL en los programas GT en Mountain View Elementary.

Procedimiento

Si usted otorga el consentimiento para formar parte del estudio, será invitado a participar en una entrevista. La entrevista tiene una duración aproximada de 30 minutos.

Participación voluntaria

Participar en esta investigación es totalmente voluntario. Si usted decide participar ahora, usted puede cambiar de parecer y dejar de ser parte del mismo en cualquier momento. Usted tiene la opción de no contestar preguntas por cualquier razón sin ninguna sanción o quitársele beneficios a los que tiene derecho.

Riesgos o incomodidades

El investigador ha tomado medidas para disminuir los riesgos de esta investigación. Aun así, como participante, usted puede experimentar incomodidad o riesgos basados en los sentimientos que pueden provocar las preguntas de la entrevista. El estudio puede incluir otros riesgos no contemplados en este momento. Si usted se siente avergonzado o incomodo en cualquier momento, puede negarse a responder o terminar la entrevista. También puede retirarse del estudio en cualquier momento. No habrá ninguna sanción, consecuencias negativas, ni se le quitará ningún otro derecho que le corresponda si decide negarse a responder, terminar la entrevista o retirarse del estudio.

Beneficios

Un beneficio importante de este estudio es informar mejor a los maestros y líderes escolares sobre las experiencias de los estudiantes ELL en GT. Busco cualquier información que me ayude a explorar y reflexionar sobre las prácticas actuales.

Incentivos por participar

Usted recibirá $25.00 por participar en este estudio.

Costo del Estudio

No se espera que usted pague algún costo asociado al estudio.

Confidencialidad

El investigador hará lo posible por mantener su información privada, no habrá ningún identificador asociándolo al estudio y un seudónimo será usado para mantener su información a salvo durante el estudio. El nombre del distrito escolar también se mantendrá confidencial y un seudónimo será usado para el distrito. El investigador se deshará de su información una vez que los datos sean transcritos y el estudio sea concluido. Los resultados del estudio serán usados solamente con propósito de aprendizaje. La información sobre usted será confidencial en a la medida de lo posible o permitido por la ley.

Comprobación de los miembros:

Su entrevista transcrita se le enviara como seguimiento para asegurar que sus respuestas sean las adecuadas. Todas las transcripciones se mantendrán en español. Si usted no está de acuerdo con alguna parte de la transcripción o siente que sus respuestas no son las correctas por favor déjemelo saber.

Dudas

Usted puede contactar a Molly Pargas al correo Molly.pargas@du.edu en cualquier momento. También puede llamar o enviar un mensaje de texto al 719-406-3193.

Opciones de participación

Favor poner sus iniciales en la opción que guste:

___ Los investigadores pueden grabarme en audio durante el estudio.

___ Los investigadores **NO** pueden grabarme en audio durante el estudio.

Favor tómese el tiempo necesario para leer el documento y decidir si le gustaría participar en el estudio de investigación.

Si decide participar en la investigación, firme abajo por favor. Se le entregara una copia del formulario.

_____ _____

Firma del participante **Fecha**

Appendix B

Teacher Consent Form

Title of Research Study Making the Invisible Visible: Redefining Giftedness to Include ELL Students' Community Cultural Wealth and Funds of Knowledge
Researcher(s): Molly Pargas
Faculty Sponsor: Dr. Hesbol
Study Site: Mountain View Elementary

Purpose
You are being asked to participate in a research study. The purpose of this research is to include teacher voice to better help teachers better understand ELL students when it comes to their access to GT programs.

Procedures
If you consent to be part of this research study, you will be invited to participate in two interviews approximately 1-2 months apart. Each Interview will last approximately 30 minutes.

Voluntary Participation
Participating in this research study is completely voluntary. Even if you decide to participate now, you may change your mind and stop at any time. You may choose not to answer any question during the interview for any reason without penalty or other benefits to which you are entitled.

Risks or Discomforts
The researcher has taken steps to minimize the risks of this study. Even so, as a participant, you may still experience some risks related to feelings that may be evoked from questions being asked in the interview. The study may include other risks that are not known at this time. If, however, you feel embarrassed or uncomfortable at any time to answer a question, you may decline to answer the questions or end the interview. You may also choose to withdraw from the study at any time. There will be no penalty, no negative consequences, and no removal of other benefits to which you are entitled if you decline to answer any question, end the interview, or withdraw from the study.

Benefits
A major benefit of this study is to better inform teachers and school leaders how to better serve ELL students. The researcher is looking for any information that will help explore and reflect on current practices.

Incentives to Participate
You will receive $25.00 for participating in this research project.
Study Costs

You will not be expected to pay any costs associated with the study.

Confidentiality

The researcher will make all efforts to keep your information private. There will be no identifiers linking you to this study and a pseudonym will be used to keep your information safe throughout the study. The name of the school district will also be kept confidential and a pseudonym for your school district will be used. The researcher will destroy the original data once it has been transcribed and the study is completed. The results from this research will be used for learning purposes only. Information about you will be kept confidential to the extent permitted or required by law.

