EXPLORING ALIGNMENT IN GIFTED EDUCATION PROGRAM POLICIES AND PRACTICES

A Dissertation

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ABSTRACT

Since no federal policy exists to guide gifted education in schools, gifted education policies about providing programs and services for gifted students vary widely across states (CDSPG & NAGC, 2015). Previous studies demonstrate a possible disconnect between gifted education policies at the state and district level (e.g., Callahan, Moon, & Oh, 2013), and the extent to which school-level practices are aligned with state and/or district policies is unknown. Additionally, previous studies (e.g., Baker, 2001a; Kettler, Russel, & Puryear, 2015) indicate gifted programs may vary according to district/school size and/or district/school resources. In the present study I use qualitative document analysis to examine gifted education policies and practices within two states. I examine state and district-level policies as well as district and school-level reported practices about gifted education services. Sample districts within each of two states were purposefully chosen to represent each end of the spectrum on both district/school size and district/school resources to include two large/high resource districts, two small/high resource districts, two large/low resource districts, and two small/low resource districts. Results indicate state and district policies in the states are, overall, moving toward alignment with recommended practices, while district and school reported practices are only weakly or partially aligned with those recommendations. No specific patterns in the data could be attributed to the differences in size or resources in this study.

DEDICATION

This dissertation is dedicated to my wonderful grandparents, all of whom paved the path for me to make it to where I am today.

ACKNOWLEDGEMENTS

I'd first like to start by thanking Carolyn, for taking me on as a student in the first place. Thanks for knowing to how to push me when I needed it, for taking the time to carefully read through everything I wrote that came across your desk and for providing some of the most constructive feedback in the business. I appreciate your high standards and how you never accepted anything less than that standard. Thank you for being incessantly available despite having one of the most horrendously busy schedules of anyone I've ever known and for always providing thoughtful advice on all the intricate processes of research and academia. There are not enough thanks or words of appreciation to express how grateful I am for your mentorship throughout this process, and I look forward to many more years of sage advice as I embark on my own journey as a researcher and academic.

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discussions about education research, eventually learning (probably) more than he ever wanted to know about gifted education.

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CHAPTER 1: INTRODUCTION

Federal emphasis on accountability and academic achievement based on test scores in schools reflects concern with low achievement by educators across levels of government, and their primary focus is on overall achievement gaps between minority and majority students (e.g., NGACBP, CCSSO, 2010). However, data show that even the highest performing students in the United States trail far behind in achievement compared with high performing students in other countries (e.g., Plucker, Hardesty, & Burroughs, 2013). This gap has increased over the past three years and is predicted to continue to grow over time (Plucker, Burroughs, & Song, 2010; Plucker, Giancola, Healey, Arndt, & Wang, 2015; Plucker et al., 2013). In contrast to simply observing and closing overall achievement gaps between groups of students, excellence gaps emphasize the importance of examining the achievement of students performing at the highest level (Plucker et al., 2010; Plucker et al., 2013). Regardless of the method used to measure excellence gaps, these data indicate a large portion of advanced students are not achieving their full potential (Plucker et al., 2013).

The logical response to the challenge of raising academic achievement for a select group of students is to investigate current research on interventions that lead to positive outcomes and translate those interventions into informed policies to guide programming (e.g., Brown, Avery, VanTassel-Baska, Worley II, & Stambaugh, 2006). The federal government, along with professional organizations in education, advocate the necessity of research- or evidence-based policy reform (e.g. U.S. Department of

Education, Office of Elementary and Secondary Education, 2002; Coalition for Evidence-based Policy [CEP], 2003). Gifted education is a field where researchers investigate promising practices in providing the most advanced students challenging academic work and opportunities with the goal of full development of their talents. Professional organizations have synthesized that research on best practices in serving gifted and talented students. (e.g., NAGC, 2010).

With the general recommendations supporting the generation of education policy based on evidence (e.g., CEP, 2003), one may assume that evidence-based policies characterize gifted education. However, results of past studies indicate that may not be the case. For example, Brown et al. (2006) found that policies in five states with mandates for gifted education, including both identification and services, did not consistently align with gifted professional association standards or recommended best practices. These results are consistent with continuing snapshots of current state policies in gifted education, where requirements or mandates for identification of students are common, but detailed requirements and funding to provide services to identified students is not (Council of State Directors of Programs for the Gifted & the National Association for Gifted Children [CSDPG & NAGC], 2015). Additionally, many states leave the responsibility of defining and implementing gifted education programming entirely up to local education agencies (i.e., LEAs or districts) (Callahan, Moon, & Oh, 2013; CSDPG & NAGC, 2015). Though we can hypothesize from current data on state law and guidelines (e.g., CSDPG & NAGC, 2015) that many states, and therefore LEAs, likely do not currently follow recommended or research-based practice in creating policy in gifted

education, a systematic investigation of the extent to which individual states, districts, and school policies are aligned with recommended practice does not exist.

The existence of evidence-based policy to guide gifted education programs is only one component of using policy to address educational challenges. Once a policy is created, it is then translated from its written form into practice. In education, this means that the policy document will be interpreted by individuals with their own sets of beliefs and values surrounding education at the state, district, school, and then, finally, the classroom level before students experience the practice of that policy (e.g., Coburn, 2001; McLaughlin, 2006). Results of studies in other areas of education policy reform show that even mandated policy is altered through interpretation at each of these levels. For example, in an early policy implementation study, Weatherly and Lipinksi (1977) found that administrators in charge of implementing a new special education policy in the state of Massachusetts displayed varying levels of fidelity to the written policy while navigating contextual resource constraints like financial inadequacy, varying levels of teacher support, and lack of time to put the changes in place. More recent research in the field of reading education policy implementation indicates similar findings, as Coburn (2001) and Coburn and Russell (2008) found that local and national professional networks, as well individual teacher beliefs, influence policy implementation.

Policy implementation is influenced at each level of education governance --the state level, district level, school level, and classroom level. Coburn and Russell (2008) focused on the influence of district administrators on the implementation of mathematics curriculum reform. They found school leaders mediate district policy and as a result, influence patterns of sense-making interactions among teachers. Additionally, Honig

(2004) found intermediary organizations such as district-level departments of instruction play an essential role in the policy implementation process.

Coburn (2005) stresses the importance of alignment across levels of the educational enterprise for successful policy implementation. For instructional practice to change at the classroom level, coherence across system level personnel (e.g., administrators) and other internal and external organizations and persons (e.g., professional networks, school-level departments) is required. Other researchers in the area of education policy also indicate the importance of coherent and aligned policy messages both in terms of general policy implementation as well as specifically for classroom instructional practices (Honig & Hatch, 2004; Newman, Smith, Allensworth, & Bryk, 2001). In order to understand policy coherence and alignment, study of policy should extend beyond teacher-level interpretation of policy to include examination of how policy is interpreted and implemented at both the district and school levels (e.g., Coburn & Russell, 2008; Spillane, Reiser, & Reimer, 2002).

Of course, it is important to keep in mind that challenges in implementing education policy are not only influenced by individuals acting as filters at each level of school governance, but policy itself reflects values on a more macro, societal level (e.g., Coburn, 2005; Spillane et al., 2002). In particular, policies in gifted education in the United States are framed by the tension between ideas of equity and excellence (e.g., Gallagher, 2002; Tannenbaum, 2001). These influences are highlighted to frame a context for the present study and analysis, but are not investigated directly at this time.

Purpose of Study

Overall, it is clear policymakers face many challenges Explanations for the failure to close excellence gaps include failure to align policy with research, failure to implement best practice, or other shortcomings in practice. In order to provide insight for policymakers and educators in the field of gifted education, I first investigate how well current state and district gifted education policies align with recommended gifted education practices. Next, I examine how well reported programming practices at the district and school level align with recommended practices. Given the importance of coherence (and alignment as a major component of coherence) in successful policy implementation, I then explore how well each component of policy and reported practices align with each other across the state, district, and school levels.

For context and to demonstrate why these inquiries matter, student outcomes are illustrated in the model below as a distal goal, strongly influenced by the alignment with both recommended practice and across system levels. Additionally, policy implementation itself is a highly subjective, interpretive process that likely has strong influences on the eventual goal of improving student outcomes. (I do not examine the implementation process or student outcomes in the present research).

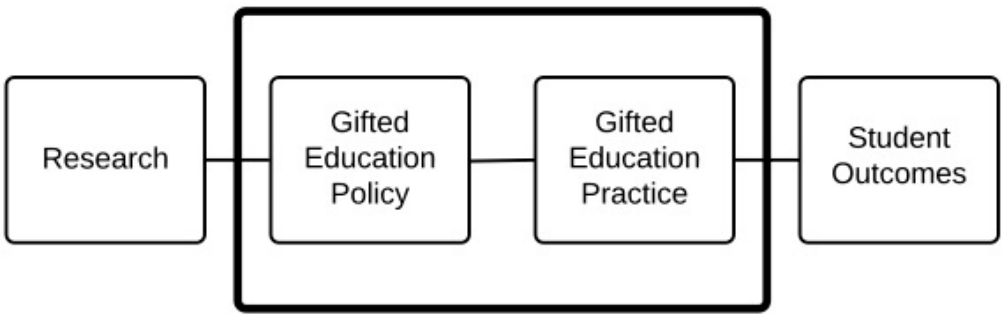

Figure 1: An illustration of the area of focus in this study.

Study Context

In partnership with the Institute for Education Sciences (IES) and the states of Colorado, North Carolina, and Florida, the National Center for Research on Gifted Education (NCRGE) is currently investigating successful practices in gifted education for serving typically underrepresented populations in gifted programs (e.g., minority, low-income, English language learners). I am currently working as part of the research team on this NCRGE study, and my study falls under the umbrella of this NCRGE study. The NCRGE study is guided by a theory of change based in the gifted education research literature (See Appendix B). Given the focus of the NCRGE study is on typically underrepresented populations of gifted students, this theory of change is specifically oriented toward practices that are likely to contribute to the success of students underrepresented in gifted programs—particularly in the areas of reading and mathematics.

The NCRGE study focuses on three states that were chosen based on the following criteria: mandated identification and services for gifted students, availability of vertically scaled longitudinal state data on student achievement, emphasis on involving higher numbers of underrepresented students with gifted program services, and the willingness of state department gifted specialist to work collaboratively (Siegle, Gubbins, McCoach, Callahan, & Knupp, 2015). Three states fit the criteria, responded to the call for participation, and were included in the NCRGE study. My study focuses on two of the three states included in this larger study.

Definition of Terms

For the purpose of this study, *giftedness* and/or *gifted students* are defined by policy statues in the two states that are studied (Colorado and North Carolina):

The state of Colorado defines gifted students in the following way:

> "Gifted Children" means those persons between the ages of four and twenty-one whose aptitude or competence in abilities, talents, and potential for accomplishment in one or more domains are so exceptional or developmentally advanced that they require special provisions to meet their educational programming needs. Gifted children are hereafter referred to as gifted students. Children under five who are gifted may also be provided with early childhood special educational services. Gifted students include gifted students with disabilities (i.e. twice exceptional) and students with exceptional abilities or potential from all socio-economic, ethnic, and cultural populations. Gifted students are capable of high performance, exceptional production, or exceptional learning behavior by virtue of any or a combination of these areas of giftedness: (a) general or specific intellectual ability, (b) specific academic aptitude, (c) creative or productive thinking, (d) leadership abilities, (e) visual arts, performing arts, musical, dance, or psychomotor abilities (Exceptional Children's Educational Act, 2015).

The state of North Carolina defines gifted students in the following way:

> Academically or intellectually gifted students exhibit high performance capability in intellectual areas, specific academic fields, or in both intellectual areas and specific academic fields. Academically or intellectually gifted students require differentiated educational services beyond those ordinarily provided by the regular educational program. Outstanding abilities are present in students from all cultural groups, across all economic strata, and in all areas of human endeavor (1996, 2nd Ex. Sess., c. 18, s. 18.24(f).).

Recommended practices are the policies and procedures in a particular field that are supported either by empirical or sound theoretical evidence. According to the National Association for Gifted Children, for something to be considered as a *research-based or theory-based recommended practice,* evidence from at least three publications should support the practice (Johnsen, 2012).

In this analysis, *policy* refers to any written documentation that pertains to legislation, statutes, procedures, guidelines, and court decisions that guide gifted programming in the study states, districts, and schools.

In this study, *implementation* refers to district and school self-reported programming practices. Other researchers use the term implementation to refer to the process of policy implementation (e.g., Coburn, 2001). However, in the current study I focus the investigation on reported practices only rather than the process leading to those practices.

Finally, for the purpose of this study *alignment* refers specifically to the alignment and consistency of policy across education system levels and with recommended practices. Researchers use the term coherence to reflect a complex analysis of how policy messages are interpreted and translated into classroom practices (e.g., DeArmond, Gross, Bowen, Demeritt, & Lake, 2012). In my study, I focus particularly on the alignment and consistency elements of coherence.

CHAPTER 2: REVIEW OF LITERATURE

Educators, including education policy makers, are faced with challenges in identifying, serving, and improving academic achievement for gifted students from all backgrounds (e.g., Plucker et al., 2013; Wyner, Bridgeland, & DiIulio, 2007). The work and recommendations of experts about best practice should be used as the basis for policy development in the areas of delineating whom the programs intend to serve, articulating identification procedures to find students who will benefit from services, and developing and selecting programming options to serve a range of gifted students. The federal government and other education agencies recommend all forms of social policy, including education policy, be informed by research-based practices (CEP, 2003; U.S. Department of Education, Office of the Deputy Secretary, 2002; U.S. Department of Education, Office of Elementary and Secondary Education, 2002).

Recommended Practices for Gifted Education

If education policy should be informed by evidence-based practices, it is important to delineate what these practices are. Gifted education as a whole suffers from a small number of research-based practices, with an abundance of recommended practices formed only from a theoretical basis (Plucker & Callahan, 2014). The National Association for Gifted Children compiled recommended standards to guide gifted education programs by combining both research- and theory-based evidence (NAGC, 2010). Additionally, the National Center for Research on Gifted Education (NCRGE) recently compiled literature-based promising practices that, theoretically, lead to positive

outcomes (e.g., increased achievement, positive affective outcomes) for gifted students from typically underrepresented populations (Siegle, et al., 2015). The NCRGE staff compiled their review of recommended practices into a conceptual "theory of change" that guides their research. A review of these recommended practices, and the research evidence or theoretical backing that supports each standard follows.

NAGC Programming Standards

In conjunction with experts in the field, NAGC developed and distributed the first set of programming standards in hopes of providing policymakers and administrators a guide for aligning practices with research in the field (NAGC, 2002). The original categories of standards were Student Identification, Professional Development, Socio-Emotional Guidance and Counseling, Program Evaluation, Program Design, Program Administration and Management, and Curriculum and Instruction (NAGC, 2002).

NAGC updated the standards over a decade later (NAGC, 2010). The current set of standards, called the 2010 Pre-K-Grade 12 Gifted Programming Standards (hereafter, NAGC standards or standards) encompasses all the original categories plus updated practices and recommendations for both assessment and professional development (Johnson, 2012). The current standards are organized into the following six categories: (1) Learning and Development, (2) Assessment, (3) Curriculum and Instruction, (4) Learning Environments, (5) Programming, and (6) Professional Development (NAGC, 2010). There are nearly 100 total standards, many of which include multiple indicators for evidence-based practices.

In addition to the general categories, there are five major principles that underlie the standards: (a) giftedness is dynamic and constantly developing, so no single trait can

characterize it, (b) giftedness is found in students from all backgrounds, (c) standards must be outcome focused, (d) all educators are responsible for gifted education in some capacity, and (e) gifted students should receive services full-time while they are at school (Johnsen, 2012).

Prior to updating the NAGC gifted education programming standards to the present version, researchers attempted to use the previous version (NAGC, 2002) to guide analysis of the district policies in one state (Matthews & Shaunessy, 2010). The researchers encountered multiple issues with using the previous version of the standards as an analysis tool. First, each original standard had sub-categories of standards that were delineated as exemplary or minimum practices. However, these sub-categories were not exclusive of each other so that an exemplary practice could be met without meeting the corresponding minimum category. Next, the researchers noted many of the standards included multiple practices under each. So, a district might meet one portion of the standard, but not meet every single portion. Finally, the language used in the standards was not specific enough to provide a clear, stand-alone coding system (Matthews & Shaunessy, 2010). Overall, the researchers recommended future investigations include the NAGC standards in the research process, but with caution as to their applicability as a ready-made checklist for analysis (Matthews & Shaunessy, 2010).

In the updated standards some of previous issues are resolved, but not all. First, each standard is now broken out into its own individual "present" or "not-present category." This means that there are no longer exemplary or minimum practices. Unfortunately, the last two challenges encountered with the previous version of the

standards still exist. Many standards have multiple indicators listed under each. The following is an example of a standard with multiple indicators:

> 2.2.4 Educators have knowledge of student exceptionalities and collect assessment data while adjusting curriculum and instruction to learn about each student's developmental level and aptitude for learning. (NAGC, 2010, p. 2)

Indicators for this standard would include (a) evidence of educator knowledge of student exceptionalities, (b) evidence that assessment data is collected, (c) evidence that curriculum and instruction is adjusted, (d) evidence of educator learning about student's developmental level, and (e) evidence of educator learning about a student's aptitude for learning. Additionally, non-specific language may continue to be an issue with using these standards to guide analysis. For instance, in the previous example, the term "assessment" may refer to a standardized test, a classroom performance assessment, a pre-test, a formative assessment, or some conglomeration of all the tests. It is really up to the user to interpret the meaning of these terms.

Despite the continued challenges one might face in using the NAGC Standards as a stand-alone checklist to analyze gifted education practices, the standards do provide a structure to inform analyses of both gifted programming and gifted education policy, since they provide a framework defining critical benchmarks and effective practices for identifying and serving gifted students (Johnsen, 2011). The updated standards were carefully crafted to ensure alignment with current research and theory in the field of gifted education as well as recommendations for teacher training from NAGC and the Council for Exceptional Children (CEC) (Johnsen, 2012). While the utility of the NAGC

Standards as an analytical checklist is limited, the standards do serve as a comprehensive collection of recommended best-practices across many areas of gifted education.

NCRGE Theory of Change

The elements of recommended practices the NCRGE gleaned from the literature are categorized in the following way: (a) Pre-identification, (b) Preparation, (c) Identification, (d) Intervention, (e) Delivery, and (f) Outcomes (Siegle et al., 2015). Because the standards were one source used to guide the theory of change, many of the practices emphasized in the NCRGE theory align with the NAGC Standards. However, they are supplemented with the addition of the elements of pre-identification and preparation programs from the research and theory literature specific to the development of underrepresented populations of gifted students.

Organization of Recommended Practices

As written, there are many evidence-based standards that overlap across the six NAGC categories. Take the following two standards for example:

> Standard 1.6.1 (Learning and Development) Educators design interventions for students to develop cognitive and affective growth that is based on research of effective practices. (NAGC, 2010, p. 1)
>
> Standard 3.2.1 (Curriculum Planning and Instruction) Educators design curricula in cognitive, affective, aesthetic, social, and leadership domains that are challenging and effective for students with gifts and talents. (NAGC, 2010, p. 4)

These two standards are designated as a part of different categories; yet, they contain overlapping constructs with regard to the kind of instruction students should be receiving. To reduce redundancy in my discussion of the literature supporting recommended

practices, I collapsed and re-organized the standards into categories more definitively unique. For example, a variety of recommended practice topics were included under the "assessment" category, such as information about identification, classroom assessment, and program evaluation (NAGC, 2010). In order to add coherence and clarity to my review, I separated this category into the individual topic areas.

I separated recommended best practices included in the NAGC standards and NCRGE theory of change elements into following interactive categories for organizational purposes and to reduce redundancy in my review: Policy and administration (POLICY), Professional development (PD), Identification process (ID), Service delivery model/program design (SDM/P), Curriculum and instruction (CI), and Program evaluation and accountability (EVAL). I will identify and review the standards and theory of change elements included in each category.

