2017

The Limitations on Colorado School Districts Adoption of an Early Access Addendum Process

Lindsey Reinert
University of Denver, lindsey.reinert@du.edu

The Limitations on Colorado School Districts Adoption of an Early Access Addendum Process

Abstract

Colorado House Bill 08-1021: Early Access is legislation that is an optional based policy for school districts in the state of Colorado to choose to implement. The basic parameters within this state legislation is identified highly gifted students defined as academically gifted, socially and emotionally mature, who are in the top 3% of the gifted peer group, motivated to learn, ready for advanced placement, and have exhausted the resources of preschool or home schooling. Colorado House Bill 08-1021: Early Access passed in 2008, but as of 2017 only 42% of school districts had a process registered with the state department of education. This study examined the limitations on the 103 Colorado school district's adoption of an Early Access Addendum process.

This descriptive survey research design asked 19 questions addressing the four categories of limitations (hindrances, awareness, favorability, and readiness) towards adoption of an Early Access Addendum process. A total of 20 school districts completed the online survey.

Regarding the findings on awareness and hindrances, 100% of the participants are aware of the Early Access Addendum and most participants indicated that funding and human resources as the most significance limitations to adoption of an Early Access Addendum. Concerning favorability and readiness, findings revealed many participants are in favor of professional learning to address the barriers towards adoption and a limited number of participants are ready to file an Early Access Addendum. Recommendations emphasized the importance of funding options and professional learning opportunities that address the revealed limitations.

Document Type

Dissertation

Degree Name

Ed.D.

Department

Curriculum and Instruction

First Advisor

Norma L. Hafenstein, Ph.D.

Second Advisor

Paul Michalec, Ph.D.

Third Advisor

Stephen H. Chou, Psy.D.

Keywords

Early access, Giftedness, Highly gifted, School readiness, Acceleration

Subject Categories

Early Childhood Education | Educational Administration and Supervision | Educational Leadership | Gifted Education

THE LIMITATIONS ON COLORADO SCHOOL DISTRICTS ADOPTION OF AN EARLY ACCESS ADDENDUM PROCESS

A Doctoral Research Project

Presented to

the Faculty of the Morgridge College of Education

University of Denver

In Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education of Curriculum & Instruction

---

by

Lindsey Reinert

June 2017

Advisor: Dr. Norma Hafenstein

Author: Lindsey Reinert
Title: THE LIMITATIONS ON COLORADO SCHOOL DISTRICTS ADOPTION OF AN EARLY ACCESS ADDENDUM PROCESS
Advisor: Dr. Norma Hafenstein
Degree Date: June 2017

Abstract

Colorado House Bill 08-1021: Early Access is legislation that is an optional based policy for school districts in the state of Colorado to choose to implement. The basic parameters within this state legislation is identified highly gifted students defined as academically gifted, socially and emotionally mature, who are in the top 3% of the gifted peer group, motivated to learn, ready for advanced placement, and have exhausted the resources of preschool or home schooling. Colorado House Bill 08-1021: Early Access passed in 2008, but as of 2017 only 42% of school districts had a process registered with the state department of education. This study examined the limitations on the 103 Colorado school district's adoption of an Early Access Addendum process.

This descriptive survey research design asked 19 questions addressing the four categories of limitations (hindrances, awareness, favorability, and readiness) towards adoption of an Early Access Addendum process. A total of 20 school districts completed the online survey.

Regarding the findings on awareness and hindrances, 100% of the participants are aware of the Early Access Addendum and most participants indicated that funding and human resources as the most significance limitations to adoption of an Early Access Addendum. Concerning favorability and readiness, findings revealed many participants are in favor of professional learning to address the barriers towards adoption and a

limited number of participants are ready to file an Early Access Addendum. Recommendations emphasized the importance of funding options and professional learning opportunities that address the revealed limitations.

Acknowledgement

Table of Contents

List of Tables

List of Figures

Chapter One: Introduction

Background

Gifted children come to us with theories, notions, and motivations to make sense of their world; they are not merely empty vessels to be filled with facts. Coleman & Cross (2001) state "Gifted students need opportunities to be together with their intellectual peers, no matter what their age differences" (p. 12). Early intervention has a significant effect on young children's development (Barbour & Shaklee, 1998). Specifically, preschool gifted education is one of the most neglected areas in education (Chamberlin, Buchanan, & Vercimak, 2007; Delisle, 1992). Many early childhood programs are unequipped to meet the needs of preschoolers with precocious intellectual and academic abilities and/or special talents (Pfeiffer & Petscher, 2008). The youngest gifted learners in our society are not being identified and served well in public education. Colorado House Bill 08-1021 passed in 2008, now it is 2017 and only 42 percent of school districts' even have a process registered with the state department of education. The purpose of this study is to examine the limitations on Colorado school districts' adoption of an Early Access Addendum process.

So, few areas related to the young gifted child have been researched that there is still uncertainty about the nature and fostering of giftedness and talent at this age (Sankar-

DeLeeuw, 2004; Gross, 1999). Experts in gifted education eagerly assert that early identification and appropriate educational intervention for gifted young children increases the probability of future extraordinary achievement and reduces the risk of later emotional and educational problems (Harrison, 2004; Hodge & Kemp, 2000; Morelock & Feldman, 1992; Pfeiffer & Stocking, 2000; Sankar–DeLeeuw, 2004; Silverman, 1997; Stile, Kitano, Kelley, & Lecrone, 1993, 1993; Whitmore, 1980). It is important to investigate the barriers that Administrative Unit experience and perceive in implementing an Early Access model to serve gifted young children because every child deserves an appropriate education to develop his/her unique potential (Colangelo, Assouline, & Gross, 2004). The Early Childhood Division [ECD] of the National Association for Gifted Children [NAGC] stresses that creating optimal environments is vital for all children, including young gifted children, to develop their capacity for learning to the fullest potential (Shaha–Coltrane, 2006).

Through a review of the NAGC: State of the Nation in Gifted Education report (2012-2013), thirty-three states do not have early entrance policies or do not permit early entrance; only eight states have legislation and detailed policy for early entrance into school. Out of the eight states with legislation for early entrance, six states' policies are not under the umbrella of gifted education (NAGC, 2012-2013 State of the Nation). Only two states, Minnesota and Colorado have Early Access legislation specific to identification of highly gifted learners and that is monitored through the state accountability annual reviews (NAGC, 2012-2013 State of the Nation). Ten states did not submit the data results to the national gifted education report (NAGC, 2012-2013 State of the Nation).

In the State of the Nation in Gifted Education report (2014-15) it was revealed that 13 out 40 states reported have policy specifically permitting acceleration strategies, 27 states left it to LEA authority, and no states prohibited it. Among individual acceleration options, 13 states had policy that specifically did not permit early entrance to Kindergarten (a form of acceleration), while seven states specifically permitted it and 19 left it to states to have decisions be made by the local school district. (NAGC, 2014-2015 State of the Nation).

There are 178 school districts in the state of Colorado (CDE, 2016). Colorado Department of Education (2017) uses the following criteria to determine a school district to be rural as "giving consideration to the size of the district, the distance from the nearest large urban/urbanized area, and having a student enrollment of 6,500 students or less; small rural districts are those districts meeting these same criteria and having a student population of less than 1,000 students" (CDE: Rural and Small Rural Designation Report, 2017). The state department has designated 108 Colorado school districts as "small rural" and 38 Colorado school districts designated as "rural" (CDE: Rural and Small Rural Designation Report, 2017). With 82% of Colorado's school districts designated under the umbrella of "rural/small rural," yet it comprises only 20% of the total student population in the state (CDE, 2016). Fifteen school districts had the designation of suburban with student enrollment of 5,000-14,999 students and seventeen school districts had the designation of urban/suburban with student enrollment of < 15,000 students (CDE, 2016).

As 75 school districts in the state of Colorado have an Early Access plan on file at Colorado Department of Education that detail the implementation of an Early Access

protocol and are evaluated through the state Colorado-Gifted Education Review (four-year cycle) process (CDE Gifted Education: Administrative Unit Program Plans for 2012-2016). Five Administrative Unit have a revised Early Access plan in place for CDE review and 103 school districts do not have an Early Access plan submitted (CDE Gifted Education: Administrative Unit Program Plans for 2012-2016). Administrative Unit have until the 2017 Colorado-Gifted Education Review (C-GER) to propose an Early Access Addendum plan (CDE Gifted Education: Administrative Unit Program Plans for 2012-2016). Colorado House Bill 08-1021 is legislation that is an optional based policy for school districts in the state of Colorado to choose to implement. The parameters within this state legislation identify highly gifted students as children scoring at the 97th percentile and above who are in the top 3% of the gifted peer group. These highly gifted students demonstrate academically gifted, socially and emotionally mature, and motivated to learn, ready for advanced placement, and have exhausted the resources of preschool or home schooling. These children must be four years of age by October 1 of the school year.

A brief history of acceleration.

There have been several research studies specific to gifted education such as: Hollingworth's (1942) work with IQ's that exceed 180, Goertzel's (1962) focus on eminent historical figures, Witty & Coomer's (1985) work with gifted twins, Gross's (1986) examples of radical acceleration of gifted children, and Feldman & Goldsmith's (1991) work with prodigies. All of these studies utilized the case study technique with the population of gifted learners and focused mainly on intellectual and academic

ramifications of acceleration instead of the overall developmental and social emotional ramifications within a social and academic setting tailored to gifted learners.

Rogers'(1991) meta-analysis is the most comprehensive review of acceleration enrichment in the field of gifted education. Early entrance to school is one of the 12 methods of acceleration delineated in this meta-analysis which states, "Early entrance is a reasonably safe decision to make. Across a broad base of short-term and longitudinal studies based primarily on school records, academic performance was found to be significantly enhanced. Social and psychological adjustment is neither enhanced nor threatened by early entrance to school" (p.201).

Purpose of the Study

The purpose of this study was to examine the limitations on Colorado school districts' adoption of an Early Access Addendum process.

Persistent problem of practice.

Colorado House Bill 08-1021 passed in 2008, and as of 2017, only 42 percent of school districts' even have a process registered with the state department of education. Coleman & Cross (2001) state "Gifted students need opportunities to be together with their intellectual peers, no matter what their age differences." Early intervention has a significant effect on young children's development (Barbour & Shaklee, 1998). Specifically, preschool gifted education is one of the most neglected areas in education (Chamberlin, Buchanan, & Vercimak, 2007; Delisle, 1992). Many early childhood programs are unequipped to meet the needs of preschoolers with precocious intellectual and academic abilities and/or special talents (Pfeiffer & Petscher, 2008). The youngest gifted learners in our society are not being identified and served well in public education.

Decisions about acceleration have traditionally been based upon personal biases, or incomplete and incorrect information (Colangelo, Assouline, & Gross, 2004). Amid the political wars of education, the interests of bright children have been lost (Colangelo, Assouline, & Gross, 2004). Schools have held back America's brightest students for all kinds of reasons (Colangelo, Assouline, & Gross, 2004). In 2015, the Belin-Blank Center produced *A Nation Empowered: Evidence Trumps the Excuses Holding Back America's Brightest Students*, which provided a significant update to *A Nation Deceived* (2004).

> "Ten years ago, the robust and unanimous research on the effectiveness of acceleration had not translated into policy and practice. Current practice is improving, however if you don't believe in something, you demand nearly perfect evidence. If you are comfortable with an educational intervention, anecdotal evidence is plentiful and sufficient. When is come to acceleration as an intervention, we do have consistently robust research evidence. However, that is not enough to put acceleration into common practice" (Colangelo, Assouline, Van-Tassel-Baska, & Lupkowski-Shoplik, 2015, p. 5).

In a Guest Forward statement in *A Nation Empowered*, Betts and Cross (2015) state, we can do more to empower our educational system of parents, educators, and policy-makers to provide interventions for gifted learners. Siegle et al. (2013) indicated, the key to changing acceleration policies and practices may be to show administrators and others who have the power to make those changes that many parents and teachers do support acceleration.

Central question.

What are the limitations impacting Colorado school districts' from adopting an Early Access process?

Rationale.

In a position paper on acceleration, NAGC (2010) states,

> "Academically gifted students often feel bored or out of place with their age peers and naturally gravitate towards older students who are more similar as "intellectual peers." Studies have shown that many students are happier with older students who share their interest than they are with children the same age. Therefore, acceleration placement options such as early entrance to kindergarten, grade skipping, or early exit should be considered for these students."

A Nation Deceived (2004) and *A Nation Empowered* (2015) contain many references where young gifted learners were helped when they could enter school ahead of age peers. Lupinski-Shoplic, Assouline, Colangelo, of the University of Iowa Belin-Blank Center state, "Like the research on grade-skipping, the research conducted on early entrance to kindergarten and first grade portrays a positive picture for these young students." Finally, Karnes and Johnson (1991) find that,

"The earlier gifted children are identified and provided appropriate programs, the better their chances of fully actualizing their potential. On the contrary, when young gifted children fail to be challenged during their early years in school and in family

situations, they tend to develop negative feelings towards school and develop poor work habits, and then become underachievers" (p. 133).

Rogers (1991) meta-analysis analyzed 12 methods of acceleration: early entrance to school, grade skipping, non-graded classroom, curriculum compaction, grade telescoping, concurrent enrollment, subject acceleration, advanced placement, mentorship, credit by examination, early admission to college, and combined acceleration options. The review of early entrance literature uncovered 68 empirical studies, no less than 22% of the pool of 314. Hence there is a gap in the evidence specifically around socio-emotional adjustment which is the main reason individuals reject the model of early entrance. Jones and Southern (1991) articulated, "Part of the problem in assessing social-emotional adjustment is that it is a nebulous concept. It is difficult to describe and measure adequately" (p.63).

Methodology

The descriptive survey research design examined the limitations on Colorado school districts adoption of an Early Access Addendum process. The research design encompassed a quantitative approach as the strategy of inquiry. An advantage of this model was that it allowed quantitative data to be collected. The nonexperimental descriptive survey research design utilized data collection, data analysis, and data interpretation stages with an emphasis on the quantitative data. Utilizing this approach afforded strengths that counteracted the weaknesses of individual methods. Gliner, Morgan, and Leech (2009) state there is no active independent variable (intervention) within the nonexperimental approach thus the researcher does not manipulate or control

the independent variable. Nonexperimental approaches focus on the attribute independent variables and will allow for no treatment or invention.

As Creswell (2009) explained, a quantitative approach provides a numeric description of "trends, attitudes, or opinions of a population by studying a sample of that population" (p. 12). For this study, a survey appeared to be the most efficient means to collect data. The researcher distributed a cross-sectional directed survey to the 103 school districts in the state of Colorado that do not have an Early Access process on file with CDE, directed to the gifted education department for the school district. Participants accessed the directed survey via an electronic online platform through an email invitation.

The 103 school districts that currently do not have an Early Access Addendum on file with CDE are geographically located in rural settings throughout Colorado. Plucker (2013) identified the factors of poverty, rural provincialism, limited resources, and negative perceptions of gifted programs, among others, as additional persistent challenges for delivery of services for gifted students in rural schools; however, relatively little is known about how those challenges influence instructional decisions and behaviors of educators of gifted students in rural schools. This evidence in the literature drove the design of survey questions for the directed survey (Azano et al., 2014; Plucker, 2013; Cross & Burney, 2005; Bainbridge, 2002; Hébert & Beardsley, 2001).

The 103 school districts were grouped in Boards of Cooperative Educational Services (BOCES) are an important and vital part of the public educational system in Colorado. Colorado's BOCES (or Educational Services agencies) are unique in that they are an extension of the local member school districts (Colorado BOCES Association,

2017). A BOCES in Colorado exists at the discretion of its members and provides only those programs and services authorized by its members (Colorado BOCES Association, 2017). At the time of this study, there were 20 BOCES regions across the state of Colorado (Appendix G). Nine of the 20 BOCES have school district members that do not have an Early Access Addendum on file with CDE (Colorado Department of Education, 2016).

The purpose of the directed survey was to collect data on the limitations impacting a school district from adopting an Early Access process. This data collected was a directed survey to guide recommendations to the field for supporting potential school districts in adoption of an Early Access Addendum process. A directed survey allowed limitations to be revealed of Early Access through survey questions addressing the four subscale areas: hindrances, awareness, favorability, and readiness surrounding adoption of an Early Access process. Survey was the preferred method of data collection for this research allowing access across the state of Colorado, the economical way of electronic distribution, and the rapid turnaround in data collection.

This research was not intended to offer a set of knowledge claims or rules but rather as an investigation to examine limitations towards adoption of an Early Access process (Noddings, 2002).

Field Check

This research study is grounded in the quantitative nonexperimental descriptive research approach (Gliner, Morgan & Leech, 2009). With that stated, the researcher looks to address a term from the qualitative nonexperimental approach, which is epoche. Epoche (or bracketing) is when an investigator sets aside their experiences, as much as

possible, to take a fresh perspective towards the topic under examination (Creswell 2013). Bracketing personal experiences may be difficult for the researcher to implement because interpretations of the data always incorporates the assumptions that the researcher brings to the topic (van Manen, 1990). As the researcher, I sought to suspended my judgments in the descriptive data analyses of the directed survey results.

The purpose of a field check is to show personal understanding towards the findings from the directed survey through a variety of informal collegial conversations about Early Access within the field of gifted education for the state of Colorado (CDE, 2016). As the researcher of this study, I am a current practitioner in the field of gifted education for a public-school district in the state of Colorado. Through my professional experiences across the state of Colorado, I engage in Colorado Department of Education Gifted Education state director meetings, Colorado Department of Education Gifted Education regional director meetings, and a variety of Colorado gifted associations as listed below:

- Colorado Association for Gifted and Talented (CAGT) conference,
- Supporting the Emotional Needs of the Gifted (SENG) conference,
- University of Denver- Institute for the Development of Gifted Education (IDGE) conference,
- Beyond Giftedness conference,
- Colorado Academy for Educators of the Gifted, Talented, and Creative (CAEGTC) board member.
- Gifted Education State Advisory Committee (GE-SAC) member and presiding secretary.

By suspending our understandings in a reflective way moves one towards cultivating curiosity (LeVasseur, 2003). Creswell (2013) states "the researcher needs to decide how and in what way his or her personal understandings will be introduced into the study." By providing a field check, the researcher shows the personal understanding of this study (Creswell, 2013).

Definition of Terms.

Acceleration- an educational intervention that moves students through an educational program at a faster than usual rate or younger than typical age (Belin-Blank Center & Acceleration Institute, 2004).

Administrative Unit(AU)- a geographic area having a single school administration over several schools (CDE, 2016).

Early Entrance- Colorado state policy specifically permits early entrance to kindergarten for students who are "four years of age and for whom Early Access to kindergarten is deemed appropriate by the administrative unit" (Belin-Blank Center & Acceleration Institute, 2004).

Early Access-The Colorado Department of Education for Gifted Education indicates **"**highly advanced gifted children under age six defines that four years olds have access to kindergarten or 5 year olds have access to first grade for child who may benefit from Early Access as a "highly advanced gifted child". The criteria from May 2008-2016 stated, this child is academically gifted, socially and emotionally mature, in the top 2% or

less of the gifted peer group, motivated to learn, ready for advanced placement, and has exhausted the resources of preschool or home schooling (CDE, 2008). As of May 2016, the criteria was altered to indicate this child is academically gifted, socially and emotionally mature, in the top 3% or less of the gifted peer group, motivated to learn, ready for advanced placement, and has exhausted the resources of preschool or home schooling (CDE, 2016). Children for Early Access are exceptionally precocious and ready for school. Academic achievement, reasoning ability, performance and motivation are keen compared to other gifted children" (CDE, 2008).

Giftedness- The National Gifted Association defines "Gifted individuals are those who demonstrate outstanding levels of aptitude (defined as an exceptional ability to reason and learn) or competence (documented performance or achievement in top 10% or rarer) in one or more domains. Domains include any structured area of activity with its own symbol system (e.g., mathematics, music, language) and/or set of sensorimotor skills (e.g., painting, dance, sports)" (NAGC, 2010). The Colorado Department of Education for Gifted Education defines "Gifted and talented children" means those persons between the ages of five and 21 whose abilities, talents, and potential for accomplishment are so exceptional or developmentally advanced that they require special provisions to meet their educational programming needs" (CDE, 2015).

Highly Gifted- The Colorado Department of Education for Gifted Education defines "Highly advanced gifted child" means a gifted child whose body of evidence demonstrates a profile of exceptional ability or potential compared to same-age gifted children (CDE, 2008).

School Readiness- The Colorado State Board of Education approved definition of school readiness states: School readiness describes both the preparedness of a child to engage in and benefit from learning experiences, and the ability of a school to meet the needs of all students enrolled in publicly funded preschool or kindergarten (CDE, 2016).

Delimitations of the Study

The purpose of this research work was to generate a baseline of data from the directed survey that addresses school districts' perceptions of limitations towards adoption of an Early Access Addendum and provides important findings to the field of gifted education. The researcher confirms that there are some flaws and limitations to this study.

A main delimitation that was revealed during this study is the low response rate. Due to the sample size of 103 participants this study received 20 responses which is quite small. There is no agreed-on standard for a minimum acceptable response rate (Fowler, 2014). A delimitation of this low response rate led to difficulties to find significant relationships from the data, as statistical tests normally require a larger sample size ensure a representative distribution of the population and to be considered representative of groups of people to whom results will be generalized or transferred (Frankfort-Nachmias & Leon-Guerrero, 2011; Gliner, Morgan & Leech, 2009).

A delimitation arose related to methodology. As a disadvantage of quantitative research, the results may be limited as they provide numerical descriptions rather than detailed narrative and generally provide less elaborate accounts of school districts

hindrances towards adoption of an Early Access Addendum (Gliner, Morgan & Leech, 2009).

Summary

This chapter provided the background, the purpose of this study, the persistent problem of practice, identified the research question that guides the examination, and the rationale for the study. Also, this chapter addressed the methodology, the definitions of terms, and the delimitations of this study. Despite numerous studies showing benefits of academic acceleration, many educators remain skeptical and are sometimes even strongly opposed towards this option in gifted education, which contributes to the need for this study.

Chapter Two: Literature Review

This review of literature provides a theoretical framework for this study. It includes the discussions of comprehensive topics regarding: (1) the concepts and definitions of giftedness and acceleration, (2) history of acceleration, (3) identification of young gifted learners, (4) programming for young gifted learners, (5) leadership and communication methods, and (6) change theory methods. In each topic, the review offers empirical evidence concerning the issues embedded in the problem of practice.

Purpose of Definitions for Giftedness & Acceleration

A definition for giftedness provides a framework for gifted education programs and services, and guides key decisions such as which students will qualify for services, the areas of giftedness to be addressed in programming (e.g., intellectual giftedness generally, specific abilities in math), when the services will be offered, and even why they will be offered. There is no universally accepted definition of giftedness (NAGC, 2015). School districts that are charged with the responsibility of creating or maintaining programs for gifted children face a difficult task when deciding what giftedness is, how gifted children can be identified, and which services will be provided through the district. A definition is important to develop a foundation for the relevance of identifying gifted children, which leads to the discussion of programming and services. A definition for acceleration provides educators with multiple options and strategies for addressing

learners' needs. Southern & Jones (2004) describe 20 different types of acceleration options, as well as dimensions of acceleration.

History of acceleration.

The overwhelming research surrounding the academic benefits of acceleration and peer ability grouping continues to face opposition with many public school districts choosing to turn their backs on the research and best practices of acceleration (Colangelo, Assouline, & Gross, 2004; Cornell, Callahan, Bassin, & Ramsay, 1991; Gagné & Gagnier, 2004; Gross, 1993,2003; Kulik & Kulik, 1982, 1984, 1987, 1992; Lubinski, 2004; Lubinski, Webb, Morelock, & Benbow, 2001; Moon, Swift, & Shallenberger, 2002; Noble, Arndt, Nicholson, Sletten, & Zamora, 1999; Richardson & Benbow, 1990; Rogers, 2004; Southern & Jones, 1991; Swiatek & Benbow, 1991). Borland (1989) states, "Acceleration is one of the most curious phenomena in the field of education. I can think of no other issue in which there is such a gulf between what research has revealed and what most practitioners believe" (p.185).

During the almost two decades, research evidence supporting acceleration has continued to accumulate (Kulik 1984, Rogers, 1991; Colangelo, Assouline, & Gross, 2004; & Colangelo, Assouline, Van-Tassel-Baska, & Lupkowski-Shoplik, 2015). Despite the evidence, advocates remain concerned that educators continue to hold negative attitudes and that schools and districts remain reluctant to implement acceleration models. The Belin-Blank Center engages in research and advocacy on academic acceleration (Assouline, 2006). Academic acceleration has been empirically validated as the most effective academic intervention for gifted students (Belin-Blank

Center's Acceleration Institute, 2006). The publication *A Nation Deceived: How Schools Hold Back America's Brightest Students* (2004) made acceleration for gifted students a topic of national discussion. In 2015, the Belin-Blank Center produced *A Nation Empowered: Evidence Trumps the Excuses Holding Back America's Brightest Students*, which provided a significant update to *A Nation Deceived* (2004) and helps to continue the national (and international) conversation on this important topic. These two dynamic documents are a foundational tool for the field of education to use for guidance in programming options; however, the field continues to demonstrate apprehensions (preconceived notions) about acceleration forms (Belin-Blank Center's Acceleration Institute, 2006).

In the NAGC: State of the Nation in Gifted Education report (2014-15), it was revealed that 13 out 40 states reported have policy specifically permitting acceleration strategies, 27 states left it to LEA authority, and no states prohibited it. Among individual acceleration options, 13 states had policy that specifically did not permit early entrance to kindergarten (a form of acceleration), while seven states specifically permitted it and 19 left it to states to have decisions be made by the local school district (NAGC, 2014-2015 State of the Nation). Many researchers consider acceleration to be "appropriate educational planning. It means matching the level and complexity of the curriculum with the readiness and motivation of the student" (Colangelo, N., Assouline, S., & Gross, M. U. M. (2004), p. 66). Even with empirical research which supports positive results with acceleration methods, many states in our nation continue to limit or not provide acceleration as a programming option (NAGC, 2014-2015 State of the Nation).

Early entrance versus Early Access.

A school district within the state of Colorado shall count and receive funding for pupils enrolled in kindergarten who are five years old as of October 1 (CDE, 2016). However, a district has the autonomy to set an earlier enrollment date for admittance into kindergarten (CDE, 2016). For example, if a district sets July 1 as its cut-off date for a student to be five to enroll into kindergarten, and a child will turn five in September, the district determines if the student is admitted into kindergarten. In this case, the district still receives per-pupil funding for the student because he/she will be five by October 1. This is considered early admittance based on the district's enrollment policy, but not Early Access. If a child turns five after October 1 and wants to be considered for kindergarten admittance, the district may choose to admit the student and receive no per-pupil funding, or if the school district/Administrative Unit has an approved Early Access program plan, conduct the Early Access assessment process to determine if the child meets Early Access criteria.

Evidence of gaps in research.

In one study Rogers (2002) meta-analysis revealed students who were allowed early entrance to elementary school averaged six months ahead in achievement when compared to their age peers during the same year. Additionally, these students showed improvement in socialization and self-esteem compared to slight difficulties faced by advanced students who were not accelerated (Roger, 1991). Failure to identify and develop talent in the very young children has been linked to subsequent negative outcomes in cognitive, academic, social, and affective development (Neihart, Reis,

Robinson, & Moon, 2002). Despite this link, the literature highlights the reluctance of educators to formally identify talent in the early years of schooling, stemming from the belief that very young students should not be "labeled" or "pushed" to perform academically (Sankar-DeLeeuw, 1999). Despite numerous studies showing benefits of academic acceleration, many educators remain skeptical and are sometimes even strongly opposed towards this option in gifted education (Colangelo, N., Assouline, S., & Gross, M. U. M., 2004). Several researchers point out that this negative attitude is based on presumptions; pedagogic, psychological, or political attitudes; or once-only experiences rather than on systematic observations (Gross, Heinbokel, McCluskey, Massey, & Baker, 1997; Southern & Jones, 1991a).