Transcription Checking:

Your transcribed interview will be sent to you as a follow-up to ensure that your responses were recorded accurately. If you do not agree with any parts of the written transcription or feel that your responses were not accurately recorded, please let the researcher know.

Questions

You can contact Molly Pargas at molly.pargas@du.edu or call me at 719-406-3193 at any time.

Options for Participation

Please initial your choice for the options below:

___The researchers may audio record me during this study.

___The researchers may **NOT** audio record me during this study.

Please take all the time you need to read through this document and decide whether you would like to participate in this research study.

If you agree to participate in this research study, please sign below. You will be given a copy of this form for your records.

_____ _____

Participant Signature **Date**

Appendix C

Parent Interview Protocol

Introduction to the Research Project:
You have been selected to participate in a study called **Gaining Access to GT Programming for ELL Students**. This research study will use parent interview data to better inform teachers and school leaders how to better support and increase their capacity for becoming more culturally responsive leaders. Your opinions, experiences, ideas, and participation are very important in this study and may lead to improving practices regarding English Language Learner students. The research question for this study is: How can more inclusive definitions of giftedness be developed to provide ELL students better access to GT programming at Mountain View Elementary School?

Introductory Protocol:
I would like to audio record our discussion today so that I can ensure the best accuracy in note- taking for this study. I will be the only person that will listen to and have access to this information. Additionally, I will destroy the audio recording after the notes have been transcribed and the research project is completed. Because of these efforts to provide protections, the informed consent form signed by you meets the requirements for human subject research. The form explains that:

- *All information shared during our conversation will be kept confidential.*
- *Your participation is completely voluntary, and you may stop at any time without penalty if you feel uncomfortable or embarrassed.*
- *There is no harm intended through this study.*

It is my plan that this interview should take no longer than 30 minutes. During this time, I have several questions that I would like to ask you. To respect your time commitment, I may need to interrupt our conversation if we are running short on time.

As a follow-up to this interview, I will ask for your comments and feedback during the writing of the report to ensure that your opinion, experiences, ideas are accurately reflected.

Do you have any questions before we begin?

Now I will ask some questions regarding the research study. You may ask me questions at any time during this process. If you would like to follow along, here is a copy of the questions I plan to ask.

1. How do you define giftedness?
2. How is giftedness defined/treated in your community? Is there anything in your culture that is valued as gifted that is not recognized here in the U.S.?
3. In <u>(country of origin)</u> how does the school and community help gifted children? What opportunities are available?
4. Your child has been identified as gifted, is there anyone else in your family that you also consider to be gifted?
5. Tell me what you know about our gifted and talented program at Mountain View Elementary? (How did you find out about it? Did anyone help you?)

6. Can you tell me what positive experiences you have had with the gifted and talented program?
7. Can you tell me about any challenges you have had with the gifted and talented program?
8. Do you think being bilingual has helped your child to be identified GT? Do you think knowing two or three languages should be a way for children to be identified as GT?
9. How do you and your family support your child with their giftedness at home?
10. Tell me about any gifted and talented opportunities you have found for your child outside of school? (How did you find out about it? Have you had any challenges in getting access to them?)
11. How do you think being identified gifted will help your child in the future? What hopes and dreams do they have?
12. How can we better support your child in the school GT programs? What other opportunities in GT would help your child? (Art, science, language) Any recommendations?

Introducción al Proyecto de Investigación:

Ha sido seleccionado para participar en un estudio llamado **Obtener acceso a la programación GT para estudiantes ELL.** Este estudio de investigación utilizará los datos de las entrevistas con los padres para informar mejor a los maestros y líderes escolares sobre cómo apoyar mejor y aumentar su capacidad para convertirse en líderes culturalmente más sensibles. Sus opiniones, experiencias, ideas y participación son muy importantes en este estudio y pueden conducir a mejorar las prácticas con respecto a los estudiantes que aprenden inglés. La pregunta de investigación para este estudio es: ¿Cómo se pueden desarrollar definiciones alternativas de superdotación para proporcionar a los estudiantes ELL acceso a la programación GT en la Escuela Primaria Mountain View?

Protocolo introductorio:

Me gustaría grabar en audio nuestra discusión el día de hoy para poder asegurar la mayor exactitud a las notas tomadas para este estudio. Seré la única persona que escuchará y tendrá acceso a esta información. Adicionalmente, destruiré las grabaciones después de que las notas sean transcritas y la investigación este completada. Debido a estos esfuerzos por brindar protección, el formulario de consentimiento informado firmado por usted cumple con los requisitos de investigación con personas humanas. El formulario explica que:

- *Toda la información compartida durante la conversación será mantenida confidencial.*
- *Su participación es completamente voluntaria, y usted puede detenerse en cualquier momento sin penalidades si se siente incómodo o avergonzado.*
- *No hay ningún daño intencionado detrás de este estudio.*

Es parte de lo planeado que esta entrevista no dure más de 30 minutos. Durante este tiempo, tengo varias preguntas que me gustaría hacerle. Para respetar su tiempo, podre interrumpir la entrevista cuando estemos cortos de tiempo.

Como seguimiento de esta entrevista, le pediré sus comentarios y realimentación durante la transcripción del reporte para asegurar que su opinión, experiencias, ideas son reflejadas correctamente.