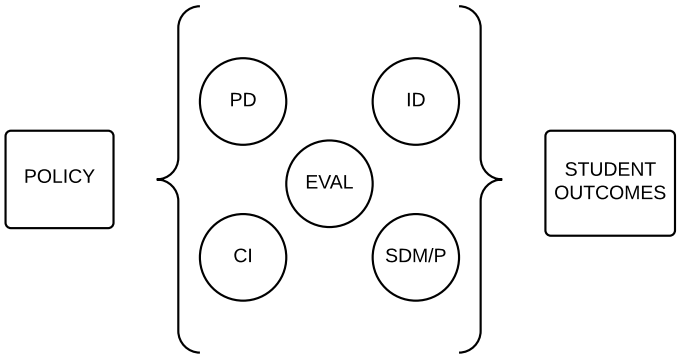

Figure 2. An illustration of recommended gifted education practices. Elements include Professional development (PD), Identification process (ID), Service delivery model/program design (SDMP/P), Curriculum and instruction (CI), and Evaluation and accountability (EVAL).

Policy and administration (POLICY)

In theory, state and district level policy and administration (POLICY) have some level of influence on practices in gifted education (PD, ID, SDM/P, CI, and EVAL).

Several standards mention or allude to the role of policy and administration, including standards 5.1.6, 5.2.1, 5.4.1, 5.6.1, and 6.1.4 (see Table 1). Standard 5.2.1 is specifically about the importance of coherent messages across general, special, and gifted education personnel. Coherence and collaboration with regards to program implementation across stakeholders is noted as an importance aspect of recommended practices in both general education (e.g., Coburn, 2005; Fuhrman, 1993) and gifted education (e.g., Bianco, 2010).

The other standards related to administration and policy highlight the need for schools to have the proper supports in place to implement the continuum of gifted education service options (NAGC, 2010). Examples of proper supports include adequate funding and resources from the state (Baker & Friedman-Nimz, 2003) in addition to coherent policy messages across system levels. Policy is not mentioned specifically as a component of the NCRGE theory of change (Siegle et al., 2015).

Table 1

NAGC Standards associated with policy and program administration (POLICY)

Standard	Criteria
2.3.2	Educators understand and implement district and state policies designed to foster equity in gifted programming and services.
5.1.6	Administrators demonstrate support for gifted programs through equitable allocation of resources and demonstrated willingness to ensure that learners with gifts and talents receive appropriate educational services.
5.2.1	Educators in gifted, general, and special education programs, as well as those in specialized areas, collaboratively plan, develop, and implement services for learners with gifts and talents.
5.4.1	Administrators track expenditures at the school level to verify appropriate and sufficient funding for gifted programming and services.
5.6.1	Educators create policies and procedures to guide and sustain all components of the program, including assessment, identification, acceleration practices, and grouping practices, all of which are built on an evidence-based foundation in gifted

education.

6.1.4 Administrators provide human and material resources needed for professional development in gifted education (e.g., release time, funding for continuing education, substitute support, webinars, or mentors).

Professional Development (PD)

Professional development is a major element of the NAGC Standards. In compiling the most recent version of the standards, the expert panel combined the old NAGC standards (2002) with the NAGC/CEC-TAG teacher preparation standards (2006). Providing teachers with professional learning experiences is not directly included in the NCRGE theory of change (Siegle et al., 2015).

Only minimal empirical evidence exists regarding the effectiveness of professional development in ensuring gifted students receive high quality gifted programming , and the evidence that does exist is mixed. In an early study of the effects of professional development in gifted education, Hansen and Feldhusen (1994) found that teachers who were trained in the area of gifted education demonstrated higher quality teaching skills and developed classroom environments more conducive to high-level learning. In contrast, at least one study indicated professional development for in-service teachers in differentiated instruction does not lead to increased instances of high-quality differentiation in the classroom (Brighton et al., 2005).

More recently Bangel, Moon, and Capobianco (2010) found that, after participation in an introductory course in gifted education and an accompanying nine-week practicum, pre-service teachers felt they were more aware of the needs of gifted students and perceived themselves as better prepared to teach in the general education classroom. Additionally, in a study of the implementation of pre-differentiated math

curricula, researchers found that teachers were able to understand and implement instruction aligned with best practices in gifted education, including differentiated instruction as well as depth and complexity, when using the pre-developed units in conjunction with professional development support (Rubenstein, Gilson, Bruce-Davis, & Gubbins, 2015). The results of these two studies suggest the best way to provide teachers with awareness of the appropriate methods for teaching gifted students may be to provide opportunities for hands-on experience with the model material (i.e., a practicum or a pre-developed curriculum).

In general, school districts spend a large portion of their budgets on professional development based on theoretical support (TNTP, 2015). However, a recent study across three school districts including more than 20,000 teachers demonstrated little to no demonstrable improvement in classroom practices or student outcomes as a result of professional development (TNTP, 2015).

Despite the lack of empirical evidence to suggest professional development for teachers as an effective strategy leading to positive changes in teacher behavior and student outcomes, several of the standards, supported by theory, promote the inclusion of professional development as a major component of recommended gifted education practice. In Table 2, I compiled the standards that contain recommendations for professional development gifted education based on theory.

Table 2

NAGC Standards associated with professional development (PD)

Standard	Criteria
4.2.1	Educators understand the needs of students with gifts and talents for both solitude and social interaction.

6.1.1	Educators systematically participate in ongoing, research-supported professional development that addresses the foundations of gifted education, characteristics of students with gifts and talents, assessment, curriculum planning and instruction, learning environments, and programming.
6.1.2	The school district provides professional development for teachers that models how to develop environments and instructional activities that encourage students to express diverse characteristics and behaviors that are associated with giftedness.
6.1.3	Educators participate in ongoing professional development addressing key issues such as anti-intellectualism and trends in gifted education such as equity and access.
6.1.5	Educators use their awareness of organizations and publications relevant to gifted education to promote learning for students with gifts and talents.
6.2.1	Educators participate in ongoing professional development to support the social and emotional needs of students with gifts and talents.
6.3.1	Educators assess their instructional practices and continue their education in school district staff development, professional organizations, and higher education settings based on these assessments.
6.3.2	Educators participate in professional development that is sustained over time, and that includes regular follow-up, and that seeks evidence of impact on teacher practice and on student learning.
6.3.3	Educators use multiple modes of professional development delivery including online courses, online and electronic communities, face-to-face workshops, professional learning communities, and book talks.
6.3.4	Educators identify and address areas for personal growth for teaching students with gifts and talents in their professional development plans.

Identification process (ID)

Several of the NAGC standards (See Table 3) as well as the NCRGE theory of change (See Appendix B) include criteria for practices in identification of students. These NAGC standards indicate gifted identification processes should include a comprehensive, cohesive, ongoing, and technically adequate procedure for identification that ensures no

discrimination against sub-populations of students (NAGC, 2010). The NCRGE theory of change suggests similar practices, including the use of multiple and varied assessments, committee reviews, parent and/or teacher nominations, and scoring procedures that promote inclusion (Siegle et al., 2015).

Pre-identification and preparation programs. In the NCRGE theory of change, pre-identification and preparation programs serve a major role prior to formal identification (Siegle et al., 2015). The implementation of preparation programs are an increasingly recommended practice in order to expand and improve gifted services to include and benefit potentially gifted students from typically underserved populations including students from minority and/or low-income families (e.g. Brulles et al., 2011; Gentry, Hu, & Thomas, 2008).

Formal identification process. Recommended practices in the formal identification of gifted students have continued to evolve since initial conceptions of giftedness and intelligence (Terman, 1925; Renzulli, 1984; Renzulli & Delcourt, 1986). Changing conceptions of intelligence and giftedness (e.g., Sternberg, 1984; Subotnik, Olszewski-Kubilius, & Worrell, 2011) and concerns about bias in test instruments and raters (e.g., McBee, 2010) have led to recommendations for the use of multiple indicators in identification process in order to capture multi-faceted manifestations of giftedness. In alignment with NAGC (2010) standards and NCRGE theory of change, scholars support the use of multiple measures, creation of full-student profiles rather than use of specific cut-off scores, collecting and valuing the input of trained evaluators throughout the identification process, and periodic universal gifted screening for all students (e.g.,

Callahan, 2005; Olszewski-Kubilius & Clarenbach, 2012; Renzulli, 1984; Renzulli & Delcourt, 1986; Stambaugh, 2007).

Recent research provides further insight into the nuances of a multiple indicator approach to identification (McBee, Peters, & Waterman, 2014). In their simulation study investigating the ways multiple indicator methods can be applied, the researchers found that using an "and" (multiple cut-off scores), "or" (cut-off score on at least one measure), or "mean" (average of standardized scores) application resulted in the identification of very different populations of students. Results from the simulation indicate the "and" rule identifies the most narrow, or most homogeneous group of gifted students while the "or" rule results in the most broad, or most heterogeneous group of gifted students based on proposed scores on hypothetical indicators for identification (McBee et al., 2014).

Table 3

NAGC Standards associated with identification (ID)

Standard	Criteria
2.2.1	Educators establish comprehensive, cohesive, and ongoing procedures for identifying and serving students with gifts and talents. These provisions include informed consent, committee review, student retention, student reassessment, student exiting, and appeals procedures for both entry and exit from gifted program services.
2.2.2	Educators select and use multiple assessment that measure diverse abilities, talents, and strengths that are based on current theories, models, and research.
2.2.3	Assessments: provide qualitative and quantitative information from a variety of sources (including off-level testing), are nonbiased and equitable, and are technically adequate for the purpose.
2.2.5	Educators interpret multiple assessments in different domains and understand the uses and limitation of the assessment in identifying the needs of students with gifts and talents.
2.3.1	Educators select and use non-biased and equitable approaches for identifying students with gifts and talents, which may include using locally developed norms or assessment tools in

	the child's native language or in nonverbal formats
2.5.1	Educators ensure that the assessment used in the identification and evaluation processes are reliable and valid for each instrument's purpose, allow for above-grade-level performance, and allow for diverse perspectives.

Service delivery model and/or program design (SDM/P)

The NAGC standards that focus on recommended practices for service delivery and program design have two main priorities. Gifted students should be offered a continuum of comprehensive services (e.g., acceleration, enrichment, grouping options, internships, technology use), and the match between student and service is essential (NAGC, 2010). The NCRGE theory of change also proposes elements of service delivery including appropriate grouping strategies, acceleration, access to knowledgeable teachers, and the proportion of the school day students spend receiving gifted services (Siegle et al., 2015).

Multiple scholars support the NAGC standards and NCRGE theory of change recommendation that educators offer a variety of opportunities to ensure student needs are met (e.g., Callahan, 2009; Treffinger, Young, Nassab, & Wittig, 2004). Acceleration provides the most clear and consistent example of a service model successful in producing both short- and long-term positive outcomes for gifted students, and is recommended by many as essential in any continuum of services (e.g., Brody & Benbow, 1987; Kulik & Kulik, 1984; McClarty, 2014; Swiatek, 2002; Swiatek & Benbow, 1991).

In the past, ability grouping has been noted as one of the most effective service delivery models for gifted students (e.g., Gentry & Owen, 1999; Kulik & Kulik, 1992). Pull-out classes as a service delivery model (i.e., when gifted students are pulled out of the regular classroom for a certain amount of time to receive gifted services) has also

demonstrated positive effects on critical thinking, creativity, and achievement for gifted students (Vaughn, Feldhusen, & Asher, 1991). Additionally, McCoach, O'Connell, and Levitt (2006) found that, in schools where teachers used ability grouping more often, students achieved higher mean gains in reading achievement at the school level.

However, ability grouping is not, in and of itself, viewed as a successful model to serve gifted students. In some cases, for example, ability grouping is perceived as taking the form of putting students into inflexible tracks that continue to reproduce social inequalities (e.g., Oakes, 2005). This is not the premise of ability grouping recommended in gifted education, and flexibility in groupings is one key method to avoid the negative implementation of this practice (e.g., Feldhusen & Moon, 1992; Matthews, Ritchotte, & McBee, 2013). Additionally, scholars note that ability grouping of any kind (including pull-out programs) is not a successful model to serve gifted students if nothing else about the classroom, in particular the curriculum, changes. That is, ability grouping must be accompanied by high quality curriculum and instruction in order to for students to achieve desired outcomes (Plucker & Callahan, 2014).

Table 4 contains the NAGC Standards that include recommended practices for service delivery models and/or program design.

Table 4

NAGC Standards associated with service delivery model and program design (SDM/P)

Standard	Criteria
1.3.1	Educators provide a variety of research-based grouping practices for students with gifts and talents that allow them to interact with individuals of various gifts, talents, abilities, and strengths.
5.1.1	Educators regularly use multiple alternative approaches to accelerate learning.

5.1.3	Educators regularly use multiple forms of grouping, including clusters, resource rooms, special classes, or special schools.
5.5.1	Educators develop thoughtful, multi-year program plans in relevant student talent areas, PK-12.
5.7.2	Educators facilitate mentorships, internships, and vocational programming experiences that match student interests and aptitudes.

Curriculum and instruction (CI)

According to the NAGC standards, it is important that educators develop a comprehensive and cohesive curriculum that is based on standards, differentiated in all domains, and incorporates balanced assessment practices throughout (NAGC, 2010). This sentiment is echoed in the NCRGE theory of change, which advocates curricular and instructional practices that are characterized by academically rigorous content, meaningful learning experiences focused on concepts or big ideas, differentiation based on readiness and student interest, and focused, scaffolded feedback (Siegle et al., 2015). The standards include indicators that suggest all curriculum and instruction practices should be culturally responsive, and educators should incorporate strategies such as critical thinking, problem solving, and inquiry models to facilitate advanced learning for gifted students which are elements also echoed in the NCRGE theory of change (NAGC, 2010; Siegle et al., 2015).

Many scholars support the practice of employing a variety of models for curricular planning and instruction in gifted education (e.g., Karnes & Bean, 2005; Tomlinson, 1999). The literature on the topic of curricular frameworks and instructional strategies for gifted students is extensive, with multiple scholarly articles, books, and book chapters existing on this topic (e.g., Hockett, 2009; Van Tassel-Baska & Brown, 2007; Van Tassel-Baska & Little, 2011). Some long-standing examples of frameworks

include differentiated instruction (Tomlinson, 1999), the schoolwide enrichment model (Renzulli & Reis, 1985), and the depth and complexity model (Kaplan, 2013). A more recent model for ensuring quality instruction for gifted students synthesized the aforementioned three models into the CLEAR curriculum model (Azano, 2013).

Hockett (2009) also provides a synthesis of curricular and instructional recommendations across gifted education scholars by proposing the following five principles for what constitutes a "good curriculum" for gifted students: 1) Instructor implements curriculum that is discipline based and includes integrative content delivered using a conceptual approach to organize or explore content; 2) Instructor implements curriculum that allows students to pursue advanced levels of understanding beyond the general education curriculum through abstraction, depth, breadth, and complexity; 3) Instructor requires students to use methods and materials that mirror those of an expert or practicing professional; 4) Instructor implements curriculum that emphasizes problems, products, and performances that are comparable to real-world outcomes; and 5) Instructor incorporates flexible classroom approaches that encourage student learning by igniting student interests, adjusting for pacing, and ensuring variety is present.

While many advocate for the use of a wide range of strategies, research indicates little support for educator implementation of the most recommended aspects of the curricular frameworks described above (Plucker & Callahan, 2014). However, several teams have conducted research on the implementation of units based on these foundational curricular frameworks, which show promising results for gifted students. Examples of these units include the differentiated language arts units based on the CLEAR Curriculum Model (Callahan, Moon, Oh, Azano, & Hailey, 2015), differentiated

units based on the integrated curriculum model (Feng, VanTassel-Baska, Quek, Bai, & O'Neil, 2004), and differentiated mathematics units (Gavin, Casa, Adelson, Carroll, & Sheffield, 2009; McCoach, Gubbins, Foreman, & Rubenstein, 2014).

It is clear curriculum planning and instruction are areas of gifted education characterized by extensive scholarly discussion, so it is not surprising that the NAGC standards also reflect this focus. More than 60 of the 97 NAGC Standards address differing aspects of curriculum and instructional practices. Since this category is so large, I report only on the main standard for each of the curricular planning and/or instructional standards (See Table 5). For the full list of all NAGC standards, refer to Appendix C.

Table 5

NAGC Standards associated with curriculum and instruction (CI)

Standard	Student Outcome
1.1	Self-Understanding. Students with gifts and talents demonstrate self-knowledge with respect to their interests, strengths, identities, and needs in socio-emotional development and in intellectual, academic, creative, leadership, and artistic domains.
1.2	Self-Understanding. Students with gifts and talents possess a developmentally appropriate understanding of how they learn and grow; they recognize the influences of their beliefs, traditions, and values on their learning and behavior.
1.3	Self-Understanding. Students with gifts and talents demonstrate understanding of and respect for similarities and differences between themselves and their peer group and others in the general population.
1.4	Awareness of Needs. Students with gifts and talents access resources from the community to support cognitive and affective needs, including social interactions with others having similar interests and abilities or experiences, including same-age peers and mentors or experts.
1.5	Awareness of Needs. Students' families and communities understand similarities and differences with respect to the development and characteristics of advanced and typical learners and support students with gifts and talents' needs

1.6	Cognitive and Affective Growth. Students with gifts and talents benefit from meaningful and challenging learning activities addressing their unique characteristics and needs.
1.7	Cognitive and Affective Growth. Students with gifts and talents recognize their preferred approaches to learning and expand their repertoire
1.8	Cognitive and Affective Growth. Students with gifts and talents identify future career goals that match their talents and abilities and resources needed to meet those goals (e.g., higher education opportunities, mentors, financial support).
2.1	Identification. All students in grades PK-12 have equal access to a comprehensive assessment system that allows them to demonstrate diverse characteristics and behaviors that are associated with giftedness.
2.4	Learning Progress and Outcomes. Students with gifts and talents demonstrate advanced and complex learning as a result of using multiple, appropriate, and ongoing assessments.
3.1	Curriculum Planning. Students with gifts and talents demonstrate growth commensurate with aptitude during the school year.
3.2	Talent Development. Students with gifts and talents become more competent in multiple talent areas and across dimensions of learning.
3.3	Talent Development. Students with gifts and talents develop their abilities in their domain of talent and/or area of interest.
3.4	Instructional Strategies. Students with gifts and talents become independent investigators
3.5	Culturally Relevant Curriculum. Students with gifts and talents develop knowledge and skills for living and being productive in a multicultural, diverse, and global society.
3.6	Resources. Students with gifts and talents benefit from gifted education programming that provides a variety of high quality resources and materials.
4.1	Personal Competence. Students with gifts and talents demonstrate growth in personal competence and dispositions for exceptional academic and creative productivity. These include self-awareness, self-advocacy, self-efficacy, confidence, motivation, resilience, independence, curiosity, and risk taking.
4.2	Social Competence. Students with gifts and talents develop social competence manifested in positive peer relationships and social interactions.
4.3	Leadership. Students with gifts and talents demonstrate personal and social responsibility and leadership skills.
4.4	Cultural Competence. Students with gifts and talents value their own and others' language, heritage, and circumstance.

	They possess skills in communicating, teaming, and collaborating with diverse individuals and across diverse groups. They use positive strategies to address social issues, including discrimination and stereotyping.
4.5	Communication Competence. Students with gifts and talents develop competence in interpersonal and technical communication skills. They demonstrate advanced oral and written skills, balanced biliteracy or multiliteracy, and creative expression. They display fluency with technologies that support effective communication

Program and outcome evaluation (EVAL)

The final area of focus in the standards is the incorporation of a purposeful, reliable, and valid program evaluation process to assess outcomes of the gifted program (NAGC, 2010). Program evaluation is not built-in as a specific component of the NCRGE theory of change, but student outcomes are included and could be considered a form of program evaluation (Siegle et al., 2015). Standards associated with evaluation components of gifted programming can be found in Table 6. According to several scholars (e.g., Avery, VanTassel-Baska, & O'Neil, 1997; Callahan & Reis, 2004), program evaluation is an essential component of a quality gifted program. Among other purposes of program evaluation, the process provides data to judge student outcomes as a result of gifted services and also allows districts and/or schools to determine whether policies and procedures have been effective for the particular students in their district (Callahan & Hertberg-Davis, 2013).