In a position paper on acceleration, NAGC (2010) states "Academically gifted students often feel bored or out of place with their age peers and naturally gravitate towards older students who are more similar as "intellectual peers." Studies have shown that many students are happier with older students who share their interest than they are with children the same age. Therefore, acceleration placement options such as early entrance to kindergarten, grade skipping, or early exit should be considered for these students (NAGC, 2010). *A Nation Deceived* (2004) and *A Nation Empowered* (2015) contain many references where young gifted learners were helped when they could enter school ahead of age peers. Lupinski-Shoplic, Assouline, Colangelo (2004) of the University of Iowa Belin-Blank Center state, "Like the research on grade-skipping, the research conducted on early entrance to kindergarten and first grade portrays a positive picture for these young students." Finally, Karnes and Johnson (1991) find that

> "The earlier gifted children are identified and provided appropriate programs, the better their chances of fully actualizing their potential. On the contrary, when young gifted children fail to be challenged during their early years in school and in family situations, they tend to develop negative feelings towards school and develop poor work habits, and then become underachievers" (p.133).

Majority of the 103 school districts that currently do not have an Early Access Addendum on file with CDE are geographically located in rural settings throughout Colorado (CDE, 2016). Plucker (2013) identified the factors of poverty, rural provincialism, limited resources, and negative perceptions of gifted programs, among others, as additional persistent challenges for delivery of services for gifted students in rural schools; however, relatively little is known about how those challenges influence instructional decisions and behaviors of teachers of gifted students in rural schools. As a result, rural gifted students are at risk of not having instruction provided by teachers with special skills or competencies in addressing their educational needs, and many of these students "may not receive the critical academic stimulation and enrichment needed to support their full cognitive, social, and academic development" (Howley et al., 2009, p. 521). The literature on gifted rural education describes numerous insufficiencies in gifted programming in those environments arising from lack of funding (Azano, 2014; Plucker, 2013), such as fewer specialists, untrained staff, limited resources, and fewer program options in those settings (Cross & Burney, 2005; Hébert & Beardsley, 2001). Public funding for gifted programs is limited (Bainbridge, 2008). This evidence in the literature drove the design of survey questions for the directed survey.

According to Creswell (2007), when little is known about an area, one of the first steps is to attempt to describe the phenomenon so that subsequent research studies can be designed for in-depth investigation. Thus, because of the lack of full understanding of the real and perceived barriers towards Early Access adoption, this descriptive study investigates if the barriers are addressed will it enable change towards adoption of an Early Access process with school districts across the state of Colorado.

Impact of Acceleration and Early Entrance Methods

The concerns that arise focus on the potential for social or emotional harm coming to students (Colangelo et al., 2004; Southern, Jones, & Fiscus, 1989). Parents express concern that acceleration will isolate their children or will be too stressful emotionally (A Nation Deceived, 2004). Asynchronous development can be a stressor for a gifted child when there is a feeling of constantly being "out-of-sync" with age peers (Silverman, 1989b). Some strategies are providing the gifted child with age peers and cognitive peers to engage with, looking at analogies to help describe the feeling of imbalance, and building self-understanding to be comfortable in one's own skin (Gross, 1999). Eisner's (1998) theory states "Cognitive potential depends upon the opportunities that children have to use their minds in the variety of ways minds can be used" (p.16).

Some argue that acceleration can be harmful to students' self-concept, ability to fit in with older peers, or other social-emotional needs (A Nation Deceived, 2004). However, research on acceleration has demonstrated multiple academic benefits to students and suggests that acceleration does not harm students (Kulik 1984, Rogers, 1991; Colangelo, Assouline, & Gross, 2004; & Colangelo, Assouline, Van-Tassel-Baska,

& Lupkowski-Shoplik, 2015). As the National Work Group on Acceleration determined, there is "no evidence that acceleration has a negative effect on a student's social-emotional development" (Institute for Research and Policy on Acceleration, (2009) p. 4). Acceleration is a cost-effective intervention (Colangelo, N., Assouline, S., & Gross, M. U. M., 2004). Grade-based forms cost little to implement, and yield societal benefits in that students complete schooling ahead of schedule and become productive adults earlier in their lives (Colangelo et al., 2004). Costs of subject-based forms may be slightly higher, but still less prohibitive than other forms of gifted programming (Assouline, S. G., Colangelo, N., & VanTassel-Baska, J., 2015).

Identification of Young Gifted Learners

The gifted education literature stresses the importance of early recognition of the learning needs of the young gifted children, as their development can be characteristically different from those developing in an age-typical way (Harrison, 2005; Sankar-DeLeeuw, 2004). In addition, recommended practice guidelines in assessment for gifted and early childhood special education have supported the use of multiple measures in assessment (Karnes, Shaunessy, & Bisland, 2004; NAGC–CEC, 2006; Sandall et al., 2005). Identification requires both formal and informal assessment (Colorado Department of Education, 2016). Formal assessment includes norm–referenced measures such as standardized tests (Colorado Department of Education, 2016). Informally, the most important stakeholders for identifying giftedness in preschool-aged children are parents and individuals who care for and educate these young children (McWilliam, 2005; Pletan, 1995; Hanover Research, 2012). Therefore, for preschool children, informal assessment

is especially useful for education and intervention planning (Siegle & McCoach, 2005). It is essential, in choosing assessments, to evaluate the ways in which results will be used to benefit the child (NAGC, 2006).

Colorado Department of Education for Gifted Education indicates Early Access shall not be an acceleration pattern recommended for most age four or age five gifted children who will benefit from preschool gifted programming that responds to the strength area. The purpose and rationale of Early Access is to identify and serve the few highly advanced gifted children who require comprehensive academic acceleration (CDE, 2016, [12.08(1)(c)]). Many young gifted children are ready for advancement in one or two areas of development (Colangelo et al., 2004). Full grade acceleration at this young age may not be appropriate; however, grade level acceleration may be considered at another point in time (Colangelo et al., 2004). Early Access is intended to support students who are evaluated to be exceptional in aptitude/cognitive reasoning, academics, school readiness and motivation (CDE, 2016, [12.08(1)(c)]).

Colorado House Bill 08-1021: Early Access was effective on April 17, 2008 into state statute (CDE, 2008, Added 22-32-138; 19-3-213(1)(d); 25-4-902(3). "Highly Advanced Gifted Child" means a gifted child who has been identified by an Administrative Unit, using criteria and a process established by rules promulgated by the state board pursuant to section 22-20-104.5 (5), to be a highly advanced gifted child" (CDE, 2016, [12.08(1)(c)]). The criteria from May 2008-2016 stated, this child is academically gifted, socially and emotionally mature, in the top 2% or less of the gifted peer group, motivated to learn, ready for advanced placement, and has exhausted the resources of preschool or home schooling (CDE, 2008). As of May 2016, the criteria was

altered to indicate, this child is academically gifted, socially and emotionally mature, in the top 3% or less of the gifted peer group, motivated to learn, ready for advanced placement, and has exhausted the resources of preschool or home schooling (CDE, 2016).

Longitudinal studies report that Early Access children excel academically, participate in extra-curricular activities, and exhibit strong positive concepts; some may require acceleration again later in their educational career (A Nation Empowered, 2015). Early-entry children – those who started school early because they were ready to learn – perform as well as or better than their older classmates in a wide range of tests and evaluations (A Nation Empowered, 2015). Research also shows the children are well-adjusted socially and suggests early-entry is a positive experience for the gifted child (A Nation Empowered, 2015). The benefits to students who qualify for Early Access include: integrating early childhood and gifted educational programming to expand access to curriculum, instruction and assessment aligned to the child's level of challenge. Additionally, Proctor, Black, and Feldhusen (1986) reported that all but a small percentage of early-entrance students were as socially well-adjusted as their older classmates.

Colorado Department of Education Process for Early Access

A comprehensive body of evidence is collected during the Early Access process. A body of evidence must contain both qualitative and quantitative data to measure exceptionality (CDE, 2008). An Administrative Unit determines when the Early Access process will open and the order in which data will be collected. The Administrative Unit should follow application timelines pursuant to CDE Early Access guidelines (CDE, 2008). The process typically begins when a parent initiates a request for an Early Access

application from the Administrative Unit Gifted Lead. Any parent who requests an application has the right to complete and apply to the Administrative Unit. Upon receiving the completed application, the Administrative Unit Gifted Lead may conduct a preliminary screening, test or interview to determine if the child might be an appropriate candidate for the Early Access evaluation process prior to the submission of a student portfolio. The parent is responsible for collecting all portfolio documents.

If the determination team finds the child gifted, but does not find that the child meets the criteria for Early Access, the team provides the child's school with the child's assessment portfolio for serving the area of exceptionality in the child's public preschool or public kindergarten program. If the student transfers to another public school in Colorado during the first year of an Early Access placement the new Administrative Unit shall maintain the placement.

Student application

The Administrative Unit determines which documents should be included in a student application pursuant to CDE Early Access guidelines (CDE, 2008). Documents may include but are not limited to:

- Administrative Unit Early Access application form
- Contact information
- Copy of child's birth certificate
- Release of student information form
- Any previous assessment data (if applicable)
- Proof of residence (if applicable)
- Application fee (if applicable)

- Letter stating the reasons for considering Early Access for their child
- Letter of recommendation from a previous teacher, mentor and/or coach
- Examples of reading, writing, math, problem solving and creativity ability
- Norm-referenced or standardized screening tool or questionnaire

Determination team procedures

Upon the submission of a completed student application, a team of educators knowledgeable of gifted education and early childhood development evaluates the application using a qualitative rating scale or rubric. Based upon the subjective and objective review, the Early Access education team determines if the child is an appropriate candidate for the next level of the Early Access assessment process. If it is deemed the child is not a candidate for additional evaluation, the parent/guardian is notified of the team's decision.

Assessment: Age-appropriate research-based standardized tests

The intelligence or IQ test is almost routinely used to determine whether a student qualifies for early gifted placement (Pfeiffer, 2002; Sparrow, Pfeiffer, & Newman, 2005). Unfortunately, there are few scientifically sound, standardized screening instruments available for this age range (three to five year olds) to give a comprehensive picture of a young child's potentiality and actual performance. Considering the significance of early identification, one critical issue is determining appropriate methods for how to identify gifted and talented students in preschool or kindergarten. In a recent survey which highlighted the identification process, 41% of 64 international authorities in the gifted

field agreed that identification of the gifted remains problematic (Pfeiffer, 2003; Pfeiffer & Petscher, 2008).

Assessment profile.

The figure below outlines the Early Access process conducted to complete an assessment profile towards identification.

Figure 5

A Complete Assessment Profile includes:

(Colorado Department of Education, 2016)

Aptitude assessments.

An aptitude test is an intelligence tests in that they measure a broad spectrum of abilities (e.g., verbal comprehension, general reasoning, numerical operations, perceptual speed, or mechanical knowledge (Lupkowski-Shoplik, Assouline, & Colangelo, 2015). An individualized intelligence test that is professionally administered continues to be a very effective predictor of academic success in elementary and secondary school setting (Assouline, 2003; Sattler, 2008; Siegler & Richards, 1988). Appendix A provides a detailed description of each age-appropriate aptitude screener. Below outline the current offerings in the field of education for age-appropriate aptitude screeners approved by Colorado Department of Education.

Figure 1

Aptitude Assessments approved by Colorado Department of Education

Aptitude		
Name	***Age***	***Administration***
Cognitive Abilities Test 7 (CogAT 7)	K-12	Group
Naglieri Nonverbal Ability Test, Second Edition (NNAT2)	K-12	Group
Batería III Woodcock Muñoz (Cognitive)	2:0 – 90+	Individual – In Spanish
Battelle Developmental Inventory, Second Edition (BDI-2) †	Birth to 7:11	Individual
Bilingual Verbal Abilities Test (BVAT)	5:0 – Adult	Individual
Differential Ability Scales-II (DAS-II)	2:6-17:11	Individual
Kaufman Assessment Battery for Children, Second Edition (KABC-II)	3:0-18	Individual
Kaufman Brief Intelligence Test, Second Edition (K-BIT2)	4:0 -90:0	
Stanford Binet Intelligence Scales, 5th Edition (SB 5)	2 to 85 + years	Individual
Universal Nonverbal Intelligence Test (UNIT)	5:0 – 17:11	Individual
Wechsler Preschool and Primary Scale of Intelligence, Fourth Edition (WPPSI-IV)	2:6 – 7:3	Individual
Woodcock Johnson Tests of Cognitive Abilities, Fourth Edition – Brief Intellectual Ability	2:0 – 90+	Individual

(Colorado Department of Education, 2016)

Achievement assessments.

An achievement test is a test to measure developed skills of knowledge, potential readiness for academic content, and determine whether a student's actual skills match the potential demonstrated in ability test (Lupkowski-Shoplik, Assouline, & Colangelo, 2015). Appendix A provides a detailed description of each age-appropriate achievement screeners. Below outline the current offerings in the field for age-appropriate achievement screeners.

Figure 2

Achievement Assessments approved by Colorado Department of Education

Achievement		
Name	***Age***	***Administration***
Test of Early Mathematics Ability, Third Edition (TEMA-3)	Ages 3-0 through 8-11	Individual
Test of Early Reading Ability, Third Edition (TERA-3)	Ages 3-6 through 8-6	Individual
Test of Early Written Language (TEWL-3)	Ages 4-0 through 11-11	Individual
Wechsler Individual Achievement Test, Third Edition	4:0–50:11	Individual
Woodcock-Johnson IV Normative Update (NU) Tests of Achievement, Forms A and B	2 to 90+	Individual

(Colorado Department of Education, 2016)

Body of evidence and perception scales.

A comprehensive body of evidence is collected during the Early Access process (CDE, 2008). Appendix A provides a detailed description of each performance tool. A body of evidence must contain both qualitative and quantitative data to measure exceptionality (CDE, 2016).

Figure 3

Performance Tools approved by Colorado Department of Education

Performance		
Name	***Age***	***Administration***
Gifted Evaluation Scales (GES)	5:0-18:0	Teacher Rating Form
Gifted Rating Scales - Preschool (GRS-P)	4:0 through 6:11 years	Teacher Rating Form
Scales for Identifying Gifted Students (SIGS)	Ages 5-18	Teacher Rating Form
Kingore Observation Inventory, 4th Edition (KOI)	K-8	Teacher Rating Form
Work Sampling via classroom performance or student portfolio		

(Colorado Department of Education, 2016)

School readiness tools.

The Colorado State Board of Education approved definition of school readiness states: "School readiness describes both the preparedness of a child to engage in and benefit from learning experiences, and the ability of a school to meet the needs of all students enrolled in publicly funded preschool or kindergarten" (Office of Early Learning and School Readiness, 2015). School readiness, social behavior, and motivation data are all aspects required by the Early Access process. Appendix A provides a detailed

description of each readiness tool. Below outline the current offerings in the field for school readiness towards collecting a required body of evidence.

Figure 4

Readiness Tools on the Commonly Used Assessment Chart by Colorado Department of Education

School Readiness – Approved for Colorado		
Name	***Age***	***Administration***
The Desired Results Developmental Profile for Kindergarten (DRDP-K)	Grade K	Teacher observation
The Riverside Early Assessment of Learning	Birth to 7:11	Teacher observation and assessment
Teaching Strategies Gold	Birth - K	Individual
Teaching Strategies Gold Survey – Kindergarten Entry Assessment	Grade K	Teacher questionnaire

(Colorado Department of Education, 2016)

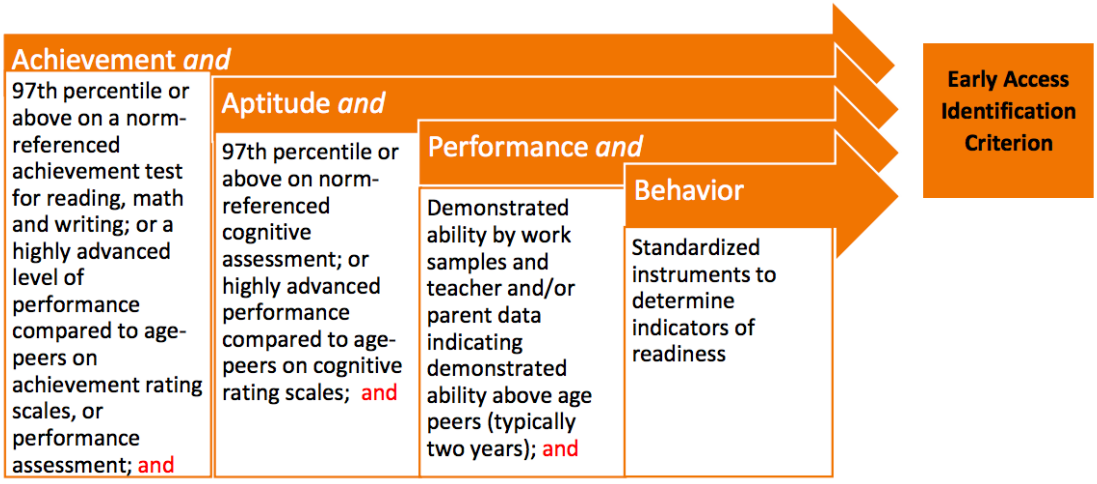
Criteria for identification

All criteria must be considered in making the determination. Test scores alone do not meet the standards of a determination (CDE, 2008). A student may score at the 97th percentile or above on aptitude and achievement tests but not have data that supports school readiness (CDE, 2008). Not every child with a score above 97th percentile may benefit from Early Access to kindergarten or first grade. Regular public or private preschools or home schooling meet the needs of the majority of gifted 4 and 5 year olds (CDE, 2016). Early Access decisions will be a consensus process (CDE, 2008). If the team cannot reach consensus, the building principal or the gifted education

director/coordinator shall make the final decision in accordance with the Administrative Unit's Early Access program plan (CDE, 2008). The decision as to whether a student qualifies for Early Access is at the sole discretion of the Administrative Unit.

Figure 6

Colorado Early Access Pathway to Meet Criteria for Early Access Identification



(Colorado Department of Education, 2016)

Alternative assessments such as parent observation, teacher observation/recommendations, and portfolio assessment have been used for screening for giftedness in many educational programs. Through structured scales, questionnaires, gifted characteristic checklists, and/or interviews teachers and parents provide valuable information. Parents can offer a unique perspective about "their children in free behavior situations and less restrictive environments than the classroom" (Feldhusen & Baska, 1989).

Concerning early identification of giftedness, parents usually know of their child's emerging abilities and begin to interact with them accordingly. Since about 80% of the parent population can identify their children's giftedness by ages four or five, a

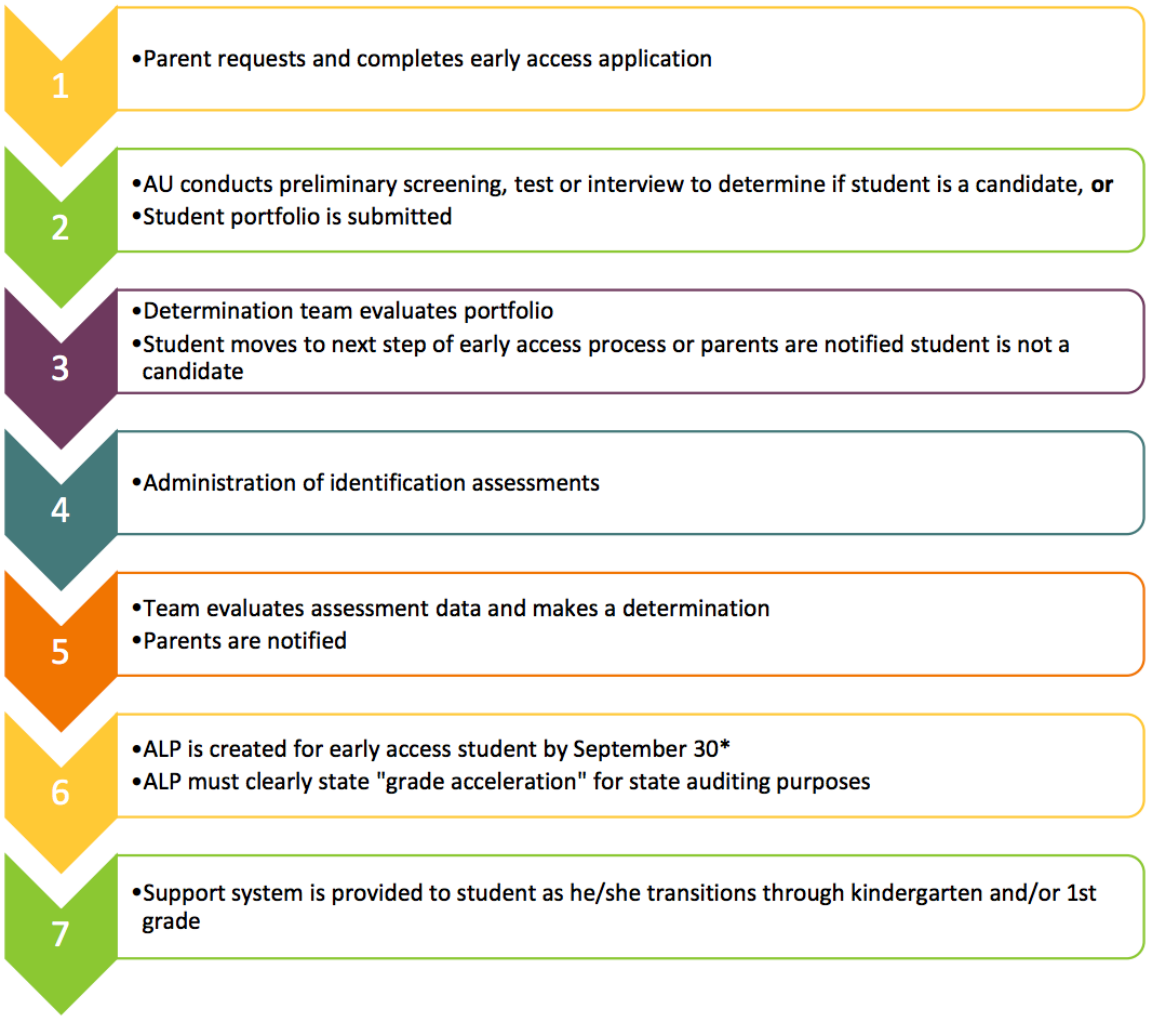
short-cut to finding these students is to consult with parents (Smutny, 2000). According to a Wright University study, 83% of parents 39 suspected their child to be gifted before formal identification and research has proven that 67% of parents who provided a list of early identifiers were accurate (Kord, 2000). Parents offer a unique perspective and are often among the first to recognize gifted behaviors in early childhood (Barbour & Shaklee, 1998; Gross, 1998; Smutny, 1998).

While many assessments are intended for use in screening and identification of students for program participation, other assessments are more appropriately used for different purposes. Beyond the initial identification of students for a program, assessments can be used for guiding curriculum development for an individual student or for a group of students (Lupkowski-Shoplik, Assouline, & Colangelo, 2015).

Figure 7

Colorado Department of Education: Early Access Process

Below outlines the Early Access process an Administrative Unit has the autonomy to determine the procedural order of the early access evaluation process (CDE, 2016).



(Colorado Department of Education, 2016)

Limitation with identification.

Widespread screening followed by individual testing appears to be the recommended identification procedure (Lupkowski-Shoplik, Assouline, & Colangelo, 2015). Many districts and programs, however, do not possess the funds and diagnostic personnel to support such extensive testing (Kitano, 1982). Many states and school districts vary widely in their provisions for gifted children (NAGC: State of the Nation, 2012-2013). Struggles can arise between the districts and parents who advocate for programs to meet their gifted child's needs when philosophic beliefs, state policy, and preconceived notions around acceleration get in the way for providing options for children (Lupkowski-Shoplik, Assouline, & Colangelo, 2015).

Colorado Early Access is a local decision of the Administrative Unit (CDE, 2016, [12.08(1)(c)]). If an Administrative Unit determines Early Access will be provided as a gifted programming service, constituent schools or districts must abide by the requirements established in the Administrative Unit's Comprehensive Program Plan (CDE Gifted Education: Administrative Unit Program Plans for 2012-2016). When considering Early Access, superintendent/s, early childhood and gifted education staff should hold conversations about the meaning of Early Access, benefits to children, existing policy or procedures that support Early Access thinking (CDE, 2016). If an Administrative Unit determines Early Access will be permitted, provisions are embedded in the Administrative Unit's Comprehensive Program Plan for Gifted Education pursuant to rule section 12.08. An Early Access Addendum is a supplement to the Program Plan provided to the Colorado Department of Education before the initial implementation of Early Access. An Administrative Unit may choose to limit Early Access consideration to

only school district residents and/or to charge a nominal fee for the assessment process (CDE, 2016).

Some researchers express a concern that the reliability of psychometric testing is lower in the early years of childhood than in the middle years (Robinson & Robinson, 1992) and question whether a high IQ score obtained by a young child is predictive of academic success in later childhood (Jackson & Klein, 1997). Further, Robinson and Weimer (1991) state that bright children need to be tested on a measure that leaves room for advanced performance; this is what aptitude and/or above-level testing provides. Unfortunately, some early childhood educators take this concern too far, and refuse to have a young child psychometrically assessed, even when the child is highly gifted and will require early intervention and an advanced learning plan (Kulik & Kulik, 1992). On this inferred notion, teachers, principals, or even school psychologist will recommend that testing be postponed until the child is in second or third grade (Gross, 1993). Both Robinson and Robinson (1992) and Gross (1993) found that the scores of young highly gifted children are likely to rise over successive testing's, whereas normally a decrease would be expected in this high-scoring population showing regression towards the mean.

Programming for Young Gifted Learners

A commonly reported observation cited in the literature is that kindergartner curriculum is boring and redundant for gifted students (Karnes & Johnson, 1990; Kitano, 1985). Gross and Feldhusen (1990) found precocious readers among nearly all the highly-gifted children they studied, and that schools disregard their precocity and subject them to the instructional level presented to all children. These children experience the world in qualitatively different ways from their age-peers, making it critical for educators

to provide programming that is flexible and individualized (Rotigel, 2003). While young gifted children need developmentally appropriate activities like those of their same age-peers, their unique characteristics dictate the need for curriculum differentiation (Walker, Hafenstein, Crow-Enslow, 1999). Smutny, Walker, and Meckstroth (1997) have addressed the importance of modified instruction for those functioning above age and grade expectations in early childhood.

Tomlinson (2005) defines three specific elements that need to be entwined in gifted learners' curriculum and instruction: appropriateness of pacing, degree of challenge and developing passion. Pacing is a key component of how students engage with the curriculum (Tomlinson, 2005). Educators need to monitor that students do not just understand the concepts but can also apply the knowledge (Smutny, Walker, & Meckstroth, 1997). Burns and Tunnard (1991), state that: "Gifted preschoolers really need a differentiated program as early as age three and four. The differentiation is necessary due to the differences in the gifted child's physical, academic, and intellectual development and their varying attention spans" (Burns & Tunnard, 1991, p.57). Tomlinson (2005) shares that the degree of challenge is one of the most essential roles the teacher can control for students' growth and positive outcomes. Challenge should move learners "towards expertise in one or more disciplines" (p. 163). Finally, the importance for high potential learners to develop passion is critical to purposeful and meaningful learning (Smutny, Walker, & Meckstroth, 1997). If the learning is connected to the students' passion area, the pacing and challenge will be adjusted for optimal growth for the student (Smutny, Walker, & Meckstroth, 1997). All three elements ebb and flow in supporting a gifted student's learning needs. Tomlinson (2005) states,

"Highly able learners can only grow when they are stretched" (p.161) and elevates the importance for providing effective program options such as early entrance to foster the "stretching" that highly able learners require.

Limitations with programming.

Highly gifted children appear only rarely (appear in the population at a ratio of approximately 1 in 1000) in the school population (Silverman, 1989). This rarity is yet another factor in teachers' lack of awareness of the cognitive and affective characteristics of this group (Lupkowski-Shoplik, Assouline, & Colangelo, 2015). To fulfill their remarkable intellectual potential, these children require an educational program which differs significantly in structure, pace, and content (Gross, 1999). Rotigel (2003) communicates that school districts may be unable to commit financial resources or are fearful of setting a precedent of services that they may not be able to provide for other gifted children. Finally, Karnes and Johnson (1991) find that

"The earlier gifted children are identified and provided appropriate programs, the better their chances of fully actualizing their potential. On the contrary, when young gifted children fail to be challenged during their early years in school and in family situations, they tend to develop negative feelings towards school and develop poor work habits, and then become underachievers" (p.133).