¿Alguna duda antes de comenzar?

Guía y protocolo de la entrevista

Ahora le haré preguntas para el estudio de investigación. Usted puede hacer preguntas en cualquier momento durante este proceso. Si desea leer junto a mí, aquí tiene una copia de las preguntas a realizar.

1. ¿Cómo defines GT?
2. ¿Cómo se define/trata GT en su comunidad? ¿Hay algo en su cultura que se valore como superdotado que no se reconozca aquí en los EE. UU.?
3. En (país de origen) ¿cómo ayuda la escuela y la comunidad a los niños GT? ¿Qué oportunidades están disponibles?

4. Su hijo ha sido identificado como GT, ¿hay alguien más en su familia que también considere GT?
5. Dígame, ¿qué sabe sobre nuestro programa GT en Mountain View Elementary? (¿Cómo te enteraste? ¿Alguien te ayudó?)
6. ¿Me puede decir qué experiencias positivas ha tenido con el programa GT?
7. ¿Puede contarme sobre algún desafío que haya tenido con el programa GT?
8. ¿Crees que el ser bilingüe ha ayudado a que tu hijo se identifique como GT? ¿Crees que saber dos o tres idiomas debería ser una forma de identificar a los niños como GT?
9. ¿Cómo apoyan usted y su familia a su hijo con su GT en casa?
10. Cuénteme sobre cualquier oportunidad de GT que haya encontrado para su hijo fuera de la escuela. (¿Cómo se enteró? ¿Ha tenido algún problema para acceder a ellos?)
11. ¿Cómo cree que ser identificado como GT ayudará a su hijo en el futuro? ¿Qué esperanzas y sueños tienen?
12. ¿Cómo podemos apoyar mejor a su hijo en los programas escolares GT? ¿Qué otras oportunidades en GT ayudarían a su hijo? (Arte, ciencia, lenguaje) ¿Alguna recomendación?

Appendix D

Teacher Interview Protocol One

Introduction to the Research Project:

You have been selected to participate in a study called **Gaining Access to GT Programming for ELL Students**. This research study will use parent interview data to better inform teachers and school leaders on how to better support ELL students with regard to GT programming. Your opinions, experiences, ideas, and participation are very important in this study and may lead to improving practices regarding English Language Learner students. The research question for this study is: How can more inclusive definitions of giftedness be developed to provide ELL students better access to GT programming at Mountain View Elementary School?

Introductory Protocol: *I would like to audio record our discussion today so that I can ensure the best accuracy in note- taking for this study. I will be the only person that will listen to and have access to this information. Additionally, I will destroy the audio recording after the notes have been transcribed and the research project is completed. Because of these efforts to provide protections, the informed consent form signed by you meets the requirements for human subject research. The form explains that:*

- *All information shared during our conversation will be kept confidential.*
- *Your participation is completely voluntary, and you may stop at any time without penalty if you feel uncomfortable or embarrassed.*
- *There is no harm intended through this study.*

It is my plan that this interview should take no longer than 30 minutes. During this time, I have several questions that I would like to ask you. To respect your time commitment, I may need to interrupt our conversation if we are running short on time.

As a follow-up to this interview, I will ask for your comments and feedback during the writing of the report to ensure that your opinion, experiences, ideas are accurately reflected.

Do you have any questions before we begin?

Interview Guide & Protocol

First, I would like to ask questions to collect demographic information. The data will be used purely for analysis. Res ponses are optional.

Demographic Questions

1. What is your cultural background? _____
2. How many years of teaching experience do you have working with students who are gifted?
3. How many years of teaching experience do you have working with students who are ELL? _____

Now I will ask some questions regarding the research study. You may ask me questions at any time during this process. If you would like to follow along, here is a copy of the questions I plan to ask.

1. How do you define giftedness? Give examples.
2. Can you tell me about your knowledge of the GT program at Mountain View?

3. Can you tell me about your knowledge of GT identification at Mountain View?
4. Can you tell me about what you know about ELL students in GT at Mountain View?
5. Can you tell me about any situations where you have had students that were both ELL and GT?
6. Have you ever had to advocate for your ELL students to have access to GT?
7. What are your thoughts about ELL students being identified as GT?
8. How can we better support you with ELL students with regard to GT? Any recommendations?

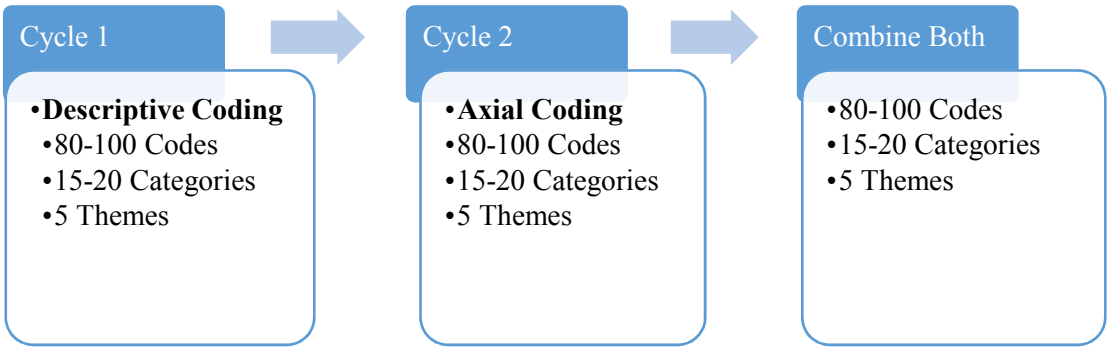
End of the interview:

- Summarize
- Thank the participant
- Provide contact information, Answer any additional questions

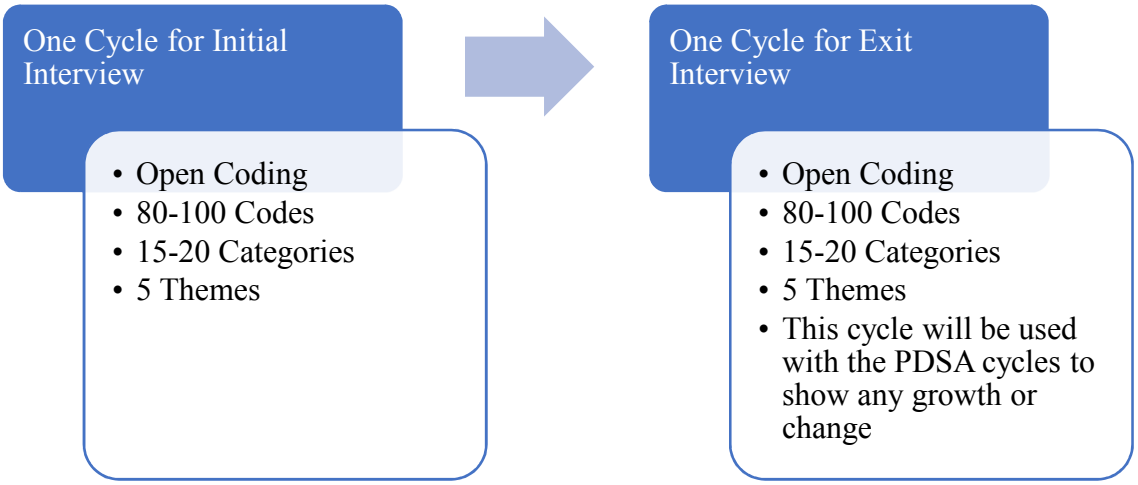
Appendix E

Coding Cycles

Parent Interviews

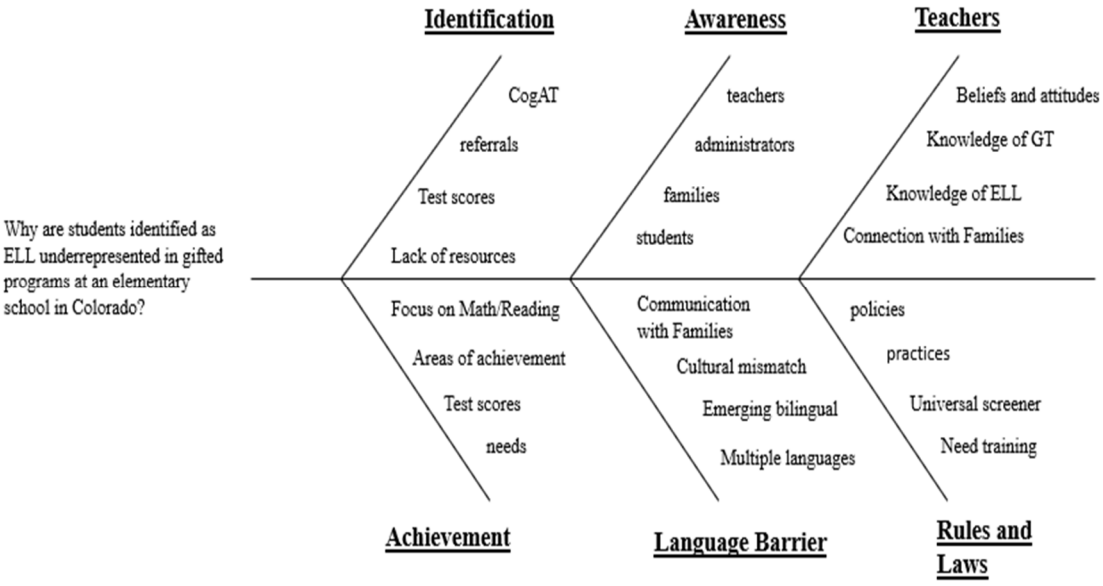


Teacher Interviews



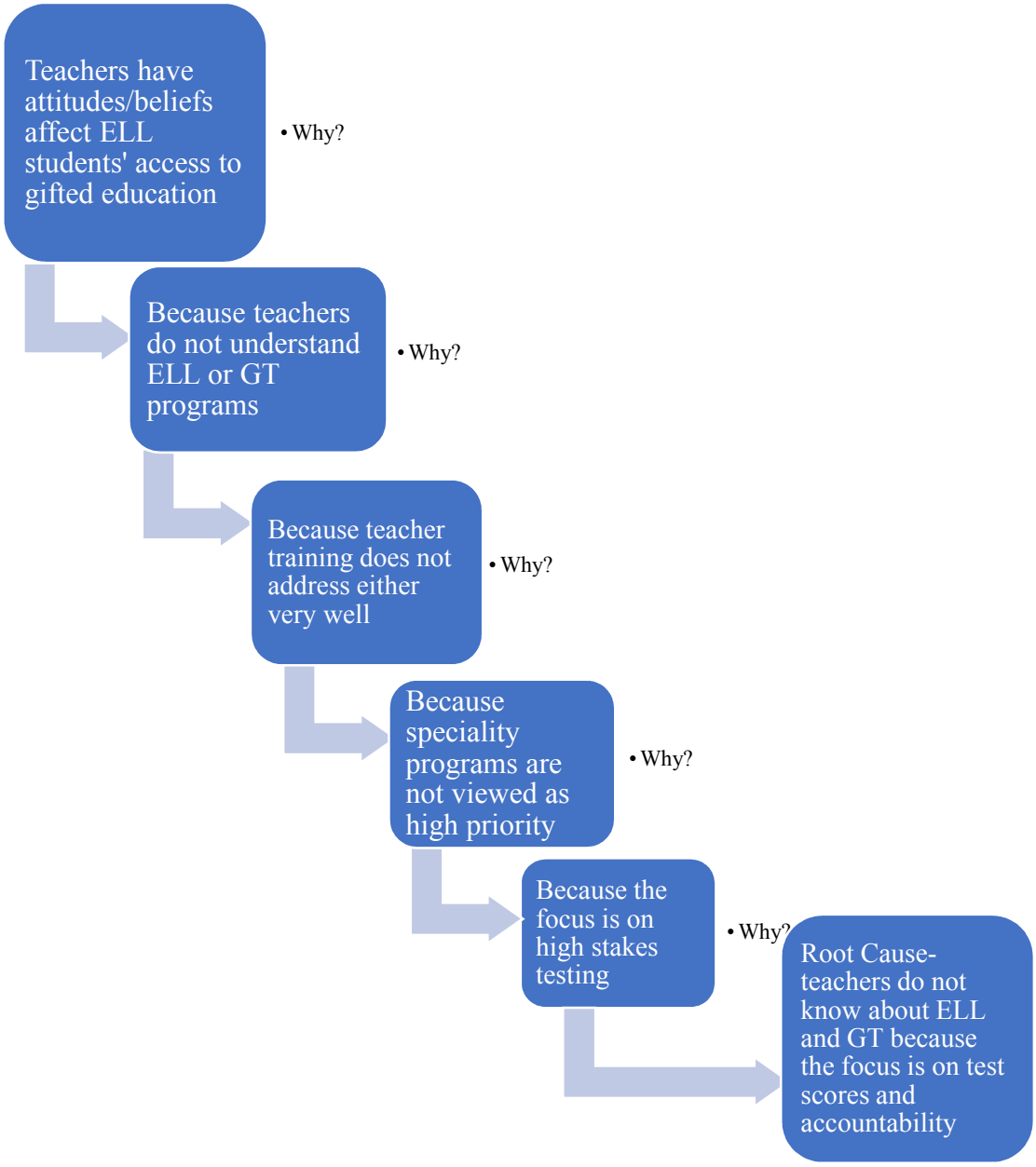
Appendix F

Fishbone Diagram



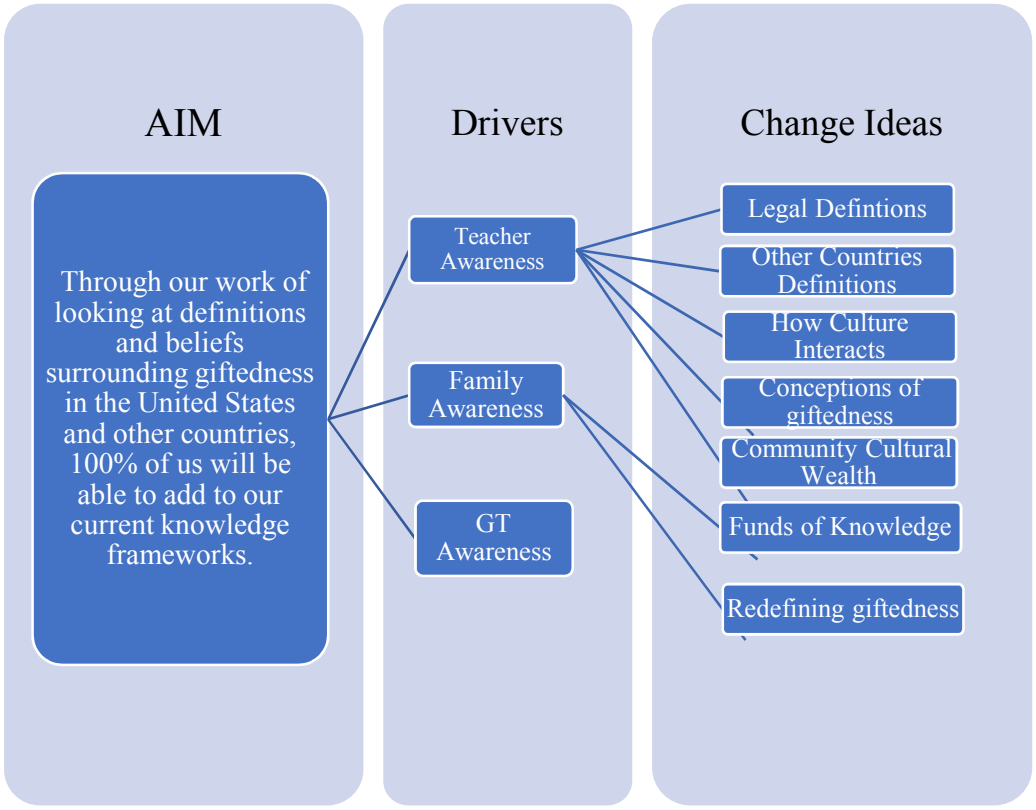
Appendix G

Five Whys Tool



Appendix H

Driver Diagram



Appendix I

Video Recording and PDSA Consent Form

Title of Research Study: Making the Invisible Visible: Redefining Giftedness to Include ELL Students' Community Cultural Wealth and Funds of Knowledge
Researcher(s): Molly Pargas
Faculty Sponsor: Dr. Hesbol
Study Site: Online using WebEx or recorded in person

Purpose

You are being asked to participate in a research study. The purpose of this research is to include your voice to better help teachers and school leaders with understanding ELL students in GT programs. These recordings are so the researcher can collect better data which will hopefully enhance the data. The researcher will be leading the meetings and will not be able to take notes. The video recordings will help the researcher remember what happened during each of the meetings. The PDSA cycle forms will help collect data to inform the research.

Procedures

If you consent to be part of this research study, you will be invited to participate in four informational meetings on WebEx. Each meeting will last approximately 30 minutes. No one besides the researcher will see or have access to the four recordings. The PDSA forms will be filled out after each meeting.

Voluntary Participation

Participating in this research study is completely voluntary. Even if you decide to participate now, you may change your mind and stop at any time.

Risks or Discomforts