Table 6

NAGC Standards associated with program and outcome evaluation (EVAL)

Standard	Criteria
2.5.2	Educators ensure that the assessment of the progress of students with gifts and talents uses multiple indicators that measure mastery of content, higher level thinking skills,

	achievement in specific program areas, and affective growth
2.5.3	Educators assess the quantity, quality, and appropriateness of the programming and services provided for students with gifts and talents by disaggregating assessment data and yearly progress data and making the results public
2.6.1	Administrators provide the necessary time and resources to implement an annual evaluation plan developed by persons with expertise in program evaluation and gifted education
2.6.2	The evaluation plan is purposeful and evaluates how student-level outcomes are influenced by one or more of the following components of gifted education programming: (a) identification, (b) curriculum, (c) instructional programming and services, (d) ongoing assessment of student learning, (e) counseling and guidance programs, (f) teacher qualifications and professional development, (g) parent/guardian and community involvement, (h) programming resources, and (i) programming design, management, and delivery.
2.6.3	Educators disseminate the results of the evaluation, orally and in written form, and explain how they will use the results.

Gifted Education Policy

Even though the field of gifted education is governed by a combination of federal, state, and local policies, policy governing gifted education at the federal level is very limited, offering only a suggested definition that guides a small grant program (Gallagher, 2006). The most recent version of the original federal definition of giftedness was established as part of the No Child Left Behind Act (2002). This definition states,

> The term "gifted and talented", when used with respect to students, children, or youth, means students, children, or youth who give evidence of high achievement capability in areas such as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who need service or activities not ordinarily provided by the school in order to fully develop those capabilities. (No Child Left Behind Act, 2002, section 9101[22])

Though many state and district-level policies may incorporate aspects of the federal definition (e.g., Stephens & Karnes, 2000), services for gifted students are regulated at the state and local level, if at all (Swanson & Lord, 2013).

At the state level regulations governing gifted education programs vary widely (CSDPG & NAGC, 2015). For example, 32 states mandate identification for gifted students, yet four of those states do not mandate gifted services be provided to identified students. Also, funding for gifted programs is different in each state, ranging from fully funded mandates for identification and services to no funding and no mandates for identification or services (CSDPG & NAGC, 2015).

Identification Policies and Practices

Most studies that have examined gifted education policy focus on the definition and identification of gifted students. Early studies by researchers at the now non-operational Gifted Education Policy Studies Program were the first of their kind on exploring education policy in the field. These researchers investigated identification policies at the state level (Coleman & Gallagher, 1995; Gallagher & Coleman, 1992; Gallagher & Coleman, 1994). Coleman and Gallagher (1995) focused their analysis of state gifted identification on the six policy areas of legislation, definition of giftedness, standard identification practices, non-standard identification practices, existence of due process procedures, and identification for special populations of gifted students. Though these researchers also examined policy implementation in the study, they only reported state-level implementation of state policy rather than district or school level implementation. Extensive support for gifted education from state leadership characterized all three states; yet state leaders perceived a clear disconnect between

themselves and local districts. State leaders reported their perceptions that local districts lacked material and financial support, information on appropriate identification and service options for gifted students, and ongoing technical assistance at the district level in developing appropriate programs (Gallagher & Coleman, 1992). Additionally, state leaders did not have consistent access to current district-level gifted policies governing programming and services offered in each district, beyond gifted identification requirements.

Later, Stephens and Karnes (2000) investigated changes in state definitions between 1990 and 1998. Results indicated 29 states had made modifications to their definitions between 1990 and 1998. Additionally, many states continued to use components of the original federal definition (Marland, 1971) to inform and infuse into their own definitions of giftedness. At the time, theories of giftedness and intelligence had been expanding to include components of giftedness in addition to academic performance and intelligence for at least 10 years (e.g., Renzulli, 1984; Sternberg, 1984), but results showed no clear indication that these components had yet to be incorporated into state definitions on a large scale (Stephens & Karnes, 2000).

McBee, Shaunessy, and Matthews (2011) focused their analysis of district-level identification policy on school districts in the state of Florida. Results indicated disparities between the identification of typically underrepresented groups of students and white students. Having a policy helped to reduce the disparity, but did not eliminate it (McBee et al., 2011).

In the most recent study of state identification policies, McClain and Pfieffer (2012) examined all 50 states policies and procedures regarding identification, including

definition of giftedness, screening procedures, and identification practices. The authors found that 48 out of 50 states include a definition of giftedness in their state education legislation. Twenty-four states had modified their definition since the Stephens and Karnes (2000) review. McClain and Pfieffer (2012) found 32 states mandated identification of gifted students, 12 states explicitly did *not* mandate it, and 6 states did not have an identification policy either way. An interesting finding was that, in contrast to previous reports on state identification practices, no state endorsed or recommended the use of a single-cut off score decision process. Overall, the authors concluded that no state had yet adopted policies or procedures that reflect the trend in the field to move toward a more developmental model of gifted and talented education (McClain & Pfieffer, 2012).

Currently, most state policies focus primarily on defining and delineating identification of gifted students. In a survey of state programming, the Council of State Directors of Programs for the Gifted and the National Association of Gifted Children (2015) found that 33 of the 42 responding states require specific criteria or methods to be used in identifying gifted students, and 12 completely or partially determined the criteria/methods. Of the 34 states providing guidance on identification, 11 require a specific process, and the other 23 leave all or part of the decision of exactly what criteria and methods will be used to the local education agency (LEA or district) (CSDPG & NAGC, 2015).

Local control for gifted programming

While policies at the state level are characterized by the delineation of identification practices, many states leave specific decisions about gifted education identification primarily up to LEAs (CDSPG & NAGC, 2015). A continuum of

specificity exists in the degree of delineation of identification criteria for districts by the individual state departments. For example, in Alabama, the state provides LEAs with a range of identification assessments to select from. In contrast, state policy in Montana does not specify practices for identification, implying control by LEAs, and both Missouri and Wyoming identify as "local control" states with no mandates to provide gifted services of any kind (CSDPG & NAGC, 2015). In a study of five states, researchers found that these states chose to delegate nearly all aspects of providing gifted services to identified students to the local district level (Brown et al., 2006). State administrators cited this local flexibility as a highly valuable component of the state policy. Though administrators viewed local control and implementation of policy as positive, the actuality of policy implementation and programming at the district and school level was not reported in this study (Brown et al., 2006).

Alignment. At present, we do not have a sound knowledge base regarding the degree of alignment across state, district, and school level gifted policies. It is clear from state gifted education policy surveys (e.g., CSDPG & NAGC, 2015) that gifted education policies vary widely with regard to the degree to which districts are monitored by states. In a survey of district-level gifted administrators by Callahan, Moon, and Oh (2013) found that 42 district coordinators in 15 states reported there were no state laws governing gifted education in their state even though nine of those 15 states actually did have state laws regulating gifted identification and services. Some confusion (or ignorance) clearly is evident at the district-level about state policy, and there is reason to suspect a disconnect or lack of alignment between district and state agencies. This disconnect between state and local school governance is of special importance, since

many aspects of gifted education policy continue to be left up to LEAs to interpret, develop, implement, and refine (CSDPG & NAGC, 2015).

Resource availability. The availability of resources influences the gifted policies and programming available to students across districts and schools. Though the regulation of many aspects of gifted identification and programming are left up to districts, no states reporting in a national survey (0 of 40) currently require districts to have a designated full-time administrator devoted to gifted education (CSDPG & NAGC, 2015). In 10 of the 40 reporting states, districts were required to have a designated administrator for gifted education, but that administrator did not need to be full-time. Further, only one state requires that the local gifted administrator have training in gifted education (CSDPG & NAGC, 2015). The findings of the most recent State of the States report are consistent with Callahan et al.'s (2013) findings that most district-wide gifted program administrators serve gifted programs on a part-time basis.

In addition to varying access to full-time gifted administrators, Baker (2001b) found that districts with no gifted education funding had higher proportions of low-income students and English language learners. Additionally, Baker and Friedman-Nimz (2004) found that schools with a higher percent of low-income children were less likely to offer a gifted education program, and of the schools offering services, the gifted program served a lower percentage of the overall student population in those schools. These findings lead to the conclusion that local resources are a factor influencing the creation of local gifted education policies and the availability and type of gifted programming students have access to.

District/School Size. The relative size (i.e., student population) in a given district and/or school can also influence the availability and nature of gifted education policy and implemented programming. For example, Baker (2001a) found that students who attended larger schools were increasingly more likely to have access to gifted education services, as students in schools enrolling 400 or more students were 6 to 8 times more likely to have access to a gifted program than students in a school with less than 50 students. Additionally, Callahan et al. (2013) found that larger school districts (50,000 + students) were more likely to have a full-time gifted coordinator (Callahan et al., 2013).

Baker (2001b) also found that, on average, districts with any amount of funding available for gifted education were nearly twice as large as districts that did not have funding. Recent research indicates that gifted services offered in districts and/or schools continue to vary relative to district/school size, as Kettler, Russell, and Puryear (2015) found that small rural school districts spend less money per student in gifted education, allocate a smaller proportion of their overall budget to gifted services, and allocate less money for faculty in gifted. Additionally, school size and locale were the strongest predictors of variance in funding and staffing across all contextual variables (Kettler et al., 2015).

State-level Mandates and Funding

Not surprisingly, Baker and Friedman-Nimz (2004) found that schools in states with policy mandates for gifted education were 2 to 2.7 times as likely to offer gifted programs as schools in states without mandates. Swanson (2007) echoed these findings in a case-study investigation of the formation and implementation of new state policy in the state of South Carolina. The researcher found that the aspects of state policy participants

reported as most influential or helpful in support of gifted program implementation were those requiring for gifted education teacher endorsement and those governing identification of students. Reported challenges in implementation were having enough time to implement all aspects of the policy as well as possible and miscommunication between levels of administration about how best to implement the new policy (Swanson, 2007).

In addition to the importance of state-level mandates, Baker and Friedman-Nimz (2004) found that schools in states allocating any amount of funding to gifted education were 2.2 times as likely as states not providing funding to offer gifted services. Additionally, Swanson and Lord (2013) used examples from the 2007 case study of South Carolina to illustrate aspects of state policy that were working well and aspects that were challenging. The researchers recommended strong state policies with fiscal incentives attached as the best way to ensure quality gifted programming occurs (Swanson & Lord, 2013). These recommendations echo results of previous work indicating state policies mandating gifted services and adequate state funding for gifted education contribute to the availability of gifted services at the district and school levels.

Overview of Gifted Policies and Practices in Study States

It is clear that the climate for gifted education varies widely from state to state. Therefore, I will provide a brief overview of the Colorado and North Carolina context, which are the states central to this investigation.

Commonalities. Both states mandate gifted education (for identification *and* services) and provide at least some funding in support of these mandates (CSDPG & NAGC, 2015). The states both have at least one full time employee dedicated to gifted

education services in the State Education Agency (SEA), and both require all school districts in the state to submit district level program plans for their gifted education programs. Results from the most recent State of the States report indicates SEA climates of support for gifted education in both these states, as participants from both states responded thoughtfully to an open-ended question regarding suggestions for future research that could contribute to more successful creation and implementation of gifted programming policies. Also, both states report aspects of their state policies were informed by the NAGC Pre K-12 Programming Standards. Finally, both Colorado and North Carolina require reporting on the number of students identified as gifted as well as the achievement and achievement growth of gifted students in reading and mathematics as a separate category (CSDPG & NAGC, 2015).

In conjunction with the Jack Kent Cooke Foundation, Plucker et al. (2015) developed a rating system to analyze state policies and the extent to which "state policies support and facilitate advanced learning for all students" (p. 9) to learn more about current state support for academically talented low-income students. The rating system took into account each state's identification practices, allocation of resources (i.e., funding), policies supportive of advanced learners, and tracking and reporting systems for the progress of advanced learners. The team used indicators like, "Does State Require Gifted Coursework in Teacher/Administrator Training?" and "Does State Require Gifted Identification and Services?" (Plucker et al, 2015, p. 9-11). Under this rating system, both states received a B- for their current policies and practices (Plucker et al., 2015). A B- grade is by criterion standards an indicator of many weaknesses, but under this scoring system, it was actually the highest rating a state received, and only five of the 50 states

received this score. While both states had the same input rating, their output ratings differed. Outputs were based on a combination of the percent of students reaching advanced levels on standardized academic assessments (both state and national) and excellence gaps in the percentage of low-income and minority students reaching advanced levels. Colorado received a C+ rating, while North Carolina received a C rating. In contrast to a "high" rating on inputs, the output ratings for the two states were more decidedly in the average category, with 29 other states receiving the same ratings (Plucker et al., 2015).

Differences. While both states mandate identification and services for gifted students, documentation provided by the state department of education to Colorado educators includes more detailed information regarding the policies, procedures, and supplemental materials. Colorado has a standing gifted and talented advisory committee while North Carolina does not. Also, Colorado requires that gifted services be provided in all areas of giftedness stated in their state definition, while North Carolina only requires services for students identified in general and/or specific academic areas (CSDPG & NAGC, 2015).

Though both states require the submission of district gifted education program plans, Colorado has a detailed auditing and approval process that includes site visits for data collection on a rotating system so that every gifted program is visited once every 5 years (ECEA, 2015). North Carolina does not evaluate district program plan implementation at this time.

Summary

Overall, survey results from the biennial State of the States report provide general data about current practices at the state-level across the United States. Colorado and North Carolina report following policy recommendations found in the literature to both mandate and fund gifted education in some form at the state level (CSDPG & NAGC, 2015). While both states report following these particular practices at the state level (i.e., mandates and funding), it is unclear how this translates into policy and practices at the district and school levels in those states. There is reason to suspect there may be some lack of alignment between district practices and state policy, based on the evidence from Callahan et al. (2013) who found several district administrators thought no state policy on gifted education existed in their states even though a state-level policy was in place.

Policy into Practice

Gifted education policies in states, districts, and schools differ from location to location, which may lead to similar variations in the interpretation and implementation of education policy. Many aspects of state policy are left up to districts and schools to determine, but Callahan et al. (2013) found that some local administrators lack accurate knowledge of state policy-specified or unspecified. Even if administrators have accurate knowledge of state-level policy, several researchers explain there are multiple ways of interpreting and implementing federal, state, and local policies in education (e.g., Coburn, 2001; Fullan, 2007; Spillane, 1998; Weatherley & Lipsky, 1977). Spillane (1998) found that different responses to state policy in schools were influenced by differences in context cues. Factors such as individual beliefs, local school culture, and level of support from national organizations act as a filter through which policy initiatives must travel through as implementation occurs (Coburn, 2001; Coburn & Russell, 2008; Spillane,

1998). Additionally, the overall social context and value system influences multiple aspects of policy creation and implementation such as the framing of policy problems and comprises regarding the allocation of resources (e.g. Coburn, 2006; Johnson, 1999).

Cross-level Alignment

The concept of policy "coherence," encompasses components of both fidelity of implementation of a policy as well alignment in policy and policy related messages across levels of implementation (Coburn, 2005; Fuhrman, 1993). In a study comparing policy coherence with student outcomes, Newman, Smith, Allensworth, and Bryk (2001) found that schools with stronger coherence attained higher gains in academic achievement scores. Additionally, DeArmond, et al. (2012) found that coherent messages across schools about high quality education and classroom practices led to an environment where teachers knew both what was expected of them as well as the steps to take toward meeting those expectations.

Coburn (2005) also supports the importance of coherence, concluding that alignment across system levels is a key factor in successful policy implementation. She found that, for instructional practice to change at the classroom level, coherence across system [e.g. administrators] and non-system [e.g. professional networks, school-level departments] actors and organizations is required (Coburn, 2005). Consistency across state, district, and local policies can influence the levels of coherence in education policy.

Many factors influence policy coherence. For example, Honig and Hatch (2004) found that district level interpretation of policy is a key component of the process of crafting coherent policy implementation. The researchers indicate coherence is really

more of a process where district administrators must negotiate state policy with their local support, resources, and mission (Honig & Hatch, 2004).

Another major challenge to cross-level coherence and alignment in education policy implementation is that policy is interpreted at the district, school, and classroom level, each by a different educator (e.g. Coburn, 2001). By the time a child in a classroom experiences an education policy, it has been filtered through multiple individuals, belief systems, and contexts that influence and shape how the policy is translated and experienced (Coburn, 2001). Also, the value individuals in positions of power place on high quality research may frame how policy is interpreted and moves through each system level (Coburn & Talbert, 2006). Both administrators' and teachers' belief systems influence policy implementation across and within districts and schools.

Individual Factors

Honig and Coburn (2008) indicate use of research-based or assessment-based evidence involves multiple sub-processes, unfolds in social interaction, and involves interpretations that are profoundly shaped by both individual and organizational pre-existing beliefs. It is important to keep in mind that while individual and group factors are highlighted separately in this outline, all factors are simultaneously influencing and interacting with each other. This interactive process of policy implementation is highlighted not because it a central focus of this study, but because it shows how "noise" in the system of policy implementation found in other fields may account for possible variations in policy implementation in gifted education.

Administrators. Administrators' level of policy related knowledge and other individual characteristics vary. For example, Coburn and Talbert (2006) investigated the

varying levels of belief in and support of high quality research-based practices in education. The researchers looked at four groups (top level district administrators, frontline district administrators (i.e., central office personnel who work below top level administrators and work directly with schools), principals, and teachers) across 8 schools in one district to compare their level of trust and research as well as their conception of what counts as high quality evidence (i.e. valid evidence of student learning). Results indicated that top-level administrators were most likely to express faith in research *and* hold a developed conception of what high quality evidence looks like. In contrast, school principals were the group that was most skeptical of research and also had an under-developed conception of high quality evidence (Coburn & Talbert, 2006).

Differing values across administrators within the same district can also influence policy implementation. In a study of the implementation of a state reading policy, Spillane (1998) found that district administrators independently interpreted and delivered guidance to teachers in their district about reading instruction. Administrators passed messages about the policy on to teachers that were heavily influenced by their prior knowledge about reading instruction. The administration's policy messages about reading distributed to teachers varied widely, and resulted in classroom instruction both within and across districts that was not aligned (Spillane, 1998).

Coburn (2006) found that administrators have more power than any other school personnel in influencing interpretation of policy. She conducted a one-year ethnographic investigation of the implementation of state reading policy. In this analysis, Coburn (2006) focused on how local actors frame policy problems during implementation. Results showed that all voices are not equal in negotiating meaning, as authority

relationships shaped all meaning. School leaders have greater (albeit contingent) authority, greater access to resources, and thus have more influence in efforts to define problems in a particular way (Coburn, 2006). Accordingly, school district administrators' own knowledge, values, and beliefs may have an even larger influence on policy implementation than other individuals in positions with less authority (e.g., principals and teachers).

According to CSDPG & NAGC (2015), only four states (of 39 reporting) currently require gifted education training or knowledge as part of administrative or school counseling training programs. Right now, we do not have evidence of whether *implementation* of gifted policy is occurring in alignment with *written* procedures. Given the potential high influence of administrators in policy implementation found in other areas of education research, a lack of knowledge about gifted education in administrators has the potential to negatively influence policy implementation in districts and schools. A more thorough investigation of gifted education policies at the local levels (district and school) is warranted.

Teachers. The individual values and beliefs of teachers can also influence the implementation of education policy. The results of research on whether the level of teacher support for a policy initiative is indicative of how closely a teacher will implement that policy as written in the classroom is mixed (e.g., Datnow & Castellano, 2000; Coburn 2001). In their study of the influence of teacher beliefs on fidelity of policy implementation, Datnow and Castellano (2000) found that, overall, individual beliefs did affect implementation in some ways, but were not necessarily indicative of fidelity to the new program policy. Coburn (2001) found the reasons teachers reported for not

implementing a new policy as written included, (1) the policy does not apply to their grade level, (2) the policy is too difficult for their students, (3) they are philosophically opposed to policy, (4) the policy is completely out of their realm of comprehension, (5) the policy doesn't "fit," (6) the policy is unmanageable due to time or other restrictions, (7) they do not feel they understand the policy enough to implement. The influence of a teacher's own values and beliefs is evident in each of the reasons Coburn (2001) found. For example, with (2), a teacher's perception of what is or is not challenging for their students is influenced by how he or she interprets various classroom interactions, which is influenced by beliefs about what level of achievement a student should be able to achieve.

Even if a teacher adheres closely to policy, underlying belief structures are not always impacted or changed (Coburn, 2005). Results of an investigation of the experiences of three teachers in the implementation of a state reading policy indicated it was rare for the process of policy implementation to make real changes in a teacher's underlying belief structure about reading instruction. Instead, teachers were more likely to adapt or accommodate new ideas into their existing belief structures, translating the policy in ways that made most sense to him or her (Coburn, 2005).