Leadership & Communication Theory

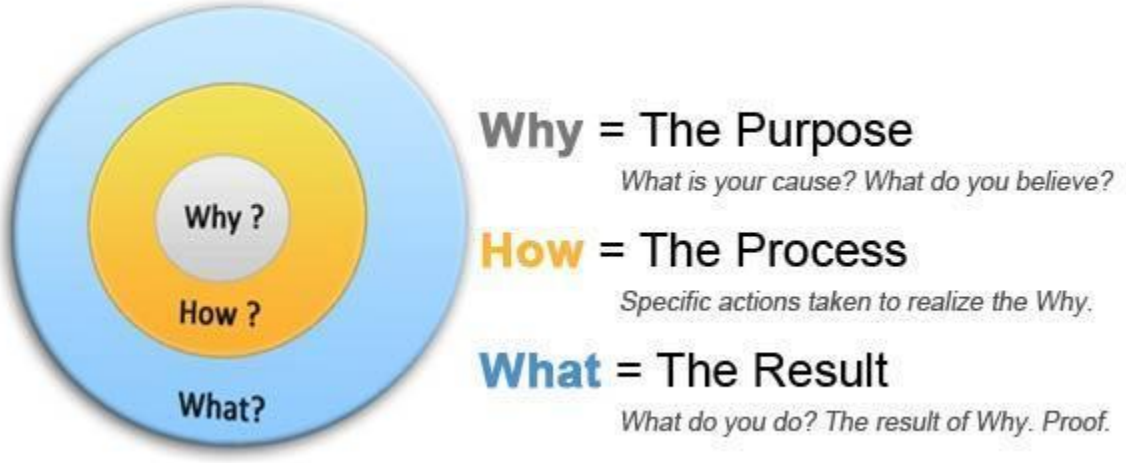
This section of the literature review focused on leadership and communication theory. Several models were addressed that support positive change in behavior, actions,

and beliefs throughout this research project. The researcher used: (1) Leadership theory, (2) Communication theory, (3) Change theory, (4) System theory, and, (5) Perceptions & Attitudes.

Simon Sinek (2009) is best known for developing the "golden circle," a theory that explains why certain individuals and companies are more successful than others. His golden circle keynote, formally known as "How Great Leaders Inspire Action," explains that some of the most successful organizations and influential leaders, such as Apple and Martin Luther King, think and act in opposite ways than others (Sinek, 2009). While most companies and leaders start with the idea of what it is they are trying to do or sell, the most distinguished and inspirational start with the question "why?" Sinek's golden circle keynote explains that people buy products or services not for what they are, but for what they represent (Sinek, 2009). According to Sinek (2009), staying loyal to an ethos is the only way a leader, company, or organization will make a difference in the world today. Below is a visual representation of the golden circle that would lead the conversation about the purpose of our work, the process that we will take, and the results we hope to gain.

Figure 8

Golden Circle Model

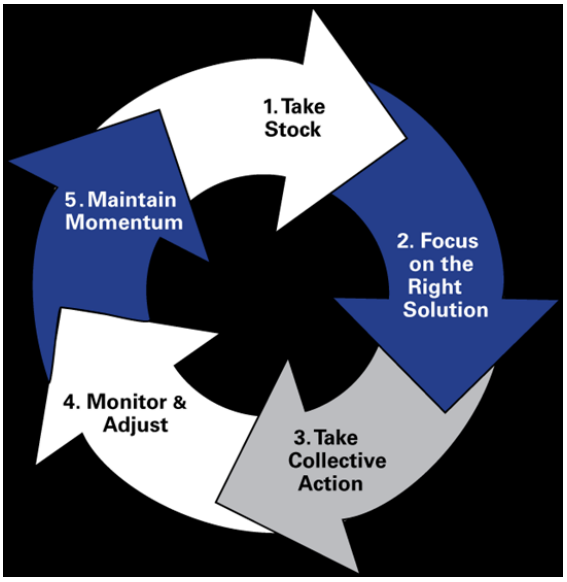


(Sinek, 2009)

McREL's program Success in Sight (2004) outlines a communication model that approaches school improvement that helps schools raise student achievement and engage in continuous, sustainable improvement that builds on past successes. Through developing shared leadership, using data to make decisions, creating a purposeful community, utilize research-based practices, and finally implementing continuous improvement practice, schools make gains in student achievement.

Figure 9

McREL-Success in Sight Model



(McREL, 2014)

By weaving these two models together to empower change, the researcher planned to inspire shared ownership among Administrative Unit and provide the spark that will ignite action to create change.

Success in Sight: McREL

Why: We believe that children have the right to access their full potential through early entrance options.

How: Implementing an Early Access process

Through:

- Using research-based practices to make improvements and increase student achievement
- Fostering and engaging in shared leadership for improvement
- Creating and maintaining a purposeful community

- Applying a comprehensive continuous improvement process that is systematic and systemic

What: Increase Access for Children across the state of Colorado

Through: Using data to guide school improvement and assess progress

Simon Sinek states, "the power of Why - the purpose, cause or belief that drives every one of us. If everyone knew Why they do what they do what an amazing place the world would be" (2009). Michael Fullan states, "A change-savvy leader always knows that you can't directly make people change. BUT you can create a system where positive change and movement is virtually inevitable" (2010, p.18). Keeping in mind the "WHY" of our work, we believe that children have the right to access their full potential through early entrance options. Through shared ownership of the "WHY", "HOW", and "WHAT" supporting Colorado Administrative Unit would increase adoption of Early Access process.

Change Theory

Weiss (1995) defines change theory quite simply as a theory of how and why an initiative works. According to Connell and Kubisch (1998), the approach has several key elements, some of which are shared with other planning approaches (Argyris, 1993; Argyris & Schon, 1974; Fetterman, Kaftarian, & Wandersman, 1995; Hustedde & Score, 1995; Julian, Jones, & Deyo, 1995; Kaufman & Herman, 1991). First, a theory of change delineates the pathway of an initiative by making explicit both the outcomes of an initiative (early, intermediate, and longer term) and the action strategies that will lead to the achievement of these outcomes (Connell & Klem, 2000). Second, the quality of a

theory of change is judged by four explicit criteria: how plausible, doable, testable, and meaningful the theory of change is (Connell & Klem, 2000).

"Plausible" means that stakeholders believe the logic of the model is correct: if we do these things, we will get the results we want and expect (Connell & Klem, 2000). "Doable" means the human, political, and economic resources are sufficient to implement the action strategies in the theory (Connell & Klem, 2000). "Testable" means that stakeholders believe there are credible ways to discover whether the results are as predicted (Connell & Klem, 2000). "Meaningful" means that stakeholders see the outcomes as important and see the magnitude of change in these outcomes being pursued as worth the effort (Connell & Klem, 2000).

Third, a theory of change is generated by "moving backward" from long-term goals and outcomes to the necessary and sufficient conditions (intermediate and early outcomes) for producing those long-term outcomes to action strategies needed to achieve early outcomes (Connell & Klem, 2000). Fourth, this approach considers not only whether change will occur, but also how much change is expected to occur, for what populations, and in what settings and when (Connell & Klem, 2000). Fifth, it examines expectations for outcomes and activities in light of available and potential resources (Connell & Klem, 2000). Sixth, the approach encourages multiple stakeholders to contribute to articulation of the theory of change (Connell & Klem, 2000). Finally, the approach recognizes that the theory of change can evolve as it is tested over the course of the initiative (Connell & Klem, 2000).

Implement School Site-Reform and Community Involvement Strategies

For teaching and learning to change across a district which will affect all students, districts will have to be organized differently, district policies and practices will need to change, and new supports will need to be provided for both students and adults (Darling-Hammond, 1997; Howley, 1989; Howley & Huang, 1991; Lee & Smith, 1994a, 1994b; Lee, Smith, & Croninger, 1995). In addition, strategies that increase—and make more meaningful—the involvement of adults, especially parents, from the community and that increase the involvement of other institutions in the community in supporting student success will increase the effectiveness of changes inside the school walls (Haynes, Comer, & Hamilton-Lee, 1989a, 1989b).

Develop district and community supports for change.

If all these changes have any chance of being implemented and sustained, leaders in the school district and in the community, will need to spark, fuel, and monitor the change process at both the school and the community levels (Connell & Klem, 2000). Through its actions, the district leadership (superintendents, teacher association leaders, and boards of education) and other key community leaders must create the conditions that convince stakeholders in the schools themselves, and in the community, that they are expected, empowered, and equipped to implement the change strategies just described (Connell & Klem, 2000).

Majority of the 103 Administrative Unit that currently do not have an Early Access Addendum on file with CDE are geographically located in rural settings throughout Colorado. Plucker (2013) identified the factors of poverty, rural provincialism, limited resources, and negative perceptions of gifted programs, among

others, as additional persistent challenges for delivery of services for gifted students in rural schools; however, relatively little is known about how those challenges influence instructional decisions and behaviors of teachers of gifted students in rural schools. As a result, rural gifted students are at risk of not having instruction provided by teachers with special skills or competencies in addressing their educational needs, and many of these students "may not receive the critical academic stimulation and enrichment needed to support their full cognitive, social, and academic development" (Howley et al., 2009, p. 521). The literature on gifted rural education describes numerous insufficiencies in gifted programming in those environments arising from lack of funding (Azano et al., 2014; Plucker, 2013), such as fewer specialists, untrained staff, limited resources, and fewer program options in those settings (Cross & Burney, 2005; Hébert & Beardsley, 2001). This evidence in the literature the design of survey questions for directed survey.

Summary

This chapter reviewed scholarly literature related to the topics of this study. The comprehensive topics regarding giftedness: definitions of giftedness and acceleration; history of acceleration; early entrance versus Early Access; identification of young gifted learners; barriers with identification and programming; and leadership, communication and change theory, were presented. This review highlighted the discussions of the empirical evidence regarding the persistent problem of practice guiding this study.

Chapter Three: Methodology

Research Design

The nonexperimental descriptive survey research design examined the limitations on Colorado school districts adoption of an Early Access Addendum process. The research design encompassed a quantitative approach as the strategy of inquiry. An advantage of this model was that it allowed quantitative data to be collected. The nonexperimental descriptive survey research design utilized data collection, data analysis, and data interpretation stages with an emphasis on the quantitative data. Utilizing this approach afforded strengths that counteracted the weaknesses of individual methods (Creswell, 2009). Gliner, Morgan, and Leech (2009) state there is no active independent variable (intervention) within the nonexperimental approach thus the researcher does not manipulate or control the independent variable. Nonexperimental approaches focus on the attribute independent variables and allow for no treatment or invention.

This research design was necessary to best examine the nature of barriers that impact the actions of Administrative Unit from adopting an Early Access process (Plucker, 2013). Noddings (2002) stated that the "position or attitude of caring activates a complex structure of memories, feelings, and capacities" (p. 8). Using a quantitative methodology to examine a broader range of research questions to discover patterns (quantitative) it yields a rich descriptive result. This research was not intended to offer a

set of knowledge claims or rules but rather as an investigation to examine limitations towards adoption of an Early Access process (Noddings, 2002).

Using a nonexperimental descriptive survey research design does not allow variables of interest to be manipulated because they are naturally existing attributes (Belli, 2007, p. 59). The benefits of using a quantitative approach are described by Creswell (2009) as research that provides a numeric description of "trends, attitudes, or opinions of a population by studying a sample of that population" (p. 12). Quantitative methods brought objective data to the study, which minimizes the shortcomings and biases or "subjectivities" qualitative methods may have on the study. Using nonexperimental descriptive survey research design was a practical means for gathering data to answer the research questions thoroughly.

A declaration regarding how an investigator views knowledge strategically motivates the research and guides every aspect of the study from question to conclusion (Broido & Manning, 2002; Charmaz, 2006; Crotty, 1998; Vogt, 2007). The following sections outline the study's ontological and epistemological process.

Ontology

As the researcher, my own knowledge development paradigm leads the exploratory effort and provides further rationale for strategic decisions regarding selection of methodology, data collection, subject sampling, and data analysis. According to Creswell (2003), ontology is the claim researchers make regarding knowledge; epistemology is how individuals have arrived at that knowledge; and methodology is the process of studying it. The principle investigator agrees with Crotty's (1998) assertion "all knowledge, and therefore all meaningful reality as such, is contingent upon human

practices, being constructed in and out of interaction between human beings and their world, and developed and transmitted within an essentially social context" (p. 42). The researcher believes the way humans respond to the social environment is based on their own perceptions and significantly affects future actions and interactions (Guba & Lincoln, 1994). These ontological assumptions helped to emphasize the lived experiences and status of Colorado Administrative Unit perspectives and further aligned my epistemological leanings with this study.

Epistemology

A fundamental belief motivating this project evolved from the affiliation with a constructivist disposition. Whereas an objectivist view espouses knowledge exists in objects independent from consciousness and experience, the constructivist epistemology asserts knowledge is a product of the social context where meaning evolves from interactions with others (Crotty, 1998). Further support for constructivism is evident in the aim of this project to explore the way in which student participants create and understand meaning through their own social constructions (Charmaz, 2006; Guba & Lincoln, 1994). According to Guba and Lincoln (1989) a study steeped in constructivism asserts:

- the researcher-respondent relationship is subjective, interactive, and interdependent
- reality is multiple, complex, and not easily quantifiable
- the values of the researcher, respondents, research site, and underlying theory undergird all aspects of the research
- the research product is context specific (p.83)

A constructivist approach aspires to both discover and describe the unique nature of those being investigated (Briodo & Manning, 2002). This epistemological leaning was fitting for the study and structurally placed the participant's voice at the center of the discovery. As the researcher, I acknowledged that participants would likely convey multiple meanings surrounding the same issue (Creswell, 2009).

Purpose of the Study

The purpose of this study was to examine the limitations on Colorado school districts' adoption of an Early Access Addendum process.

Central questions.

What are the limitations on Colorado school districts' adoption of an Early Access Addendum process?

Community Partner

Colorado Department of Education- Gifted Education (CDE GT) and a variety of volunteer Colorado Administrative Unit across the state were the community partners in this research. CDE gifted education mission states to "ensure gifted student growth and achievement through systems of support, programming and advocacy." Through this partnership, the researcher had access to school district gifted and talented administrators at the Fall 2016 state gifted directors meeting.

Through planning conversations with the state director of gifted education, Jacquelin Medina verbally and written agreed to partner with this research project (Appendix B). The researcher utilized the Fall 2016 state gifted directors meeting as an avenue for recruiting potential participants in the Directed Survey. To facilitate a meaningful discussion with the community partner an email communication was included

(Appendix B). The community partner is committed to this research work and had confirmed with the researcher that this problem of practice is of importance to CDE and the field of gifted education.

Sampling, Subjects, & Setting

Sampling participants.

As this study's primary focus is to understand what the limitations on Colorado school districts adoption of an Early Access Addendum process. Purposeful sampling is defined as intentionally selecting individuals or sites that have the information necessary to understand a central phenomenon (Patton, 2015). According to Patton (2015), this means of selection is common to qualitative research because of its flexibility of incorporating a variety of participants from individuals to different sites or any combination thereof. Additionally, through purposeful sampling the Administrative Unit in Colorado in this study were a homogenous sample in that they are members of "a subgroup that has defining characteristics" (Creswell, 2002, p. 196). The complexity of establishing sampling participants for this study is outlined in the sections below corresponding to each phase of the data collection and intervention.

Sampling for directed survey.

As Creswell (2009) explained, a quantitative approach provides a numeric description of "trends, attitudes, or opinions of a population by studying a sample of that population" (p. 12). For this study, a survey appeared to be the most efficient means to collect data. The researcher distributed a cross-sectional directed survey to the 103 school districts in the state of Colorado that do not have an Early Access process on file

with CDE, directed to the gifted education department for the school district. Participants accessed the directed survey via an electronic online platform through an email invitation. The contact information for each Colorado Administrative Unit is updated each summer by the Office of Gifted Education and is located on the Colorado Department of Education website as a public data-base of information to access. Participation was voluntary, and all responses were anonymous. This directed survey asked basic demographic questions and specific questions addressing barriers for current Administrative Unit that do not have an Early Access process on file with CDE.

Majority of the 103 school districts that currently do not have an Early Access Addendum on file with Colorado Department of Education are geographically located in rural settings throughout Colorado. Colorado Department of Education (2017) uses the following criteria to determine a school district to be rural as "giving consideration to the size of the district, the distance from the nearest large urban/urbanized area, and having a student enrollment of 6,500 students or less; small rural districts are those districts meeting these same criteria and having a student population of less than 1,000 students" (CDE: Rural and Small Rural Designation Report, 2017). The state of Colorado has 178 school districts (CDE, 2016). The state department has designated 108 Colorado school districts as "small rural" and 38 school districts designated as "rural" (CDE: Rural and Small Rural Designation Report, 2017). Plucker (2013) identified the factors of poverty, rural provincialism, limited resources, and negative perceptions of gifted programs, among others, as additional persistent challenges for delivery of services for gifted students in rural schools; however, relatively little is known about how those challenges influence instructional decisions and behaviors of educators of gifted students in rural

schools. This evidence in the literature drove the design of survey questions for the directed survey (Azano, 2014; Plucker, 2013; Cross & Burney, 2005; Bainbridge, 2002; Hébert & Beardsley, 2001).

Participants were informed via email distribution prior to the directed survey the data collected would be part of a dissertation study. The email described the nature and scope of the study it also included the consent form/waiver for consent for review. As part of the survey, participants completed the consent form/waiver for consent prior to engaging the directed survey. This instrument provided the research with the evidence of the participant's opinion of needs concerning school districts' limitations to Early Access.

The purpose of the directed survey was to collect data on the hindrances impacting an Administrative Unit from adopting an Early Access process. This data collected was a directed survey to guide recommendations to the field for supporting potential school districts in adoption of an Early Access Addendum process. A directed survey allowed limitations to be revealed of Early Access through survey questions addressing the four subscale areas: hindrances, awareness, favorability, and readiness surrounding adoption of an Early Access process. Survey was the preferred method of data collection for this research allowing accessing across the state of Colorado, the economical way of electronic distribution, and the rapid turnaround in data collection.

Setting.

One setting was established for this study. The setting for the study utilizes an online distribution of a directed survey disseminated to 103 Colorado school districts in September 2016.

Instrumentation/Data Collection

There are several benefits to online surveys, including low cost, wide availability of survey design and implementation tools, ease of implementation including reminders, and built-in features that facilitate data cleaning and improve the survey experience for respondents and researchers (Dillman, Smyth, & Christian, 2014). The rationale for choosing this method was a useful method for gathering data from individuals for the sample population (Garson, 2009). Additionally, survey research is one of the most important areas of measurement in applied social research (Frankfort-Nachmias & Leon-Guerrero, 2011). The broad area of survey research encompasses any measurement procedures that involve asking questions of respondents (William, 2008).

Participation in online surveys is thought to be easy for frequent computer users (Israel, 2011) and those with high-speed Internet access (Archer 2003). However, one major concern is online surveys' typically low response rates (Archer, 2008; Miller & Smith, 1983; Wiseman, 2003). Dillman (2014) provides several strategies that can increase response rates to online surveys. The researcher has considered the importance of respect to respondents' time. Due to the population and sample group outlined above and advice from the community partner, the survey should take no longer than five minutes to complete for a better response/completion rate. Typically, surveys with ten or fewer questions fit this guideline. Dillman, Smyth, & Christian (2014) indicate the importance of providing the participant with a definition within the stem question "will help respondents comprehend the meaning of the question" (p.109).

Online Directed Survey

Guidance through the literature review and previous research (Colangelo, Assouline, & Gross, 2004; Southern et al., 1991a), the researcher constructed a customized survey to measure the unique factors which contribute to the evaluation of the central question of this study (Azano, 2014; Plucker, 2013; Cross & Burney, 2005; Bainbridge, 2002; Hébert & Beardsley, 2001). Operational definitions for the survey can be found in the following section. A field pretest was conducted with the construct for the purpose to find out how the data collection protocol and survey instrument worked under realistic conditions (Fowler, 2014).

Operational Definition.

For clarity, the central question is restated as "what are the limitations on Colorado school districts' adoption of an Early Access Addendum process?" The term "initiative" in this section refers to Colorado House Bill 08-1021 as legislation that is an optional based policy for school districts in the state of Colorado to choose to implement.

For the purpose of this study, the construct of "limitations" was operationally defined as a composition of the following factors: awareness, favorability, readiness, and hindrances. Weiss (1995) defines change theory quite simply as a theory of how and why an initiative works. A theory of change delineates the pathway of an initiative by making explicit both the outcomes of an initiative and the action strategies that will lead to the achievement of these outcomes (Connell & Klem, 2000). *A Nation Empowered* (2015) states that a first step towards successful acceleration is becoming informed, understanding the research findings on acceleration. Utilizing "explicitness of both outcomes and actions" define "Awareness" as a school districts knowledge or perception

of a statewide initiative (Connell & Klem, 2000; Colangelo, Assouline, Van-Tassel-Baska, & Lupkowski-Shoplik, 2015).

A quality of change theory is judged by four explicit criteria: how plausible, doable, testable, and meaningful the theory of change is (Connell & Klem, 2000). By applying the "four explicit criteria" "Favorability" was defined as a school districts degree of view of the statewide initiative with partiality (Connell & Klem, 2000).

A component of change theory is to examine expectations for outcomes and activities in light of available and potential resources (Connell & Klem, 2000). The ability to "examine expectations for the outcome" defined "Readiness" as a school district's state of preparedness for the statewide initiative (Connell & Klem, 2000).

Plucker (2013) identified the factors of poverty, rural provincialism, limited resources, and negative perceptions of gifted programs, as persistent challenges for delivery of services for gifted students. Utilizing "persistent challenges" defined "Hindrances" as a school districts perception of an obstacle, barrier, or restriction to the statewide initiative (Plucker, 2013).

Therefore, the survey questions were divided into five, unlabeled subscales: Sample Demographics, Awareness, Favorability, Readiness, and Hindrances. Questions which comprised each subscale were arranged in no specific order and were not grouped by subscale or otherwise categorized.

Construct

Descriptions of hindrance questions.

This section addresses survey questions that speak to the limitations category of hindrances outlined as barriers towards submission and the most impactful aspects

needed for an Early Access Addendum filing (Appendix D). This multi-level question addresses seven different perceived hindrances towards adoption of an Early Access Addendum. All seven questions were designated as a forced response of yes or no. The seven-perceived hindrance that were lifted from the literature are as follows: (1) Lack of process, (2) Lack of Administrative Unit commitment, (3) Conflicting philosophy within AU, (4) Lack of human resources, (5) Lack of assessment resources, (6) Lack of training specific to Early Access, and (7) Enacting an unfunded mandate.

Hindrances survey questions.

Majority of the 103 school districts that currently do not have an Early Access Addendum on file with CDE are geographically located in rural settings throughout Colorado. Plucker (2013) identified the factors of poverty, rural provincialism, limited resources, and negative perceptions of gifted programs, among others, as additional persistent challenges for delivery of services for gifted students in rural schools; however, relatively little is known about how those challenges influence instructional decisions and behaviors of teachers of gifted students in rural schools. The literature on gifted rural education describes numerous insufficiencies in gifted programming in those environments arising from lack of funding (Azano et al., 2014; Plucker, 2013), such as fewer specialists, untrained staff, limited resources, and fewer program options in those settings (Cross & Burney, 2005; Hébert & Beardsley, 2001). This evidence in the literature will drive the design of survey questions for the Directed Survey.

Azano (2014), Plucker (2013), Cross & Burney (2005), and Hébert & Beardsley (2001) work elevates the persistent challenges, limits, and insufficiencies rural school districts face for delivery of services for gifted students. Responding to the literature

outlined above, the researcher derived the subscale factor of hindrances for the directed survey. Factors indicated as challenges, limits, and insufficiencies for delivery of services for gifted are outlined in the survey question addressing hindrances (Azano, 2014; Plucker, 2013).

Indicate which of the items below ARE hindrances towards submission of an Early Access Addendum?

Yes	No	Lack of process
Yes	No	Lack of AU commitment
Yes	No	Conflicting philosophy within AU
Yes	No	Lack of human resources
Yes	No	Lack of assessment resources
Yes	No	Lack of training specific to Early Access procedures and criteria
Yes	No	Enacting an unfunded mandate
Yes	No	None

Within the response options, the usage of "lack of" is derived from the literature indicating limits and insufficiencies as challenges and barriers (Azano, 2014; Plucker 2013; Cross & Burney, 2005; Hébert & Beardsley, 2001). This form of forced-choice question format allows respondents "to make an explicit judgment about each item independently" (Dillman, Smyth, & Christian, 2009, p.148). The survey contained eight statements (Appendix F) regarding hindrances to filing an Early Access Addendum with Colorado Department of Education by January 2017. The construct of the directed survey provided participants with yes or no, forced-choice responses.

Description of awareness questions.

This section addresses survey questions that speak to the limitations category of awareness towards State Gifted Education Programs. A theory of change delineates the pathway of an initiative by making explicit both the outcomes of an initiative and the

action strategies that will lead to the achievement of these outcomes (Connell & Klem, 2000). *A Nation Empowered* (2015) states that a first step towards successful acceleration is becoming informed, understanding the research findings on acceleration. Utilizing "explicitness of both outcomes and actions" define "Awareness" as a school districts knowledge or perception of a statewide initiative (Connell & Klem, 2000; Colangelo, Assouline, Van-Tassel-Baska, & Lupkowski-Shoplik, 2015).

Awareness survey questions.

Two survey questions utilize the closed-ended ***c***onstruct. Closed-ended questions limit the answers of the respondents to response options that are provided by the survey construct (Dillman, Smyth, & Christian, 2014). Dichotomous response options were "yes" and "no"; two-point questions were used for time-efficient and easy to code and interpret (Dillman, Smyth, & Christian, 2014).

Description of favorability questions.

This section addresses survey questions that speak to the limitations category of favorability of State Gifted Education Programs and Professional Learning. A quality of change theory is judged by four explicit criteria: how plausible, doable, testable, and meaningful the theory of change is (Connell & Klem, 2000). By applying the "four explicit criteria" "Favorability" was defined as a school districts degree of view of the statewide initiative with partiality (Connell & Klem, 2000).

Favorability survey questions.

Two survey questions utilize the closed-ended construct. Closed-ended questions provide the participant a list of categories to choose from dichotomous response options of "favor" or "oppose." (Dillman, Smyth, & Christian, 2014). This type of response

option was needed to state both positive and negative sides indicated in: Does the district/AU you represent favor or oppose Early Access? By the researcher selecting to use "favor" or "oppose" the stem implies that there is not a right or wrong answer chose to the question (Dillman, Smyth, & Christian, 2014). Within the construct of the close-ended question: Would you be in favor or opposed to attending a break out professional learning session on the topic of Early Access?

Descriptions of readiness questions.

This section addresses survey questions that speak to the limitations category of readiness towards submission of State Gifted Education Program Plans. A component of change theory is to examine expectations for outcomes and activities in light of available and potential resources (Connell & Klem, 2000). The ability to "examine expectations for the outcome" defined "Readiness" as a school district's state of preparedness for the statewide initiative (Connell & Klem, 2000).

Readiness survey questions.

Two survey questions utilize the closed-ended construct. Closed-ended questions limit the answers of the respondents to response options that are provided by the survey construct (Dillman, Smyth, & Christian, 2014). Dichotomous response options were "yes" and "no"; two-point questions were used for time-efficient and easy to code and interpret (Dillman, Smyth, & Christian, 2014).

Descriptions of demographic questions.

Survey Question 1: Please select from the drop-down menu the name of your school district (see Appendix E).

Survey Question 2: Please indicate the name of your Administrative Unit (AU). This was a fill in the blank response. The demography of participants, which include school district/Administrative Unit description, participant's role in school district/Administrative Unit, and participant's years in current role is presented in Table 3.

Survey Question 3: Please indicate the role in the school district or Administrative Unit you hold. This demographics question addresses the role the participant holds within the school district/Administrative Unit and was an open-ended response. The seven response options indicate the following roles held: Superintendent/Elementary Principal (1), Assistant Superintendent (1), Executive Director of Educational Services (1), Director of Curriculum (1), Director of Instructional Services (1), Director of Student Services (1), Gifted Facilitator (1), each representing 5.3% of the participants.