The researcher has taken steps to minimize the risks of this study. Even so, as a participant, you may still experience some risks related to feelings that may be evoked from discussions or participation during in the meetings. The study may include other risks that are not known at this time. If, however, you feel embarrassed or uncomfortable at any time you may decline to participate in the meetings. You may also choose to withdraw from the study at any time. There will be no penalty, no negative consequences, and no removal of other benefits to which you are entitled if you decline to withdraw from the study.

Benefits

A major benefit of this study is to better inform teachers and school leaders how to better serve ELL students. I am looking for any information that will help me explore and reflect on current practices.

Incentives to Participate

The only incentives for participating for this study are to add to the research.

Study Costs

You will not be expected to pay any costs associated with the study.

Confidentiality

The researcher will make all efforts to keep your information private. There will be no identifiers linking you to this study and a pseudonym will be used to keep your information safe throughout the study. The name of the school district will also be kept confidential and a pseudonym for your school district will be used. The researcher will destroy the original data once it has been used and the study is completed. The results from this research will be used for learning purposes only. Information about you will be kept confidential to the extent permitted or required by law.

Questions

You can contact Molly Pargas at molly.pargas@du.edu at any time.

Options for Participation

Please initial your choice for the options below:

___The researchers may video record me during this study.

___The researchers may **NOT** video record me during this study.

___The researchers may use my PDSA Cycles for this study.

___The researcher may **NOT** use my PDSA Cycles for this study.

Please take all the time you need to read through this document and decide whether you would like to participate in this research study.