Similar to administrator and counselor training programs in the area of gifted education, only one state in the nation currently reports requiring course work in gifted education or specific competencies as part of the general teacher-training program (CSDPG & NAGC, 2015). Nevada currently requires "pre-service teacher candidates to take separate coursework in gifted education" (CSDPG & NAGC, 2015, p. 14). Many states do require certification or endorsement in gifted education to administer gifted

programming (19 out of 30 responding states), but ongoing professional development for gifted education professionals is only required in seven states (CSDPG & NAGC, 2015). Most general education teachers are not required to have background knowledge in gifted education, and we know from other areas of policy implementation that pre-existing beliefs influence policy interpretation (e.g. Coburn, 2005). We have reason to suspect that the implementation of gifted education policy may differ from written procedures, but it is important to learn more about gifted policy implementation to discern the nature of reported gifted education practices in districts and schools.

Group Factors

It is clear that individual beliefs and values influence policy implementation, but interactions and sense-making that happen at the larger group level are equally influential (e.g. Spillane et al., 2002).

Local climate (e.g. teacher/colleague networks). Groups of teachers create a climate of support or resistance that contextualizes policy initiatives. Researchers found that teachers spend time making sense of new policies and come to conclusions as a group whether to adapt, adopt, combine, or reject implementation of the new policy (Coburn, 2001; Spillane et al., 2002). Coburn (2001) found that teachers construct and reconstruct the multiple, sometimes conflicting messages, about policy within the local micro culture that is made up of their teaching colleagues.

Honig (2004) demonstrated that intermediary district level organizations (e.g., the curriculum department) influenced policy implementation. Results of her investigation of the implementation of four community-school partnership initiatives through intensive case studies of four intermediary organizations within one school district indicated that

the four organizations had their own contextual climate (i.e., micro culture) within the larger district, which in turn influenced how much intermediary organizations were able to assist the implementation process. Overall, it was clear that the intermediary organizations play an essential-role, but were ill-defined and needed more explicit roles and dedicated funding in order be more effective in facilitating reform implementation (Honig, 2004).

In one case, education policy was created in an attempt to foster and influence teacher interactions and in turn, positively influence policy fidelity (Coburn & Russell, 2008). Using an exploratory comparative case design, the researchers examined six teachers in four schools within two districts who were implementing state math policy initiatives. The authors found that aspects of the policy designed to foster more teacher interaction did not necessarily contribute to more interactions or more coherent policy implementation. Additionally, some evidence suggested this interaction policy actually may have had the counter effect of moving teachers further away from implementing the initiative with fidelity (Coburn & Russell, 2008).

Professional climate (e.g. national organizations). Local networks are not the only social groups that contribute to policy interpretation. Classroom teachers are more likely to support policy initiatives if national organizations in their field of expertise are also in support of the efforts (Spillane, 1998). Additionally, Coburn (2005) found that professional networks and their position and level of active support of a policy were a positive component of cross-level coherence. Teachers noted that receiving consistent messages from policy, professional organizations and administrators provided an environment where fidelity to the new policy was improved (Coburn, 2005).

Social Context & Problem Framing

Researchers in education policy indicate the importance of larger social and political influences on implementation fidelity and coherence (e.g., Malen, 2006). First, Johnson (1999) discusses the political climate surrounding the social problem of education policy. "Policy outcomes rarely reflect the full agendas of all competing interests. Compromise is the typical order of the day" (Johnson, 1999, p. 27). Johnson characterizes policy (especially in the form of legislation) as the result of a combination of best practice and social agendas, filtered through the lenses of a politicians with their own interests to promote (e.g., re-election). The result is always a compromise between these competing goals, and someone is always at the losing end of this negotiation (Johnson, 1999). In general, social problems are framed though an interactive process where individual frames are invoked, countered, and reframed until negotiation results in a way of framing the problem that allows diverse individuals to connect with it (Coburn, 2006).

Social context of gifted education. While evidence regarding the influence of larger social context does not yet exist in gifted education policy studies, a significant cultural tension (i.e. competing goals) does characterize the field of gifted education. The National Excellence Report (O'Connell Ross, 1993) characterized the historical and social context surrounding gifted education as ongoing tension between the "twin goals" of equity and excellence. Gallagher (2002) echoed this notion of contrasting goals. He argued that our society continues to value both equity and excellence, and one value takes the prominent position over the other off and on over time. In different amounts at different times throughout history, society advocates that everyone be treated the "same"

while at the same time, encourages and rewards individual success. Gifted education is at the crux of the tension between these two values. The outcome for gifted students in battles over scarce social resources that occur in the policy formation process is determined by the ability of advocates to match the goals of gifted education with the currently trending societal value (equity or excellence) (Gallagher, 2002).

Tannenbaum (2000) also described the historically tenuous relationship between gifted education and the rest of society. The author provides a thorough overview of how the climate for gifted education has shifted throughout history. He describes how historical events (e.g., the launch of Sputnik) have influenced societal interest in gifted education over time as well as the ebb and flow of support experienced in gifted education (Tannenbaum, 2000).

The push and pull relationship between equity and excellence not only occurs between the field of gifted education and society as a whole, but is also expressed between gifted education scholars within the field. A major example of the expression of this tension can be seen in the recent Subotnik, Olszewski-Kubilius, and Worrell (2012) proposal for a talent development oriented theory of giftedness and gifted education, along with subsequent reactions and commentaries by scholars in the field compiled in a special issue of the *Gifted Child Quarterly* (Grantham, 2012; Jung, 2012; Makel, Putallaz, & Wai, 2012; McBee, McCoach, Peters, Matthews, 2012; Plucker, 2012; Plucker & Callahan, 2012, Rinn, 2012; Robinson, 2012; Worrell, Olszewski-Kubilius, Subotnik, 2012; Ziegler, Stoeger, & Vialle, 2012).

In one commentary, Grantham (2012) contributes to the argument that the goal of *equitable* education is in direct contrast to outcome goals of excellence. He argues that

painting excellence as the ultimate goal of gifted education "white-washes" the discussion of gifted education and removes all possibility for equitable gifted programming. Grantham (2012) states,

> Gifted education cannot move forward and have a positive image among the masses until we do a better job of communicating our message and more fully considering the pluralistic nature of our society and the importance of proactively striving to achieve excellence, and perhaps eminence, without continuing to neglect equity. (p. 219)

It is clear from this excerpt that Grantham (2012) believes excellence is a dangerous goal for programs targeting gifted and talented students, and argues that instead, equity must be take center stage with excellence in every single theory about gifted education moving forward.

The social context surrounding the framing of problems in gifted education both within the field and within society in general continues to be tenuous. As recommended by scholars in policy implementation, the social context surrounding education policy must be taken into consideration in any policy-focused analysis since social context frames and shapes the development and implementation of all areas of education policy. The context surrounding gifted education at the societal level as well as the context within the field of gifted education frame both the creation of gifted education policy and the implementation of gifted programming. While the social context of gifted education is not a specific focus of this study, it is important to understand and consider how this tenuous relationship contributes to the framing of gifted education challenges and resulting policy decisions from development through interpretation and implementation.

Summary

There are major challenges in implementing policy with coherence in other areas of education and the social tension surrounding gifted education may create a more volatile environment for implementation than in those other fields. Policy coherence is influenced by policy alignment across system levels, but we do not yet know the extent to which gifted education policies are aligned across states, districts, and schools. In order to better understand the relationships between state, district, and school gifted policies, it is important to investigate the extent to which gifted education policy implementation is characterized by alignment between states, districts, and schools as well as between research, policy, and practice.

Research Questions

As a result of continued evidence of the existence of excellence gaps, we continue to face challenges in serving our most advanced students. In all areas of social policy, authorities recommend accessing and following evidence-based practices in policy development and implementation in order to face these challenges. Experts in the field of gifted education reached a consensus on the most up to date, evidence based-recommended practices found in the literature. However, evidence from recent surveys of state policy and practices in gifted education indicate there are several states, in differing aspects of policy, whose policies do not yet match up with these practices. Additionally, we see that many states leave the details of gifted education programming policies up to LEAs and that, in some cases, there is a major disconnect between the LEA and SEA. As a result of studies in other education fields, we find policy implementation is influenced by many factors and that social framing of education problems heavily influences the

policy environment. We do not know whether or how the sense-making process in general education aligns with gifted education, but the climate surrounding gifted education is tenuous. We can hypothesize that at least some challenges in writing and implementing policy exist in gifted education, but we do not have evidence of the relationship between gifted education policy, recommended practices in the field, and cross-level alignment.

Two states provided cases within which to examine the following questions:

Recommended practice

1. To what extent are state level gifted program policies aligned with current recommendations in gifted education?
2. To what extent are district level gifted program policies aligned with current recommendations in gifted education?
3. To what extent are reported gifted programming practices at the district level aligned with current recommendations in gifted education?
4. To what extent are reported gifted programming practices at the school level aligned with current recommendations in gifted education?

Cross-level Alignment

1. Is there evidence of alignment across state and district policy?
2. To what extent are reported gifted programming practices at the district and school level aligned with state and district policy?

CHAPTER 3: RESEARCH DESIGN

In partnership with the Institute for Education Sciences (IES) and the states of Colorado, North Carolina, and Florida, the National Center for Research on Gifted Education (NCRGE) is currently investigating successful practices in gifted education for serving typically underrepresented populations in gifted programs (e.g., minority, low-income, English language learners). I am currently working as part of the research team on this NCRGE study, and my current study falls under the umbrella of this larger study.

NCRGE Study

The NCRGE project titled, "Systematic Exploration of Gifted Programming: Seeking Promising Practices in Three States," began in the fall of 2014, and will continue for five years (contingent on availability of additional federal funding). This NCRGE study has two phases. The purpose of phase one is to identify and understand current gifted education practices in schools and districts where typically underrepresented populations of gifted students are particularly successful, as judged by higher performance math and reading achievement outcomes. In phase two, the research team will use the analysis from phase one to inform and implement a randomized control trial intervention designed to promote better outcomes for underrepresented populations of students in gifted programs.

The research team is currently in the process of collecting and analyzing data for phase one. Data collection and analysis includes the collection and coding of district gifted program plans (described in detail below), collecting and analyzing district and school level surveys, collecting and analyzing site visit data from high and low performing

schools, and analyzing state-level student achievement data.

Advisory Board

A key strength of the NCRGE study is the direct participation and advice of an expert panel of scholars with expertise in a variety of relevant fields. Members of the advisory board were selected because of their expertise in the areas of research design, early childhood education, language arts, gifted education, English language learners, and other typically underrepresented populations. This advisory board has and will continue to provide feedback at each stage of the data collection and analysis process. Access to the advisory board helps to ensure a high level of credibility and rigor in the conceptualization of each stage of the research project.

Theory of Change

As introduced in the literature review, the NCRGE study is guided by a theory of change based in the gifted education research literature. Given the focus of the NCRGE study is on typically underrepresented populations of gifted students, this theory of change specifically highlights practices that are likely to contribute to the success of students underrepresented in gifted programs—particularly in the areas of reading and mathematics. Some components of the theory are guided by empirical research results (i.e., research-based practices) while others are guided by theoretical literature only. Major components of the theory of change are: pre-identification, preparation, identification, delivery, intervention, and outcomes (see Appendix B for full theory).

Sample

The three states included in the NCRGE study were chosen based on the following criteria: (a) mandated identification and services for gifted students, (b)

availability of vertically scaled longitudinal state data on student achievement, (c) emphasis on involving higher numbers of underrepresented students with gifted program services, and (d) the willingness of state department gifted specialist to work collaboratively (Siegle et al., 2015). A total of 11 states matched these criteria, but only three of the states responded to the call for participation. The data in the NCRGE study comes from multiple sources, including all available district program plans, surveys of all districts and schools in each of the three states, and student achievement data for all current 7th graders from when those students were in third, fourth, and fifth grade.

The research team has analyzed NC district-level program plans from 2010-2013, CO district-level program plans from 2012-2016, current district and school survey data, and state level student achievement data from 2010-2013 to inform selection of sites for follow-up intensive case studies. First, we identified schools where typically underrepresented gifted students have high achievement scores and where there are high gifted identification rates for underrepresented students. Once those schools were identified, the team used the district program plans, district survey data, and school survey data to match the programming practices of schools who are doing with schools that have similar programming practices. As a result of this analysis, we chose a total of 24 schools, eight in each of the three states, to visit for completion of intensive case studies.

District Plans

The district-level gifted programming plans are a major component that contributes to the understanding of current practices in the states under examination. Both Colorado and North Carolina require submission of a district gifted program plan

annually. The district gifted program plans are the reports to the state department of education about what the districts are currently doing and/or what they plan to implement as their services for gifted students in their LEAs. In Colorado, the plans are regulated and approved at the state level. In North Carolina, the plans are submitted but do not currently have an approval process regulated by the state. A sample district plan for Colorado and North Carolina can be found in Appendices H and I, respectively.

We collected district gifted programming plans from 2012-2016 in the state of Colorado and from 2010-2013 in the state of North Carolina. Initially, we believed we would also be able to analyze Florida's version of this type of plan, the "progression plan." Upon closer examination, we found that many districts in Florida did not include their gifted education policies in this full school program status and improvement plan. Those that did include gifted education in their plans did not provide enough information to be useful in the final analysis. In total, the research team analyzed 178 district programming plans from Colorado, and 115 district programming plans from North Carolina.

Coding development. To analyze the district gifted programming plans, the research team created a 133 item coding system aligned with the theory of change guiding the NCRGE study. The coding scheme was developed as the result of several drafts and revisions, simultaneously for conceptual match and ease of use. First, the research team reviewed the theory of change and draft surveys for districts and schools to identify potential categories to be used for coding the program plans. Next, several researchers read the district plans of seven school districts and took note of how the information in the plans fit with the categories from the theory of change and surveys.

From this process, an initial matrix for coding was compiled and then tested by two additional readers. Readers with expertise in gifted education provided feedback in terms of consistency, clarity, and completeness.

In December 2014, the research team agreed on a rating scale for each of the items as well as questions for collecting specific information on variables such as the number of full-time gifted education staff in a district. We then piloted this draft of the coding scheme using three North Carolina and three Colorado district program plans. As a result of this pilot coding, we discovered the program plans often did not provide enough detail to determine placement on a rating scale or on other scales requiring a frequency or numeric count. We determined that we were limited to a simple "present" or "not-present" coding scheme.

We conducted coder training on this nearly final version of the coding scheme in March 2015 (described below). As a result of the training process, we provided clarifications and extra descriptions for several items and finalized the coding scheme. Example items from the final scheme include "Pull-out classes (students leave regular education classroom and work with other identified gifted students in a separate location)" and "Identify students for general intellectual ability across subject areas (i.e., a student is either identified as gifted or not)." Items are coded based on whether the indicated item is present (1) or not-present (0). The full coding scheme can be found in Appendix D

Coder training. All nine coders met to complete training on the district plan coding scheme. Coders consisted of both professional researchers and graduate students in the field of gifted education. First, the scoring team discussed each of the items and

any lack of clarity that still lingered. After we completed minor clarifications, each member of the team coded one North Carolina plan independently. We entered all scores into a common matrix and discussed any items where there was a large discrepancy across coders. Again, minor explanations were added for clarity and consistency. For example, we determined that a "set of standards" or "statements of goals and objectives" should not be interpreted as cues meaning a district was implementing a specific curriculum.

Next, the coding team coded one Colorado plan independently. Again we entered all scores into a common matrix. This time, the nine raters achieved agreement on 82% of the items in the coding scheme. This process resulted in the addition of further clarifications on items. As the final component of training, the scorers rated one final North Carolina and one final Colorado district plan independently. We achieved inter-rater agreement for the NC plan (85.3%) and the CO plan (92.3%) across all nine raters. While we attained good overall agreement, there were still a few individual items where agreement was low. We coded two additional plans and conducted a follow-up training conference call in order to discuss final clarifications with the coding team prior to moving forward with the scoring process.

Coding. To code the district plans and ensure ongoing agreement across raters, we used the following process. Each rater coded 10 district plans independently. After every tenth plan, we randomly chose a district plan that was then coded by all nine raters on the team. The criterion for acceptable agreement was set at a minimum of 80% inter-rater agreement before coding could continue. Throughout the process of coding the 293 total district plans, the team achieved above 80% inter-rater agreement during each ten-

plan iteration. Inter-rater agreement for all coded plans are reported in Appendices D and E.

District and School Survey

The district and school surveys are focused on the current gifted programming at both the district and school levels. The District Level Survey was sent to all district administrators with responsibility for gifted education, and the School Level Survey was administered to every public school containing a fifth grade class in the three states. The surveys both underwent an extensive review and revision process as part of the NCRGE study. First, the research team created a survey draft based on the NCRGE theory of change. The research team then conducted cognitive interviews with a small number of district level administrators. We refined the wording of several of the questions based on the results of these interviews. We then proposed this refined survey draft to the advisory board for detailed feedback and revision suggestions. After this revision, we completed a pilot test of the survey to a sample of 100 district and school personnel across all states except Colorado, North Carolina, and Florida. The final district and school surveys are located in Appendix G and H respectively.

Advisory board feedback. In November 2014, the research team presented the advisory board with an early draft of the district and school surveys. The advisory board provided detailed feedback and suggestions on the content of the surveys, the language used in the questions and responses, the general format of the surveys, and the logistics of the upcoming revision and distribution process. Suggestions included minor rewordings of questions, shortening the surveys by collapsing some overlapping questions and creating categories, and performing cognitive interviews with individuals in each state to

ensure language used was relevant to their context.

Cognitive interviews. In response to suggestions from the advisory board, the research team completed two interviews with the state directors from Colorado, Florida, and North Carolina. These conversations ensured the language on the surveys matched the language used in each state to describe the intended constructs. Once these revisions were incorporated, we conducted five cognitive interviews on the school survey with school level personnel and three cognitive interviews on the district survey with district level administrators. Based on recommendations by Willis (2005), the cognitive interviews ensured (a) the directions for the completing the online surveys are clear, (b) the survey item stems are understood as intended in the item construction, (c) the response options are accurately interpreted, and (d) the data gleaned from the survey administration reflect the information about which we are inquiring, while minimizing construct- and content-irrelevant information. The research team incorporated further revisions to the surveys based on these interviews.

Pilot survey. The next step toward survey distribution was to complete a pilot study. In this case, a pilot survey was sent to ensure the electronic survey website was operating properly as well as to ascertain any aspects of survey content or distribution that were challenging. We piloted both surveys by sending an email request for participation to multiple listervs targeted to gifted education personnel. Confratute attendees (a summer program for educators in gifted education conducted annually at the University of Connecticut) from 2000-2014, past EduFest participants (an annual conference held in Idaho addressing best- practices in gifted education), and some members of the National Association for Gifted Children (contacted through listervs for

various association networks) received the request for participation. We excluded individuals in Colorado, Florida, and North Carolina from the pilot study. For the district pilot survey, a total of 100 district personnel participated. A total of 148 teachers participated in the pilot school survey. The school survey is the longer of the two surveys, and the median amount of time to complete the school survey was 11.2 minutes, the interquartile range was 7.7 to 18.6, and 80% of respondents were able to finish the survey in less than 20 minutes.

Initial survey deployment. For full distribution of the survey to the study population, the NCRGE subcontracted the dissemination and collection process to the University of New Hampshire Survey Center. The Survey Center uses Qualtrics to assist in electronic survey distribution and follow-up requests to non-respondents. The Survey Center alerted district administrators of the incoming survey on April 15, 2015. One week later, the University of New Hampshire Survey Center distributed the district survey by email. Then, one week after the district survey was sent, the school surveys were deployed.

After this initial survey data collection attempt, the research team found that not quite 30% of the emails sent had been opened, but of those that opened the email, over 50% completed the survey. At that time, the response rate for the district survey was 58% (207 out of 357) and the response rate for the school survey was only 8.7% (374 out of 4,302). The Survey Center sends at least three follow-up emails to each non-respondent who does not opt out of the survey and will follow up via phone call with each non-respondent up to 20 times.

Follow-up survey deployment. The NCRGE received additional advice on

survey data collection from the advisory board at the June 2015 advisory board meeting. The board suggested that instead of continuing to follow-up with non-responders throughout the summer, a re-launch of the survey should be scheduled when target participants return for the new school year. As a result, a second survey deployment plan was initiated in Fall 2015.