Survey Question 4: Please select the description that best describes your Administrative Unit. To outline the demographics of the participants engaged in this study, the fourth question addressed the size that most closely matched their student population. There was representation in four of the six size descriptors. The six description of the school district/Administrative Unit via the following: (1) Rural with multiple districts, (2) Rural district, (3) Suburban with multiple districts, (4) Urban/Suburban Large district (15,000+ students), (5) Suburban district (5,000-14,999 students), and/or (6) Small district (less than 5,000 students) but not rural.

Demographic survey questions.

The survey had five questions designated to collect demographic information. Response scales consisted of: 1) a drop-down list for name of the school district, 2) an

open-ended/fill in the blank, and 3) a multiple-choice format for demographic information of the name of the school district, Administrative Unit group, participant's role in school district, description of Administrative Unit size, and participant's years of education experience (Dillman, Smyth, & Christian, 2014).

Data Analysis Process & Procedures

Utilizing a descriptive survey research design approach allowed for analysis of one directed survey. An integration strategy was utilized to allow for the quantitation data collection to involve combining open-ended questions on a survey with closed-ended questions on a survey (Creswell, 2003). Due to the design of the research study, descriptive analysis and descriptive statistics were utilized (Frankfort-Nachmias & Leon-Guerrero, 2011; Gliner, Morgan & Leech, 2009).

Descriptive analysis allowed for univariate analysis which involves the examination across cases of one variable at a time. There are three major characteristics of a single variable that the researcher examined: the distribution, the central tendency, and the dispersion. The distribution is a summary of the frequency of individual values or ranges of values for a variable. The central tendency of a distribution is an estimate of the "center" of a distribution of values. There are three major types of estimates of central tendency that were run in this data analysis were the mean, median, mode statistical tests. Dispersion refers to the spread of the values around the central tendency. There are two common measures of dispersion, the range and the standard deviation.

Descriptive statistics are used to describe the basic features of the data in the study. This data provided simple summaries about the sample and the measures (Creswell, 2009; Frankfort-Nachmias & Leon-Guerrero, 2011; Gliner, Morgan & Leech,

2009). This descriptive analysis formed the basis of quantitative analysis of data. Descriptive statistics helped to simplify large amounts of data in a sensible way. Each descriptive statistic reduced lots of data into a simpler summary. Describing a large set of observations with a single indicator can run the risk of distorting the original data or losing important detail. Even given these limitations, descriptive statistics provide a powerful summary that may enable comparisons across the data collection set.

All statistical analyses were chosen based on the research design which was determined by the central question: What are the limitations on Colorado school districts' adoption of an Early Access Addendum process? The central question was very broad and was explored to explain the perspective of Coronado educators in school districts on the Early Access Addendum limitations (Creswell, 2009; Frankfort-Nachmias & Leon-Guerrero, 2011; Gliner, Morgan & Leech, 2009). The statistical analysis does not explore a relationship between variables, i.e. it does not compare differences between groups or look for a relationship between two variables. Findings seek a cross-sectional (not longitudinal) summary description of the limitations using one sample and is not designed to generalize to school districts beyond Colorado. Therefore, the appropriate statistical analyses are descriptive statistics which quantitatively organize and describe data collected from the sample. Descriptive statistics consist of means, percentages & graphs (Frankfort-Nachmias & Leon-Guerrero, 2011; Gliner, Morgan & Leech, 2009).

There are a wide variety of internal consistency measures that can be used, for this analysis the Kuder-Richardson Formula (KR-20) was utilized as it is a special computation of Cronbach's alpha for dichotomous data (Kuder, G. & Richardson, M.W.,

1937; Gliner, Morgan & Leech, 2009). Due to the dichotomous data set the Kuder-Richardson Formula (KR-20) was the most appropriate reliability test to run (Gliner, Morgan & Leech, 2009).

The overall writing structure and reporting using the nonexperimental descriptive survey research design approach involved the use of textual and structural descriptions (Creswell, 2013) to reveal the patterns of the data. It was imperative that the researcher was immersed in the data by repetitiously reading over the material for analysis (Marshall & Rossman, 2006). Data collection, note-taking, coding and memoing transpired simultaneously from the onset of the research and a sorting process facilitated project organization to achieve categorical saturation (Locke, 2001). Cross-case analysis provided themes from the coding of both surveys.

Summary

This chapter presents the rationale regarding a quantitative research design and survey research chosen to examine the limitations on Colorado school districts adoption of an Early Access Addendum process. This chapter indicates the research design of this study, purpose and central question, and the construction of the survey. It outlines the sampling method, the construct of the instrumentation used to collect data, and the descriptive statistical measurement used to analysis the survey.

Chapter Four: Analysis & Results of Findings

This chapter provides the research results from data collection and analysis to examine the limitation on Colorado school districts adoption of an Early Access Addendum process. The data collection tool was a directed survey distributed to 103 school districts across the state of Colorado. Using descriptive statistics, each survey question was examined individually in the following pages (Frankfort-Nachmias & Leon-Guerrero, 2011). Where appropriate, tables were inserted and for additional clarity to aid statistical results reports. The survey questions and associated statistics were categorized into five sections of results outlined as: Sample Size/Demographics, Hindrance, Awareness, Favorability, and Readiness.

Central Question

What are the limitations on Colorado school districts' adoption of an Early Access Addendum process?

Overview of Data Collection and Analysis

The directed online survey was electronically distributed to 103 school districts across the state of Colorado that did not have an Early Access Addendum on file with CDE at the time of the survey administration. The 103 school districts were grouped in Boards of Cooperative Educational Services (BOCES) are an important and vital part of

the public educational system in Colorado. Colorado's BOCES (or Educational Services agencies) are unique in that they are an extension of the local member school districts (Colorado BOCES Association, 2017). A BOCES in Colorado exists at the discretion of its members and provides only those programs and services authorized by its members (Colorado BOCES Association, 2017). At the time of this study, there were 20 BOCES regions across the state of Colorado (Appendix G). Nine of the 20 BOCES have school district members that do not have an Early Access Addendum on file with CDE (Colorado Department of Education, 2016).

The East Central BOCES was composed of 20 school districts which 15% of the school districts participated in the survey. Adams BOCES was composed of one school district which 0% participated. Metro BOCES was composed of three school districts which 33.3% participated. Centennial BOCES was composed of 30 school districts which 13.3% participated. Ute Pass BOCES was composed of eight school districts which 37.5% participated. South Central BOCES was composed of 12 school districts which 25% participated. Santa Fe Trail BOCES was composed of six school districts which 0% participated. Southeastern BOCES was composed of 12 school districts which 16.6% participated. San Juan BOCES was composed of 11 school districts which 36.3% participated. Summary statistics can be found in Table 1 below. Appendix G provides a pictorial representation of the 20 BOCES regions across the state of Colorado.

Table 1

School Districts without EA Addendum & Completed Directed Online Survey

Name of BOCES	NR	n	%
East Central BOCES	3	20	15%
Adams BOCES	0	1	0%
Metro BOCES	1	3	33.30%
Centennial BOCES	4	30	13.30%
Ute Pass BOCES	3	8	37.50%
South Central BOCES	3	12	25%
Santa Fe Trail BOCES	0	6	0%
Southeastern BOCES	2	12	16.60%
San Juan BOCES	4	11	36.30%

Note: All data were self-reported. NR=Number of responses

The researcher distributed the survey to all 103 school districts via an initially launching electronically, using the distribution features of the Qualtrics software, in September of the 2016-2017 school year (Appendix H). This first round of distribution yielded seven responses. The survey remained open and available for four months. One week after the initial survey launch, an email was sent to the 96 participants which had not yet responded as a reminder to please complete the survey. This second round launch which yielded four more responses. The researcher continued this process for three additional weeks with reminders sent October 10th, November 1st, and December 5th respectively. For the week of October 10, 2016, an email was sent to 92 participants, thus a third-round launch which yielded six responses. For the week of November 1, 2016, an email was sent to 86 participants, thus a fourth-round launch yielded two additional responses. For the week of December 5, 2016, an email was sent to 84 participants, thus a fifth-round launch which yielded one more response. The survey closed on December 11, 2016. The total number of responses received was 20, which

resulted in, a survey response rate of 19% as calculated based on the 103 survey recipients and the 20 survey respondents. There is no agreed-on standard for a minimum acceptable response rate (Fowler, 2014).

Table 2

Rounds of Survey Distribution and Amounts of Response Per Round

Survey	Round 1	Round 2	Round 3	Round 4	Round 5
Surveys Sent	103	96	92	86	84
Responses Received	7	4	6	2	1

Analysis of Survey Response and Research Findings

Using descriptive statistics, each survey question was examined individually in the following pages (Frankfort-Nachmias & Leon-Guerrero, 2011). Where appropriate, figures were inserted and described for additional clarity. The survey questions and corresponding responses were clustered into construct subscales as: Demographics, Hindrance, Awareness, Favorability, and Readiness. Survey details can be found in Appendix F.

Demographic results.

This section addresses the survey questions that speak to the demographics of the sample population. A brief descriptive of each question is followed by the statistical analysis report and Table 3 summary statistics.

Descriptions of questions.

Survey Question 1: Please select from the drop-down menu the name of your school district (see Appendix F).

Survey Question 2: Please indicate the name of your Administrative Unit (AU). This was a fill in the blank response. The demography of participants, which include

school district/AU description, participant's role in school district/AU, and participant's years in current role is presented in Table 3.

Survey Question 3: Please indicate the role in the school district or Administrative Unit you hold. This demographics question addresses the role the participant holds within the school district/Administrative Unit and was an open-ended response. Five participants indicated the role they hold is Gifted Coordinator, which represents 26.3% of the participants. Three participants indicated the role they hold is Superintendent, which represents 15.8% of the participants. Two participants indicated the role they hold is Gifted Director, which represents 10.4% of the participants. Rounding off the final seven participants indicated the following roles held: Superintendent/Elementary Principal (1), Assistant Superintendent (1), Executive Director of Educational Services (1), Director of Curriculum (1), Director of Instructional Services (1), Director of Student Services (1), Gifted Facilitator (1), each representing 5.3% of the participants.

Survey Question 4: Please select the description that best describes your Administrative Unit. To outline the demographics of the participants engaged in this study, the fourth question addressed the size that most closely matched their student population. There was representation in four of the six size descriptors. The six description of the school district/Administrative Unit via the following: (1) Rural with multiple districts, (2) Rural district, (3) Suburban with multiple districts, (4) Urban/Suburban Large district (15,000+ students), (5) Suburban district (5,000-14,999 students), and/or (6) Small district (less than 5,000 students) but not rural.

Demographic statistics.

Thirteen regions indicated that they identified as a Rural district representing 65% of the participants, while three districts indicated that they identified as a Suburban district (5,000-14,999 students), representing 15% of the responding districts. The final four districts indicated two as Rural with multiple districts and two as Urban/Suburban Large district (15,000+ students), each representing 10% of the responding districts. Two demographic options were not selected from the survey choices which are as followed: Suburban with multiple districts and Small district (less than 5,000 students) but not rural.

Survey Question 5: How many years have you been responsible for Gifted Education in your current district/Administrative Unit? The fifth question addressed continues to provide information on demographics of the participants. The question inquiries about the years of experience responsible for gifted education through the following options: 0-1years, 2-4 years, 5-9 years, and greater than 10 years. 40% of participants indicated 2-4 years of experience, 30% of participants indicated 5-9 years of experience, 15% of participants indicated greater than 10 years of experience and 15% of participants indicated 0-1 years of experience.

Table 3

Frequency Distribution of Sample Demographics

Variable	**n**	**%**
School District/AU Description		
Small (< 5,000 students not Rural)	0	0.0
Suburban district (5,000-14,999 students)	3	15.0
Urban/Suburban (< 15,000 students)	2	10.0
Suburban (multiple districts)	0	0.0
Rural (multiple districts)	2	10.0
Rural district	13	65.0
Role in School District/AU		
Superintendent	3	15.8
Superintendent/Elementary Principal	1	5.3
Assistant Superintendent	1	5.3
Executive Director of Educational Services	1	5.3
Director of Curriculum	1	5.3
Director of Instructional Services	1	5.3
Director of Student Services	1	5.3
Director of Gifted Education	2	10.4
Gifted Education Coordinator	5	26.3
Gifted Education Coordinator/Teacher	2	10.4
Gifted Facilitator	1	5.3
Years in Current Role		
0-1	3	15.0
2-4	8	40.0
5-9	6	30.0
10+	3	15.0

Note: All data were self-reported. AU = Administrative Unit. Role in School District n = 19. School District/AU n = 20. Years in Current Role n = 20.

Hindrance results.

Descriptions of questions.

This section addresses survey questions that speak to the limitations category of hindrances outlined as barriers towards submission and the most impactful aspects needed for an Early Access Addendum filing (Appendix D). This multi-level question addresses seven different perceived hindrances towards adoption of an Early Access Addendum. All seven questions were designated as a forced response of yes or no. The seven-perceived hindrance that were lifted from the literature are as follows: (1) Lack of process, (2) Lack of Administrative Unit commitment, (3) Conflicting philosophy within AU, (4) Lack of human resources, (5) Lack of assessment resources, (6) Lack of training specific to Early Access, and (7) Enacting an unfunded mandate. Table 4 below gives an overview of all seven perceived hindrances by percentage of responses.

Hindrance statistics.

The two most prominent hindrances are the "lack of human resources" as respondents indicated 75% (n= 15) and "lack of funding" respondents indicated 75% (n= 15). The least prominent hindrance is the "lack of Administrative Unit commitment" as respondents indicated 25% (n= 5).

Frequencies of responses reported by Yes/No response options were: (1) Lack of process (Y= 50%; N= 50%), (2) Lack of Administrative Unit commitment (Y= 25%; N=75%), (3) Conflicting philosophy within AU (Y=30%; N= 70%), (4) Lack of human resources (Y=75%; N=25%), (5) Lack of assessment resources (Y=45%; N=55%), (6) Lack of training specific to Early Access (Y=65%; N=35%), and (7) Enacting an unfunded mandate (Y=75%; N=25%), and Other (Y=30%, N=70%).

The second hindrance is the "lack of training specific to Early Access" (Y=65%; N=35%). The third hindrance is the "lack of process" (Y= 50%; N= 50%). The fourth hindrance is the "lack of assessment resources" (Y=45%; N=55%). The fifth hindrance is the "conflicting philosophy within Administrative Unit" (Y=30%; N= 70%). The sixth hindrance is the "lack of Administrative Unit commitment" (Y= 25%; N=75%).

Table 4

Actions Hindering Early Access Addendum Submission

Variable	Yes		No	
	n	%	n	%
Lack of Process	10	50.0	10	50.0
Lack of AU Commitment	5	25.0	15	75.0
Conflicting Philosophy within AU	6	30.0	14	70.0
Lack of Human Resources	15	75.0	5	25.0
Lack of Assessment Resources	9	45.0	11	55.0
Lack of EA Training	13	65.0	7	35.0
Enacting Unfunded Mandate	15	75.0	5	25.0
Other	6	30.0	14	70.0
None	4	20.0	16	80.0

Note: AU = Administrative Unit. EA = Early Access. n=20 for all variables. All data were self-reported.

Survey Question 13: If you/Administrative Unit had to identify the MOST important thing that would have the greatest impact towards filing an Early Access Addendum with CDE? Out of the 20 participants eight believed the most important aspect that needs to be addressed is providing funding for Early Access to be implemented in their school districts. Descriptive results for each response to the MOST important thing that would have the greatest impact towards filing are as follows: (1) A clear process (10%), (2) An Administrative Unit commitment (10%), (3) Sufficient

human resources (15%), (4) Sufficient age appropriate assessments (0%), (5) Additional training needed (10%), (6) Funding (40%), and (7) Other (15%).

The most prominent aspect to impact filing is the need for "funding" (40%) which would compel school districts to file a CDE Early Access Addendum. The 40% indicates that school district representatives communicated this as a dominate need. The second aspect to impact filing is the need for "sufficient human resources" (15%) and third aspect to impact filing is the need for "other" (15%) which would compel school districts to file a CDE Early Access Addendum. The 15% indicates that school district representatives communicated this as a need. The fourth, fifth, and sixth aspect to impact filing is the need for "a clear process" (10%), "an Administrative Unit commitment" (10%), and "additional training needed" (10%)," which would compel school districts to file a Colorado Department of Education Early Access Addendum. The 10% indicates that school district representatives communicated this as a need. The "sufficient age appropriate assessments" option received (0%) responses.

Table 5

Most Important Impact on Filing CDE Early Access Addendum

	n	%
Funding	8	40.0
Sufficient Human Resources	3	15.0
A Clear Process	2	10.0
AU Commitment	2	10.0
Additional Training Needed	2	10.0
Other	3	15.0

Note: CDE = Colorado Department of Education. n=20 for all variables. All data were self-reported.

Awareness results.

Description of questions.

This section addresses survey questions that speak to the limitations category of awareness towards State Gifted Education Programs. Two survey questions utilize the closed-ended/dichotomous response options. Closed-ended questions limit the answers of the respondents to response options that are provided by the survey construct.

Awareness statistics.

Survey Question 6: Is the school district aware of the Colorado Department of Education Comprehensive Program Plan for 2016-2020 pending deadline? Table 6 displays that 85%(n=17) of the respondents are aware of the CDE comprehensive Program Plan. Fifteen percent (15%) of the respondents were unaware of this plan.

Survey Question 9: Is the school district/Administrative Unit aware of House Bill 08-1021: Early Access? This survey question addresses the awareness of the school district/Administrative Unit leadership concerning House Bill 08-1021: Early Access.

100% of the participants indicated awareness of the Colorado state statute that was passed in May 2008.

Table 6

Awareness of State Gifted Education Programs

Gifted Education Program	Yes		No	
	n	%	n	%
House Bill 08-1021: Early Access	20	100.0	0	0.0
CDE 2016-2020 Comprehensive Program Plan Deadline	17	85.0	3	15.0

Note: AU = Administrative Unit. CDE = Colorado Department of Education. n=20 for all variables. All data were self-reported.

Favorability results.

Description of questions.

This section addresses survey questions that speak to the limitations category of favorability of State Gifted Education Programs and Professional Learning. Two survey questions utilize the closed-ended/dichotomous response options. Closed-ended questions limit the answers of the respondents to response options that are provided by the survey construct.

Favorability statistics.

Survey Question 7: Does the district/Administrative Unit you represent favor or oppose the Colorado Department of Education Comprehensive Program Plan for 2016-2020? Ninety-five percent (95%) of the respondents revealed that their district favor the program plan and 5.0% of the respondents indicated an opposed view to this plan.

Survey Question 10: Does the district/Administrative Unit you represent favor or oppose Early Access? Survey question 10 addresses the intent of the school district/Administrative Unit position on Early Access implementation. Conversely, 65%

(n=13) of the participants surveyed indicated that their school district/Administrative Unit is in favor to adopting an Early Access Addendum and 35% (n=7) of the participants surveyed indicated that their school district/Administrative Unit is opposed to the adoption of an Early Access Addendum and process.

Survey Question 14: Would you be in favor or opposed to attend a professional learning session on the topic of Early Access? Ninety percent (90%) of the respondents show favor to a professional learning opportunity and 10% of the respondents indicate an opposed view to professional learning session specific to Early Access.

Survey Question 8: How ready, if at all, all you with submitting the Colorado Department of Education Comprehensive Program Plan for 2016-2020? This survey question addresses the intent of the school district/Administrative Unit in potential submission of the Colorado Department of Education Comprehensive Program Plan for 2016-2020. Results revealed by response options provided on the survey are as follows: (1) Very ready (30%; n= 6), (2) Somewhat ready (50%; n=10), (3) Slightly ready (10%; n= 2), (4) Not at all ready (10%; n=2).

Table 7

Favorability of State Gifted Education Programs and Professional Learning Opportunity

Gifted Education Program	Yes		No	
	n	%	n	%
Early Access	13	65.0	7	35.0
CDE 2016-2020 Comprehensive Program Plan	19	95.0	1	5.0
Professional Learning at CDE GE Director Meeting	18	90.0	2	10.0

Note: AU = Administrative Unit. CDE = Colorado Department of Education. GE = Gifted Education. n=20 for all variables. All data were self-reported.

Readiness results.

Descriptions of Questions.

This section addresses survey questions that speak to the limitations category of readiness towards submission of State Gifted Education Program Plans.

Readiness statistics.

Survey Question 11: How ready, if at all, are you with submitting the optional Colorado Department of Education Early Access Addendum? This survey question addresses the intent of the school district/Administrative Unit in potential submission of an Early Access Addendum with the Four Year Comprehensive Plan 2016-2020. Results reported by response options provided on the survey are as follows: (1) Very ready (10%; n= 2), (2) Somewhat ready (30%; n= 6), (3) Slightly ready (15%; n=3), (4) Not at all ready (45%; n=9). Notably, 45% of (n=9) participants indicated that their school district/Administrative Unit is <u>not at all ready</u> to submit an Early Access Addendum and process, and 15% of (n=3) participants surveyed indicated that their school district/Administrative Unit is <u>slightly ready</u> to submit an Early Access Addendum and process, whereas 30% of (n=6) participants surveyed indicated that their school district/Administrative Unit is <u>somewhat ready</u> to submit an Early Access Addendum and process. Only 10% of (n=2) participants surveyed indicated that their school district/Administrative Unit is <u>very ready</u> to submit an Early Access Addendum and process.

Survey Question 9: How ready, if at all, are you with submitting the Colorado Department of Education Comprehensive Program Plan for 2016-2020? This survey question addresses the intent of the school district/Administrative Unit in submission of

the Colorado Department of Education Comprehensive Plan 2016-2020. In contrast to responses for Early Access Addendum submission, 30% of (n=6) participants surveyed indicated that their school district/Administrative Unit is very ready to submit the Comprehensive Plan, 10% of (n=10) participants surveyed indicated that their school district/Administrative Unit is somewhat ready to submit Comprehensive Plan, 10% of (n=2) participants surveyed indicated that their school district/Administrative Unit is slightly ready to submit an Comprehensive Plan, and 10% of (n=2) participants surveyed indicated that their school district/Administrative Unit is not at all ready to submit Comprehensive Plan.

Table 8

Readiness for Submitting State Gifted Education Program Plans

Gifted Education Program	**n**	**%**
CDE Early Access Addendum		
Very Ready	2	10.0
Somewhat Ready	6	30.0
Slightly Ready	3	15.0
Not at All Ready	9	45.0
CDE 2016-2020 Comprehensive Program Plan		
Very Ready	6	30.0
Somewhat Ready	10	50.0
Slightly Ready	2	10.0
Not at All Ready	2	10.0

Note: CDE = Colorado Department of Education. n=20 for all variables. All data were self-reported.

Cross tabulation analysis.

This section will address two different cross tabulation analyses that show the relationship between: 1) school district size and most important impact, 2) school district size and the rank order responses of the four limitation categories. The use of a cross

tabulation analysis will provide a side-by-side comparison of how different groups of respondents answered specific survey questions.

This cross tabulation addresses the six types of impacts on filing a Colorado Department of Education Early Access Addendum by School District/AU size. As indicated above, funding (40%, n=8) is communicated as the most important impact on filing; 25% Rural districts, 10% Rural Multiple district, 5% Suburban district, and 0% Urban/Suburban district. Sufficient human resources is designated only by Rural districts at 15% (n=3) shared as the most important impact on filing.

Clear process is chosen only by Rural districts at 10% (n=2) shared as the most important impact on filing. Additional training needed specific to Early Access is indicated only by Rural districts at 10% (n=2) communicated as the most important impact. AU commitment is chosen by both Rural district at 10% (n=1) and Suburban districts at 5% (n=1) shared as the most important impact on filing. An interesting finding revealed, Suburban district (5%; n=1) and Urban/Suburban districts (10%; n=2) selected the response option of "other" as the most important impact on filing but did not complete the open-ended option to indicate what the "other" type of impact is to file an CDE Early Access Addendum.

Table 9

Size of School District/AU by Most Important Type of Impact on Filing CDE Early Access Addendum

School District/AU Size	Type of Impact													
	Funding		Sufficient Human Resources		Other		A Clear Process		Additional Training Needed		AU Commitment		School District/AU Total	
	n	**%**	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**
Rural District	5	25%	3	15%	0	0%	2	10%	2	10%	1	5%	13	65%
Rural Multiple Districts	2	10%	0	0%	0	0%	0	0%	0	0%	0	0%	2	10%
Suburban District (5,000-14,999 students)	1	5%	0	0%	1	5%	0	0%	0	0%	1	5%	3	15%
Urban/Suburban (< 15,000 students)	0	0%	0	0%	2	10%	0	0%	0	0%	0	0%	2	10%
Type of Impact Total	8	40%	3	15%	3	15%	2	10%	2	10%	2	10%	20	100%

Note: Overall n = 20. 'Total' represents total number of respondents within column category, i.e. 13 respondents from Rural District.

This cross tabulation descriptive analysis addresses the four limitations (hindrance, awareness, favorability, and readiness) categories by School District/AU size. For coding this data set, the researcher utilized a ranking scale of one as most important to four as least important. Hindrances are the most important factors impacting filing a Colorado Department of Education Early Access Addendum for both Rural districts (n=13) and Suburban school district (n=2). Followed by readiness as the second most important factor impacting both Rural districts and Suburban districts. Favorability was indicated as the third important and awareness as the least important factor respectively for both Rural districts and Suburban districts who responded to the survey.

In contrast, readiness is indicated as the most important factor impacting filing a Colorado Department of Education Early Access Addendum for both Rural Multiple districts (n=2) and Urban/Suburban (n=2). Followed by hindrance as the second most important factor impacting both Rural Multiple districts and Urban/Suburban. Favorability and awareness are both indicated as the third or least important factor respectively for both Rural Multiple districts and Urban/Suburban districts who

responded to the survey. There is not a 4th ranking for Rural Multiple districts and Urban/Suburban districts.

Table 10

Limitations Impacting CDE Early Access Addendum Filing by Rank Order

		Limitations			
School District/AU Size	**n**	Hindrances	Awareness	Favorability	Readiness
Rural district	13	1	4	3	2
Rural (multiple districts)	2	2	3	3	1
Urban/Suburban (< 15,000 students)	2	2	3	3	1
Suburban district (5,000-14,999 students)	3	1	4	3	2

Note: Overall n=20. Rank order 1=Most Important to 4=Least Important with redundant ranks indicating a tie; School District/AU Sizes Small (< 5,000 students not Rural) & Suburban (multiple districts) categories excluded due to non-response.

Summary statistics and reliability.

All statistical analyses were chosen based on the research design which was determined by the central question: What are the limitations on Colorado school districts' adoption of an Early Access Addendum process? The central question was very broad and was explored to explain the perspective of Colorado educators in school districts on the Early Access Addendum limitations (Creswell, 2009; Frankfort-Nachmias & Leon-Guerrero, 2011; Gliner, Morgan & Leech, 2009). The statistical analysis does not explore a relationship between variables, i.e. it does not compare differences between groups or look for a relationship between two variables. Findings seek a cross-sectional (not longitudinal) summary description of the limitations using one sample and is not designed to generalize to school districts beyond Colorado. Therefore, the appropriate statistical analyses are descriptive statistics which quantitatively organize and describe data collected from the sample. Descriptive statistics consist of means, percentages & graphs (Frankfort-Nachmias & Leon-Guerrero, 2011; Gliner, Morgan & Leech, 2009).

Internal consistency reliability (broadly referred to as coefficient alpha) confirms an instrument's reliability by estimating how well the items that reflect the same construct yield similar results (Gliner, Morgan & Leech, 2009). This allows a researcher to look at how consistent the results are for different items for the same construct within the measure. There are a wide variety of internal consistency measures that can be used, for this analysis the Kuder-Richardson Formula (KR-20) was utilized as it is a special computation of Cronbach's alpha for dichotomous data (Kuder, G. & Richardson, M.W.,

1937). Due to the dichotomous data set the Kuder-Richardson Formula (KR-20) was the most appropriate reliability test to run.