If you agree to participate in this research study, please sign below. You will be given a copy of this form for your records.

_____ _____

Participant Signature **Date**

Appendix J

PDSA Cycles

Pseudonym _____

Cycle One: Reviewing Definitions of Giftedness

Plan	**Do**
Looking at definitions of giftedness both here and around the world may widen some of our current knowledge frameworks.	We will review definitions of giftedness here in the United States, Colorado, and D11. Following we will review some cultural definitions of giftedness, how different cultures may view giftedness, and how those intersect with our ideas.
Study (notes from presentations)	**Act** (recommendations/thoughts/ideas)

		Strongly Disagree			Strongly Agree	
	Question	**1**	**2**	**3**	**4**	**5**
1	The information that was provided was helpful to me.					
2	The information added to my knowledge framework.					
3	The information increased my awareness about giftedness and how it relates to ELL students.					
4	The information that was presented was new to me.					

Pseudonym _____

Cycle Two: How Definitions of Giftedness Interact with Identification

Plan	**Do**
Looking at the literature regarding giftedness for ELL students may widen our current knowledge frameworks.	We will review the literature regarding common identification procedures, CO procedures and how those play out for ELL students.
Study (notes from presentations)	**Act** (recommendations/thoughts/ideas)

		Strongly Disagree			**Strongly Agree**	
	Question	**1**	**2**	**3**	**4**	**5**
1	The information that was provided was helpful to me.					
2	The information added to my knowledge framework.					
3	The information increased my awareness about giftedness and how it relates to ELL students.					
4	The information that was presented was new to me.					