We employed several strategies to raise response rates to the survey for the second deployment. One of the primary investigators (Dr. Del Siegle) attended the state gifted conferences in both Florida and Colorado. At the conferences, Dr. Siegle presented information about the NCRGE study and encouraged all in attendance to look for the survey in their inboxes and to encourage school-level personnel to look out for and complete the surveys.

In order to ensure the surveys would be sent to appropriate contacts during the second survey launch, we updated all contact information for both district and school level administrators across the three states using school websites and telephone contacts. This time, in addition to emails, we also sent personalized letters via U.S. mail from the state education departments to all districts and schools who had not yet responded. The personalized letters alerted the districts and schools to the existence of the survey, provided the link to the survey, and sought to provide an additional sense of importance of the study to participants. District and school surveys were all re-launched prior to November 1, 2015.

As of the most recent report at the end of March, the research center has collected complete surveys from 42% (1,806 out of 4,302) of the schools and 84% (302 out of 360) of the school districts across the three study states.

Current Study

For my study, I drew from three separate, but linked, layers of data in two of the three states from the NCRGE study. These two states were chosen for three reasons. First, the two states both require submission of district gifted education program plans every three years. In order to answer questions about cross-level alignment, I required access to data on state policy, district policy, district surveys, and school surveys. Second, results of a recent investigation indicated similar quality of gifted education policy inputs across the two states, yet different results or outputs for gifted students (Plucker et al., 2015). Third, the state policies contrast in whether state or local control takes precedence, as well as the extent to which the state provides guidance to LEAs in designing and implementing gifted programming. In Colorado, for example, there are extensive resource materials and guidelines provided at the state level to guide gifted program development as well as a specific plan to monitor and audit district implementation of gifted programming (Exceptional Children's Educational Act, 2015). North Carolina, in contrast, provides only general guidelines to local school divisions, and, while the state requires completion and submission of local district programming documentation, no system for monitoring or review is currently in place (1996, 2nd Ex. Sess., c. 18, s. 18.24(f)).

Two states provided cases within which to examine the following questions: Recommended practice alignment:

1. To what extent are <u>state</u> level gifted program policies aligned with current recommendations in gifted education?

2. To what extent are district level gifted program policies aligned with current recommendations in gifted education?
3. To what extent are reported gifted programming practices at the district level aligned with current recommendations in gifted education?
4. To what extent are reported gifted programming practices at the school level aligned with current recommendations in gifted education?

Cross-level Alignment

1. Is there evidence of alignment across state and district policy?
2. To what extent are reported gifted programming practices at the district and school level aligned with state and district policy?

Research Design

I used Qualitative Document Analysis (QDA) (Altheide, 1996), sometimes referred to as ethnographic content analysis, to answer the research questions in this study. Both sets of research questions are about alignment, either across different education system levels or between recommended gifted education practices and reported practices. I employed a systematic qualitative document analysis of state and district policy documentation, and district and school survey results in order to ensure I captured the complex nature of policy implementation and recommended practices in gifted education as best as possible.

As part of this thorough qualitative approach, I also used the coding tool developed as part of the NCRGE study to provide an additional component of information about the district plans in each state. Though the literature reviewed in both gifted education and policy implementation suggested the complexity of alignment

cannot fully be understood by the use of a simple "evident" or "not-evident"" data analysis process, coding the district plans in this way provided an additional lens to examine the district plans that the qualitative data analysis process does not typically include.

One example of how using this coding tool adds to the qualitative analysis process is in the area of identification. Some aspects of identification processes can be interpreted in different ways depending upon context, as multiple criteria for identification can serve as multiple barriers or hurdles a student must jump through in order to be identified, while multiple criteria for identification can also serve to provide a coherent profile of a student to better inform identification processes. One of these practices is a recommended practice (using multiple pieces of information in identification) and one is not (creating multiple barriers to identification); yet it would be difficult to ascertain what specifically is occurring in a particular district with *only* a "present" or "not-present" criteria (McBee et al., 2014). Though the tool does not provide enough information on its own, noting the presence (or lack of presence) of the NCRGE theory of change criteria using the tool provided an additional layer of information to analyze the complexities of gifted education policies and practices.

Sample

In order to ensure I could answer the research questions, it was important that cross-level data was available for analysis. Therefore, I first eliminated districts in the two states who did not complete the survey as part of the NCRGE study. Next, I systematically eliminated any of those districts that did not have at least one completed school survey from their district.

Drawing from the resulting districts that both completed the district level survey as well as at least one school survey, I used purposive sampling to obtain a sub-sample of school districts to examine in my study. Based on the review of the literature, it is clear that relative school and school district size as well as school resources (e.g., financial) likely have an influence on the quality of gifted education programming occurring in LEAs (Baker, 2001a; Kettler et al., 2015). I selected a sub-sample of districts based on the following criteria.

Low and high resource. For the purpose of this study, *low resource* versus *high resource* school districts were initially categorized on the basis of an actual high to low listing of percentage of students receiving free/reduced lunch at all school districts in each state. Students in the highest (3rd and 4th) socioeconomic status quartiles were significantly more likely to attend schools offering gifted education programs (odds ratios of 1.227 and 1.148, respectively) (Baker, 2001a); therefore, districts from each end of this extreme were targeted for analysis. Using the most recent public student data from each state, I listed each district (separately for each of the two states) from high resource to low resource in order to select and include the highest and lowest resource districts from each state. I selected two districts from each category in each state, resulting in a total of two high resource and two low resource districts per state, and four high resource and four low resource districts overall.

Small and large size. According to Baker's (2001a) findings, gifted students in schools with a student population of 400 or more have significantly more access to gifted education programming than students in schools with a population of 50 or less. Additionally, researchers found that larger school districts of 50,000 + students are more

likely to have access to a full-time gifted coordinator (Callahan et al., 2003). Therefore, it was important to ensure examination of districts from each side of this extreme (both small and large school districts) to investigate policy alignment differences that might happen as a result of this known variation. Again, I used the most recent public state student data to list district size as indicated by total k-12 student population from highest to lowest (in each of the states, separately) in order to select districts with most and least numbers of students for further examination. I selected two districts from each category in each state, resulting in a total of two large size and two small size districts per state, and four large size and four small size districts overall.

Overall sample. In choosing from the listing of large/small and high/low resource districts, I prioritized district size (total number of students) over district free-reduced lunch percentages. I made this decision based on the potential influence of extremely large or small sizes of school districts, regardless of district resources (Baker, 2001b). Essentially, I prioritized smaller district size over free-reduced lunch percentage in the "small size" quadrants, and larger district size over free-reduced lunch percentage in the "large size" quadrants.

The above decision process was used for each quadrant except North Carolina, Quadrant 2 (Low resource, Large size). In the district that met the criteria, there is a large, university based, gifted education research program and presence in the local district suggesting it is likely an outlier school district. I chose to select the next largest district in the category to eliminate any influence the university program might have on local gifted education program that would be unique only to that district, and not necessarily representative of a typical school district in that category.

The final sample included eight school districts in each of the two states, for a total of 16 school districts overall (See Tables 8-11).

Table 7

Distribution of districts for purposive sampling, overall

	Low Resource	High Resource
Small Size	4	4
Large Size	4	4

Table 8

District characteristics, Large size, low resource

	Total students	Free-reduced lunch %	Locale
District 1	90,234	68.5	City: Large
District 2	42,249	65.5	City: Large
District 3	49,860	63.8	City: Midsize
District 4	23,320	62.6	Town: Distant

Table 9

District characteristics, Large size, high resource

	Total students	Free-reduced lunch %	Locale
District 5	66,896	12.0	Suburb: Large
District 6	25,063	13.5	City: Large
District 7	152,089	36.7	Suburb: Large
District 8	41,296	36.3	Suburb: Large

Table 10

District characteristics, Small size, low resource

	Total students	Free-reduced lunch %	Locale
District 9	648	91.0	Rural: Remote

District 10	1,290	76.7	Town: Remote
District 11	573	80.6	Rural: Remote
District 12	936	76.9	Town: Distant

Table 11

District characteristics, Small size, high resource

	Total students	Free-reduced lunch %	Locale
District 13	896	21.7	Rural: Distant
District 14	356	25.8	Rural: Remote
District 15	3,853	37.6	Rural: Distant
District 16	1,219	43.0	Town: Distant

School selection. In half of the selected school districts (8 out of 16), there is only one elementary school or only one school in the district returned the school survey. In those cases, that school was selected for analysis. In the eight other school districts, most of them in the large category (6 of 8), more than one school in each district responded to the school survey. Since I already took size into consideration in the sampling procedure by prioritizing it over resources in district selection, I chose to prioritize resources in the school selection process. I selected two schools from each school district that were similar in size and differed as much as possible in free-reduced lunch percentage. Characteristics of the final selection of schools are below (Table 12).

Table 12

School sample for districts with more than one school survey

	Total students	Free-reduced lunch %
School 1a	699	12.3
School 1b	639	93.6
School 3a	414	31.6
School 3b	588	91.0

School 4a	589	59.4
School 4b	442	87.8
School 5a	550	3.3
School 5b	556	19.1
School 6a	388	10.1
School 6b	442	34.4
School 7a	788	13.8
School 7b	789	85.9
School 8a	691	32.2
School 8b	692	99.3
School 15a	236	57.2
School 15b	243	61.7

Data Collection

State policy. First, I collected documents related to state policy from the Colorado and North Carolina state department websites. Documents included state legislation, guidebooks, resources, references, and documents that were created by the state to guide local gifted program planning development. I specifically obtained legislation relating to gifted education in each state from its respective state department of education websites. Each state also has supplementary material publically available, including a detailed LEA audit program plan from Colorado and programming standards that should guide LEA development from North Carolina. After the initial state department website search, I confirmed with each state director that I have all available policy documentation from her[1] state.

District plans. Both Colorado and North Carolina require submission of a district gifted program plan annually. The district gifted program plans are the reports to the state department of education about what the districts are currently doing and/or plan to implement in their services for gifted students in their LEAs. In Colorado, the plans are

[1] Both of the state directors of gifted programs are female.

regulated, approved, and reviewed on-site at the state level. In North Carolina, the plans are submitted but do not currently have an approval and on-site review process regulated by the state. A sample district plan for Colorado and North Carolina can be found in Appendices H and I, respectively.

I collected all of the most recent district plans from Colorado and North Carolina. The current plans for Colorado cover years 2012-2016 and were already collected as part of the NCRGE study. In the case of Colorado, I confirmed the district plans I already have from the NCRGE match with the current plans available for download through the state department of education website. The most recent plans for North Carolina cover 2013-2016 and were available for download through the state department of education website. I downloaded the current North Carolina plans for analysis.

District and school survey. The survey data for the current study was taken directly from the data collected in the NCRGE study. Data collection for the second round of survey data collection was completed in February 2016. Information collected in the survey included responses to items that aim to solicit information about the gifted programming practices currently being implemented in the districts and schools.

As described earlier, district-level surveys were created based on the NCRGE theory of change (which includes aspects of the NAGC Standards as well as additional recommended gifted education practices) as part of the NCRGE study. The district level surveys were distributed to district level administrators responsible for gifted education programming in every district in the three NCRGE study states (n=360). For the states in my study, the survey was sent to 293 school districts in Colorado and North Carolina.

The school-level surveys were also created based on the NCRGE theory of

change (which includes aspects of the NAGC Standards as well as additional recommended gifted education practices) as part of the NCRGE study. School surveys were distributed to administrators, typically the school building principal, with the request to forward on to someone in the school responsible for gifted education programming if the principal did not feel knowledgeable to answer the questions. All elementary schools in the three NCRGE study states (n=4.302) received the school survey. For the states in my study, the survey was sent to 893 schools in Colorado, 1,376 in North Carolina.

Example items from the district level survey include, "Which of the following statements describes your district's use of acceleration as a service delivery option for your elementary school gifted students? (Check all that apply.)" and "Which statements describe your district's decision making process regarding selecting and placing students in the gifted program? (Check at least one option.)." Example items from the school survey include, "Is there a gifted education curriculum for reading/English language arts that is separate from the regular education curricula offered at your school?" and "Do gifted students at your school attend homogeneously grouped (by ability or achievement level) classes?" Survey items on the district- and school-level surveys are not parallel, and therefore could not be used to make direct comparisons across the district and school levels. However, items cover some overlapping areas and responses will provide useful data as part of the qualitative analysis. Full district and school level surveys can be found in Appendix G and H, respectively.

Data Analysis

To answer the research questions guiding this study, I primarily drew from the twelve step process for Qualitative Document Analysis to analyze the state policy, district program plans, district level survey, and school level surveys for both cross-level alignment as well as recommended practice alignment.

The process of Qualitative Data Analysis (QDA), as described by Altheide (1996), includes the following 12 steps: (1) Pursue a specific problem to be investigated, (2) Become familiar with the process and context of the information source and explore possible additional sources of information, (3) Become familiar with several examples of relevant documents, not particularly the format and select a unit of analysis, which may change, (4) List several items or categories to guide data collection, (5) Test the protocol by collecting data from a few documents, (6) Revise the protocol and select several additional cases to further refine the protocol, (7) Arrive at a sampling rationale and strategy (most likely theoretically based), (8) Collect the data using preset codes, if appropriate, and many descriptive examples. Keep the data with the original documents, but also enter data in a computer-text-word processing format for easier search-find and text coding. Midpoint analysis (about half to two-thirds through) examine data to permit emergence, refinement, or collapsing of additional categories. Make appropriate adjustments to other data, and complete data collection, (9) Perform data analysis, including conceptual refinement and data coding. Read notes and data repeatedly and thoroughly, (10) Compare and contrast "extremes" and "key differences" within each category or item. Make textual notes and write brief summaries or overview of data for each category, (11) Combine brief summaries with an example of the typical case as well as the extremes, and illustrate from the protocol(s) for each case. Note surprises and

curiosities about these cases and other materials in your data, (12) Integrate the findings with your interpretations and key concepts in another draft. These steps are considered more to be guidelines or a general framework for the types of tasks that might occur at each phase of a QDA and should not be thought of as a stringent steps to be followed in order or inflexible in any way (Altheide, 1996).

Prior to the proposal for my study, steps 1-3 and step 7 were completed. I identified a specific problem and associated research questions to be investigated, I became familiar with the process and context of the information source through gathering data for the review of literature and as part of work on the NCRGE study (state policy, district plans, district surveys, and school surveys), and I became familiar with several examples of relevant documents through work on the NCRGE study. I also devised a theoretically based sampling strategy supported by research in gifted education policy. I selected documents for analysis at the district-level, based on resource and district size (as described above).

Steps four through six were completed during the open coding stage (described more thoroughly below). I began by reading a small portion of the data corpus, identifying a few codes that emerged, tested those codes on the next element of data, while revising and adding codes throughout. Steps eight and nine align with the axial coding stage, where I used codes developed in the open coding stage to read all data and categorize chunks of information into those codes. These two steps were iterative, which means I used the codes developed on a portion of the data, checked to make sure the codes were appropriate and comprehensive, and considered revising the codes. If at any time revisions to codes were necessary, I then returned to data coded under the previous

codes to revise and recode under the new system. A final coding protocol emerged at the end of the axial coding stage, after stages eight and nine were complete.

Stages 10 and 11 aligned with the selective coding process. Here, I began to look for patterns that emerged across the codes and collapsed, combined, or related the codes. I examined confirming and disconfirming evidence for each code and each pattern, and I noted key differences or extremes in the data. The results of this part of the data analysis led to stage 12, where I drew conclusions with the support of data and compiled results of the analysis into a report.

Altheide recommends drawing from multiple sources to inform protocol and coding development. According to Altheide (1996), a protocol is "a list of questions, items, categories, or variables that guide data collection from documents (p. 26). Many of the steps for Qualitative Document Analysis recommended by Altheide (1996) align with other methods in qualitative analysis. For example, Miles, Huberman, and Saldaña (2013) recommend the use of analytic reflection and memoing throughout the data analysis process, which closely aligns with Atheide's (1996) steps 10 and 11 where the researcher is asked to summarize, reflect, and note surprising themes emerging from the data.

Primary coding strategy. I drew from coding techniques typically used in grounded theory approaches as described by Strauss and Corbin (1998). I did not attempt to create a fully developed grounded theory as a result of my analysis (which would require several additional pieces of data such as observations and interviews). Instead, the purpose of this study was to understand the extent to which gifted programming is aligned with recommended practices and is coherent across education system levels. The

grounded theory coding approach was useful to answer these questions without bringing pre-conceived ideas to the data.

The coding method described by Strauss and Corbin is aligned with the steps recommended by Altheide (1996), as it is an iterative coding process that allows for multiple readings of the all collected data. I analyzed the data corpus (state policy, district plans, district survey, and school survey) for general themes. I chose to draw from the grounded theory qualitative coding methods because of the complex nature of gifted education programming and the lack of previous systematic inquiry into gifted education programming to guide this analysis. In answering the research questions guiding this study, I hoped to provide a basis on which we can begin to understand the nature of gifted education program policies and practices across education system levels.

Open coding. In Strauss & Corbin's (1998) coding model, the first stage was open coding. At this stage, the goal was to read all data at a very minute level (e.g., line-by-line), identify any portions or statements relevant to the research question, and assign each chunk a code or category. For my study, this meant I read all state policy documents, district program plans, the district survey, and school surveys from the 16 identified district very carefully. I began to assign codes to text and survey responses, keeping in mind the context of recommended practices and cross-level alignment. In this initial stage, I was not looking specifically for recommended practices or cross-level alignment. Instead, the goal was to observe all programming policies and practices that emerge from the data and begin categorizing these into codes.

Axial coding. Using the codes developed in the open coding process, I then moved to stage two and begin axial coding. This type of coding is where the researcher

returns to the full data corpus and identifies any additional data that may fit under the created codes. At this stage, the particular codes are not yet undergoing a reduction or analytic process by the researcher. For this stage in my study, I returned to all documents (state policy, district plans, district survey responses, and school survey responses) and searched for additional material that may fit under the codes that emerged as part of the open coding process. I did not yet begin to collapse or categorize the codes, as the purpose of this stage was to ensure all possible data was included under each code.

Axial coding continued until I reached the point of saturation (Strauss & Corbin, 1998). This means that no new information seemed to be emerging from the data upon further reading, even when using constant comparative methods to look for disconfirming cases of the codes. According to Strauss and Corbin, "Saturation is more a matter of reaching the point in the research where collecting additional data seem counterproductive; the "new" that is uncovered does not add that much more to the explanation at this time (1998, p. 136). During the axial coding stage, I not only looked for additional evidence of each code, but I also sought out data (i.e., words or chunks of information) that disconfirmed or demonstrated the opposite of each code.

At the end of this stage, a second reviewer with expertise in education and qualitative methods, but not gifted education, reviewed the emerging coding materials. The reviewer examined the data for two things. First, to confirm whether all material was captured in the axial codes. Second, to confirm whether saturation of data was reached.

Selective coding. Once axial coding was complete and reviewed, I moved on to stage three, which was where I began looking for patterns and relationships among codes. This process is called selective coding, and is the stage in coding where the research

begins to integrate and refine codes into themes (Strauss & Corbin, 1998). I began to ask myself questions like, "Are there any codes that can be collapsed or have overlap?" and "Are there any patterns or relationships between codes I am seeing?" An additional aspect of selective coding is that, once patterns began to emerge, I looked for both confirming and disconfirming evidence of each of the proposed relationships or themes amongst codes developed in the previous two stages. After these processes were completed, the final analysis included a narrative that identifies the major themes found through the coding along with supporting data for each (Strauss & Corbin, 1998). Since the research questions for this study focus on the alignment between policies and recommended practices, the final narrative focuses on the alignment analysis rather than emerging themes themselves.

Throughout the coding process, I used the qualitative data analysis software, Dedoose, to compile and work with codes. This strategy was especially relevant to this analysis, since the final data analysis task involved comparing themes based on various alignment criteria (i.e., recommended practice and cross-level comparisons). The qualitative data analysis software allowed for more streamlined disaggregation of the data by level and theme when I reached this step in the analysis.

At the end of this stage, the second reviewer with expertise in education and qualitative methods, but not gifted education, also reviewed the concluding themes. The reviewer examined the data, resulting themes, and support for the themes to confirm whether the conclusions reached were credible.