The KR-20 analysis was conducted three times with the hindrance variables. First, all variables were included in the analysis, next, the variable "none" was removed, and finally the variables "none" and "other" were both removed. As a result, the analysis with all variables for hindrance yielded (α=0.67; n=9), when the variable "none" was removed from the hindrance options results revealed (α= 0.78; n=8), whereas upon removal of the variables "none" and "other" results revealed (α=0.82; n=7). With results ranging from acceptable (α=0.67) to strong (α=0.82) overall reliability of the hindrance questions on the directed survey was supported regardless of removal of items.

The KR-20 analysis was conducted for the awareness, favorability, and readiness subscale items as well. Results revealed the following for each subscale: Awareness (α= -2.67; n=2); the estimate is negative due to a negative average covariance among items, Favorability (α=0.28; n=3), and Readiness (α=2.67; n=2). Alpha estimates were extremely low due to the limited number of questions which comprised the Awareness (n=2), Favorability (n=3), and Readiness (n=2) subscales. This was not a surprising discovery to the researcher in retrospect, considering this was a first attempt at instrument construction.

Field Check

This research study is grounded in the quantitative nonexperimental descriptive research approach (Gliner, Morgan & Leech, 2009). With that stated, the researcher looks to address a term from the qualitative nonexperimental approach, which is epoche. Epoche (or bracketing) is when an investigator sets aside their experiences, as much as

possible, to take a fresh perspective towards the topic under examination (Creswell 2013). Bracketing personal experiences may be difficult for the researcher to implement because interpretations of the data always incorporates the assumptions that the researcher brings to the topic (van Manen, 1990). As the researcher, I sought to suspended my judgments in the descriptive data analyses of the directed survey results.

The purpose of a field check is to show personal understanding towards the findings from the directed survey through a variety of informal collegial conversations about Early Access within the field of gifted education for the state of Colorado (CDE, 2016). As the researcher of this study, I am a current practitioner in the field of gifted education for a public-school district in the state of Colorado. Through my professional experiences across the state of Colorado, I engage in Colorado Department of Education Gifted Education state director meetings, Colorado Department of Education Gifted Education regional director meetings, and a variety of Colorado gifted associations as listed below:

- Colorado Association for Gifted and Talented (CAGT) conference,
- Supporting the Emotional Needs of the Gifted (SENG) conference,
- University of Denver- Institute for the Development of Gifted Education (IDGE) conference,
- Beyond Giftedness conference,
- Colorado Academy for Educators of the Gifted, Talented, and Creative (CAEGTC) board member.
- Gifted Education State Advisory Committee (GE-SAC) member and presiding secretary.

By suspending our understandings in a reflective way moves one towards cultivating curiosity (LeVasseur, 2003). Creswell (2013) states "the researcher needs to decide how and in what way his or her personal understandings will be introduced into the study" (p. 35). By providing a field check, the researcher shows the personal understanding of this study (Creswell, 2013).

Through professional experiences with colleagues in the field of gifted education, the researcher provided a variety of informal collegial conversations that addressed Early Access implementation through the state of Colorado.

Four collegial conversations have focused on individual school districts seeking advice and consultation to improve/modify the individuals school districts current Early Access process due to the May 2016 released updated Colorado Department of Education: Early Access for Highly Advanced Gifted Children under Age Six guidelines (2016). Additional conservation has focused on individual school districts looking for support in revising the Early Access Addendum prior to the required CDE submission in October 2016.

A colleague communicated that their school district leadership had interest, support, and buy in that made moving forward with adoption of Early Access easy. This same colleague shared that without the funds from the Right 4 Rural Grant (Appendix I) the rural school district would not have been able to pursue the adoption of an Early Access process. On behalf of the Jacob K. Javits Grant Program (2015) - Right 4 Rural (R4R) is a project with great promise to increase the identification of gifted students from

underrepresented populations (Jacob K. Javits Grant Program, 2015; CDE, 2016). The Right 4 Rural Grant funds allowed this school district to purchase age-appropriate aptitude and achievement assessments and provide professional learning/training for district personal on proper administration of the assessments and step by step support in creating the Early Access Addendum. See Appendix I for more details about Right 4 Rural.

Another perspective shared was a colleague's philosophical belief supported the concept of Early Access, however the school district that employs them already has a process of advanced kindergarten programming that they inherited upon employment into the gifted department of this school district. The colleague shared that new initiatives within the school district system are prioritized and due to the current advanced kindergarten program serving young children it is not a district priority to adopt a new process such as Early Access. The colleague shared that an approach of keeping things status quo is the belief structure of the school district.

A different concerned revealed that a small rural district had interest in implementing an Early Access process but plans to watch and learn from a neighboring rural district that had moved forward with Early Access implementation this school year. The colleague shared that this specific school district approached most initiatives through observing other districts implementation success before moving forward with adoption of an initiative.

Another perspective shared from a rural school district was the perception of the school district was completely strained financially and for human resources to serve the third through 12th grade students, let alone young learners in the community they serve. Additional conversation shared that the school district administration voiced the question of what program would have to be cut to allow for funding for Early Access programing to be implemented which the colleague communicated as a demonstration of a lack of knowledge of gifted identification and programming options.

A different concerned revealed was a suburban school district had chosen not to engage in adopting an Early Access process due to the affluent population the school district serves. The colleague's perception was parents would be lining up out the district office door to sign up for Early Access. The current district led administer is unwilling and uninterested in implementing this optional legislation now. The Colorado Department of Education: Early Access for Highly Advanced Gifted Children under Age Six guidelines (2016) address this concern by stating,

> "full grade acceleration at this young age may not be appropriate; however, grade level acceleration may be considered at another point in time. Regular public or private preschools or home schooling meet the needs of many gifted 4 and 5 year olds. Early access is intended to support students who are evaluated to be exceptional in aptitude/cognitive reasoning, academics, school readiness and motivation" (p. 3).

Colorado Department of Education (2016) has established guidelines to support school districts in Colorado with the intent and implementation of an Early Access process.

Yet another concern arose was having school districts/BOCES (that do not have an Early Access Addendum on file with CDE) regions engage in a directed survey regarding Early Access. The concern was a lack of collegial engagement with the directed survey. This concern arose from a selected Gifted Education Regional Consultants who indicated that they would need to contact each school district/BOCES to explain what Early Access is prior to completely the directed survey, which would negatively impact the individuals work load. Additional conversation with this colleague shared a resistance to confirm email addresses or forward the directed survey link to appropriate stakeholders within the school districts/BOCES region this individual served.

A regional concerned arose revealed that a few school districts within a particular BOCES region were very interested in implementing an Early Access process but due to the BOCES by-laws stating "A BOCES cannot conduct independent programs" and "Any programs or activities operated by a BOCES must be approved and authorized by all its Board of Directors" (Colorado BOCES Association, 2017). This conversation indicated that all Board of Directors placing a unanimous vote for any program to be approved for implementation by a BOCES region. The colleague shared that the other school districts within this BOCES region did not agree with HB 08-1021, so the few school districts that had interest in adopting Early Access, cannot move forward without removing their membership to the BOCES organization.

Through multiple conversations with colleagues and the community partner supporting this research, individuals shared that school districts might not want to engage in the directed survey due to individual school districts exposing possible deficiencies

within their school system which would demonstrate vulnerability. By school district representatives completing a survey that revealed potential limitations could put employees in an uncomfortable position with their employer. Low response rate effected by participants selecting to not participate bring about a non-response rate (Fowler, 2014).

Through the variety of collegial conversations, perceptions, and concerns in the field, I the researcher and the practitioner in the field of gifted education show a personal understanding of the findings related to the directed survey and the conversations throughout the state of Colorado concerning Early Access. This field check presented multiple limitations that exist for practitioners in the field who look to adopt and/or implement an Early Access process but continue to be presented with barriers. Colangelo states,

> "Current practice is improving, however if you don't believe in something, you demand nearly perfect evidence. If you are comfortable with an educational intervention, anecdotal evidence is plentiful and sufficient. When is come to acceleration as an intervention, we do have consistently robust research evidence. However, that is not enough to put acceleration into common practice" (Colangelo, 2015, p. 5).

This statement confirms the conversations, perceptions, and concerns that continue to arise in the field of gifted education within the state of Colorado regarding Early Access. Without changing House Bill 08-1021 legislation from an optional based policy for school districts in the state of Colorado to choose to implement to a mandated state

statute required by all school districts/BOCES to implement Early Access, individual beliefs and perspectives continue to determine educational access for young gifted learners. Burns and Tunnard (1991) state, "Gifted preschoolers really need a differentiated program as early as age three and four. The differentiation is necessary due to the differences in the gifted child's physical, academic, and intellectual development and their varying attention spans" (Burns & Tunnard, 1991, p. 57). If the key to changing acceleration policies and practices may be to show administrators and others who have the power to make those changes that many parents and teachers do support acceleration (Siegle, 2013) then educators must continue to push on the limitations that stand in the way for educational access.

Central Question

What are the limitations on Colorado school districts' adoption of an Early Access Addendum process?

Major Findings

Overall, the major findings that were revealed from the data analysis clustered into the four subscale categories of limitations: hindrance, awareness, favorability, and readiness. This was grounded in the gifted literature, change theory literature, and supported by logic (Connell & Klem, 2000; Azano, 2014; Plucker, 2013; Cross & Burney, 2005; Bainbridge, 2002; Hébert & Beardsley, 2001; and Colangelo, Assouline, Van-Tassel-Baska, & Lupkowski-Shoplik, 2015). The researcher concludes that the findings from these four subscale categories are interconnected to one another, as evidenced by the survey results. It's quite encouraging that all participants are aware of Colorado House Bill 08-1021: Early Access. This indicates an awareness and knowledge

of the state statute which supports the reliability of the communicated hindrances. With this awareness, participants indicated that "funding" (75%) and "human resources" (75%) are the major hindrances enabling school districts from implementing an Early Access process. The researcher concurs, as evidenced by the data analysis results and from the literature on gifted rural education, which describes "numerous insufficiencies in gifted programming in those environments arising from lack of funding" (Azano, 2014; Plucker, 2013; Bainbridge, 2002).

Out of the 20 participants eight believed the most important aspect that needs to be addressed is providing funding (40%) for Early Access to be implemented in their school districts. Through the lens of the survey question of the MOST important thing that would have the greatest impact towards filing are as follows: Funding (40%), Sufficient human resources (15%), Other (15%), A clear process (10%), An AU commitment (10%), Additional training needed (10%), and Sufficient age appropriate assessments (0%).

It is encouraging that 90% of the participants communicated favorability to engage in a professional learning session specific to Early Access to address the needs that are limiting the adoption, which is in alignment with the literature that… "such untrained staff, limited resources, and fewer program options in those settings" (Cross & Burney, 2005; Hébert & Beardsley, 2001). It is disconcerting that 17 out of 20 participants communicated their school district is not at all ready to slightly ready to submit an Early Access Addendum. Without additional or further professional learning to overcome the perceived hindrances outlined above, school districts continue to select to not engage in the implementation and adoption of an Early Access process.

The cross tabulation revealed six types of impacts on filing a CDE Early Access Addendum by School District/AU size. As indicated above, funding (40%, n=8) is communicated as the most important impact on filing; 25% Rural districts, 10% Rural Multiple district, 5% Suburban district, and 0% Urban/Suburban district. Sufficient human resources was designated only by Rural districts at 15% (n=3) shared as the most important impact on filing. Again, the cross-tabulation results demonstrating similar findings about funding as the most important impact (Azano, 2014; Plucker, 2013; Bainbridge, 2002).

Another cross tabulation that address the four subscale categories of limitations (hindrance, awareness, favorability, and readiness) communicate hindrances are the most important factors impacting filing a CDE Early Access Addendum for both Rural districts (n=13) and Suburban school district (n=2). Connecting back to the use of "persistent challenges" defined "Hindrances" as a school districts perception of an obstacle, barrier, or restriction to the statewide initiative (Plucker, 2013). Followed by readiness as the second most important factor impacting both Rural districts and Suburban districts. Favorability was indicated as the third important and awareness as the least important factor respectively for both Rural districts and Suburban districts who responded to the survey.

In contrast, readiness is indicated as the most important factor impacting filing a CDE Early Access Addendum for both Rural Multiple districts (n=2) and Urban/Suburban (n=2). Connecting back to the ability to "examine expectations for the outcome" defined "Readiness" as a school district's state of preparedness for the statewide initiative (Connell & Klem, 2000). Followed by hindrance as the second most

important factor impacting both Rural Multiple districts and Urban/Suburban. Favorability and awareness are both indicated as the third or least important factor respectively for both Rural Multiple districts and Urban/Suburban districts who responded to the survey. There is not a 4th ranking for Rural Multiple districts and Urban/Suburban districts.

Limitations of the Study

Although there is much remaining to be done, the purpose of this research work was to generate a baseline of data from the needs assessment survey that addresses school districts perceptions of limitations towards adoption of an Early Access Addendum and provides important findings to the field of gifted education. Having acknowledged the importance of the findings, the researcher confirms that there are some flaws and limitations to this study.

A main limitation that was revealed during this study is the low response rate. From the sample size of 103 participants this study received 20 responses, which is quite small. There is no agreed-on standard for a minimum acceptable response rate (Fowler, 2014). A limitation of this low response rate led to difficulties to find significant relationships from the data, as statistical tests normally require a larger sample size to ensure a representative distribution of the population and to be considered representative of groups of people to whom results will be generalized or transferred (Frankfort-Nachmias & Leon-Guerrero, 2011; Gliner, Morgan & Leech, 2009). This study does not provide a complete picture of hindrances affecting all 103 school districts across the state of Colorado. The researcher cannot draw trends from the data set, due to the low response rate (Frankfort-Nachmias & Leon-Guerrero, 2011).

For future research including more multiple choice or scaled response options in the survey that could have helped addressed aspects of the central question. Future research would ensure inclusion of a self-rating validity item built into the scale at a minimum or inclusion of a gold standard validity correlation scale at best (Frankfort-Nachmias & Leon-Guerrero, 2011; Gliner, Morgan & Leech, 2009).

The crosstab analysis used for ranking most important to least important type of impact hindering filing of Early Access Addendum was merely a descriptive analysis, rudimentary at best for statistical analysis of rank order data (Frankfort-Nachmias & Leon-Guerrero, 2011). This clearly impeded generalizability and it would be best to be followed up with at least one of the following non-parametric tests; Friedman's Q, Kendall's W. In addition, Spearman's rank correlation coefficient could be used to assess reliability between all pairs of raters (Frankfort-Nachmias & Leon-Guerrero, 2011).

The focus of this study possesses a limitation for school districts to engage in due to individual representatives revealing the hindrances to adoption of an Early Access Addendum. By school district representatives completing a survey that revealed potential limitations could put employees in an uncomfortable position with their employer. This could expose deficiencies within a school system demonstrating vulnerability. This could be a cause of the low response rate effected by participants selecting to not participate bring about a non-response rate (Fowler, 2014).

A limitation that is inferred from this data collection is the many roles or positions the participants hold within their designated school district. Due to the variety of roles,

there could be a bias that is rooted in the inability to answer correctly. Frequently, respondents will be unable to answer questions 100% accurately (Fowler, 2014). This could be due to various reasons, but most often respondents give inaccurate responses due to unfamiliarity to the content of the survey (Fowler, 2014). This limits access and knowledge to the content to be able to engage in a research study due to several duties to address in each role or position (Fowler, 2014).

Summary

This chapter presents the research findings and results regarding school districts' view of limitations towards adoption of an Early Access Addendum. Major findings, limitations of the study, and related discussion based on the previous research or existing literature are presented. The prominent limitations are outlined in four categories: awareness, favorability, readiness, and hindrance. Finally, the importance of providing ongoing professional learning to address the limitations to provide change across these school districts.

Chapter Five: Implications, Future Research, & Application

Having reported the research findings from data collection and analysis in the previous chapter, this final chapter presents conclusions and recommendations. To draw conclusions, the overview of the study and the summary of research findings and discussion are provided. The summary of research findings and discussion leads to the recommendations for educational leaders and researchers in the future. Finally, literature and directions for further study are addressed.

Major Findings

Overall, the major findings that were revealed from the data analysis clustered into the four subscale categories of limitations: hindrance, awareness, favorability, and readiness. This was grounded in the gifted literature, change theory literature, and supported by logic (Connell & Klem, 2000; Azano, 2014; Plucker, 2013; Cross & Burney, 2005; Bainbridge, 2002; Hébert & Beardsley, 2001; and Colangelo, Assouline, Van-Tassel-Baska, & Lupkowski-Shoplik, 2015). The researcher concludes that the findings from these four subscale categories are interconnected to one another, as evidenced by the survey results. It's quite encouraging that all participants are aware of Colorado House Bill 08-1021: Early Access. This indicates an awareness and knowledge of the state statute which supports the reliability of the communicated hindrances. With

this awareness, participants indicated that "funding" (75%) and "human resources" (75%) are the major hindrances enabling school districts from implementing an Early Access process. The researcher concurs, as evidenced by the data analysis results and from the literature on gifted rural education, which describes "numerous insufficiencies in gifted programming in those environments arising from lack of funding" (Azano, 2014; Plucker, 2013; Bainbridge, 2002).

Out of the 20 participants eight believed the most important aspect that needs to be addressed is providing funding (40%) for Early Access to be implemented in their school districts. Through the lens of the survey question of the MOST important thing that would have the greatest impact towards filing are as follows: Funding (40%), Sufficient human resources (15%), Other (15%), A clear process (10%), An AU commitment (10%), Additional training needed (10%), and Sufficient age appropriate assessments (0%).

It is encouraging that 90% of the participants communicated favorability to engage in a professional learning session specific to Early Access to address the needs that are limiting the adoption, which is in alignment with the literature that… "such untrained staff, limited resources, and fewer program options in those settings" (Cross & Burney, 2005; Hébert & Beardsley, 2001). It is disconcerting that 17 out of 20 participants communicated their school district is not at all ready to slightly ready to submit an Early Access Addendum. Without additional or further professional learning to overcome the perceived hindrances outlined above, school districts continue to select to not engage in the implementation and adoption of an Early Access process.

The cross tabulation revealed six types of impacts on filing a CDE Early Access Addendum by School District/AU size. As indicated above, funding (40%, n=8) is communicated as the most important impact on filing; 25% Rural districts, 10% Rural Multiple district, 5% Suburban district, and 0% Urban/Suburban district. Sufficient human resources was designated only by Rural districts at 15% (n=3) shared as the most important impact on filing. Again, the cross-tabulation results demonstrating similar findings about funding as the most important impact (Azano, 2014; Plucker, 2013; Bainbridge, 2002).

Another cross tabulation that address the four subscale categories of limitations (hindrance, awareness, favorability, and readiness) communicate hindrances are the most important factors impacting filing a CDE Early Access Addendum for both Rural districts (n=13) and Suburban school district (n=2). Connecting back to the use of "persistent challenges" defined "Hindrances" as a school districts perception of an obstacle, barrier, or restriction to the statewide initiative (Plucker, 2013). Followed by readiness as the second most important factor impacting both Rural districts and Suburban districts. Favorability was indicated as the third important and awareness as the least important factor respectively for both Rural districts and Suburban districts who responded to the survey.

In contrast, readiness is indicated as the most important factor impacting filing a CDE Early Access Addendum for both Rural Multiple districts (n=2) and Urban/Suburban (n=2). Connecting back to the ability to "examine expectations for the outcome" defined "Readiness" as a school district's state of preparedness for the statewide initiative (Connell & Klem, 2000). Followed by hindrance as the second most

important factor impacting both Rural Multiple districts and Urban/Suburban. Favorability and awareness are both indicated as the third or least important factor respectively for both Rural Multiple districts and Urban/Suburban districts who responded to the survey. There is not a 4th ranking for Rural Multiple districts and Urban/Suburban districts.

Implications of Results

Budget concern and lack of sufficient funds for preschool age identification for early identification often leave young, gifted children unidentified and underserved (CDE, 2016). Although in recent years the number of measures for identifying young has increased, much work remains to address effective programming and services for this population (Colangelo, Assouline, Van-Tassel-Baska, & Lupkowski-Shoplik, 2015). Evaluating students' abilities and performance using tests or rating scales provides educators with data that help them effectively plan appropriately challenging curriculum and instruction to ensure on going cognitive development and learning (Assouline, 2006).

The results of the directed survey indicate that there is a need for increased engagement from more of the 103 school districts who do not have an Early Access Addendum on file. For teaching and learning to change across a district which will affect all students, districts will have to be organized differently, district policies and practices will need to change, and new supports will need to be provided for both students and adults (Darling-Hammond, 2009; Howley, Rhodes, Beall, 2009; Howley, 1989; Lee, Smith, & Croninger, 1995).

It is important to help children connect, experience purposeful learning, and grow as individuals developmentally, academically, and social-emotionally (Colangelo,

Assouline, Van-Tassel-Baska, & Lupkowski-Shoplik, 2015). This study believes it is a disservice to students when society does not provide options such as early entrance to school for gifted learners (Colangelo, Assouline, Van-Tassel-Baska, & Lupkowski-Shoplik, 2015). Colangelo (2015) shares,

> "Current practice is improving, however if you don't believe in something, you demand nearly perfect evidence. If you are comfortable with an educational intervention, anecdotal evidence is plentiful and sufficient. When is come to acceleration as an intervention, we do have consistently robust research evidence. However, that is not enough to put acceleration into common practice" (p. 5).

In a Guest Forward statement in *A Nation Empowered*, Betts and Cross (2015) state, we can do more to empower our educational system of parents, educators, and policy-makers to provide interventions for gifted learners. When students do not have choice in expressing their mastery and understanding they usually do not make the real connections to their learning (Tomlinson, 2005). Robinson (2004) states, "Boredom, underachievement, perfectionism, and succumbing to the effects of peer pressure are predictable when needs for academic advancement and compatible peers are unmet" (p. 62).

Response to Limitations

The first response to limitations would be the researcher encourages school districts to utilize two CDE Gifted Education Grant programs to address the two predominant limitations. With this awareness, participants indicated that "funding" (75%) and "human resources" (75%) are the major hindrances enabling school districts from implementing an Early Access process. This hindrance can be potentially addressed using

the Colorado Gifted Education Universal Screening and Qualified Personnel Grant (CDE, 2016). The Colorado General Assembly passed legislation in 2014 that established an appropriation for an Administrative Unit gifted education grant program (CDE, 2016). The program supports the foundational programming elements of universal screening and qualified personnel. It is the intent of the General Assembly that:

- Universal screening provides a means of access to gifted identification assessment and programming to every student (CDE, 2014).

Through this opportunity, Administrative Unit can apply for funds to offset the cost incurred when:

1) Conducting universal screening no later than second grade; and
2) Employing a qualified person to administer the gifted program, implement the program plan, and provide professional learning to increase capacity of educators to identify and program for gifted students and family partnerships.

(CDE Gifted Education, 2014)

The second response to the limitations would be the researcher encourages that BOCES school districts and Gifted Education Regional Consultant start a discussion about the Early Access Addendum that is tied to the Gifted Education Comprehensive Program Plan. This collegial discourse could start to build understanding for each BOCES school district members about Colorado House Bill 08-1021 as legislation that is an optional based policy to choose to implement. By establishing a new understanding of Early Access for BOCES school districts, it may provide an option for serving their unique community's needs through appropriate programs.

The third response to limitations would be the researcher advocates for CDE Gifted Education Department and Early Access advocates to collaboratively state a case for potential changes to how CDE distributes funds according to legislation regulations. This group could review why a change in regulation might be necessary to support school districts implementation of Colorado House Bill 08-1021. A possible change could address modifying the distribution formula that CDE utilizes. A different distribution strategy could allow for CDE to allocate specific grant funds towards school districts that have an Early Access Addendum on file with CDE.

The final response to limitations would be changing House Bill 08-1021 legislation from an optional based policy for school districts in the state of Colorado to choose to implement to a mandated state statute required by all school districts/BOCES to implement Early Access, individual beliefs and perspectives continue to determine educational access for young gifted learners. Siegle et al. (2013) indicated, the key to changing acceleration policies and practices may be to show administrators and others who have the power to make those changes that many parents and teachers do support acceleration.

Response to Results and Next Steps

In response to the directed survey results, the recommended actions would be to offer an Intervention specific to Early Access and follow up with a Post Intervention Survey. The following outlines the process and procedures.

Intervention.

The researcher recommends that a professional learning session be offered during the CDE Gifted Education State Directors fall meeting called a Gifted Education Project break out session. The Gifted Education Projects are examples of program ideas from Administrative Unit across the state. The primary focus of this Gifted Education Project is to address HB 08-1021 educating Administrative Unit of ways to combat the limitations that are impacting an Administrative Unit from adopting an Early Access process and examine whether the impact of professional development change Administrative Unit actions to submitting an Early Access addendum. Sharing the examined outcomes from the directed survey to clarify the focus and guide the direction of the CDE Gifted Education content is vital in the communicating and ownership of the intervention.

The directed audience for this recommended intervention would be the 103 school districts that do not have an Early Access Addendum on file with Colorado Department of Education and individuals who represent the state of Colorado in gifted education such as (gifted directors, gifted coordinators, and/or school representative for gifted education). Participants would access the intervention via the Gifted Education Project session and a post intervention survey via an electronic online platform. This data collection would happen after the implementation of the professional learning intervention and post-survey following the intervention. Participation would be voluntary, and all responses would be anonymous.

The researcher recommends informing participants via email distribution prior to the Gifted Education Project that the data collected will be part of a research study. The

email would describe the nature and scope of the study and includes the consent form/waiver for consent for review. Participants' that opt-out of the study will not be used in the analysis process. Names of the participants' school district/Administrative Unit would be changed to obscure participant's identities and provide every attempt to ensure privacy.

Professional learning intervention format/content.

The professional learning intervention would be hosted through the Colorado Department of Education "Gifted Education Project" at the Colorado Department of Education State Gifted Directors annual fall meeting. During this annual Colorado State Directors meeting, Administrative Unit are invited to attend professional learning, one-or-two hour breakout sessions focused on Early Access modules constructed from the directed survey results.

The professional learning intervention includes differentiated online modules. For this study to be responsive to the participants' needs, the content is derived from the directed survey limitations. Factors indicated as limitations implementation of an Early Access Addendum would be outlined in the survey question: Indicate which of the items below ARE hindrances towards submission of an Early Access Addendum?

Yes	No	Lack of process
Yes	No	Lack of AU commitment
Yes	No	Conflicting philosophy within AU
Yes	No	Lack of human resources
Yes	No	Lack of assessment resources
Yes	No	Lack of training specific to Early Access procedures and criteria
Yes	No	Enacting an unfunded mandate

The content of the modules would be pulled from the data from the directed survey. The eight different modules would address re-envisioning limitations to adoption of Early

Access. The titles of the modules would be: Dynamic Early Access process, Supportive Administrative Unit commitment, Influencing Philosophy within the Administrative Unit, Collaboration of Human Resources, Blending of Assessment Resources, Engaging in Training specific to Early Access procedures and criteria, Resourceful Use of Funding. The modules utilize an online platform such as a website for participants to access the intervention content. The researcher envisions each module to have a presentation with voice over, talking points, and a blog discussion thread for participants to collaborate around research evidence to support the content of the intervention.

The intervention design would allow participants to select the content that meets their learning needs. The online platform would house the content for the eight hindrances (referenced above) modules and be accessible from any internet based tool. Each module would have a video of the researcher outlining Simon Sinek's WHY work to the root cause of the barrier. Once the root cause work is processed, the next focus would address the McREL-Success in Sight model. By weaving these two models together to empower change, the researcher advocates for shared ownership among Administrative Unit and provide the spark that will ignite action to create change (Connell & Klem, 2000).

Adult learning theory.

In aiding the construction of the modules, the researcher would need to address the literature that focuses on adult learning theory methods. This empirical evidence is vital to the implementation of the adult learning professional intervention that takes place in the field for this research project. The researcher used: (1) Brief History of Professional Development, (2) Standards for Professional Learning, (3) Research on Best

Practices for Delivery of Adult Professional Learning, and (4) Virtual Coaching Methods to guide the design of the professional learning intervention.

Brief history of professional development.