Pseudonym _____

Cycle Three: Community Cultural Wealth/Funds of Knowledge and What Our Parents Say

Plan	**Do**
Sharing new knowledge frameworks for viewing different cultures as well as voices from our families' cultures may add to our current knowledge frameworks.	We will review Community Cultural Wealth and Funds of Knowledge. Then we will look at some data from parent interviews that help illustrate how these frameworks can be viewed.
Study (notes from presentations)	**Act** (recommendations/thoughts/ideas)

		Strongly Disagree			Strongly Agree	
	Question	**1**	**2**	**3**	**4**	**5**
1	The information that was provided was helpful to me.					
2	The information added to my knowledge framework.					
3	The information increased my awareness about giftedness and how it relates to ELL students.					
4	The information that was presented was new to me.					

Appendix K

Second Teacher Interview Protocol

Introduction to the Research Project:
You have been selected to participate in a study called **Gaining Access to GT Programming for ELL Students**. This research study will use parent interview data to better inform teachers and school leaders how to better support and increase their capacity for serving ELL students. Your opinions, experiences, ideas, and participation are very important in this study and may lead to improving practices regarding English Language Learner students. The research question for this study is: How can more inclusive definitions of giftedness be developed to provide ELL students better access to GT programming at Mountain View Elementary School?

Introductory Protocol:
I would like to audio record our discussion today so that I can ensure the best accuracy in note- taking for this study. I will be the only person that will listen to and have access to this information. Additionally, I will destroy the audio recording after the notes have been transcribed and the research project is completed. Because of these efforts to provide protections, the informed consent form signed by you meets the requirements for human subject research. The form explains that:

- *All information shared during our conversation will be kept confidential.*
- *Your participation is completely voluntary, and you may stop at any time without penalty if you feel uncomfortable or embarrassed.*
- *There is no harm intended through this study.*

It is my plan that this interview should take no longer than 30 minutes. During this time, I have several questions that I would like to ask you. To respect your time commitment, I may need to interrupt our conversation if we are running short on time.

As a follow-up to this interview, I will ask for your comments and feedback during the writing of the report to ensure that your opinion, experiences, ideas are accurately reflected.

Do you have any questions before we begin?

Interview Guide & Protocol

Now I will ask some questions regarding the research study. You may ask me questions at any time during this process. If you would like to follow along, here is a copy of the questions I plan to ask.

1. What have you learned about ELL students and GT programming during this study?
2. How are you able to connect what you have learned to what you already knew?
3. How has your view changed, if any, during this study?
4. What is your definition of giftedness?
5. What do you think was most helpful in the information presented? Why?
6. What do you think was least helpful in the information presented? Why?
7. If I were to give this training again, what recommendations do you have to improve it?

8. What were your main takeaways from your time participating in the study?
9. What do you think you would need to better support ELL students in gaining access to GT?

End of the interview:

- Summarize
- Thank the participant
- Provide contact information
- Answer any additional questions

Appendix L

Teachers' Constructs of Giftedness

Teacher	Initial Construct of Giftedness	Revisions to Construct of Giftedness	Changes
Mr. Alas	3 types in elementary school. 5 more in middle school. Made up. 95% or higher on tests. Subjective.	Educating families should be part of this. Bilingual GT teacher will advocate more. Its subjective and many groups are left out on multiple layers. If more ELL families were included in creating GT stuff than there would be more ELL GT kids.	Included information that families' funds of knowledge should be included.
Mrs. Jaret	Giftedness is where a person or student has an aptitude or significant strength in an area of academics. The academics can be quantitative, verbal, nonverbal, or in arts. (Math, comprehension, problem solving).	An aptitude in math, reading, writing, art, sports, social aspects, religion, etc. This definition varies from culture to culture. GT is more identified with English speaking students whereas non-English speaking individuals are less likely to be identified/receive services.	Added areas: art, sports, social aspects, religion, etc. Definitions are culturally based Recognizes that ELLs are under identified and underserved.
Mrs. Gomme	Many ELL students are overlooked. GT is more of a different way of thinking; being creative, innovative, or great critical thinkers. Standardized testing isn't always the best at identifying gifted students.	Varies from culture to culture, even within cultures. Can include social-emotional or spirituality in some cultures. Standardized tests can be hindering for identifying ELLs due to language barriers.	Definitions are culturally based. Added areas: social-emotional, spirituality.
Mrs. Moore	Giftedness is when a person demonstrates or shows the capacity in an area that exceeds the typical or average person. Usually it	To include multi-areas: academic aptitude, leadership, creative, performing arts/etc., general aptitude (US). However, cultural influences from	Added areas: leadership, creative, performing arts, general aptitude