Validity, Credibility, and Trustworthiness. Twice during the coding process I had an additional reviewer with expertise in qualitative data analysis, but not gifted education,

evaluate the quality of the emerging codes. The additional reviewer performed her task at the end of the axial coding stage as well as after selective coding was completed. Because of the potential for researcher bias related to the knowledge of recommended best practices in gifted education, the additional reviewer with expertise in qualitative research methods and an unrelated area of education (i.e., instructional technology) was a valuable addition to the analysis. This is one way I ensured the analysis was valid, credible, and trustworthy.

Additionally, the analysis was performed to the point of data saturation (as described above) (Strauss & Corbin, 1998). This means that, if the additional qualitative data analysis reviewer or I continued to uncover new information and new codes and we could not reach strong conclusions based on the data already collected, additional districts from each category would be selected for inclusion in the analysis. At the time of review, we agreed the data had reached saturation.

Another element of the research design employed that ensured validity was the process of checking for both confirming and disconfirming cases throughout the iterative coding process. Both the additional researcher and I performed this task specifically during the axial and selective coding stages. I also performed this task throughout each of the coding phases, recording these steps as they occurred in analytic memos (described below).

Secondary coding strategy. I used the coding scheme developed as part of the NCRGE study as a secondary or augmenting element of the data analysis process. In the NCRGE study, the coding tool was used to provide information about district program plans as part of the process of matching school districts with similar programming

practices. In my study, I used the codes resulting from the application of the coding tool for the district program plans as an additional element of the corpus. The results from the coding scheme were not used on their own to make assertions or reach conclusions about the data. Instead, I considered the codes as an additional piece of information that added to my understanding of the data as a whole.

The current district plans from Colorado (2012-2016) were already coded using the NCRGE district plan coding scheme as part of the larger study. Inter-rater agreement across all districts in Colorado are reported in Appendix E. I, along with an additional member of the original nine-member coding team, coded the current district plans from the sub-sample of North Carolina (2013-2016) school districts selected for this study. We double coded 5 out of 8 of the newly coded plans, checking inter-rater agreement after every other coded plan to ensure agreements stayed over 80% throughout the coding process. All agreements were 80% or above on the five double-coded program plans.

A major strength of including the coding tool as part of the analysis was that it provided a framework for examining the data from a differing perspective. The inclusion of this more objective, validated coding tool provided an additional lens through which to examine the multi-faceted policy and practice data. Instead of being incorporated as a stand-alone analysis checklist, the results of the coding scheme for each school district were used to augment the qualitative data analysis. I used the coding from the district program plans as another piece of data to confirm or disconfirm evidence of recommended practices when performing the alignment coding procedure (described below).

Analytic memoing. Throughout the reflexive and iterative data analysis process, I

engaged in the practice of analytic memoing (Miles et al., 2013). This aligns with the recommendation from Athleide (1996) to combine codes into brief summaries including reflection, commentary, and contrasting examples. In these memos, I took detailed notes of emergent ideas, anecdotes, and reactions to the data as I read it through multiple times throughout the iterative process. Analytic memos included researcher created vignettes or illustrations of semi-formulated conceptions of the themes emerging from the data corpus (Miles et al., 2013). Memoing and/or journaling is an important component of the qualitative research process, which provides both an audit trail to track back through the analytical process the researcher used as well as an additional document to include in the data corpus itself (Miles et al., 2013).

Comparison strategy. In the initial coding process, I did not use knowledge of the NAGC standards and NCRGE theory of change to make quality judgments about the data I found (see section below for research as instrument statement). Instead, I just determined what was occurring and what was not occurring in the data, and the themes and categories that emerged from that analysis. After the initial coding strategy was completed and verified by the additional qualitative reviewer, I then examined the data with respect to alignment.

To answer the first set of research questions about alignment with recommended practices in gifted education, I used the framework of the NAGC Standards to guide the data comparisons. Using the constant-comparative method (Strauss & Corbin, 1998), I checked for confirming and disconfirming evidence of criterion under each category of the NAGC Standards reviewed, in relation to the emergent themes. I used the qualitative data analysis software, Dedoose, to assist in the comparison process so that the labeling

of codes was easily accessible and comparable between standards and resulting data.

Comparing emerging themes to NAGC standards categories to examine alignment did not work as originally intended. Instead, it made more sense to examine all of the data compiled under each of the axial codes, compiled in Dedoose, to each of the NAGC standard criteria. This worked especially well since the district program plans were organized in the same way state policies were and also, the way the NAGC standards were categorized for analysis. For example, one of the axial codes that emerged from the data was "identification." Thus, I then examined each excerpt from each district plan that was coded under identification for confirming and disconfirming evidence of each criterion.

To answer the second set of research questions, I used the constant-comparative method (Strauss & Corbin, 1998), to check for confirming and disconfirming comparing the themes that emerged at each system level to each other. I compiled the themes disaggregated by system level. Again, I used qualitative data analysis software to assist in the comparison process so that the labeling of codes was easily accessible and the story of cross-level alignment could emerge.

After both of the recommended practice and cross-level alignment comparisons were complete, an additional reviewer with expertise in gifted education performed the same comparison process. Discrepancies between my conclusions and the additional reviewers' conclusions were resolved and noted in analytic memos. Once final codes and alignment was agreed on and resolved, the final report was written in terms of overall themes as well as recommend practice and alignment descriptions.

Table 13

List of documents reviewed

Document	Characteristics
State Policy	• Legislation • Supplemental Resources
District Program Plans	• CO: 2012-2016 • NC: 2013-2016
District Survey	• Questionnaire responses
School Survey	• Questionnaire responses
NCRGE Coding Scheme	• Present/Not present codes
Analytic Journal	• Researcher reflection

Researcher as instrument. My study employed a qualitative research design and I as the researcher played a key role in the analysis, so it is important to denote any biases and background characteristics that may influence the results and conclusions of the study. First, my interest in this topic began after several anecdotal observations about state and district policies when working on the NCRGE study. I noticed there seemed to be several inconsistencies, and became frustrated that we as a field did not seem to have a good sense of how what we recommend as best practices are being translated through the levels of the education system. Second, I study gifted education and am quite familiar with both the NAGC standards and NCRGE theory of change elements. Though I know them and they were in the back of my mind, the standards and theories were not used to categorize or guide the analysis. It is important to note, however, the potential for this knowledge to influence both the data analysis and conclusions. Steps taken to ensure validity, credibility, and trustworthiness described above help to ensure these biases were not influential on the analysis.

CHAPTER IV: RESULTS

As indicated in the literature review, we know that both Colorado and North Carolina currently have state policies that mandate identification and services for gifted students, a state gifted education director with the sole responsibility of gifted education, and a requirement for the submission of program plans delineating the nature of gifted education programming in each local education agency. In the following sections, I explore these policies and practices both within each state and provide overarching findings about practices across both states.

State Context

Colorado

There is a wide range of district contexts in Colorado, with more than 60% of the counties classified as rural (Colorado Department of Education Gifted Education Unit [CDEGEU], 2015). Some counties in Colorado (23) are so rural they are classified as "frontier," which means they are among the most rural and remote places in the United States (CDEGEU, 2015, p.5). As a result of this diversity, Colorado's local education agencies are referred to as "Administrative Units" (AUs) which sometimes are made up of a single district and sometimes represent a collection of school districts. In the case of larger school divisions, the AU may consist of a single school district. For smaller divisions, the AU may be a collection of a set of these districts with a single AU who oversees all the districts in a collective agreement. Collections of districts within one AU

are referred to as a Board of Cooperative Services (BOCES). In my study, all four small-size school districts are members of an overarching BOCES AU.

Though services for gifted children have been allowed by state policy in Colorado for several years, the mandate for services for gifted students began with the passing of HB 07-1244 less than ten years ago, in 2007. This bill changed the language in state special education policy (ECEA, 2015) that indicated AUs "may" also provide special services to gifted students to requiring AUs to provide services, as best as possible, indicated in the excerpt below:

> While the bill states that constituent schools and school districts will make available appropriate special provisions for gifted children to the extent that funds are provided for implementation, no additional state funding will be provided by the bill for gifted children programs beyond current funding levels. (HB 07-1224)

In addition to this major change from making services for students identified as gifted optional/allowable to mandated, several special policy amendments have been approved within the last three years. First an additional law was passed requiring AUs to provide direct and clear local policies for the process of full-grade and subject-based acceleration in their program plans (HB13-1023, 2013). This law was enacted after the submission of the 2012-2016 AU program plans, so evidence of the effects of this bill will likely not be apparent in the plans until the next iteration (2016-2020). The second additional law, passed in 2014, provides additional grant money provisions to ensure gifted programming is financially supported across AUs (HB14-1102, 2014). If an AU applies for and receives grant funds from this provision, those funds can be used to pay

for universal identification screening procedures, professional development in gifted education, and endorsed/certified gifted education personnel (HB14-1102, 2014).

North Carolina

Like most states, North Carolina also has a wide range of school district sizes and resources, from rural and remote district locales to urban centers, and from very small (less than 1,000 total students) to very large (150,000 + students). Though the range in size is similar to that of Colorado, rural and remote presence in North Carolina is smaller, and no districts in North Carolina are classified as frontier districts. Regardless of district size, all districts are required to submit program plans under the same guiding state policy parameters. North Carolina does not have the intermediary administrative unit structure present in Colorado.

North Carolina's gifted education policy, Article 9B, has been in place since 1996. Local program plans for gifted education programming have been required in the state since 1996, but Academically and Intellectually Gifted (AIG) standards were added in 2009, and then refined further in 2012. The official standards came about as a result of a state performance audit of the North Carolina AIG program conducted through the Office of the State Auditor (AIG Standards, 2012). The audit occurred in response to parent and family concerns that AIG students were underserved and AIG funding was going to purposes other than AIG programming. No updates to legislation have been instituted at the state level since 2012, aside from minor updates to language in the AIG Standards.

State Policies and Recommended Practices

Overall, the state policies in Colorado are moving toward alignment with gifted

education recommendations. With the inclusion of the more specific AIG Standards as policy in the state of North Carolina, state policies are moving toward alignment with recommended practices there as well. In the following section, I review the state-level policies of both states in relation to these recommendations from the gifted education literature.

There are six categories of recommended practices, and specific criteria against which the policies were coded and evaluated. If a state policy clearly mandates each criterion, I deemed the policy as "fully aligned." If many of the elements are present, but not all, or there was strong evidence for a particular criterion in a policy, I categorized it as moving "toward alignment." If some elements are present, but not many or additional evidence was weak, I deemed the policy "partially" aligned. If a policy did not mention a particular area and no recommended practice elements are disallowed by the state, "weakly aligned" was assigned. Finally, if a state policy specifically limits or bans a recommended practice, I classified the policy as "not aligned" on that criterion. No policies were categorized as not aligned.

Every policy that contained no evidence of a criterion was classified as "weakly aligned" with recommended practices. I do not state this for each instance where this lack of evidence occurs, but it can be assumed for the purpose of the analysis that "no evidence" means weak alignment.

Policy (POLICY)

The following criteria, based on the NAGC standards (2010) about policy, guided the analysis of policy as enacted in Colorado and North Carolina:

1) Policy ensures educators understand/ implement district and state policies,

2) Policy includes provision for demonstrates administrator support of gifted education through equitable allocation of resources for gifted students,

3) Educators in gifted, general, and special education collaboratively plan develop and implement services,

4) Expenditures are tracked at the school level,

5) Polices/ procedures guide/ sustain all program elements (i.e., assessment, identification, acceleration practices, and grouping practices), and

6) Administrators provide human/ material resources needed for professional development (i.e., release time, funding for continuing education, substitute support, webinars, or mentors).

Colorado. Overall, state policy in Colorado is moving toward alignment with recommended practices in policy. A summary of the full analysis of the alignment of state-level policies with recommended policy practices is provided in Table 14.

Policy ensures educators understand/ implement district and state policies. State policy indicates AU administrators must understand and implement state and federal law at the district level:

> Each AU shall comply with all applicable state and federal laws and regulations regarding the program plan, identification and special educational services for gifted students. (ECEA, § 220-R-12.07(1)).

Per the excerpt from state policy above, Colorado is fully aligned with recommended practices in this area.

Equitable allocation of resources. As part of the program plan submission process of Colorado, the staff of each administrative unit is required to submit full budgets

detailing expenditures for their gifted services. Within this budget requirement, the state indicates programs that funding for the cost of implementing the program plan should be accounted for.

> The AU shall include in the annual plan a budget for gifted education which reflects the collaborative efforts of the AU and cost of implementing the program elements and the student goals stated in the annual comprehensive program plan. (ECEA, § 220-R-12.02(2)(k)(i))

AUs must track and report expenditures across the district and align the expenditures with program goals. This is fully aligned with recommended practices.

Educators collaboratively plan, develop, and implement services. The first part of the above excerpt mentions the budget should reflect "collaborative efforts" of the AU and implies that the gifted program itself should be planned collaboratively. Additionally, § 220-R-12.02(2)(h)(i)(h) indicates each Advanced Learning Plan (ALP; individualized program plans for gifted students) will be developed through "collaborative efforts of the teacher(s), other school personnel (as needed), parents and the student (as appropriate)." Though the idea of collaboratively planning is mentioned in each of these policy examples, there is no explicit requirement indicating comprehensive program plans or AU gifted education policy must be planned implemented collaboratively nor is documentation of cooperative planning required. Colorado is moving toward alignment with this policy.

Expenditures are tracked at school level. The state of Colorado requires expenditures be tracked, but primarily at the level of the Administrative Unit. According to policies about reporting procedures,

Administrative units shall submit to the Department an end-of-year report for the prior fiscal year, including:

A detailed report of financial income and expenditures;

The number of formally identified gifted students served through gifted student programming reported by:

Each grade level, preschool (if applicable) through grade 12;

Gender and ethnicity;

Free and reduced lunch;

Area(s) of giftedness;

Twice exceptionality; and

Gifted preschoolers served through early entrance per local policies and procedures if applicable;

The percent of students in the AU who have been identified as gifted and talented through a formal identification procedure;

Qualified personnel by school level, district resource personnel and central administration (ECEA, § 220-R-12.03)

From the excerpt above, it is clear that the only element of school-level reporting that is required is the number of qualified personnel per school-level. However, it is important to note that this reference is not about the personnel at each school, but all qualified personnel across the elementary level. This means that, in smaller AUs, there may be only one qualified personnel for the whole district that would be reported. AUs are required to report specific expenditure information overall, but not at the individual school-level. The policy is partially aligned with recommended practices.

Policies/procedures to guide/sustain all program elements. The state policy in Colorado includes an element of regulation in each area of programming on at least some level, and the NAGC standards do not really indicate that a specific level of detail is required. The major policy areas regulated in Colorado are: definitions, administrative unit gifted education program plans, reports, audits, record keeping, procedures for resolving disagreements, monitoring, and provisions for early access to kindergarten (ECEA, § 220-R-12.00). Further, the policy section provides direction for the creation of program plans covering the following specific program areas: procedures for communication with families and students, definition of "gifted student," identification procedures, criteria for determining exceptional ability (giftedness) or talent pool, identification portability (consistency in identification practices across school districts in Colorado to ensure students identified in one Colorado district would be identified in another within the state), Advanced Learning Plan content, ALP procedures and responsibilities, programming, evaluation and accountability procedures, personnel, budget, and early access (ECEA, § 220-R-12.02(2)). There are more specific policies about each program plan category within each of the listed main categories. Since there is some form of policy that exists in each area, Colorado policies are fully aligned with the recommended practice in this domain.

Human/material resources for professional development. Finally, state policy indicates AUs must provide some material resources for PD as gifted education funds provided by the state department can be used for, "Professional development and training relating to gifted education" (ECEA, § 220-R-12.02(2)(k)(i)(B)). The state policy is fully aligned with recommended practices on this criterion.

North Carolina. In North Carolina, state policy is also moving toward alignment in the policy category.

Policy ensures educators understand/ implement district and state policies. The state requires districts to monitor,

> […] the implementation of the local AIG program and plan in accordance with current legislation and state policies to ensure fidelity of implementation for all AIG program components. (AIG Standard 6b).

This excerpt demonstrates a state regulation that aligns with the recommended practice to ensure educators understand and implement state policies. North Carolina state policy is fully aligned with recommended practices on this criterion.

Equitable allocation of resources. There is no specific mention of equitable distribution of funds in gifted legislation (N.C.G.C. § 115C-150.5-8 [Article 9B]). According to the AIG standards, LEAs are required to "use and monitor state funds allotted for the local AIG program according to state policy" (AIG Standard 6c); yet there is no guideline about how specifically those resources should be spent and reported to the state in Article 9B. Though the AIG standards are comprehensive and cover many programming areas, no specific policy ensures equitable allocation of resources for gifted programs. Since the policy includes some elements of recommended practices (e.g., monitoring expenditures), but excludes important others (e.g., ensuring equitable allocation), the policy is partially aligned with recommended practices.

Educators collaboratively plan, develop, and implement services. Collaboration in the creation and implementation of services is required at the state level in North Carolina, as AIG Standard 2h states,

AIG personnel and other professional staff, including regular education teachers, special education teachers, other instructional staff, and administrators, will collaborate to develop and implement differentiated curriculum and instruction.

It is clear from the policy excerpt above that North Carolina policy is fully aligned with recommended practices in the requirement for collaboratively planning and implementation of gifted services.

Expenditures are tracked at school level. Again, the AIG standards mention that LEAs are required to "use and monitor state funds allotted for the local AIG program according to state policy" (AIG Standard 6c). However, the state does not have a policy specifically about a reporting procedure for gifted program expenditures according to Article 9B. Since monitoring is required, but the specifics of that requirement are not evident, the policy is only partially aligned with recommended practices.

Policies/procedures to guide/sustain all program elements. As was the case with Colorado, the state of North Carolina provides policies to guide each of the mentioned program elements (i.e., assessment, identification, acceleration practices, and grouping practices). The categories of the AIG Standards are as follows:

(1) Student identification,

(2) Differentiated curriculum and instruction,

(3) Personnel and professional development,

(4) Comprehensive programming within a total school community,

(5) Partnerships (i.e., meaningful participation of stakeholders and community members in the planning and implementation of AIG program), and

(6) Program accountability (AIG Standards, 2002).

Within each AIG Standard, there are several guidelines that delineate specific practices an LEA must abide by in its AIG program. Since each of the program elements have policies or procedures to guide them, this criterion is fully aligned with recommended practices.

Human/material resources for professional development. While the following statement from the AIG Standards does not specifically indicate that provision must be made for the necessary human and/or material resources required for professional development, it does outline the need for such resources, " [school district] provides opportunities for AIG specialists and other teachers to plan, implement, and refine applications of their professional development learning" (AIG Standard 3f). Though the state policy is not fully aligned with recommended practice, it is partially aligned in this category.

Identification (ID)

According to the NAGC standards (2010) and literature review of recommended practices, identification polices should include measures that match the expanded definitions used by both Colorado and North Carolina to describe gifted students. In general, researchers recommend the use of multiple measures for identification, the creation of student profiles, observations of students in the classroom, and some form of universal screening procedure (e.g., Callahan, 2005; Olzsewski-Kubilius & Clarenbach, 2012; Renzulli, 1984; Renzulli & Delcourt, 1986; Stambaugh, 2007). Additionally, results indicate multiple measures should be utilized in ways that expand identification pools (McBee et al., 2014). It is important to note whether and to what extent state and district policies in place are aligned with these recommendations.

I used the following criteria from the NAGC standards and researchers/scholars in gifted education to guide the alignment analysis about identification:

(1) Provision for review by committees of professionals with background and expertise in gifted education and assessment review,

(2) Provision for universal screening,

(3) Inclusion of an appeals procedure,

(4) Opportunity for student reassessment,

(5) Use of locally developed norms as appropriate,

(6) Use of multiple assessments,

(7) Inclusion of both qualitative and quantitative measures,

(8) Use of assessments that allow above grade-level performance, and

(9) Creation of student profiles that allow for an expanded pool of potentially gifted students.

Table 15 includes the summary of the state-level analysis of alignment with recommended practices in identification.

Colorado. State policy related to identification in Colorado is moving toward alignment with current recommended practices in gifted education.