We often ask questions about how children learn, but not often about how adults learn. An important question to ponder as a researcher prepares to design professional learning for adults. In the 1970s, changes in the locus of recertification gave rise to professional development as a component of professional life (Joyce & Calhoun, 2015). Most districts decided to offer workshops — something like courses, but generally much shorter. That change resulted in the scheduling by districts of contracted staff development days, often two during the year —somewhat more in some districts — and menus of workshops were developed from several sources. State and district officials suggested topics. Teachers were surveyed to suggest topics they would like (a process usually called "needs assessment"), and the menus of those days were built from the combination (Joyce & Calhoun, 2015). As the federal government became more involved in making initiatives, the conference days contained sessions about regulations, beginning with Title I and Public Law 94-142 and later extending to No Child Left Behind.

Beginning in the late 1980s, many districts moved toward site-based management that gave schools most of the responsibility for regulating and improving themselves. Site-based management shifted many day-to-day and professional development responsibilities to the principal and school staffs (Hill, Bonan, & Warner, 1992). In the 1990s, the movement to organize school staffs into study groups, soon called professional learning communities (PLC), fit nicely with the site-based management concept (Hill,

Bonan, & Warner, 1992). The small number of scheduled professional development days continued, but parts of them were used for school staff and PLC meetings as workshops became fewer.

Within the last decade views on the workshop model and professional learning communities have shifted. The Hanover research group (2015) argues that the United States "is substantially behind other Organizations for Economic Co-operation and Development (OECD) nations in providing the kinds of powerful professional learning opportunities that are more likely to build their capacity and have significant impacts on students." Recent literature suggests that many professional development programs are ineffective in improving or changing educator's perspectives, practices, and performance. Current professional development relies on teacher satisfaction and perceptions of quality rather than objective measures of teacher learning and implementation. As of this research study, most professional development misses the mark. One-time workshops are the most prevalent model for delivering professional development, yet, workshops have an abysmal track record for changing teacher practice and student achievement (Yoon et al, 2007).

Standards for professional learning.

The National Staff Development Council (NSDC), now Learning Forward, have discussed the importance of high-quality professional learning for educators for the past two decades. The mission for this council was to develop standards that would require collaboration among representatives from a significant number of professional associations (Learning Forward, 2011). Majority of association leaders wanted educators to have a single, common set of standards for professional learning and hoped to have the

NSDC speak with one voice to the field about the elements of effective professional learning. By 2000, the number of standards was reduced to 12 appropriate for K-12 levels. These 12 standards were grounded in evidence and research to support the relationship between each standard and the current changes in educators practice and student learning (Learning Forward, 2011). Over the past 15 years, the standards have become foundation for designing, supporting, and evaluating professional learning and numerous states and organizations have adopted these standards. Success has been observed through several organizations where the standards were consistently implemented, regularly monitored, and evaluated the standards delivered.

As National Staff Development Council evolved with support on the MetLife Foundation grant, Learning Forward emerged in 2011 to undertake the revision of the standards for professional learning. With new innovative technology tools to support educators within the learning cycle presenting a compelling reason to revisit the two-decade old work. New educational reforms, research, and heightened accountability mean that educators and students are required to meet increasingly rigorous standards (Learning Forward, 2011). It is so vital to offer professional learning that prepares educators to meet these higher standards. A team of researchers from Stanford University's Stanford Center for Opportunity Policy in Education (2011) conducted a three-part study that guided the foundation for the standard revision work.

Learning Forward (2011) has undergone an important shift in focus and message: from one of development to one of learning. These standards call for a new form of educator learning. The decision to call these Standards for Professional Learning rather

than Standards for Professional Development signals the importance of educators taking an active role in their continuous development and places emphasis on their learning. The professional learning that occurs when these standards are fully implemented enrolls educators as active partners in determining the content of their learning, how their learning occurs, and how they evaluate its effectiveness. The standards give educators the information they need to take leadership roles as advocates for and facilitators of effective professional learning and the conditions required for its success. Widespread attention to the standards increases equity of access to a high-quality education for every student, not just for those lucky enough to attend schools in more advantaged communities.

The revised standards emphasize collaboration and community. Educators can access the Standards for Professional Learning via Learning Forward's website (Learning Forward, 2011). They are organized into seven domains that describe the context, processes, and content for effective professional learning.

Learning Communities, Leadership, and Resources standards define the essential conditions for effective professional development (Learning Forward, 2011).

1.) Learning Communities: Professional learning that increases educator effectiveness and results for all students occurs within learning communities committed to continuous improvement, collective responsibility, and goal alignment (Learning Forward, 2011).

2.) Leadership: Professional learning that increases educator effectiveness and results for all students requires skillful leaders who develop capacity, advocate, and create support systems for professional learning (Learning Forward, 2011).

3.) Resources: Professional learning that increases educator effectiveness and results for all students requires prioritizing, monitoring, and coordinating resources for educator learning (Learning Forward, 2011).

Data, Learning Designs, and Implementation standards describe the attributes of educators' learning processes that define quality and effectiveness of professional learning (Learning Forward, 2011).

4.) Data: Professional learning that increases educator effectiveness and results for all students uses a variety of sources and types of student, educator, and system data to plan, assess, and evaluate professional learning (Learning Forward, 2011).

5.) Learning Designs: Professional learning that increases educator effectiveness and results for all students integrates theories, research, and models of human learning to achieve its intended outcomes (Learning Forward, 2011).

6.) Implementation: Professional learning that increases educator effectiveness and results for all students applies research on change and sustains support for implementation of professional learning for long term change (Learning Forward, 2011).

The single content standard, Outcomes, identifies the essential content of professional learning.

7.) Outcomes: Professional learning that increases educator effectiveness and results for all students aligns its outcomes with educator performance and student curriculum standards (Learning Forward, 2011).

Within this research study, the professional learning standard that was central to the research question is: Learning Designs. This standard communicates professional learning that increases educator effectiveness and results for all students, and integrates theories, research, and models of human learning to achieve its intended outcomes (Learning Forward, 2011). When choosing designs for professional learning one must first look at the intended outcome and draw from analysis of the educators learning need. Learning Forward (2011) articulates that "Learning designers need to consider how to build knowledge, develop skills, transform practice, challenge attitudes and beliefs to affect active change." Active engagement in professional learning promotes change in educators practice. Active engagement occurs when learners interact during the learning process with the content and with one another (Learning Forward, 2011).

Research on best practices for delivery of adult professional learning.

Research led by the Center for Public Education (2013) found that professional development must be significant and ongoing to allow time for educators to learn a new strategy and grapple with the implementation problem. Hence, the greatest struggle is not the learning a new skill but in implementing it, something referred to as the "implementation dip" (Fullan, 2001). Implementation dip research reveals teachers

change their underlying beliefs about those to instruct only after they learn about success (Guskey, 2002).

Overwhelming research, recommends reform in professional development. School districts must consider how educators learn and adopt new techniques for instruction and tailor the professional learning accordingly (National School Board Association, Center for Public Education, & Gulamhussein, A. 2013). In Teachers Know Best: Teacher Views on Professional Development, educators describe at an effective professional development describes learning that "is relevant, hands-on, and sustained over time" (Boston Consulting Group (BCG) with the Bill & Melinda Gates Foundation, 2014). Learning Forward has undergone an important shift in focus and message, from one of development to one of learning. Ideal professional learning should focus less on presentation and lectures and more on opportunities to apply learning through demonstration or modeling and practice. Modeling has been found to be a highly effective way to introduce a new concept and help educators understand a new practice (National School Board Association, Center for Public Education, & Gulamhussein, A. 2013).

Since the 1980s, staff developers have used collaborative teacher relationships as one solution (Showers, 1985). Most often referred to as peer coaching, teachers form structured partnerships that enable peer learning and support. The application of peer coaching may take a variety of forms but tends to fall within three main categories: collegial coaching, technical coaching and challenge coaching. Collegial coaching promotes observation of current practice; technical coaching supports classroom application of a new teaching strategy; and challenge coaching addresses specific

classroom problems and seeks to locate solutions (Garmston, 1987). The CUREE (2005) framework compares co-coaching with specialist coaching and describes how co-coaches draw on evidence from their own practice to offer nonjudgmental support.

Coaching has gained popularity in the past 10 years as a tool to reinforce the individual's learning during leadership development programs (Hunt & Weintraub, 2007). Educators continue to voice a desire to enter professional conversations with colleagues and cite colleagues as the preferred resource used for instructional planning and design (Alexander & Sinkinson, 2008). Showers and Joyce (1996) claim that this form of professional learning improves the likelihood of long term implementation of learned strategies and solutions. Coaching is widely recognized as a tool to reinforce learning in leadership development programs (Hunt & Weintraub, 2007). Consistent among the multiple definitions of coaching in the literature is that it is "facilitation activity or intervention" for the purpose of "helping individuals to improve their performance in various domains, and to enhance their personal effectiveness, personal development and personal growth" (Hamlin, Ellinger, & Beattie, 2008, p. 291).

Virtual coaching methods.

While some professional learning occurs individually, particularly to address individual development goals, the more one educator's learning is shared and supported by others, the more quickly the culture of continuous improvement, collective responsibility, and high expectations for students and educators grows (Hilt, 2011). Collective responsibility and participation foster peer-to-peer support for learning and maintain a consistent focus on shared goals within and across communities (Hilt, 2011).

The International Coach Federation (2016) defines coaching as partnering with educators in a thought-provoking and creative process that inspires them to maximize their personal and professional potential.

Virtual Coaching is holding that same trusted partnership with educators via telecommunication tools and equipment, such as telephone or internet connections (Giebelhaus & Cruz, 1994; Scheeler, McAfee, Ruhl, & Lee, 2006). The participants connect from different locations, instead of physically being in the same room. Technology facilitates and expands community interaction, learning, resource archiving and sharing, and knowledge construction and sharing. Some educators may meet with peers virtually in local or global communities to focus on individual, team, school, or school system improvement goals. Often supported through technology, cross-community communication within schools, across schools, and among school systems reinforces shared goals, promotes knowledge construction and sharing, strengthens coherence, taps educators' expertise, and increases access to and use of resources.

The classic version of Virtual Coaching was telephone coaching, or using Skype without video, in case of limited internet bandwidth. Experience telephone coaching to find out how our ears can compensate for the missing eye contact. Coaching over the phone requires a coach to demonstrate skills such as Active Listening, Powerful Questioning and Direct Questioning.

With affordable access to internet-based video communication, Virtual Coaching is no longer limited to telephone coaching. Adding the visual element, the ability to hear

and see clients, coaches now listen to the client's words and verify with their body language. Fortunately, technology overcame the limitations of the first generation of video conferencing, where low quality lost nuances of facial expressions or even body language. At that time, the experience was less than satisfying, if not completely distracting from the process of coaching.

High-definition (HD) video created a complete game changer. The coach and educator are now able to clearly see each other and interact almost as if they are in the same room. Testimonials from coaches and educators who have used HD video conferencing extensively confirm that the virtual conversations are as effective as being in the same room. Collaboration tools provide a set of functionalities for enriching virtual coaching sessions. For example, the educator and coach can share documents, images, or presentations directly from their computer. Using virtual whiteboards for brainstorming ideas, being able to annotate and comment directly in documents, and communicate with chat tools are some of the available functionalities. In group coaching or webinars, the "raising hand" feature offers a non-disruptive way to signal interest, and voting features allow making ad-hoc group decisions. Connecting through the distance is easy with these new functionalities as communication technology becomes intuitive and user friendly.

Benefits to virtual coaching.

Increase awareness using the recording function. With permission, educators can listen for their responses to specific questions or the way they respond or jog the memory from the discussion. The coach can review the session to improve competencies and the

session structure. This lowers the barrier for new educators to experience your coaching style. It also removes concerns about travel restrictions, travel costs, and working in isolation.

Through Huston & Weaver's (2008), research on Peer Coaching: Professional Development for Experienced Faculty the work revealed three recommendations for success with peer and virtual coaching methods.

Recommendation 1: Goal-Setting

The first and perhaps most important guideline is that the goals of the coaching relationship are set by the colleague, rather than by the coach. In other words, the coach's first objective is to determine what the colleague wants to focus on and to support that person in setting the agenda.

Recommendation 2: Voluntary Participation

The second guideline follows directly from the first: a peer coaching program must be voluntary. More explicitly, the program must be voluntary for both the coach and the colleague (Bernstein et al. 2000).

Recommendation 3: Confidentiality

A third guiding principle concerns the confidentiality of the coaching process. The content of the coaching relationship--including the colleague's questions, the coach's suggestions, and the colleague's receptiveness (or lack thereof) to those suggestions--must remain confidential between the two faculty members. Research repeatedly

indicates that if a colleague is to trust the coach and ask those candid questions or reveal those teaching dilemmas that really matter, then the colleague must know that the coach will not share the content of these conversations with anyone who might affect the colleague's tenure or promotion possibilities or, in the case of faculty who are already tenured, threaten the respect that colleague has earned as a teacher (Brinko, 1993; Carroll & Goldberg, 1989; Hicks, 1999).

Post intervention survey.

The purpose of the post intervention survey is to collect data on the impact the professional learning had on participants' actions to submitting an Early Access Addendum. This data collected assists in measuring the connection between professional learning and the submission of the CDE Early Access Addendum.

The second setting is the Colorado State Gifted Directors fall face to face meeting. This annual scheduled meeting is hosted by Colorado Department of Education Gifted Education Department. Within this meeting there are whole group presentations and small group break-out sessions called Gifted Education Projects. In this setting, the intervention could be applied to volunteer school district representatives (gifted directors, gifted coordinators, and/or school representative for gifted education) during a Gifted Education Project break out session. This venue allows for participants to engage in examining the findings from the directed survey, implementation of the professional learning intervention, and post-survey following the intervention.

The surveys could be divided into four, unlabeled sections: demographic information, limitations defined as hindrance, awareness, favorability, and readiness

(Appendix J). Within sections, items should be in no particular order and not grouped by subcategories. From the directed survey outcomes, the top two hindrances indicated "funding" (75%) and "human resources" (75%) as the major hindrances enabling school districts from implementing an Early Access process. The researcher recommends the design for the professional learning intervention be centered around these predominant hindrances for the CDE Gifted Education Project session. The post intervention survey could have nine questions. See Appendix F for a draft of the post intervention survey questions.

Recommendations for Future Research

Further study can be expanded to overcome the limitation of this study regarding research response rate and quantitative methodology. First, this study may be limited because of the low response rate at 19% as calculated based on the 103 survey recipients and the 20 survey respondents. Future research could include one on one interviews with participants to increase the response rate addressing the limitations on Colorado school districts adoption of an Early Access Addendum. Second, another limitation is related to the use of quantitative methodology. The findings provide only statistical and numerical descriptions rather than detailed narrative and provide less elaborate records of limitations on adoption of an Early Access Addendum. To understand these limitations in more depth, further study should include the qualitative methodology such as interviews, observations or open–ended questions.

An additional future research study can examine the only two states, Minnesota and Colorado who have Early Access legislation specific to identification of highly gifted learners and that is monitored through the state accountability annual reviews

(NAGC, 2012-2013 State of the Nation). First, this study would disseminate the same directed survey from this study to Minnesota school districts that have not adopted Early Access. Second, the study would allow for a comparison of Colorado directed survey results to the Minnesota directed survey results. These results would potentially allow for a larger sample size and generalization of the results of this study to comparison of two states engaging in Early Access legislation.

Next, it would be interesting to investigate the current school districts in Colorado that are implementing Early Access and address the stages of change theory each school district is presently engaged in. Utilizing Connell and Kubisch (1998), "theory of change approach" to evaluating comprehensive communities of initiatives. Three stages in carrying out this approach are:

• surfacing and articulating a theory of change

• measuring comprehensive communities of initiative's activities and intended outcomes

• analyzing and interpreting the results of an evaluation, including their implications for adjusting the initiative's theory of change and its allocation of resources (Connell & Kubisch, 1998). This study would allow for data collection on change theory directly impacted by statewide initiatives.

Additional further research could explore other Colorado Department of Education state policies such as the Colorado General Assembly Senate Bill 08-212, known as the Preschool through Postsecondary Alignment Act or Colorado's Achievement Plan for Kids (CDE, 2016). This legislation requires every child in state funded kindergarten programs to have an individual school readiness plan to support the school readiness and success for each child. Colorado Achievement Plan for

Kindergarten also requires a child's school readiness plan to be informed by assessments approved by the Colorado State Board of Education that are known to measure school readiness (CDE, 2016). Colorado Department of Education School Readiness initiative HB 15-1323 provides a 60 calendar day window at the beginning of the school year for districts to assess and complete kindergarten entry information in the areas mandated by Colorado Achievement Plan for Kindergarten (CAP4K) legislation: Social-emotional, Physical, Cognitive, Language, Literacy, and Math (CDE, 2016). This study would examine the state policies shared above by evaluating potential connections to Early Access policy for possible addendums to the Preschool through Postsecondary Alignment Act or Colorado's Achievement Plan for Kids and the Colorado Department of Education School Readiness to include components of Early Access legislation (CDE, 2016).

Next, it would be interesting to engage in some action research with Colorado school districts that have interest in adopting an Early Access Addendum. Action research is either research initiated to solve an immediate problem or a reflective process of progressive problem solving led by individuals working with others in teams or as part of a "community of practice" to improve the way they address issues and solve problems (Creswell, 2003). Denscombe (2010) writes that an action research strategy's purpose is to solve a problem and to produce guidelines for best practice. This study would address the persistent problem of practice within a specific school district and address the limitations towards adoption of an Early Access Addendum utilizing the McREL model to address the issues and solve problems.

Creative Dissemination

A creative, community-based dissemination is a required component of this project. Researchers must disseminate their work to interested community members as defined by the nature of the research. This included the school districts that engaged in the research project, the administration in that school district, school leaders and policymakers who face issues like those examined in the research, or other community members and stakeholders.

Dissemination Considerations.

Below is a list of possible ways to disseminate the research.

• Written article for CDE GT Director's Corner

• Written article for all participating Administrative Unit in the research to communicate results, findings, and recommendations of research

• Follow up CDE Gifted State Directors presentation to communicate results, findings, & recommendations of research

• CDE GT state of the state in gifted education written document for statewide dissemination to communicate results, findings, and recommendations of research

• Presentation to State School Board on results, findings, and recommendations of research

Summary

This final chapter presents implications and recommendations according to research findings and discussions. This study presented multiple limitations that exist for practitioners in the field who look to adopt and/or implement an Early Access process but continue to be presented with barriers. Colangelo states,

> "Current practice is improving, however if you don't believe in something, you demand nearly perfect evidence. If you are comfortable with an educational intervention, anecdotal evidence is plentiful and sufficient. When is come to acceleration as an intervention, we do have consistently robust research evidence. However, that is not enough to put acceleration into common practice" (Colangelo, 2015).

This statement confirms the findings that arose in the field of gifted education within the state of Colorado regarding Early Access. Without changing House Bill 08-1021 legislation from an optional based policy for school districts in the state of Colorado to choose to implement to a mandated state statute required by all school districts/BOCES to implement Early Access, individual beliefs and perspectives continue to determine educational access for young gifted learners. Burns and Tunnard (1991) state, "Gifted preschoolers really need a differentiated program as early as age three and four. The differentiation is necessary due to the differences in the gifted child's physical, academic, and intellectual development and their varying attention spans" (Burns & Tunnard, 1991, p.57). Weiss (1995) defines change theory quite simply as a theory of how and why an initiative works. On reflection of the persistent problem of practice: Colorado House Bill 08-1021 passed in 2008, and as of 2017, only 42 percent of school

districts' even have a process registered with the state department of education, this study has revealed two most impactful hindrances impeding school districts' from adopting this initiative. If the key to changing acceleration policies and practices may be to show administrators and others who have the power to make those changes that many parents and teachers do support acceleration (Siegle, 2013) then educators must continue to push on the limitations that stand in the way for educational access.

Regarding limitations towards adoption of an Early Access Addendum, recommendations for educational leaders and researchers are presented concerning funding options and human source support options which results revealed as the most important factors impacting adoption of an Early Access Addendum. The recommendations include an intervention of professional learning for the 103 school districts that have not filed an Early Access Addendum in Colorado utilizing knowledge of change theory and adult learning theory and research-based practices to guide the intervention. Further study is recommended for overcoming the limitations of this study, by implementing the Intervention and Post Intervention Survey to include raising the response rate of the sample of the 103 school districts.

Appendix A

Aptitude			
Full Name	**Age**	**Purpose of Measurement**	**Scoring Details**
Cognitive Ability Test (CogAT 7) David F. Lohman (2011)	K-12	Measurement of cognitive abilities and learning styles. Battery include 3 cognitive domains: verbal, nonverbal, and quantitative processing	Standard Age Score, PR for each subtest and Composite PR; scores for both age and grade
Nagliari Non Verbal Ability Test Second Edition (NNAT2) Jack A. Nagliari (2011)	K-12	Single battery for cognitive domain: nonverbal	Naglieri Ability Index (NAI), PR, stanines, scaled scores, and normal curve equivalents (NCEs) by age
Batería III Woodcock- Muñoz Normative Update (Cognitive) Richard W. Woodcock, Ana F. Muñoz-Sandoval, Kevin S. McGrew, and Nancy Mather, (2004, 2007)	2:0-90+	Measuring general intellectual ability. Spanish adaption/translation of the Woodcock-Johnson III. Battery include: bilingual, low verbal, brief, standard, extended scale, & early development scale	PR, SS, AE, T score, Change Sensitive Score, and z score
Battelle Development Inventory, Second Edition (BDI-2) NU Jean Newborg, (2004, 2016)	Birth to 7:11	Measurements early childhood development milestones Battery include: personal-social, adaptive, motor, communication, and cognitive	PR, SS, AE, T score, Change Sensitive Score, and z score
Bilingual Verbal Abilities Test (BVAT) Ana F. Muñoz-Sandoval, Jim Cummins, Criselda G. Alvarado, Mary L. Ruef (1996)	5:0-Adult	Measurement of verbal ability for bilingual individuals	PR, SS, AE, GE, NCN, stanine, T scores, z scores, W, score, RPI, CALP levels, and instructional zones

Aptitude			
Full Name	**Age**	**Purpose of Measurement**	**Scoring Details**
Differential Ability Scales- II (DAS-II) Colin D. Elliott (2007)	2:6-17:11	Measurements of early years' cognitive battery includes: verbal, nonverbal, spatial, reasoning. Optional diagnostic clusters: working memory, processing speed, and school readiness.	Ability scores, *T* scores, cluster scores, composite scores, and PR. GCA (General Conceptual Ability)
Kaufman Assessment Battery for Children, Second Edition (KABC-II) Alan S. Kaufman & Nadeen L. Kaufman (2004)	3:0-18	Measurements of cognitive ability subtests include: simultaneous, sequential, planning, learning, and knowledge.	Age-based standard scores, age equivalents, and PR
Kaufman Brief Intelligence Test, Second Edition (K-BIT-2) Alan S. Kaufman & Nadeen L. Kaufman (2004)	4:0-90:0	Measurements of cognitive ability subtests include: verbal and nonverbal	Crystallized (Verbal), Fluid (Nonverbal), IQ Composite: Standard scores and PR by age
Stanford Binet Intelligence Scales, 5th Edition (SB 5) Gale H. Roid (2003)	2 to 85+ years	Measurements of intelligence and cognitive abilities. Five factors of cognitive ability: fluid reasoning, knowledge, quantitative reasoning, visual-spatial processing, and working memory.	Two domain scales: Nonverbal IQ (NVIQ) & Verbal IQ (VIQ). Abbreviated Battery IQ (ABIQ). Full Scale IQ (FSIQ)
Universal Nonverbal Intelligence Test (UNIT) Bruce A. Bracken, R. Steve McCallum (2016)	5:0-17:11	Measurements of general intelligence, measured nonverbally. Seven composite scores—memory, reasoning, quantitative, abbreviated battery, standard battery with memory, standard battery without memory, full scale battery	SS, PR, and Confidence intervals for all quotients; Scaled scores and Test age equivalents for all subtests

Aptitude			
Full Name	**Age**	**Purpose of Measurement**	**Scoring Details**
Wechsler Preschool and Primary Scale of Intelligence, Fourth Edition (WPPSI-IV) David Wechsler (2012)	2:6-7:3	Measurements of cognitive development for preschoolers and young children Primary Index scales include: verbal comprehension, visual spatial, working memory, fluid reasoning, and processing speed.	FSIQ, Primary Index scores include: VCI, VSI, WMI, FRI, PSI. Ancillary Index scores include: VAI, NVI, CAI, CPI.
Woodcock Johnson Tests of Cognitive Abilities, Fourth Edition-Brief Intellectual Ability Fredrick A. Schrank, Nancy Mather, Kevin S. McGrew (2014)	2:0-90+	Measurement of cognitive abilities offer nine standard & 9 extended battery tests.	Standard scale score and PR for each subtest; yields a FSIQ score. Of the 42 median test reliabilities reported, 38 are .80 or higher and 15 are .90 or higher.

Achievement			
Full Name	**Age**	**Purpose of Measurement**	**Scoring Details**
Test of Early Mathematics Ability, Third Edition (TEMA-3) Herbert P. Ginsburg and Arthur J. Baroody (2003)	3:0 through 8:11	Measurement of informal and formal concepts in the following domains: numbering skills, number-comparison facility, numeral literacy, mastery of number facts, calculation skills, and understanding of concepts.	Internal consistency reliabilities are all above .92; immediate and delayed alternative form reliabilities are in the .80s and .90s.
Test of Early Reading Ability, Third Edition (TERA-3) D. Kim Reid, Wayne P. Hresko, et al. (2001)	3:6 through 8:6	Measurements of three subtests: Alphabet (measuring knowledge of the alphabet and its uses), conventions (measuring knowledge of the conventions of print), and meaning (measuring the construction of meaning from print).	Standard scores are provided for each subtest. An overall Reading Quotient is computed using all three subtest scores. Reliability is consistently high across all three types of reliability studies. All but 2 of the 32 coefficients reported approach or exceed .90.
Test of Early Written Language (TEWL-3) Wayne P. Hresko, Shelley R. Herron, Pamela R. Peak, Deanna L. Hicks (2012)	Ages 4:0 through 11:11	Measurement of basic writing and contextual writing. Basic writing subtest includes: understanding is metalinguistic knowledge, directionality, organizational structure, awareness of letter features, spelling, capitalization, punctuation, proofing, sentence combining, and logical sentences. Contextual writing subtest includes: construction of a story with a picture prompt.	Standard score indexes for age and grade PR, and age and grade equivalents. Internal consistency reliability (alpha) coefficients of all scores meet or exceed .90 for all ages, with most meeting or exceeding .95.

Achievement			
Full Name	**Age**	**Purpose of Measurement**	**Scoring Details**
Wechsler Individual Achievement Test, Third Edition David Wechsler (2009)	4:0-50:11	Measurement of achievement domains of oral language, basic reading, reading comprehension/fluency, written expression, and math fluency/mathematics. Additional 16 subtests.	Fall, Winter, and Spring grade-based standard scores, age-based standard scores, PR, stanines, NCEs, age and grade equivalents. Internal consistency ranges from .80-.98.
Woodcock-Johnson IV Normative Update (NU) Tests of Achievement, Forms A & B Richard W. Woodcock, Fredrick A. Shrank, Kevin S. McGrew, Nancy Mather (2014)	2 to 90+	Measurements of screening, diagnosing, and monitoring progress in reading, writing, and mathematics achievement areas. Offers 11 standard & 9 extended battery tests.	AE, GE, instructional zones, developmental zones, RPI, PR, SS, W Score, T Score, NCE, Z score, and Stanine. 38 median test reliability coefficients at .80 or higher and 17 at .90 or higher.