	includes a unique perspective, depth of understanding or ability to pick up a topic or ability quickly.	other countries may be considered in their culture/country of origin. How can we incorporate here?	Cultural influences matter
Mrs. Devlin	My thoughts are that it is: when a child thinks/learns differently than other students or peers- it is also a thinking that is of a higher grade level than their peers. They just do it differently.	ELL students face additional challenges because we may not know what they know because of the language barrier. Not only does the student know how to do certain things- their parents have a hard or harder time understanding the process.	Barriers to access to GT.
Mrs. Tapia	Outside the box thinkers. Often struggle with being so smart and expecting everything to go easily. Sometimes perfectionists. Common emotional struggles. Often bored in classrooms. Needs often ignored in school. Minorities and ELLs (many groups) underrepresented.	Cultural advantages to getting identified GT. Identified based on test instead of whole child. Our 85 & 95 percentiles are guidelines, not cutoffs. Families from Guatemala at our school with GT students have very high expectations, especially because many had limited/costly educations.	Barriers to access to GT. Cultural strengths of families.
Mrs. Earle	Children that can work through multiple types of problems, problem solve efficiently. Out of the box thinking. Natural inclination for a skill or talent. Someone with extraordinary or abnormal amount of talent.	Includes emotionally stable intelligence. Differs based on country, custom, beliefs. Access to giftedness, resources, opportunities, and services are exclusive, super selective, and not entirely fair/open/opportunistic to ELL friends. We need to consider what their culture defines as giftedness.	Definitions are culturally based. Barriers to access to GT. Consider cultural definitions of giftedness.

Appendix M

Teachers' Definitions of Giftedness from Interviews

Teacher	Definition of Giftedness (pre)	Definition of Giftedness (post)	Changes
Mr. Alas	It's just made up. That it's subjective. It's just whatever a group of people came together for giftedness and made it up. Usually whatever group that is, I'm sure whatever they made up was to benefit their own group. I think it's made up and any kid could do it. Whoever comes up with the test and rules can make it up.	Whoever comes up with the test and rules can make it up.	None
Mrs. Jaret	A student's aptitude to see things outside the box in many different content areas. It could be art, it could be music, it could be language, reading comprehension, math, and creativity. Willing to take risks without worrying about boundaries. They are students who see things a little bit deeper without being prompted by the teacher.	My definition is having an aptitude in different areas of schooling, it has changed since taking your course. It used to be use qualitative, quantitative, and nonverbal. But it could also be in social areas, religious areas, arts, sports, all sorts of things, really anything a person can do they can be gifted.	Additional areas of giftedness: social areas, religious areas, sports. Belief that anyone can be gifted.
Mrs. Gomme	A way of thinking, being able to think outside the box being able to critically problem solve. Seeing thinking in different ways, not just the way a teacher might have taught you something. Being able to see different things connect, making interdisciplinary connections on your own.	It is a different way of looking at things. Thinking outside the box, being able to apply yourself differently, or further than what is expected. There are different types of giftedness, there's not just one, and I think that's probably why the typical school setting is not necessarily	Notes different types of giftedness. Failing ELL students because of language barrier.

		conducive to finds these ELL gifted student. Because with the language barrier, everyone just looks at that and says, well they don't know anything, because they can't speak the same language as me and that's not true.	
Mrs. Moore	People who think outside the box. A lot of times they are the ones who explain things in different ways. Or we might be having a discussion on one thing, and it leads their mind to several different things. You can see it in discussion. You can see it in any of the subjects, including arts. I often see kids that are twice exceptional.	Students that have an ability, higher than most. It does not have to be just academic. I want to say it's kind of out of the box thinking. So, it may be an artist who is amazingly creative and doesn't just cop out of a book in second grade. And in a lot of ways doesn't think like the rest of us.	Higher ability learners.
Mrs. Devlin	A student who thinks differently, who process differently, who doesn't look at it in a traditional way. They go about it in a different way and can explain their thought processes and completely understand it. They are above grade level, and they just get it, they understand it. You can tell them something once or twice and they really get it. The way they go about problem solving is a little bit above their peers.	A different way of thinking. These students learn differently. It can be a higher level than their peers. Although I think every student almost has a giftedness in some way. Every child is smart in every way regardless of their socioeconomic, their language status, whatever. I've always not really liked the label giftedness; I like that they learn differently. But there are kids who have a bigger knowledge base.	Belief that every student can be gifted. Notes socioeconomic and language statuses. Notes how background knowledge plays a part.

Mrs. Tapia	I would define giftedness as an exceptionality in a specific area. It may be exceptionality in thinking, it may an exceptionality in abilities. It may be an exceptionality in talent, some kind of skill.	My definition of giftedness would be that students possess an ability or talent above and beyond those of the general population in an area. It could be anything from academics, to sports, to art to leadership, all different areas that they can demonstrate talent.	Additional areas of giftedness: academics, sports, art, leadership, all areas where talent can be demonstrated.

Appendix N

Definitions

ELL- English Language Learner

Giftedness- a social construct regarding ways of being and acting intelligent. Based upon cultural norms and ways of being.

GT programming- access to enrichment programs provided by or supported by gifted resource teacher.

Knowledge Framework- the framework upon which inferences are drawn based upon lived experiences and environmental factors in place.

Talent- areas where children display intelligence and aptitude that while high, does not reach the threshold for giftedness.