Committee review. State policy in Colorado requires that a committee review must be part of the identification process. "A review team procedure; and that includes at least one person trained or endorsed in gifted identification and programming" (ECEA, § 220-R-12.02(2)(c)(vi)). This policy is fully aligned with recommended practices.

Universal screening. Policy about the inclusion of a universal screening procedure in the state is as follows, "Every AU is strongly encouraged to include optional

universal screening in identification procedures" (ECEA, § 220-R-12.02(2)(c)(ii)). While the state does not require universal screening, it is mentioned and encouraged. This policy is moving toward alignment with recommended practices.

Appeals procedure. In Colorado, AUs are required to include an appeals procedure for identification decisions, and other aspects of gifted programming, in their comprehensive program plans. "The program plan shall describe procedures for resolving disagreements with parents/guardians, or students in regard to identification, programming, and ALPs" (ECEA, § 220-R-12.06). This requirement for an appeals procedure is fully aligned with recommended practices.

Student reassessment. No polices or procedures about student reassessment are mentioned in state policy in Colorado. No policy prevents the practice.

Locally developed norms. The use of locally developed norms in the identification process are not mentioned in state policy in Colorado. Though the use of cut-scores is indicated as a criterion for qualifying for gifted programs (e.g., 95th percentile criteria), these do not appear to be mandated qualification cut-off rules.

> For each category of giftedness defined in 12.01(16), criteria for exceptional ability means: 95 percentile or above on a standardized nationally normed test or observation tool, or a rating on a performance assessment that indicates exceptionality/distinguished compared to age mates. (ECEA, § 220-R-12.02(2)(d)(i)

A student can qualify for services through either the cut-off score *or* through the designation of "advanced" performance scores. The policy does specifically say AUs should use national norms for students to meet the 95th percentile cut-off criterion, but the

state does not mandate this practice for identification, nor does it indicate local norms cannot be used. Because the state policy does not mention or ban the use of local norms in testing, Colorado is weakly aligned on this criterion.

Uses multiple assessments. State policy clearly states that multiple assessments should be used in the identification process.

> Collection of data for a body of evidence that includes, but is not limited to: assessment results from multiple sources and multiple types of data (i.e. qualitative and quantitative data about achievement, cognitive ability, performance, parent and teacher input, motivation and observations of gifted characteristics/behaviors). (ECEA, § 220-R-12.02(2)(c)(v))

In the policy, the collection of a "body of evidence" is described and specific examples of multiple measures are provided. Colorado is fully aligned with recommended practices under this criterion.

Qualitative and quantitative measures. In the excerpt above, the policy specifically mentions the use of "qualitative and quantitative data" which measure different specific areas of giftedness (e.g., achievement, cognitive ability) ((ECEA, § 220-R-12.02(2)(c)(v)). The policy is fully aligned with recommended practices on this criterion.

Assessments that allow above grade-level performance. The use of assessments that specifically allow for above grade-level performance are not mentioned in the state policy. Assessments that allow above grade-level performance are not explicitly banned, which means the state is weakly aligned in this category.

Student profiles to expand identification pool. The state of Colorado requires the

development of student profiles in order to expand pools of students for potential identification for gifted services. As part of the identification procedure, the state requires AUs use:

> A review team procedure for determining identification or a talent pool designation from a body of evidence and for developing individualized ALPs for identified students. (ECEA, § 220-R-12.02(2)(c)(vii))

The language in this excerpt indicates AUs must create a "talent pool" from a "body of evidence," which indicates the state policy is fully aligned with recommended practices on this criterion.

North Carolina. Similar to the findings in Colorado, identification policies in North Carolina are also moving toward alignment.

Committee review. A requirement for the use of an identification review committee as part of the identification process is not mentioned in North Carolina state policy. There are no AIG Standards that require this practice, and no policies prevent the practice from occurring.

Universal screening. The use of universal screening procedures in the identification process are not mentioned in North Carolina policy. No policy specifically prevents the practice.

Appeals procedure. According to AIG Standard 6j, each multi-year program plan must contain a procedure to resolve disagreements.

> The LEA plan includes: informed consent regarding identification and placement, reassessment procedures, transfers from other LEAs, and procedures for resolving disagreements.

In addition to this regulation for program plans through the AIG Standards, the requirement for an appeals procedure is also articulated in Article 9B. It states,

> In the event that the procedure developed under G.S. 115C-150.7(b)(7) fails to resolve a disagreement, the parent or guardian may file a petition for a contested case hearing under Article 3 of Chapter 150B of the General Statutes. (NCGS, § 115C-150.8)

That is, in the event that a school district's program plan resolution procedure does not allow both parties to come to a final decision, the state has an additional back-up measure in place to continue through the resolution process. These policies are fully aligned with recommended practices.

Student reassessment. According to the excerpt above from AIG Standard 6j, each LEA must put student reassessment procedures in place. "Reassessment procedures" are included as a required element of program plans, which is in full alignment with recommended practices.

Locally developed norms. The use of locally developed norms are not mentioned or prevented in North Carolina state policy.

Use of multiple assessments. According to AIG Standards, each school district will include multiple criteria and incorporate different types of measures into their identification procedures.

> States and employs multiple criteria for AIG student identification. These criteria incorporate measures that reveal student aptitude, student achievement, or potential to achieve in order to develop a comprehensive profile for each student.

> These measures include both non-traditional and traditional measures that are based on current theory and research. (AIG Standard 1b)

Though the language of this policy does not specifically say "multiple assessments" are to be used, it does say that measures of aptitude, achievement, or potential to achieve will be used. Additionally, the word "measures" is plural rather than singular, which implies that districts must use more than one. North Carolina policy is fully aligned with the recommended practice of using multiple assessments in the identification process.

Qualitative and quantitative measures. In the above excerpt, it is clear that different types of measurement must be used in the identification process. However, the specific information about what types of measures are to be used does not indicate whether LEAs need to use both qualitative and quantitative measures, just "traditional" and "non-traditional." There are no other specific policies about the types of measurement used in the identification process other than the one listed above in North Carolina policies. Since the policy does not mention the requirement for any qualitative measures, we cannot assume the implementation of such tools is required. The policy is only partially aligned with recommended practices.

Assessments that allow above grade-level performance. The use of assessments that allow above grade-level performance in the identification process are not mentioned in North Carolina policy. No policy specifically prevents the practice.

Student profiles to expand identification pool. Referring back again to the initial example of student identification policies in AIG Standard 6j, the policy states,

> These criteria incorporate measures that reveal student aptitude, student achievement, or potential to achieve in order to develop a comprehensive profile for each student.

According to this excerpt, multiple pieces of information about students are brought together to create a profile, but it is not clear from the policy whether this is specifically used to expand the identification pool of students. However, the following excerpt indicates, in a generic way, that identification procedures should ensure under-represented populations of gifted students are identified using procedures that are in place.

> Ensures AIG screening, referral, and identification procedures respond to traditionally under-represented populations of the gifted and are responsive to LEA demographics. (AIG Standard 1c)

Taken together, the two excerpts from the AIG Standards about identification indicate North Carolina policies under this criterion are fully aligned with recommended practices.

Professional Development (PD)

Teacher training is recommended for educators of gifted students by both the NAGC standards (2010) and researchers in gifted education. Research results in both general education and gifted education indicate certain types of professional development may not be effective in changing classroom practices and/or student outcomes (e.g., Brighton et al., 2005; TNTP, 2015). However, specific types of professional development including experiential learning through implementing a specific curriculum with professional development support or a practicum/course-work combination may have

positive effects on teacher quality and classroom experiences for gifted students (Bangel et al, 2010; Rubenstein et al., 2015).

In order to be aligned with recommended practices in gifted education professional development policymakers should provide provisions for teacher training that:

(1) encourage educators to understand gifted students' need for both solitude and social interaction

(2) are ongoing, and research-based,

(3) address multiple aspects of giftedness and gifted programs,

(4) provide models of how to develop learning activities,

(5) address anti-intellectualism/current trends in gifted education,

(6) encourage awareness of organizations/ publications in gifted education,

(7) encourage educators to support the social/ emotional needs of gifted students

(8) allow educators to assess and revise their own instructional practices, and

(9) are sustained over time including follow-ups on the effects of the training on actual teacher practices.

A summary of the state-level analysis of alignment with recommended practices in professional development is contained in Table 16.

Colorado. State policy in the area of professional development is partially aligned with recommended practices in Colorado.

The state requires reporting of any specific costs of professional development in the annual budget (ECEA, § 220-R-12.02(2)(k)(i)(B)) and requires delivery of professional development with the purpose of improving and enhancing skills,

knowledge, and expertise of personnel in gifted education as well as to increase the number of qualified personnel in providing instruction to gifted students ((ECEA, § 220-R-12.02(2)(j)(i)(B)).

Educators understand the need for both solitude and social interaction. While state policy in Colorado does not specify that professional development must cover the particular area of solitude versus social interaction for gifted students, it does indicate that student affective needs are a key topic to be included.

> Key topics should include, but need not be limited to, gifted characteristics and myths, differentiated instruction, affective needs, counseling, content instructional options and advanced curricular strategies (e.g., higher order thinking strategies). (ECEA, § 220-R-12.02(2)(i)(vii))

The policy on professional development topics specifically indicates "gifted characteristics and myths" and "affective needs" are required subject matter. Though the language of these topic areas does not specifically indicate professional development will contain information about social interaction for gifted students, it is reasonable that this topic would be covered as part of these discussions based on the inclusion of "myths" (e.g., gifted students have no unique social and emotional needs, Peterson, 2009) and "affective needs." Therefore, policy is partially aligned on this criterion.

Professional development is ongoing and research-based. There are no policies in Colorado about how professional development should be on-going and/or research-based.

Training addresses multiple aspects of giftedness and gifted programs. Using the same excerpt from above about professional development, it is clear that state policy requires the inclusion of multiple aspects of giftedness and programming. The excerpt

states topic areas should include, but not be limited to, "gifted characteristics and myths, differentiated instruction, affective needs, counseling, content instructional options, and advanced curricular strategies" (ECEA, § 220-R-12.02(2)(i)(vii)).

There are additional specific content categories offered as potential examples for types of professional development that could be offered including induction and in-service programs, job-embedded training and coaching, gifted education workshops or institutes and college coursework (ECEA, § 220-R-12.02(2)(i)(vii)). Overall, the combination of these two sets of offerings meets the recommended practice criteria and is fully aligned with recommended practices.

Trainers provide models for how to develop learning activities. No state policies mention modeling learning activities for teachers.

Training addresses anti-intellectualism/current trends in gifted education. No state policies in Colorado mention addressing anti-intellectualism or current trends in gifted education.

Educators are made aware of organizations and publications in gifted education. No policies in Colorado indicate educators of gifted students or general education teachers should be made aware of professional organizations or publications in gifted education.

Training addresses support of social and/or emotional needs of gifted students. State policy requires the inclusion of both affective needs and counseling information as professional development topics (ECEA, § 220-R-12.02(2)(i)(vii)). This is fully aligned with gifted education recommendations for professional development.

Professional development allows teachers to assess and revise their own

instructional practices. No policies in Colorado mention whether teachers must be allowed to assess and revise their own instructional practices with gifted students as part of the professional development process.

Training is sustained over time and includes follow-up on effects on teacher practices. Colorado state policy does not mention whether professional development training is sustained over time or whether AUs must measure follow-up effects on teacher practices as a result of professional development.

North Carolina. The state policies in North Carolina are also partially aligned with recommended practices.

Educators understand the need for both solitude and social interaction. No state policies mention ensuring educators understand the potential for gifted students to have unique social interaction needs.

Professional development is ongoing and research-based. According to state policy in North Carolina, districts should, "align professional development opportunities with local AIG program goals, other district initiatives, and best practices in gifted education" (Standard 3e). Within this excerpt, the state indicates professional development should be aligned with "best practices in gifted education," which means the professional development should therefore be aligned with recommended practices. The state does not require the professional activities to be ongoing, but since this is part of best practices and the state policy says training is aligned with those, it is likely the intention is that training is ongoing. Policy in this area of recommended practice is moving toward alignment.

Training addresses multiple aspects of giftedness and gifted programs. State policy in North Carolina does not specifically indicate multiple topic areas must be included in professional development. Consider the following policy excerpt:

> Establishes specific and appropriate professional development requirements for all personnel involved in AIG programs and services, including classroom teachers, special education teachers, counselors, and school administrators. (AIG Standard 3c)

The state does hint at the idea that multiple topic areas should be included in professional development opportunities by suggesting it should be specific and appropriate to each individual receiving the training. Presumably, each staff member is acting in a different capacity in the gifted program, and therefore would require different kinds of training. Additionally, while the policy does not specifically require the coverage of multiple areas of giftedness and gifted programming for personnel, the previous excerpt about training indicates alignment with best practices. This area is moving toward alignment with recommended practice.

Trainers provide models for how to develop learning activities. No policies in North Carolina indicate educators of gifted students or general education teachers must receive professional development with modeling for how to develop learning activities. In AIG Standard 3e, the policy about professional development indicates it is all aligned with best practices. Since modeling learning activities is a "best-practice," it is possible that this provision in AIG Standard 3e provides for the inclusion of this criterion in professional development. Since the evidence from policy is not fully clear about the inclusion of this criterion, the policy is partially aligned with recommended practices.

Training addresses anti-intellectualism/current trends in gifted education. No state policies indicate professional development should include a specific topic area. This means that addressing anti-intellectualism or current trends in gifted education is not required or mentioned in North Carolina state policy. Since addressing anti-intellectualism/current trends in gifted education is a "best-practice," it is possible that this provision in AIG Standard 3e provides for the inclusion of this criterion in professional development. Since the evidence from policy is not fully clear about the inclusion of this criterion, the policy is at least partially aligned with recommended practices.

Educators are made aware of organizations and publications in gifted education. There are no state policies in North Carolina that requires educators be made aware of professional organizations and publications in gifted education.

Training addresses support of social and/or emotional needs of gifted students. No specific topic areas of professional development are mentioned or required by the state policy in North Carolina. Since addressing support of social and/or emotional needs in gifted education is a "best-practice," it is possible that the provision in AIG Standard 3e provides for the inclusion of this criterion in professional development. The evidence from policy may include this criterion, thus the policy is at least partially aligned with recommended practices.

Professional development allows teachers to assess and revise their own instructional practices. There are no policies that require or mention that educators will be able to assess and revise their own instructional practices through professional development sessions. Because allowing teachers to assess and revise their own

instructional practices as part of professional development activities is a "best-practice," it is possible that the provision in AIG Standard 3e provides for the inclusion of this criterion in professional development. The evidence from policy may include this criterion, thus the policy is at least partially aligned with recommended practices.

Training is sustained over time and includes follow-up on effects on teacher practices. North Carolina state policy does not mention the amount of time required or the kind of follow-up activities that should occur with professional development implementation. Sustained training over time that includes follow-up assessment of effects on teacher practices is "best-practice." Therefore, it is possible that the provision in AIG Standard 3e provides for the inclusion of this criterion in professional development. The evidence from policy may include this criterion, thus the policy is at least partially aligned with recommended practices.

Service Delivery Model/Program (SDM/P)

The overarching recommendation for service delivery models and programming for gifted students are that a continuum of multiple services should be provided (e.g., Callahan, 2009; Treffinger et al., 2004). Researchers support the inclusion of flexible ability grouping options (e.g., Gentry & Owen; Kulik & Kulik, 1992; McCoach et al., 2006) and acceleration (e.g., Swiatek, 2002; McClarty, 2014) as essential elements in the continuum of service delivery. The NAGC standards (2010) are consistent with these recommendations, and encourage research-based grouping practices, acceleration options, multi-year program plans in student talent areas, and the facilitation of mentorships.

To assess the degree of alignment with recommended practices in the service delivery model/programming area, I used the following criteria:

(1) Policy indicates continuum of services are offered,

(2) Provisions allow for acceleration,

(3) Policies require use of multiple grouping options

(4) Provisions institute multi-year program plans

(5) Policy provides opportunities for mentorships, internships, and/or vocational experiences must be provided.

A display of the state-level analysis of alignment with recommended practices in service delivery model/program is included in Table 17.

Colorado. State policy in service delivery model/programming are fully aligned in Colorado. See Table 17 for a summary of results in this category.

Continuum of services. Under the provision of providing programing at the state level, the state of Colorado indicates a continuum of programing options including ALPs, general classroom service delivery, resource room access, small instruction groups, pullout classes for direct/extended instruction, support in differentiated instruction and methods including acceleration, cluster grouping, and higher order thinking skills, affective and guidance support, and the opportunity for mentorship (ECEA, § 220-R-12.02(2)(h)(i)). Also, the state indicates services should be matched to a student's area of strength. The state policy is fully aligned with recommended practices for the offering of a continuum of services for gifted students.

Acceleration allowed. State policies about acceleration allow and suggest the practice as an option, but do not require or mandate its use.

> "Gifted education services" and "gifted education programs" include, but need not be limited to, strategies, programming options, and interventions reflecting evidence-based practices, such as acceleration, concurrent enrollment, differentiated instruction, and affective guidance. (ECEA, § 220-R-12.01(17))

In the policy excerpt, it states programs can include practices "such as acceleration." This means it the policy allows the service. Another example of how acceleration is mentioned in the state policy is seen in the following excerpt:

"Support in differentiated instruction and methods (e.g., acceleration, cluster grouping and higher order thinking skills)" (ECEA, § 220-R-12.02(2)(h)(i)(C)). In this statement, acceleration is indicated as an example of a specific service delivery option. As a result, the state of Colorado is fully aligned with recommended practices on this criterion.[2]

Multiple grouping options. Returning to the first excerpt, it is clear state policy in Colorado requires multiple grouping options. The policy states that students are served at the different schools levels through "the general classroom, resource location, small instructional group, and/or pullout for direct and extended instruction aligned to strength areas" (ECEA, § 220-R-12.02(2)(h)(i)). Additionally, "cluster grouping" is mentioned as a specific type of grouping offered by the state (ECEA, § 220-R-12.02(2)(h)(i)(C)). Policies in the area of multiple grouping options are in full alignment with recommended practices.

[2] An amendment to state policy on acceleration was passed in 2013, outside the scope of this analysis which includes district program plans created based on 2012 state policies in Colorado. The new amendment contains more specific language about acceleration requirements as part of gifted programs (HB13-1023).

Multi-year program plans. As indicated in the literature review, Colorado state policy requires each Administrative Unit to submit a comprehensive local program plan for gifted education services. The policy states,

> Administrative units shall submit to the Department a comprehensive gifted education program plan on a multiple-year cycle as declared by the Department, such cycle to be no longer than 5 years. The program plan shall be implemented by all constituent schools and districts of the AU. (ECEA, § 220-R-12.02(2))

Not only is a plan required, but the plan must be revised and submitted at intervals no longer than every five years. State policy in Colorado is fully aligned with this criterion from recommended practices.

Includes mentorships, internships, and/or vocational experiences. Policy about the inclusion of mentorships is provided as part of the policies on service delivery options. "Diverse content options provided for gifted students in their areas of strength (e.g., mentorship, Socratic seminars, advanced math, honors courses)" (ECEA, § 220-R-12.02(h)(i)(E)). According to this policy, mentorship is mentioned as a service delivery option, is fully aligned with recommended practices.

North Carolina. State standards regarding service delivery fully aligned with recommended practices in North Carolina.

Continuum of services. In general, there are multiple services required for gifted students by the state of North Carolina. First, policy about the Differentiated Education Plan indicates a continuum of services must be provided.

> Develops and documents a student plan that articulates the differentiated curriculum and instruction services that match the identified needs of the K-12

> AIG student, such as a Differentiated Education Plan (DEP). This document is reviewed annually with parents/families to ensure effective programming, provide a continuum of services, and support school transitions. (AIG Standard 2i).

In addition to the individualize plan described above, the state also indicates districts must provide a wide range of services in the following standard:

> District must deliver AIG programs and services which are comprehensive of the academic, intellectual, social, and emotional needs of gifted learners across all classroom environments, grade levels, and settings. (AIG Standard 4a)

There are several other standards that describe the types of services that district must provide as part of gifted programs, but the two excerpts above provide the clearest evidence of the offering of a continuum of services. State policy in North Carolina is fully aligned with recommended practices on this criterion.