Performance			
Full Name	**Age**	**Purpose of Tool**	**Scoring Details**
Gifted Evaluation Scales (GES) Stephen B. Mc Carney & Tamara J. Arthaud (2009)	5:0-18:0	Aids in identification and program planning for gifted education. 48 items and 6 subscales: intellectual, creativity, specific academic aptitude, leadership ability, and performing/ visual arts.	Five types of scores may be obtained: frequency rating, subscale raw score, subscale standard score, percentile, and a quotient score.
Gifted Rating Scales-Preschool (GRS-P) Steven Pfeiffer & Tania Jarosewich (2003)	4:0-6:11 years	Aid in identification and placement for gifted and talented education. Brief scales cover five domains: intellectual ability, academic ability, creativity, artistic talent, leadership, and motivation.	Normal and gifted range with T score and PR. Coefficient alpha reliabilities ranged from .97 to .99.
Scales for Identifying Gifted Students (SIGS) Gail R. Ryser, Kathleen McConnell (2004)	Ages 5-18	Aid in identification and progress monitoring of gifted students. Composed of seven scales: general intellectual ability, language arts, mathematics, science, social studies, creativity, and leadership. Offers school and home rating scales.	Normal and gifted range with T score and PR. Internal consistency reliability exceeds .90 for all scales for both the normal and gifted norming samples.
Kingore Observation Inventory, Fourth Edition (KOI) Bertie Kingore (2016)	K-8	Aid in identification with seven categories of observable behavior include: advanced language, analytical thinking, meaning motivated, perceptive, sense of humor, sensitivity, and acceleration learning.	Standard scores, PR, stanines, and standard deviation

School Readiness			
Full Name	**Age**	**Purpose of Measurement**	**Scoring Details**
The Desired Results Developmental Profile for Kindergarten (DRDP-K) California Department of Education, (2015)	Grade K	Observational tool for learning and developmental needs for kindergarten students. Tool has 51 measures across 11 domains, utilizing a continuum of: building, integrating, emergent.	Reliabilities scales five domains range from .83 to .90. Correlation only range from .70 to.83.
The Riverside Early Assessment of Learning (REAL) Bruce A. Bracken (2013)	Birth to 7:11	Measurement of school readiness for effective planning and targeted daily instruction. Five domains, 31 subcategories.	NA
Teaching Strategies GOLD (TS Gold) Teaching Strategies, Inc. (2010)	Birth- K	Observational tool for 38 objectives and indicators organized in six areas: social-emotional, physical, language, cognitive, literacy, and mathematics.	Pearson correlation coefficients were used to assess the degree of association between the external measures and Teaching Strategies GOLD scale scores.
Teaching Strategies GOLD Survey-Kindergarten Entry Assessment Teaching Strategies Inc. (2010)	Grade K	Survey has the educator compare students' knowledge, skills, and behaviors over 18 objectives.	NA

Appendix B

Community Partner Communication

COLORADO
Department of Education

Office of Gifted Education
Exceptional Student Services Unit

Memo

To: Ruthi Manning-Freeman
Lindsey Reinert

From: Jacquelin Medina, Director of Gifted Education

Date: April 9, 2016

Re: Community Partnership

I am available and interested in serving as your community partner. Early access is a statewide policy of particular significance when addressing the needs of specific young gifted learners. Your work has promise to uplift the importance of this policy and provide insight into how leaders can move such policy forward in their districts.

I will provide constructive feedback and support as you design and implement the phases of your doctoral study.

Thank you for initiating this important work.

Jacquelin Medina
CDE Director, Gifted Education

Lindsey Reinert
University of Denver Researcher

Appendix C

Exceptional Student Services
Office of Gifted Education
www.cde.state.co.us/gt

COLORADO Department of Education

FACT SHEET

Guidelines for Enrolling or Counting Early Access Students

Student Types

In addition to the documentation necessary for ensuring that students meet the enrollment, attendance, and scheduling criteria needed for funding, additional documentation may be required, depending on the classification of a student or program in which the student is participating. Following are provisions for the "Advanced Highly Gifted Students", a type of student enrollment category that requires additional documentation.
*Please note that the audit documentation listed for all "Student Types" is in **addition** to all other required documentation (e.g., enrollment dates, 11-day count window attendance, student schedules).*

Advanced Highly Gifted Students

Pursuant to CSL 22-20-204(2) administrative units may permit early access to kindergarten to a highly gifted advanced four year old and early access to first grade to a highly gifted advanced five year old.

- The administrative unit at the school district, board of cooperative services or the state Charter School Institute must file a written early access addendum to the AU's Comprehensive Program Plan.
- The initial AU addendum must be filed for approval with the Gifted Education Unit at the Department of Education by January 1 prior to the fiscal year of implementation. (For example: Eligible addendums for fiscal year 2016-2017 must be submitted by January 2016).
    - The early access addendum template and checklist are located on CDE's Web page: http://cde.state.co.us/gt/resources.htm
- The early access student for grades K and 1st must have an ALP on file by September 30 of each year to be verified and counted in the October enrollment.
- **For a four year old to be counted as a kindergartener or a five year old to be counted as a first grader the ALP must show the notation "grade acceleration" on the first or cover page of the ALP. This notation must be visible for both the kindergarten and grade one school years, as applicable to the early access student.**
    - The student must reach the age of four by October 1 for kindergarten.
    - The student must reach the age of five by October 1 for grade one.

Notes:

- The early access provisions benefit only a few highly advanced gifted children. The legislation is not for the majority of age 4 or age 5 gifted students who are served in preschool and kindergarten programs. Gifted education directors and coordinators determine with their superintendent if early access will be permitted in the administrative unit and an early access addendum filed with CDE.
- The AU's gifted education director has current information about the local advanced learning plan system of support. Examples of ALP's are located on CDE's Web page: http://www.cde.state.co.us/gt/resources.htm. Administrative Units typically maintain ALPs on Web-based or an internal electronic system which must record the student's date of entry, the ALP start date and a label of "grade acceleration "on the ALP for grades K and 1st.

November 2016

Summary

Additional Audit Documentation	See the notes listed above for details. • Administrative Unit Program Plan including the early access addendum is current and on file with the Colorado Department of Education. • The ALP is dated on or before September 30. • A clear notation is on the front or cover page of the ALP: "grade acceleration".
Reference	22-54-103(10)(b)(I)(B), C.R.S. and 22-54-103(10)(a)(IV)(B), C.R.S.

Appendix D

Colorado Department of Education
Gifted Education Program Plan: 2012-2016
Early Access Addendum

Early Access: Rule Section 12.02(1)(H) and 12.08 Gifted children who qualify for grade level acceleration and are age 4 for kindergarten, or age 5 for first grade, by October 1

Directions:
Address each section and the provisions of the early access ECEA Rules 12.08.
http://www.cde.state.co.us/gt/lawsregs
In each section below, describe the methods and/or tools that the administrative unit will implement for early access communication, criteria and process. Type your response in the white boxes referencing the topics.

Communication
In what ways will the administrative unit: • Inform parents, educators, and community members about criteria, process, time frames, portfolio referral, tests, final determinations and ALP development. • Provide professional development for educators and administrators about early access and ALP development, especially staff involved in the process
.

Criteria
• Describe the method, the standard (level of results) and tool/s that will be considered to determine early access for a highly advanced gifted student using the following categories for criteria: aptitude, achievement, readiness for school, social behavior and motivation. • Explain the support system that will assist the child during year one of transition into early access. How will parents, teachers, school administrators and the learning environment contribute to a positive support system? How will the transition goal be monitored? In what ways will parents, teachers, and the child communicate about progress?
Aptitude:
Achievement:
Performance:
Readiness, social behavior and motivation:
Support system:

Process

- Briefly summarize how the administrative unit will address each component in the early access process. Include specifics prompted by the questions or bulleted points that satisfy conditions of the law. Note: The child's ALP must be developed no later than the end of the first month (September 30) for both kindergarten and first grade years of early access.

Timelines:

Personnel:

- Identify personnel who will be involved in: collecting referrals and how that person is "qualified"; testing; collecting data for the body of evidence; the determination team; the support team; and any other personnel the AU deems helpful in the early access process.
-

Evaluation:

- What are the AU's implementation steps or requirements for early access evaluation?
- In the description, summarize each factor related to evaluation: responsibility for and content of the screening portfolio; the screening tool for a referral; performance information; referral procedures; testing for a body of evidence; consensus decision making; method to inform parents; the resolve if the determination team cannot come to consensus; the ALP development responsibility; and the process to provide ALP data to the home school if the child is gifted, but not deemed appropriate for early access.
- Attach a copy of the determination letter that will be used in the process at the end of this addendum.

Monitoring:

- Describe what standards the AU will set for teachers and parents when monitoring student performance and progress during the first year of early access.

Dispute Resolution: This requirement is the same as already stated in the AU's Program Plan.

☐ Mark the box if the AU will be using the same dispute resolution process as in the main Program Plan. If the dispute resolution is different for early access type the policy here:

The administrative unit's program plan is due with the Comprehensive Program Plan or no later than January 1 prior to early access implementation.

Early Access
BOCES Consolidated Signature Page

Administrative Unit's Name:		**Region:**
BOCES Executive Director Signature: **Date: _____**		
Number of Districts within Administrative Unit:		
List the names of each district within the Administrative Unitbelow:	**List the names of each district superintendent within the Administrative Unitbelow:**	**Obtain the signature of each district's superintendent below:**

Appendix E

Study population will be drawn from the 103 Colorado school districts who do not have an Early Access addendum plan on file with the Colorado Department of Education.

1) AGATE 300 (1)
2) ARICKAREE R-2 (2)
3) ARRIBA-FLAGLER C-20 (3)
4) BENNETT 29J (4)
5) BETHUNE R-5 (5)
6) BURLINGTON RE-6J (6)
7) BYERS 32J (7)
8) CHEYENNE COUNTY RE-5 (8)
9) DEER TRAIL 26J (9)
10) GENOA-HUGO C113 (10)
11) HI-PLAINS R-23 (11)
12) IDALIA RJ-3 (12)
13) KARVAL RE-23 (13)
14) KIOWA C-2 (14)
15) KIT CARSON R-1 (15)
16) LIBERTY J-4 (16)
17) LIMON RE-4J (17)
18) STRASBURG 31J (18)
19) STRATTON R-4 (19)
20) WOODLIN R-104 (20)
21) WESTMINSTER 50 (21)
22) SHERIDAN 2 (22)
23) DENVER COUNTY 1 (23)
24) AULT-HIGHLAND RE-9 (24)
25) BRIGGSDALE RE-10 (25)
26) EATON RE-2 (26)
27) MORGAN RE-2 (J) (Brush) (27)
28) PAWNEE RE-12 (28)
29) PLATTE VALLEY RE-7 (29)
30) PRAIRIE RE-11 (30)
31) WELD COUNTY RE-1 (31)
32) WELDON VALLEY RE-20(J) (32)
33) WIGGINS RE-50(J) (33)
34) KEENESBURG RE-3(J) (34)
35) WELD COUNTY S/D RE-8 (35)
36) POUDRE R-1 (36)
37) PARK (ESTES PARK) R-3 (37)
38) JOHNSTOWN-MILLIKEN RE-5J (38)
39) WINDSOR RE-4 (39)
40) FORT MORGAN RE-3 (40)

41) ELIZABETH C-1 (41)
42) VALLEY - STERLING (42)
43) AKRON R-1 (43)
44) FRENCHMAN (Logan RE-3, Fleming) (44)
45) BUFFALO RE-4 (Logan RE-4J, Merino) (45)
46) HAXTUN RE-2J (46)
47) HOLYOKE RE-1J (47)
48) JULESBURG RE-1 (48)
49) LONE STAR 101 (49)
50) OTIS R-3 (50)
51) PLATEAU 5 (Logan RE-5, Peetz) (51)
52) REVERE (52)
53) WRAY RD-2 (53)
54) YUMA 1 (54)
55) CRIPPLE CREEK-VICTOR RE-1 (55)
56) MANITOU SPRINGS 14 (56)
57) WOODLAND PARK RE-2 (57)
58) CHEYENNE MOUNTAIN (58)
59) WIDEFIELD 3 (59)
60) FOUNTAIN 8 (60)
61) FREMONT RE-2/FLORENCE (61)
62) PUEBLO COUNTY 70 (62)
63) AGUILAR REORGANIZED 6 (63)
64) BRANSON REORGANIZED 82 (64)
65) COTOPAXI RE-3 (65)
66) CROWLEY COUNTY RE-1-J (66)
67) CUSTER C-1 (67)
68) FOWLER R-4J (68)
69) HOEHNE REORGANIZED 3 (69)
70) HUERFANO RE-1 (70)
71) LA VETA RE-2 (71)
72) MANZANOLA 3J (72)
73) PRIMERO REORGANIZED 2 (73)
74) TRINIDAD 1 (74)
75) CHERAW 31 (75)
76) EAST OTERO R-1 (76)
77) LAS ANIMAS RE-1 (77)
78) ROCKY FORD R-2 (78)
79) SWINK 33 (79)
80) CAMPO RE-6 (80)
81) EADS RE-1 (81)
82) GRANADA RE-1 (82)
83) HOLLY RE-3 (83)
84) KIM REORGANIZED 88 (84)
85) LAMAR RE-2 (85)

86) MC CLAVE RE-2 (86)
87) PLAINVIEW RE-2 (87)
88) PRITCHETT RE-3 (88)
89) SPRINGFIELD RE-4 (89)
90) VILAS RE-5 (90)
91) WALSH RE-1 (91)
92) WILEY RE-13JT (92)
93) BAYFIELD 10 JT-R (93)
94) CORTEZ RE-1 (94)
95) ARCHULETA 50, Pagosa Springs (95)
96) DOLORES RE-4A (96)
97) DOLORES RE-2, Dove Creek (97)
98) DURANGO 9-R (98)
99) IGNACIO 11 JT (99)
100) MANCOS RE-6 (100)
101) SILVERTON 1 (101)
102) DELTA 50J (102)
103) MONTROSE COUNTY RE-1J (103)

Appendix F

Online Directed Survey Questions

Please review the consent information form, by clicking on the embedded document below.
Then click the red arrow to proceed forward.

Long consent online directed survey

I have read the embedded consent information form.

By selecting, "I agree," you consent to take part in the study.

By selecting, "I disagree" will automatically direct you out of the survey.

I agree
I disagree

Please select from the drop down menu the name of your school district

Please indicate the name of your Administrative Unit (AU)

Please indicate the role in the school district or Administrative Unit you hold

Please select the description that best describes your school district/AU

Rural with multiple districts
Rural district

Suburban with multiple districts

Urban/Suburban large district (15,000+ students)

Suburban district (5,000-14,999 students)

Small district (less than 5,000 students) but not rural

How many years have you been responsible for Gifted Education in your current district/Administrative Unit?

0-1 years

2-4 years

5-9 years

Greater than 10 years

Is the school district/AU aware of the CDE Comprehensive Program Plan for 2016-2020 pending deadline?

Yes

No

Does the district/Administrative Unit you represent favor or oppose the CDE Comprehensive Program Plan for 2016-2020?

Favor

Oppose

How ready, if at all, are you with submitting the CDE Comprehensive Program Plan for 2016-2020?

Very ready

Somewhat ready

Slightly ready

Not at all ready

Is the school district/AU aware of House Bill 08-1021: Early Access?

Yes

No

Does the district/Administrative Unit you represent favor or oppose Early Access?

Favor

Oppose

How ready, if at all, are you with submitting the optional CDE Early Access Addendum?

Very ready

Somewhat ready

Slightly ready

Not at all ready

Indicate which of the items below ARE hindering actions towards submission of an Early Access Addendum?

	Select Yes or No for each question	
	Yes	No
Lack of process	○	○
Lack of Administrative Unit commitment	○	○
Conflicting philosophy within AU	○	○
Lack of human resources	○	○
Lack of assessment resources	○	○
Lack of training specific to early access procedures & criteria	○	○
Enacting an unfunded mandate	○	○
None	○	○
Other	○	○

If you/Administrative Unit had to identify the MOST important thing that would have the greatest impact towards filing an Early Access Addendum with CDE, select ONE item below?

A clear process

An AU commitment

Sufficient human resources

Sufficient age appropriate assessments

Additional training needed

Funding

Other

Would you be in favor or opposed to attending a professional learning session on the topic of early access?

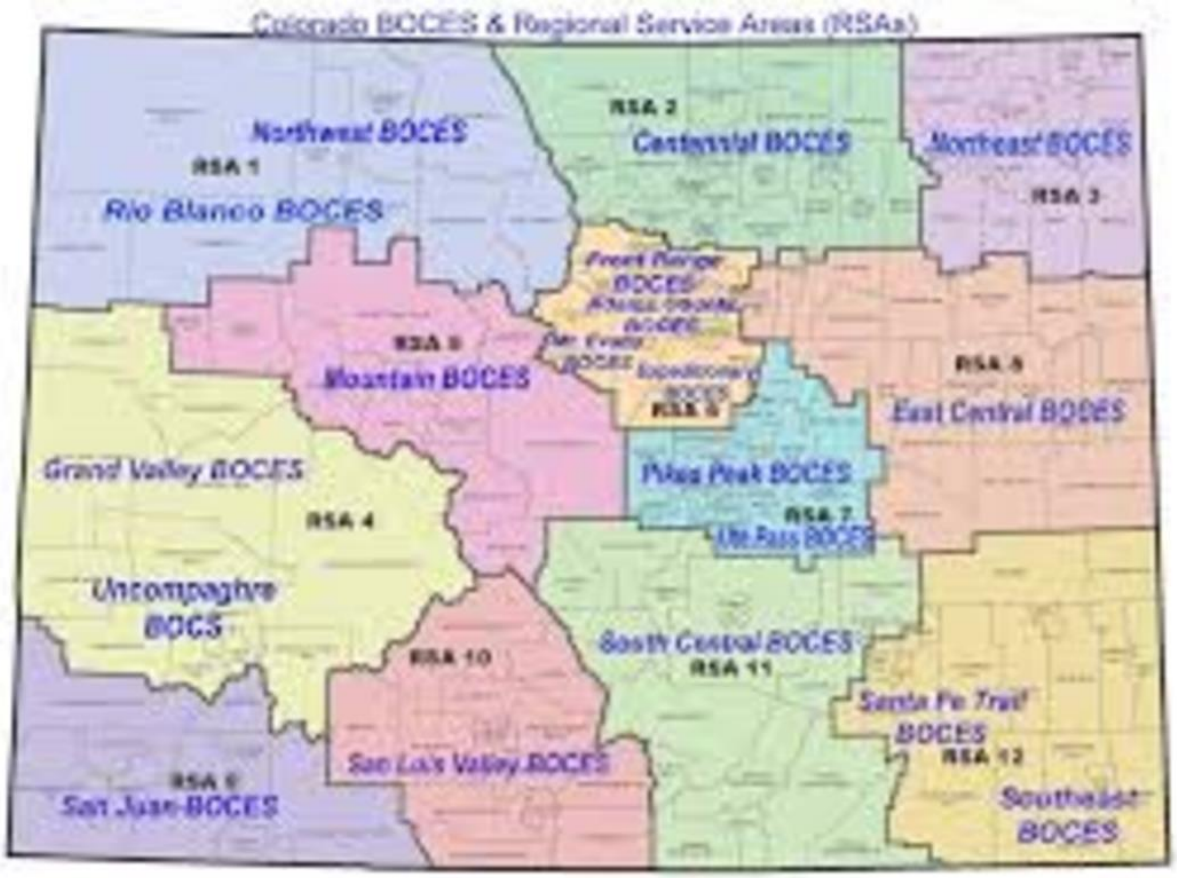
Favor

Oppose

Thank you for completing the Directed Survey.
Your participation in completing this survey is greatly appreciated.

Appendix G

Map provides a pictorial representation of the twenty BOCES regions across the state of Colorado.



This map provides a pictorial representation of the Colorado school districts and AUs that engaged in the online directed survey. This is represented as the sample, (s) geographic overview and not specifically label either a school district or an AU.

Appendix H

Timeline of Research and Launch of Online Directed Survey

April 2016-Establish community partnership with Jacquelin Medina, Colorado Department of Education, Director of Gifted Education.

May 2016 – Meet with my community partner, Jacquelin Medina, Colorado Department of Education, Director for Gifted Education, to discuss ways this study can propel Colorado school districts to submit Early Access Addendums and open access to public schools early for more gifted young learners.

July/August 2016 – Craft an introductory email that introduces the researcher(s) and the purpose of the study. Remind participants that the research was seeking their personal knowledge and understanding. Participation in the survey is completely voluntary.

July/August 2016- Craft a follow-up "reminder" email to be sent to potential respondents who have not yet submitted a survey.

July 2016- Create content of online survey which was delivered through the University of Denver, Qualtrics system, to be distributed electronically to the 103 Administrative Unit personnel responsible for gifted education. The name and contact email information is updated each summer by the Office of Gifted Education and can easily be found on the Colorado Department of Education website as public information.

End of July 2016- Via community partnership with CDE Office of Gifted Education, notification about the upcoming Directed survey and dissertation research connected to Early Access was shared in the State Gifted Director's monthly communication tool: Director's Corner.

September 2016- Distribute Directed survey-board survey to 103 Administrative Unit

October-November 2016- Analysis Directed survey results to lift themes, trends, and patterns.

Appendix I

Right 4 Rural: Colorado Department of Education

This document outlines the Colorado Department of Education Right 4 Rural is a project with great promise to increase the identification of gifted students from underrepresented populations (Jacob K. Javits Grant Program, 2015).

. As partners, the Colorado Department of Education and the University of Denver co-constructed a design to impact program and instructional supports for identification. Right 4 Rural provides services to selected administrative units (AUs) so that the proportionality of diverse student groups in their respective gifted populations becomes more like that of their total school community and to the state total gifted population average of 7%. To this end, leaders and teachers within the administrative units receive professional development tailored to reframing their gifted program and instructional practices to address unique local needs and resources.

The project outcome is demonstration sites where leadership in rural AUs apply design thinking about and practices of community to build a sustainable gifted program with their member districts. Building in the consideration of sustainability factors such as policy, systems thinking, and staff, family and community regard, the administrative units will generate a strong gifted program to continue the program plan design and identification of gifted students.

Teachers will be coached in the use of three selected instructional strategies in their classrooms, one each grant year. The principal investigators will conduct action research regarding the formative results of using these strategies in the classroom, determined using performance rubrics. This attention to student performance reinforces

the notion that identification requires opportunities to demonstrate exceptional potential; and once recognizing the exceptional potential, rubrics with advanced or distinguished levels set high expectations for students and teachers. Simultaneously, over the course of year 2 and year 3, Colorado's revised Right 4 Rural Colorado Department of Education Application for the Javits Gifted and Talented Students Education Program Gifted Education Identification Guidelines will be applied to determine the effectiveness and perceptions about its guidance for identification outcomes.

These major components – leadership in program design and support, evidence-based instructional strategies, and the culture/climate of identification – set the scene for strong identification results. Right 4 Rural defines four goal areas to impact identification:

- All administrative units will implement a local gifted program plan that addresses needs of students and teachers, including identification, programming, family partnerships, evaluation and expectations as seen by plan analysis and survey results.
- All administrative units will increase the number of gifted students to 7% identified in one or more categories of giftedness, especially from underrepresented groups of low incomes, English language learner, Hispanic students, and Native American students.
- Teacher survey and observation results will provide evidence of change in teacher practice to implement instructional strategies (inquiry/exploratory learning, depth and complexity, and learning clusters) proven to have a positive effect on identification and student learning.

- The administrative unit will increase student performance as measured by tests and/or performance rubrics in literacy, math, or science using selected instructional methods.

The combination of grant management and research is proposed to accomplish goals by leveraging existing state structures for professional development and improving identification while using high level content, personnel and research from the University's resources.

Right 4 Rural is supported by administrative units with high rates of traditionally underrepresented students in the gifted population. Right 4 Rural will build a vision and a practical model for all rural districts in and out of Colorado that wish to impact identification.

Appendix J

Draft of a Post Intervention Survey

1a. Name of school district_____

1b. Administrative Unit_____

2.Please select the description that best describes your AU.

Rural with multiple districts
Rural district
Suburban with multiple districts
Urban/Suburban Large district (15,000+ students)
Suburban district (5,000-14,999 students)
Small district (less than 5,000 students) but not rural

3.Please indicate the role in the school district or Administrative Unit you hold

_____

4. How many years have you been responsible for Gifted Education in your current district/AU?

0-1
2-4
5-9
Greater than 10 years

5. Does the district/Administrative Unit you represent favor or oppose Early Access?

Favor
Oppose

6. How ready, if at all, are you with submitting the optional CDE Early Access Addendum?

Very ready
Somewhat ready
Slightly ready
Not at all ready

7. Indicate which of the items below ARE hindering towards submission of an Early Access Addendum in January 2017?

Yes	No	Lack of process
Yes	No	Lack of AU commitment
Yes	No	Conflicting philosophy within AU
Yes	No	Lack of human resources
Yes	No	Lack of assessment resources
Yes	No	Lack of training specific to Early Access procedures and criteria
Yes	No	Enacting an unfunded mandate

Yes No None

8. If you/AU had to identify the most important thing that would have the greatest impact towards filing an Early Access Addendum with CDE, select ONE item below?
A clear process
An AU commitment
Sufficient human resources
Sufficient age appropriate assessments
Additional training needed
Funding
Other

9.Would you be in favor or opposed to attending a break out professional learning session on the topic of Early Access?
Favor
Oppose

References

Acceleration/A nation deceived (2009). Thousand Oaks, CA: Sage Publications, Inc.

Alexander, S., & Sinkinson, C. (2008). Providing the 'right' instructional improvement opportunities. *LOEX Quarterly*, 34(4), 4–10.

Argyris, C. (1993). *Knowledge for action: A guide to overcoming barriers to organizational change.* (Jossey-Bass Management Series & Jossey-Bass Social & Behavioral Series.) San Francisco: Jossey-Bass.

Argyris, C., & Schon, D. A. (1974). *Theory in practice: Increasing professional effectiveness.* (A joint publication in the Jossey-Bass Higher and Adult Education Series and The Jossey-Bass Management Series.) San Francisco: Jossey-Bass.

Archer, T. M. (2003). Web-based surveys. *Journal of Extension* [Online], 41(2) Article 4TOT6. Available at: http://www.joe.org/joe/2003august/tt6.phphttp://www.joe.org/joe/2003august/tt6.php

Assouline, S. G. (2003). Psychological and educational assessment of gifted children. In N. Colangelo & G. A. Davis (Eds). *Handbook of gifted education* (pp.124-145). Boston: Allyn & Bacon.

Assouline, S. (2006). Belin-Blank Center. Iowa City: University of Iowa.

Azano, A. P. (2014). Gifted rural students. In J. Plucker & C. Callahan (Eds.), Critical issues and practices in gifted education: *What the research says* (2nd ed., pp. 297-304). Waco, TX: Prufrock Press

Azano A. P., Callahan C. M., Missett T. C., Oh S., Brunner M., (2014). Understanding the experiences of gifted education teachers and fidelity of implementation in rural schools. *Journal of Advanced Academics*, 22, 88-100.

Bainbridge, W. (2002). Demographics, diversity, and K–12 accountability: The challenge of closing the achievement gap. *Education and Urban Society*, 34(4), 422–437.

Barbour, N. E., & Shaklee, B. D. (1998). Gifted education meets Reggio Emilia: Visions for curriculum in gifted education for young children. *Gifted Child Quarterly*, 42(4), 228–238.

Borland, J. H. (1989). *Planning and implementing programs for the gifted*. New York: Teacher College Press.

Bower, B. (1990). *Academic acceleration gets social lift*. Washington: Society for Science & the Public.

Brinko, K. T. (1993). The practice of giving feedback to improve teaching: What is effective? *Journal of Higher Education*, 64, 574–593.

Brody, L. E., & Persson Benbow, C. (1987). Accelerative strategies: How effective are they for the gifted? *Gifted Child Quarterly, 31*(3), 105-110. doi:10.1177/001698628703100302

Broido, E. M., & Manning, K. (2002). Philosophical foundations and current theoretical perspectives in qualitative research. *Journal of College Student Development*, 43(4), 434-445.

Bryk, A., & Schneider, B. (2003). Trust in schools: A core resource for school reform. *Educational Leadership*, 60(6), 40–45.

Burns, J. M., & Tunnard, J.D., (1991). Public programming for precocious preschoolers. *Gifted Child Today*, November/December 1991, 56-60.

Carroll, J. G., & Goldberg, S. R. (1989). Teaching consultations: A collegial approach to better teaching. *College Teaching*, 37, 143–146.

Chamberlin, S. A., Buchanan, M., & Vercimak, D. (2007). Serving twice exceptional gifted preschoolers: Blending gifted education and early childhood special education practices in assessment and program planning. *Journal for Education of the Gifted*, 30(3), 372–394.

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis.* Thousand Oaks, CA: Sage.

Colangelo, N., Assouline, S. G., Gross, M. U. M., & Iowa University, Connie Belin & Jacqueline N. Blank International Center for Gifted Education and Talent Development. (2004). *A nation deceived: How schools hold back america's brightest students. the templeton national report on acceleration. volume 2* Distributed by ERIC Clearinghouse.

Colangelo, N, Assouline, S. G., Van Tassel-Baska, J., & Lupkowki-Shoplik, A., M. U. M. (Eds.). (2015). *A nation empowered: evidence trumps the excuses holding back American's brightest students.* Iowa City: University of Iowa.

Coleman, L. J. & Cross, T. L. (2001). *Being gifted in school: An introduction to development, guidance, and teaching.* Waco, TX: Prufrock Press.

Colorado Department of Education, (2014). Fact sheet: Early Access to Educational Services K-1. http://www.cde.state.co.us/gt/fac-shee-earlyaccessseptember2014

Colorado Department of Education, (2012-2016). Administrative Unit Program Plans. http://www.cde.state.co.us/gt/data

Colorado Department of Education. About Gifted Education. (2015, November 3). Retrieved April 24, 2016, from http://www.cde.state.co.us/gt/about.

Colorado Department of Education. (2016). *Colorado Gifted Education Universal Screening and Qualified Personnel Grant.* Exceptional Children's Educational Act (ECEA) for Rules and Regulations, Retrieved from www.cde.state.co.us/gt/lawsregs.

Colorado Department of Education. (2016). *Colorado Preschool through Postsecondary Alignment Act or Colorado's Achievement Plan for Kids,* Rules and Regulations, Retrieved from https://www.cde.state.co.us/cdedepcom/cap4klegislation

Colorado Department of Education. (2016). *Early Access for Highly Advanced Gifted Children under age Six Guidelines*. Retrieved from https://www.cde.state.co.us/gt/earlyaccess2016.

Colorado Board of Cooperative Educational Services Association BOCES (2017). By-laws and regulations Retrieved from https://www.coloradoboces.org/

Colorado Department of Education. (2016). Right 4 Rural Jacob K. Javits Grant Program. Retrieved from https://www.cde.state.co.us/gt/right4ruralprogram

Colorado Department of Education. (2017). *Rural and Small Rural Designation Report.* Retrieved from https://www.cde.state.co.us/ruraledcouncil

Colorado Department of Education. (2008). Legislation Summary. Sixty-sixth general assembly, second regular session. https://www.cde.state.co.us/sites/default/files/documents/cdedepcom/download/pdf/legisum08.pdf

Connell, J. P. & Klem, A. M. (2000). You can get there from here: Using a theory of change approach to plan urban education reform. *Journal of Educational and Psychological Consultation*, 11 (1), 93-120.

Connell, J. and A. Kubisch (1998) `Applying a Theory of Change Approach to the

Evaluation of Comprehensive Community Initiatives: Progress, Prospects and Problems', in K. Fulbright-Anderson, A. Kubisch and J. Connell (eds) *New Approaches to Evaluating Community Initiatives, vol. 2, Theory, Measurement, and Analysis.* Washington, DC: Aspen Institute.

Colaizzi, P. (1978). Psychological research as a phenomenologist views it. In R. Valle & M. King, *Existential-phenomenological alternatives for psychology*. New York: Oxford University Press.

Creswell, J. W. (2003). Research design: *Qualitative, quantitative, and mixed method approaches* (2nd ed.). Thousand Oaks, CA: Sage.

Creswell, J. W., & V. L. Plano Clark. (2007). Designing and Conducting Mixed Methods Research. Thousand Oaks, CA: Sage Publications.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches,* 3rd Edition. Los Angeles, CA: Sage Publications.

Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research.* Los Angeles: SAGE Publications.

Creswell, J. W. (2013). *Qualitative inquiry & research design: Choosing among five approaches.* Thousand Oaks: Sage.

Cross, T. L., & Burney, V. H. (2005). High ability, rural, and poor: Lessons from Project Aspire and implications for school counselors. *Journal of Secondary Gifted Education*, 16, 148–156.

Crotty, M. (1998). *Foundations of social research*. London: Sage.

CUREE (2005), "Mentoring and coaching CPD capacity building project, national framework for mentoring and coaching", available at: www.curee-paccts.com/files/publication/ 1219925968/National-framework-for-mentoring-and-coaching.pdf.

Darling-Hammond, Ruth, et al. (2009). Professional Learning in the Learning Profession: A Status Report on Teacher Development in the U.S. and Abroad. *National Staff Development Council.* February. p. 59. https://edpolicy.stanford.edu/sites/default/files/publications/professional-learning-learning-profession-status-report-teacher-development-us-and-abroad.pdf

Delisle, J. R. (1992). *Guiding the social and emotional development of gifted youth: A practical guide for educators.* White Plains, NY: Longman.

Denscombe M. 2010. *Good Research Guide: For small-scale social research projects* (4th Edition). Open University Press. Berkshire, GBR. ISBN 978-0-3352-4138-5

Dillman, D., Smyth, J. & Christian, L. (2009). *Internet, Mail, and Mixed-Mode Surveys: The Tailored Design Method,* New York: Wiley.

Eisner, E. (1998). The kinds of schools we need: Personal essays. Portsmouth, NH: Heinemann

Feldhusen, J. F. & Baska, L. K. (1989). Identification and assessment of the gifted. In J. Feldhusen, J. VanTassel-Baska, & K. Seeley (Eds.). *Excellence in educating the gifted* (pp.85-102). Denver, CO: Love.

Feldman, D. H., & Goldsmith, L. T. (1991). *Nature's gambit: Child prodigies and the development of human potential*. New York, NY: Teachers College Press.

Fetterman, D. M., Kaftarian, S. J., & Wandersman, A. (1995). *Empowerment evaluation: Knowledge and tools for self-assessment and accountability.* Newbury Park, CA: Sage.

Fiske, S.T., & Taylor, S.E. (1991). Social cognition (2nd ed.). New York: McGraw-Hill

Fowler, J. F. (2014). *Survey Research Methods*. (5th ed.). Los Angeles, CA: Sage.

Fullan, M. (2001). *Leading in culture of change*. San Francisco: Jossey-Bass.

Fullan, M. (2010). *Motion leadership: The skinny on becoming change savvy*. Thousand Oaks, CA: Corwin: A Sage Company

Frankfort-Nachmias, C., Leon-Guerrero, A. (2011). *Social Statistics for a Diverse Society* (6th ed). Thousand Oaks, CA: Pine Forge Press, an Imprint of Sage Publications, Inc.

Gall, M.D., Borg, W.R. & Gall, J.P. (1996). *Educational research: An introduction* (6th ed.). New York: Longman.

Gagné, Françoys & Gagnier, Nadia. (2004). The socio-affective and academic impact of early entrance to school. vol. 26, iss. 3, 2004 *Roeper Review, 26*(3)

Garmston, R. (1987). How administrators support peer coaching. *Educational Leadership*, 44(5), 18–26.

Garson, G. D. (2009). *Survey research: State-notes from North Carolina Stata University*, Retrieved on September 20, 2009 from http://faculty.chass.ncsu.edu/garson/PA765/survey.htm

Giebelhaus, C. R., & Cruz, J. (1994). The mechanical third ear device: An alternative to traditional student teaching supervision strategies. *Journal of Teacher Education*, 45, 365–373.

Glass, G. V., & Hopkins, K. D. (1996). *Statistical methods in education and psychology. Needham Heights,* MA: Allyn & Bacon.

Gliner, J. A., Morgan, G. A., & Leech, N. L. (2009). *Research methods in applied setttings: an integrated approach to design and analysis*. New York, NY: Routledge.

Goertzel, M. G., Goertzel, V., (1962). *Cradles of eminence*. Boston: Little Brown.

Greene, J. C. (2007). Mixed Methods in Social Inquiry. San Francisco, CA: John Wiley & Sons.

Gross, M. (1986). Radical acceleration in Australia: Terence Tao. *Gifted Child Today*, 9, 2-11

Gross, M. U. M., & Feldhusen, J. F. (1990). The exceptionally gifted child. *Understanding Our Gifted*. 2(1), 7-10.

Gross, M. U. M. (1992). The early development of three profoundly gifted young boys of IQ 200. In P. N. Klein and A. J. Tannenhaum (eds.) *To be young and gifted* (141-170). New Jersey: Ablex

Gross, M.U.M. (1998, winter). Issues in assessing the highly gifted. *Understanding Our Gifted*, 10(2), 3–8.

Gross, M. U. M. (1999). Small poppies: Highly gifted children in the early years. *Roeper Review*. 21(3), 207-214.

Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N.K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105-117). London: Sage.

Guskey, T. R., (2002). Professional development and teacher change. *Teachers and Teaching: theory and practice,* 8 (3), 381-391.

Hamlin, R. G., Ellinger, A. D., & Beattie, R. S. (2008). The emergent coaching industry: A wakeup call for HRD professionals. *Human Resource Development International*, 11(3), 287–305.

Hanover Research (2012). Identifying and Accommodating the Highly Gifted. *Independent School Administration Practice*. Washington, D.C.

Harrison, C. (2004). Giftedness in early childhood: The search for complexity and connection journal article by Cathie Harrison. *Roeper Review*, 26(2), 78–84.

Haynes, N. M., Comer, J. P., & Hamilton-Lee, M. (1989a). The effects of parental involvement on student performance. *Educational and Psychological Research*, 8(4), 291-299.

Haynes, N. M., Comer, J. P., & Hamilton-Lee, M. (1989b). School climate enhancement through parental involvement. *Journal of School Psychology*, 27, 87-90.

Hébert, T. P., & Beardsley, T. M. (2001). Jermaine: A critical case study of a gifted Black child living in rural poverty. *Gifted Child Quarterly*, 45, 85–103.

Heinbokel, A. (1997). Acceleration through grade skipping in Germany. *High Ability Studies*, 8, 61-77.

Hicks, O. (1999). A conceptual framework for instructional consultation. In C. Knapper & S. Piccinin (Eds.), *Using consulting to improve teaching* (pp.9–18). New directions for teaching and learning, vol. 79. San Francisco, CA: Jossey-Bass.

Hill, P., Bonan, J., & Warner, K. (1992). Uplifting education: Sending schools soaring with site-based management. *American School Board Journal*, 179(3), 21-25

Hilt, L. (2011) *Out with professional development, in with professional learning.* Connected Leadership, Local Professional Collaboration, Teacher Leadership 2.0, Voices (18)

Hodge, K. A., & Kemp, C. R. (2006). Recognition of giftedness in the early years of school: Perspectives of teachers, parents and children. *Journal for the Education of the Gifted*, 30(2), 164–204.

Hollingworth, L. S. (1942). *Children above 180 IQ, Standford-Binet: Origins and development*. New York: World Book.

Howley, A., Rhodes, M., & Beall, J. (2009). Challenges facing rural schools: Implications for gifted students. *Journal for the Education of the Gifted*, 32, 515-536.

Howley, C. (1989). Synthesis of the effects of school and district size: What research says about achievement in small schools and school districts. *Journal of Rural and Small Schools*, 4(1), 2-12.

Hunt, J. M., & Weintraub, J. R. (2007). *The coaching organization: A strategy for developing leaders.* Thousand Oaks, CA: Sage.

Hustedde, R., & Score, M. (1995). Force-field analysis: Incorporating critical thinking in Goal setting. *CD Practice*, 4, 1–7.

Huston, T. & Weaver, C. L. (2008). Peer coaching: professional development for experienced faculty. Innovation High Education, 33, 5-20.

Institute for Research and Policy on Acceleration, National Association for Gifted Children, and Council of State Directors of Programs for the Gifted. (2009). Guidelines for developing an academic acceleration policy. Iowa City, IA: Authors.

International Coach Federation (2016). Lexington: KY Retrieved from https://www.coachfederation.org/

Israel, G. D. (2011). Strategies for obtaining survey responses for Extension clients: Exploring the role of e-mail requests. *Journal of Extension* [Online], 49(3) Article 3FEA7. Available at: http://www.joe.org/joe/2011june/a7.php

Jefferson County Public Schools, (2014). Early Access Archived Records

Joyce, B., Weil, M., & Calhoun, E. (2015). *Models of teaching* (9th ed.). Boston, MA: Pearson.

Julian, D. A., Jones, A., & Deyo, D. (1995). Open systems evaluation and the logic model: Program planning and evaluation tools. *Evaluation and Program Planning*, 18, 333–341.

Karnes, M. B., & Johnson, L.J. (1990). A plea: Serving young gifted children. *Early Development and Care.* 63, 131-138.

Karnes, F. A., Shaunessy, E., & Bisland, A. (2004). Gifted students with disabilities: Are we finding them? *Gifted Child Today*, 27(4), 16–21.

Kaufman, R. & Herman, J. (1991). *Strategic planning in education: Rethinking, restructuring, and revitalizing.* Lancaster, PA: Technomic.

Kennedy, D. M. (2002). Glimpses of a highly-gifted child in a heterogeneous classroom. *Roeper Review, 24*(3), 120-124. doi:10.1080/02783190209554148

Kitano, M (1982). Young gifted children: Strategies for preschool teachers. *National Association for the Education of Young Children (NAEYC).* 37, 14-24.

Kitano, M. (1985). Ethnography of a preschool for the gifted: What gifted young children actually do. *Gifted Child Quarterly*. 29, 67-71.

Kord, P. (2000, November 20). *Gifted identification: Parents left out! Parenting a gifted child,* Suite 101. Available from http://www.suite101.com/article.cfm/simply_gifted/52981.

Koshy, V., & Pascal, C. (2011). Nurturing the young shoots of talent: Using action research for exploration and theory building. *European Early Childhood Education Research Journal, 19*(4), 433-450. doi:10.1080/1350293X.2011.623515

Kuder, G. Frederic and Richardson, M. W. (1937). The Theory of the Estimation of Test Reliability. *Psychometrika*, II, 151-160.

Kulik, J. A. (2004). Meta-analytic studies of acceleration. *A Nation Deceived: How Schools Hold*

Kulik, J. A., & Kulik, C. C., (1992). Meta-analytic findings on grouping programs. *Gifted Child Quarterly,* 36, 73-77

Learning Forward. (2011). Standards for Professional Learning. http://learningforward.org/standards#.U2p_4PldUg2

Lee, V. E., Smith, J. B., & Croninger, R. G. (1995). *Understanding high school Restructuring effects on the equitable distribution of learning mathematics and science.* Madison, WI: Center on Organization and Restructuring of Schools.

LeVasseur, J. J. (2003). The problem with bracketing in phenomenology. *Qualitative Health Research*, 31(2), 408-420.

Locke, K. (2001). *Grounded theory in management research*. Thousand Oaks, CA: Sage Publications.

Maddux, C. D. (1983). Early school entry for the gifted: New evidence and concerns. vol. 5, iss. 4, 1983 *Roeper Review*, *5*(4)

Maggio, M. R., & Sayler, M. (2013). Trying out acceleration for mathematically talented fifth graders. *Gifted Child Today,36*(1), 20-26. doi:10.1177/1076217512465284

Marshall, C. & Rossman, G. B. (2006). *Designing qualitative research* (4th ed.). Thousand Oaks, CA: Sage.

McAdamis, S. (2000). A district-wide plan for acceleration and enrichment. *Gifted Child Today, 23*(3), 20.

McCluskey, K. W., Massey, K. J., & Baker, P. A. (1997). Early entrance to kindergarten: An alternative to consider. *Gifted and Talented International*, 12, 27-30.

McREL. (n.d.). *Mcrel: Making a difference-success in sight*. Retrieved from http://www.mcrel.org/products-and-services/featured-products-and-services/sis-suite-page

McWilliam, R. A. (2005). Assessing the resource needs of families in the context of early intervention. In M. J. Guralnick (Ed.), *A developmental systems approach to early intervention: National and international perspectives* (pp. 215–234). Baltimore, MD: Paul H. Brookes.

Merriam, S. B. (2002). Assessing and evaluating qualitative research. In S.B. Merriam(Ed.), *Qualitative research in practice: Examples for discussion and analysis* (pp.18-33). San Francisco: Jossey Bass.

Miller, L. E., & Smith, K. L. (1983). Handling nonresponse issues. *Journal of Extension* [Online], 21(5). Available at: http://www.joe.org/joe/1983september/83-5-a7.pdf

Morelock, M. J., & Feldman, D. H. (1992). The assessment of giftedness in preschool Children. In E. B. Nuttall, I. Romero, & J. Kalesnik (Eds.), *Assessing and screening preschoolers: Psychological and educational dimensions* (pp. 301–309). Boston, MA: Allyn and Bacon.

Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage.

National Association for Gifted Children [NAGC] & Council for Exceptional Children [CEC]. (2006). NAGC–CEC *Teacher knowledge & skill standards for gifted and talented education*. Retrieved on February 15, from www.nagc.org/...standards/final%20standards%20(2006).pdf

National Association for Gifted Children (NAGC), Definitions of Giftedness. (2010, March). Retrieved April 24, 2016, from http://www.nagc.org/resourcespublications/resources/definitions-giftedness

National Association for Gifted Children, & Council of State Directors of Program for the Gifted. (2012-2015). *State of the states in gifted education, 2012-2015, summary of findings.* Washington, DC: National Association for Gifted Children.

National School Board Association, Center for Public Education, & Gulamhussein, A. (2013). *Teaching the teachers: Effective professional development in an era of high stakes accountability.* Washington, DC: The Center for Public Education.

Neihart, M., Reis, S. M., Robinson, N. M., & Moon, S. M. (Eds.). (2202). The social and emotional development of gifted children: What do we know? Waco, TX: Prufrock Press.

Neihart, M. (2007). The socioaffective impact of acceleration and ability grouping: Recommendations for best practice. *Gifted Child Quarterly, 51*(4), 330-341. doi:10.1177/0016986207306319

Noddings, N. (2002). *Educating moral people: A caring alternative to character education*. New York, Teachers College Press.

Noddings, N. (2013). *Education and democracy in the 21st century*. New York, NY: Teachers College Press.

Onwuegbuzie, A., & Leech, N. (2005). On becoming a pragmatic researcher: The importance of combining quantitative and qualitative research methodologies. *International Journal of Social Research Methodology*, 8 (5), 375-387. Retrieved on January 29, 2008 from Academic Search Premier.

Patton, M. Q. (2002). *Qualitative research & evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage Publications.

Patton, M. Q. (2015). *Qualitative research & evaluation methods: Integrating theory and practice* (4th ed.). Thousand Oaks, CA: Sage.

Pfeiffer, S. I., & Stocking, V. (2000). Vulnerabilities of academically gifted students. *Special Services in the Schools*, 16(1–2), 83–93.

Pfeiffer, S. I. (2002). Identifying gifted and talented students: Recurring issues and promising solutions. *Journal of Applied School Psychology*, 1, 31-50.

Pfeiffer, S. I. (2003). Challenges and opportunities for students who are gifted: What the experts say. *Gifted Child Quarterly*, 47(2), 161–169.

Pfeiffer, S. I., & Petscher, Y. (2008). Identifying young gifted children using the gifted rating scales–preschool/kindergarten Form. *Gifted Child Quarterly*, 52(1), 19–29.

Piaget, J., & Inhelder, B., (1969). The Psychology Of The Child. New York, NY: Basic Books.

Pletan, M. (1995). Parents observations about kindergartners who are advanced in mathematical reasoning. *Journal for the Education of the Gifted*, 19(1), 30–44.

Plucker, J. A. (2013). Students from rural environments. In C. Callahan & H. Hertberg-Davis (Eds.), *Fundamentals of gifted education* (pp. 301-314). New York, NY: Routledge.

Proctor, T.B., Black, K. N., & Feldhuisen, J.F. (1986). Early admission of selected children to elementary school. A review of the research literature. *Journal of Educational Research,* 80,70-76.

Reinert, Lindsey D., & Penelope Heinigk. Early Access: Fostering Future Academic Success Through the Acceleration of Young Gifted Children. National Association for Gifted Children Conference 2012. Denver Conventions Center, Denver. 10 Nov. 2012. Lecture.

Reinert, Lindsey D., & Ruthi Manning-Freeman. "The Many Faces of Acceleration: Finding the Optimal Match for the Young Gifted Learner." Colorado Association of Gifted Children Conference 2014. Denver Marriott Tech Center, Denver. 21 Oct. 2014. Lecture. Back America's Brightest Students, 2, 13-22.

Robinson, N. M. (2004). Effects of academic acceleration on the social-emotional status of gifted students. *A Nation Deceived: How Schools Hold Back America's Brightest Students, 2*, 59-67.

Robinson, N. M., & Robinson, H., (1992). The use of standardized tests with young gifted children. In P. N. Klein and A. J. Tannenhaum (eds.) *To be young and gifted* (141-170). New Jersey: Ablex

Robinson, N. M., & Weimer, L. J. (1991). Selection of candidates for early admission to kindergarten and first grade. In W. T. Southern & E. D. Jones (Eds.), *The academic acceleration of gifted children* (pp.29-50). New York: Teachers College Press.

Rogers, K. L. B. (1991). *A best evidence synthesis of the research on types of accelerative programs for gifted students. (volumes I and II).* ProQuest, UMI Dissertations Publishing). *I and II*

Rogers, K. B. (2002). *Re-forming gifted education: How parents and teachers can match the program to the child.* Scottsdale, AZ: Great Potential Press.

Rotigel, J. V. (2003). Understanding the young gifted child: Guidelines for parents, families, and educators. *Early Childhood Education Journal.* 30, 209-214.

Sandall, S., Hemmeter, M. L., Smith, B. J., & McLean, M. E. (2005). The division for early childhood [DEC]-*Recommended practices: A comprehensive guide for practical application in early intervention/early childhood special education*. Longmont, CO: Sopris West.

Sankar-DeLeeuw, N. (1999). Gifted preschoolers: Parent and teacher views on identification, early admission, and programming. *Roeper Review*, 21, 174-179.

Sankar-DeLeeuw, N. (2004). Case studies of gifted kindergarten children: Profiles of promise. vol. 26, iss. 4, 2004 *Roeper Review, 26*(4)

Sattler, J. M. (2008). *Assessment of children: Cognitive foundations* (5th ed.). San Diego, CA: Author.

Scheeler, M. C., McAfee, J. K., Ruhl, K. L., & Lee, D. L. (2006). Effects of corrective feedback delivered via wireless technology on preservice teacher performance and student behavior. *Teacher and Special Education*, 29, 12–25.

Siegle, D., & McCoach, D. B. (2005). Making a difference: Motivating gifted students who are not achieving. *Teaching Exceptional Children*, 38(1), 22–27.

Siegle, D., Wilson, H. E., & Little, C. A. (2013). A sample of gifted and talented educators' attitudes about academic acceleration. *Journal of Advanced Academics, 24*(1), 27-51. doi:10.1177/1932202X12472491

Siegler, R. S., & Richards, D. D. (1988). The development of intelligence. In R. J. Steinberg (Ed.), *Handbook of human intelligence* (pp. 901-974). New York: Cambridge University Press.

Sinek, S.(2009). *Start with why: How great leaders inspire everyone to take action paperback*. New York: Penguin Group

Shaha–Coltrane, S. (Ed.). (2006 Fall). News from early childhood division chair, early childhood division newsletter, 1–2, Retrieved September 13, 2009 from www.nagc.org/.../About.../Division.../EC_Fall_Newsletter_2006.pdf

Showers, B. (1985). Teachers coaching teachers. *Educational Leadership*, 42(7), 43–48.

Showers, B., & Joyce, B. (1996). The evolution of peer coaching. *Educational Leadership*, 53(6), 12–16.

Silverman, L. K. (1997–2004). *Characteristics of giftedness scale: A review of the literature.* Retrieved April 25, 2005 from www.gifteddevelopment.com/Articles/Characteristics_Scale.htm

Silverman, L. K. (1989b). The highly gifted. In J. F. Feldhusen, Van Tassel-Baska, J., & Seeley, K. R. (eds). Excellence in educating the gifted. (71-83). Denver: Love.

Smutny, J.F., Walker, S.Y., & Meckstroth, E.A. (1997). *Teaching young gifted children in the regular classroom*. Minneapolis, MN: Free Spirit.

Smutny, J. F. (Ed.). (1998). *The young gifted child: Potential and promise, an anthology*. Cresskill, NJ: Hampton Press.

Smuthy, J. F. (2000, May). CEC–Teaching young gifted Children in the regular classroom. Retrieved February 24, from www.cec.sped.org/AM/TemplateRedirect.cfm?template=/CM/...cfm...

Sokolowski, R. (2000). *Introduction to phenomenology*. New York, NY: Cambridge, University Press.

Sparrow, S. S., Pfeiffer, S. I., & Newman, T. M. (2005). Assessment of children who are gifted with the WISC-IV. In A. Prifitera, D. H. Saklofske, & L. G. Weiss, *WISC-IV: Clinical use and interpretation* (pp.282-299). Burlington, MA: Elsevier Academic Press.

Steenbergen-Hu, S., & Moon, S. M. (2011; 2010). The effects of acceleration on high-ability learners: A meta-analysis. *Gifted Child Quarterly, 55*(1), 39-53. doi:10.1177/0016986210383155

Stile, S. W., Kitano, M., Kelley, P., & Lecrone, J. (1993). Early intervention with gifted children: A national survey. *Journal of Early Intervention*, 17(1), 30–35.

Strauss, A. & Corbin, J. (1998). *Basics of qualitative research*. Thousand Oaks, CA: Sage.

Southern, W. T., & Jones, E. D. (1991a). *The academic acceleration of gifted children*. New York: Teachers College Press.

Southern, W. T., & Jones, E. D. (2004). Types of acceleration: Dimensions and issues. In N. Colangelo, S. Assouline, & E. Gross (Eds.), *A nation deceived: How schools hold back American's brightest students* (pp.5-12). Iowa City: University of Iowa.

Table D: State Policies that Support Gifted Learners, (2012-2013). State of the States in Gifted Education report http://www.nagc.org/nagc2/ngcShopper/ProductDetails.aspx?productID=NGC42068

Teachers Know Best: Teachers' Views of Professional Development. (2014). Bill & Melinda Gates Foundation. December. p. 3. http://collegeready.gatesfoundation.org/wp-content/uploads/2015/04/Gates-PDMarketResearch-Dec5.pdf

Tomlinson, C. A. (2005). Quality curriculum and instruction for highly able students. Theory Into Practice ,2(44), 160-166. doi: 10.1207/s15430421tip4402_10

Van Manen, M (1990). *Researching lived experiences: Human science for an action sensitive pedagogy.* Albany: State University of New York Press.

Viadero, D. (2004). Report urges acceleration for gifted students. *Education Week [H. W. Wilson - EDUC], 24*(5), 5.

Vogt, W. P. (2007). *Quantitative research methods for professionals.* Boston, MA: Allyn & Bacon.

Walker, B., Hafenstein, N. L., & Crow–Enslow, L. (1999). Meeting the needs of gifted learners in the early childhood classroom. *Young Children,* 54(1), 32–36.

Weiss, C. H. (1995). *Nothing as Practical as Good Theory: Exploring Theory-based Evaluation for Comprehensive Community Initiatives for Children and Families.* In New Approaches to Evaluating Community Initiatives: Concepts, Methods, and Contexts, ed. James Connell et al. Washington, DC: Aspen Institute.

Whitmore, J. R. (1980). *Giftedness, conflict, and underachievement.* Boston, MA: Allyn and Bacon.

William, M. K. (2008). *Social research methods knowledge base*. Retrieved January 12, 2010, from http://www.socialresearchmethods.net/kb/survey.php

Witty, P., & Coomer, A. (1985). A case study of twin gifted boys. *Exceptional Children,* 22, 104-108

Wiseman, F. (2003). On the reporting of response rates in Extension research. *Journal of Extension* [Online], 41(3) Article 3COM1. Available at: http://www.joe.org/joe/2003june/comm1.phphttp://www.joe.org/joe/2003june/comm1.php

Wood, S., Portman, T. A. A., Cigrand, D. L., & Colangelo, N. (2010). School counselors' perceptions and experience with acceleration as a program option for gifted and talented students. *Gifted Child Quarterly, 54*(3), 168-178. doi:10.1177/0016986210367940

Yoon, Kwang Suk, et al. (2007). Reviewing the evidence on how teacher professional development affects student achievement. Institute of Education Studies. October. P. iii. http://ies.ed.gov/ncee/edlabs/regions/southwest/pdf/rel_2007033.pdf