Acceleration allowed. The state policy in North Carolina includes the requirement for acceleration practices in AIG Standard 4g:

> Articulates and implements opportunities for acceleration, including compacted content, Credit by Demonstrated Mastery, subject and/or grade acceleration when an appropriate body-of-evidence indicates the need. (AIG Standard 4g)

This policy excerpt shows that the state requires districts to ensure acceleration practices are both articulated and implemented. This is in full alignment with recommended practices in gifted education.

Multiple grouping options. Flexible grouping strategies are required as part of North Carolina state policy. AIG Standard 4 j states district must, "Utilize intentional, flexible grouping practices to facilitate effective instruction and support the growth of

AIG students" (AIG Standards, 2012). The state requirement to use intentional grouping practices is also found in AIG Standard 2e, which states districts will, "use on-going assessment, both formative and summative, to differentiate classroom curriculum and instruction and inform flexible grouping practices."

The state policy about grouping practices is fully aligned with recommended gifted education practices.

Multi-year program plans. In North Carolina, Article 9B regulates gifted education policy. As indicated in the literature review, the policy includes a provision requiring the creation and submission of a local gifted program plan. The policy states:

> Each local board of education shall develop a local plan designed to identify and establish a procedure for providing appropriate educational services to each academically or intellectually gifted student. The board shall include parents, the school community, representatives of the community, and others in the development of this plan. The plan may be developed by or in conjunction with other committees. (NCGS, § 115C-150.7)

In addition to the above policy, North Carolina also states, "A plan shall remain in effect for no more than three years" (NCGS, § 115C-150.7(d)). This state policy requiring multi-year local gifted program plans is fully aligned with recommended practices.

Includes mentorships, internships, and/or vocational experiences. State policies about mentorships, internships, and/or vocational experiences in North Carolina are not as clear and direct as the other areas of service delivery, but are included as service options. State policy states districts will:

> form partnerships with institutions of higher education, local business and industry, and other stakeholders within the community to enhance and gain support for AIG programs and services. (Standard 5e)

Though this particular excerpt does not specifically state mentorship must be included, partnerships with the community would allow mentorships to occur. Additionally, we already know that North Carolina AIG Standards include the requirement for a continuum of services, which implies that mentorship is provided as an option. Thus, the policy is classified as fully aligned with recommended practices.

Curriculum and Instruction (CI)

Classroom practices, including both curriculum and instruction, have by far the most NAGC provided guidelines (NAGC, 2010). Many of the standards in this category are based primarily on theory and focus on the social/emotional or self-learning process for gifted students (e.g., Standards 1.1-1.8). Further, data from state and district policies as well as reported gifted program practices did not provide thorough information about classroom-level practices. Therefore, instead of using the standards themselves as the framework to guide analysis of recommended practices, I used a condensed set of criteria. The criteria are based on Hockett's (2009) analysis of indicators that make a "good curriculum" for gifted students as well as results from multiple studies (e.g. Callahan et al., 2015; Feng at al., 2004; Gavin et al., 2009) that indicate increases in gifted student achievement with the implementation of pre-developed units.

The criteria I identified to assess recommended curriculum and instruction practices are:

(1) Provisions that require curriculum implementation goes beyond instructor-based delivery (e.g., must go beyond just stating teachers will "differentiate instruction")

(2) Requirements for multiple forms of ongoing assessments used to inform instruction

(3) Requirements for students to be given the opportunity to engage in advanced content, based on expanded standards

(4) Policies that ensure content is organized conceptually

(5) Provisions to ensure the curriculum is aligned with real-world outcomes

(6) Policy that requires use of flexible classroom approaches to student

A full analysis of policy for each state in curriculum and instruction is displayed in Table 18.

Colorado. State policy in Colorado is only weakly aligned with recommended practices in this category. The only element of classroom instruction that is regulated by state policy is that programming should "support differentiated instruction and methods" (ECEA, § 220-R-12.02(2)(h)(i)(C)). No other specific information about classroom-level curriculum and instruction requirements are provided in the policy. While none of the six criteria are specifically banned or prevented by state policy, they are also simply not mentioned at all in policy provisions.

North Carolina. In contrast to Colorado state policy, North Carolina state level policies about classroom practices are moving toward alignment with recommended practices.

Beyond instructor implementation. State policy in North Carolina does not require the implementation of pre-developed curricular units. The state does not encourage nor inhibit the practice.

Assessment used to inform instruction. Standard 2e states a district will "use on-going assessment, both formative and summative, to differentiate classroom curriculum and instruction and inform flexible grouping practices" (AIG Standards, 2012). The policy is fully aligned with recommended practices.

Advanced content based on expanded standards. State policy in North Carolina requires the expansion of state-level standards.

> Adapt the NC Standard Course of Study (SCOS) K-12, to address a range of advanced ability levels in language arts, mathematics, and other content areas as appropriate through the use of differentiation strategies, including enrichment, extension, and acceleration. (AIG Standard 2a)

The excerpt from policy indicates districts are required to ensure the NCSOS is expanded and extended for gifted students. Policy that requires extension of standards and advanced content is in full alignment with recommended practices.

Content organized conceptually. There are no state-level policies in North Carolina that require curriculum to be organized conceptually. No policies prevent the practice.

Curriculum aligned with real-world outcomes. No evidence that state policy requires curriculum to be aligned with real-world outcomes, specifically. However, the state does indicate curriculum should, "foster the development of 21st century content and skills at an advanced level" (AIG Standard 2d). In many cases, "21st century content

and skills" mean that real-world outcomes may be considered in the curriculum. Therefore, the state likely encourages the alignment of curriculum with real-world outcomes and is moving toward alignment on this criterion.

Flexible classroom approaches to student learning. Several areas of North Carolina state policy indicate flexible classroom approaches to student learning should be employed. First, the concepts of individualized classrooms and instructional practices are emphasized in the following practice under AIG Standard 2i:

> Develop and document a student plan that articulates the differentiated curriculum and instruction services that match the identified needs of the K-12 AIG student, such as a Differentiated Education Plan (DEP). This document is reviewed annually with parents/families to ensure effective programming, provide a continuum of services, and support school transitions. (AIG Standards, 2012)

This excerpt indicates that programming should be aligned to each individual student's need in order to be effective, and implies there should be flexible approaches for learning depending on the student. Second, as described briefly earlier, the state indicates districts must, "use on-going assessment, both formative and summative, to differentiate classroom curriculum and instruction and inform flexible grouping practices" (AIG Standard 2e). This policy excerpt shows that the state requires districts employ flexible classroom approaches, informed by instruction, in order to foster student learning. Policies in the area of flexible classroom approaches to student learning are fully aligned with recommended practices.

Program Evaluation (EVAL)

Evaluation of gifted education programming is an essential element of gifted programs and a key recommended practice (e.g., Avery et al., 1997; Callahan & Reis, 2004). According to the NAGC standards (2010), program evaluation should be comprehensive and include the evaluation of not only student outcomes, but also program processes.

The following criteria were used to assess recommended practices in program evaluation policies including the degree to which:

(1) Provisions require student progress to be assessed with multiple indicators,

(2) Policy requires student *achievement* growth to be measured,

(3) Policy requires student *affective* growth to be measured,

(4) Policy requires student high-level thinking skill growth to be measured,

(5) Provisions require the quantity, quality, and appropriateness of program elements be assessed,

(6) Policy requires yearly assessment data to be disaggregated and made public,

(7) Provisions for the time/resources for full evaluation are in place,

(8) Policy ensures student outcomes are evaluated and effected by program elements (i.e., identification, curriculum, instructional programming and services, ongoing assessment of student learning, counseling and guidance programs, teacher qualifications and profession development, parent/guardian and community involvement, programming design, management, and delivery (NAGC, 2010)).

Table 19 presents a visual display of the policy alignment analysis for each state in program evaluation.

Colorado. State policy in Colorado on program evaluation is categorized as moving toward alignment, but is not yet fully (100%) aligned with recommended practices.

Assesses student progress with multiple indicators. State policy in Colorado requires that gifted student progress be monitored using multiple indicators.

> […] methods by which gifted student performance is monitored and measured for continual learning progress and how such methods align with the state accreditation process (e.g., annual UIP gifted education addendum, multi-district/BOCES summary, intervention progress monitoring data sources, ALP goals, and performance, district, and/or state assessment data). (ECEA, § 220-R-12.02(2)(i)(i))

The excerpt shows that student progress must be monitored through multiple indicators including the AU summary, ALP goals, general performance, and/or assessment data. In addition to the above example, the state requires that specific student assessment information in their area of strength(s) be reported (ECEA, § 220-R-12.02(2)(i)(ii) and -12.02(2)(i)(iii)). The combination of these two requirements indicates state policy in Colorado is fully aligned with this recommended practices criterion.

Measures student achievement growth. Colorado state policy requires the monitoring and reporting of student achievement growth for gifted students.

> Methods for ensuring that gifted student performance (achievement and growth) and reporting are consistent with state accreditation and accountability requirements (i.e., disaggregation of state assessment data for gifted students,

> identification of discrepancies in the data, goal setting and demonstration of achievement and growth). (ECEA, § 220-R-12.02(2)(i)(iii))

Since the state policy specifies that student achievement growth must be monitored, it is fully aligned with recommended practices in this category.

Measures student affective growth. State policy in Colorado also requires measurement of student growth in affective areas.

> Methods by which student affective growth is monitored and measured for continual development (e.g., rubrics for personal journals and anecdotal data, student surveys, demonstration of self-advocacy, and student career and/or college plans). (ECEA, § 220-R-12.02(2)(i)(ii))

The state not only requires measurement of student affective growth, but also identifies specific measurement tools that are required for use in measuring that growth. Colorado state policy is in full alignment with recommended practices in this category.

Measures high level thinking skill growth. No state policy in Colorado specifically requires or mentions the measurement of student progress on high level thinking skills.

Assesses the quantity, quality, and appropriateness of the program. There are state policies in Colorado about how to evaluate programs, including the quantity, quality, and appropriateness of the program. For example, the state requires:

> Methods for self-evaluation of the gifted program including a schedule for periodic feedback and review (e.g., review of gifted policy, goals, identification process, programming components, personnel, budget and reporting practices, and the impact of gifted programming on student achievement and progress). (ECEA, § 220-R-12.02(2)(i)(iv))

The policy clearly delineates areas of programming that must be evaluated, including how the program relates to student achievement and progress. Policy in this category is fully aligned with recommended practices in Colorado.

Disaggregates yearly assessment data and makes results public. State policy requires reporting of disaggregated assessment data for gifted students in Colorado. In one of the previous excerpt about program evaluation, we see that "[…] disaggregation of state assessment data for gifted students" is a specific requirement as part of the evaluation process (ECEA, § 220-R-12.02(2)(i)(iii)). Information from the disaggregated data is collected by the state and reported as part of annual state-level reports. Colorado policies in this area are fully aligned with recommended practices.

Provides time and resources for evaluation. While state policy does require AUs to provide a specific timeline for evaluations ("a schedule for periodic feedback and review" (ECEA, § 220-R-12.02(2)(i)(iv)), it does not require AUs specifically provide time and resources for an internal evaluation to occur. State-level reviews of local gifted education policy do occur on a schedule, and happen regardless of whether or not an internal local evaluation is in place. This policy is partially aligned with recommended practices.

Evaluates how student outcomes are affected by program elements. The policy about evaluation in Colorado mentions that program elements should be evaluated based on student outcomes. It includes the concept in the follow example which states, "[…] the impact of gifted programming on student achievement and progress" (12.02(2)(i)(iv)). Thus, the state policy in this category is in full alignment with recommended practices in gifted education.

North Carolina. State level policies in this category are also moving toward alignment with recommended practices.

Assesses student progress with multiple indicators. Policies about student progress assessment are fully aligned with recommended practices. According to state policy, district must, "utilize multiple sources of data to review and revise the local AIG program and plan during comprehensive program evaluation" (AIG Standard 6h). This standard about evaluation does not specifically indicate that student progress itself should be measured using multiple indicators, but the following AIG Standard does indicate student progress tracking is also important. The policy states districts will, "maintain, analyze, and share student achievement, student growth, and annual drop-out data for AIG students" (AIG Standard 6d).

Measures student achievement growth. Policy in North Carolina requires districts to, "maintain, analyze, and share student achievement, student growth, and annual drop-out data for AIG students" (AIG Standard 6d). This policy is in full alignment with recommended practices in gifted education.

Measures student affective growth. No state policies in North Carolina indicate affective growth must be measured.

Measures high level thinking skill growth. No state policies in North Carolina indicate student growth in high level thinking skills must be measured.

Assesses the quantity, quality, and appropriateness of the program. From the excerpts above, we see that policies about program evaluation in North Carolina include provisions about monitoring the quantity, quality, and appropriateness of the program. First, with AIG Standard 6h, that requires districts to "utilize multiple sources of data to

review and revise the local AIG program and plan during comprehensive program evaluation." The program plan must be monitored using multiple sources of data. Additionally, feedback from stakeholders is used to inform program evaluation processes. Districts will, "elicit regular feedback from students, parents/families, teachers, and other stakeholders regarding the implementation and effectiveness of the local AIG program" (AIG Standard 6g). Finally, districts must ensure the local AIG program is in line with state and federal gifted education guidelines. Policy states a district should:

> monitors the implementation of the local AIG program and plan in accordance with current legislation and state policies to ensure fidelity of implementation for all AIG program components. (AIG Standard 6b)

Overall, the combination of policies in this area of recommended practice including the collection of multiple sources of data, stakeholder satisfaction, and adherence to state regulations, show the policies are in full alignment with recommendations in gifted education.

Disaggregates yearly assessment data and makes results public. Policy information in Article 9B and the AIG Standards does not indicate there is a requirement for reporting disaggregated assessment data for gifted students. However, student achievement and growth data must be reported (AIG Standard 6d), and districts must "disseminate all data from evaluation of the local AIG program to the public" (AIG Standard 6i). Since the state policy does not specifically require disaggregation of data, policy in this category is only partially aligned with recommended practices.

Provides time and resources for evaluation. No specific provisions are in place in North Carolina to ensure districts will provide the time and resources needed to employ a full program evaluation.

Evaluates how student outcomes are affected by program elements. There are no policies in North Carolina that require program evaluations to include information about how student outcomes are specifically affected by program elements.

District Policies and Recommended Practices

In both states, the district-level program plan is considered district education policy. The districts must submit program plans to the state each year, and the state board of education in each state must approve the program plan. For the purpose of this analysis, "district policy" refers to the "district program plan."

Findings about alignment in district polices as compared with recommended practices are similar to the findings at the state level. This is to be expected, as district policies are closely monitored by the state and the program plans are organized and evaluated based on criteria set forth in state policy. District policies in the sixteen sample districts are, overall, toward alignment with recommended gifted education practices. In the following section, I review the district-level policies of Colorado and North Carolina in relation to the same criteria used to evaluated state-level policies versus recommended practices.

Policies (POLICY)

Colorado. Across the districts in Colorado, policies are partially aligned with recommended practices about policy.

Policy ensures educators understand/ implement district and state policies. One policy across the eight sample districts in Colorado specifically ensure educators must understand and implement any aspect of district and state policy. In one school division, the policy alludes to this idea of adherence to policy in stating, "By Fall 2013, all districts within the AU will be consistently implementing the identification process" (District 9). No other sample districts mention the practice, so district policies are partially aligned with recommended practices in this area.

Equitable allocation of resources. Most (7 of 8) AU policies in Colorado do not contain requirements for administrators to ensure gifted education receives an equitable amount of monetary resources. One AU is the exception to this larger trend.

> District 6 has made substantial financial commitment to gifted education, indicating its value to the community. The district contributes approximately ten times the state allocation. (District 6)

While all AUs submit their budget information in general in Colorado, this particular AU includes a clear distinction about the priority it places on gifted education in the AU. Though this one school division's policy is in line with recommended practices, overall, district policy is partially aligned in this category.

Educators collaboratively plan, develop, and implement services. Most of the larger school districts (3 of 4) specifically indicate services for gifted students are developed and implemented collaboratively. For example, the following district notes the role of collaboration in implementing policy:

> There are frequent direct communications with other departments including Planning, Assessment and Research, Budget, ELA, Special Education, Early

Childhood, SchoolChoice, Curriculum, Technology, Human Resources, Communications. (District 1)

Though the larger school divisions program plans have provisions for collaboration in place, the four smaller districts do not mention this practice. As a result, AUs in Colorado are partially aligned in this category.

Expenditures are tracked at school level. Some of the larger school divisions have specific policies about school-level budget reporting practices. District 1, 2, and 6 describe the requirement for school-level expenditure reports. For example, in one of the large districts, school-level budgets must be planned and submitted for approval:

> Every elementary and middle school receives a .25 FTE and $120 per identified gifted student. All schools submit a plan and budget for GT Department approval. (District 1)

In District 6, another larger district in Colorado, there are similar detailed requirements about budgeting at the school level. The division reports a finding from their C-GER 2011 review as part of their current comprehensive program plan:

> "District 6 has made substantial financial commitment to gifted education, indicating its value to the community. The district contributes approximately ten times the state allocation. The budget is in compliance with state regulations." C-GER/2011. (District 6)

While tracking school-level expenditures is common in larger school division policy, this is not true for the smaller sized sample districts. In the budgets submitted for these smaller school divisions, District 9, 10, 13, and 14, there were no policies that explicitly

require school-level budget information. Therefore, overall, district policies in this category are partially aligned with recommended practices.

Policies/procedures to guide/sustain all program elements. Each aspect of a comprehensive program plan required by the state of Colorado is mentioned in each district plan (i.e., procedures for family communication, definition of "gifted student," identification procedures, criteria for determining a "talent pool," identification portability, ALP content, ALP procedures and responsibilities, programming, evaluation and accountability procedures, personnel, budget, and early access provisions). Though each required category is mentioned in the plan, is it important to note each district differs on the level of detail and specific requirements provided for each program For example, District 10 provides a detailed, step-by-step procedures for their identification process, but does not provide similar detail about their evaluation process.

> Step 1 - Nomination component consists of a standard protocol to review assessment scores of all students utilizing a universal assessment.
>
> Step 2 – Collection of the Body of Evidence.
>
> Step 3 – Body of Evidence is reviewed by a Screening Review Committee.
>
> Step 4 – Development of Advanced Learning Plan to match programming and services with the needs, interests, and strengths of the student. (District 10, p. 4)

Underneath each step of the identification process, the AU provides specific procedures, measurements and methods that it requires. Under Step 1, for example, District 10 states:

> Teachers complete the Informal Class Review of Students Traits and Characteristics of Gifted Children form for all students in his/her class. The nomination process is conducive to receiving nominations from teachers, parents,

students, community members, peers, self and other school personnel. A Nomination Form is completed and given to the building GT representative. (District 10, p. 4)

In contrast to the detail this district provides about identification procedures, the district provides only limited information about evaluation procedures.

> Gifted student achievement and affective or talent goals are monitored and measured by a variety of methods:
>
> - utilization of data sources (to include performance, district and state assessments, progress monitoring data, ALP goals), complete body of evidence (to include anecdotal data, student surveys, student career and/or college plans, individual portfolios),
>
> - consistent reporting procedures (to include analysis of state assessment data, identification of discrepancies in the data, goal setting and demonstration of growth). (District 10)

The district does identify specific goals for the program evaluation, though it does not clearly delineate the procedures that must be followed in such a process. Since this criterion is in each sample district policy in Colorado, the policies are fully aligned with recommendations in this area.

Human/material resources for professional development. In a few school divisions (2 of 8), financial resources to seek outside training are specifically provided according to the policy. For example, District 5 states, "District 5 will also sponsor attendance for teachers of gifted learners at NAGC [National Association for Gifted

Children] (2012) and CAGT [Colorado Association for the Gifted and Talented] (yearly)" (District 5).

While policy provisions exist for specific monetary resources for professional development in two of the AUs (e.g., attendance to conferences or reimbursement for college courses), no districts mention a requirement for human resources (e.g., class coverage for teachers to attend training). Six out of eight districts provide no resource provisions about professional development. In this category, Colorado district policies are partially aligned with recommended practices.

North Carolina. Overall, district policies in North Carolina are moving toward alignment in the policy category of recommended practices.

Policy ensures educators understand/ implement district and state policies. All eight sample districts in North Carolina mention educators should be knowledgeable about state and district AIG policies. For example,

> AIG teachers and administrators are responsible at the school level to appropriately implement the District 7 AIG plan and adhere to related District 7 Board of Education (BOE) policies and applicable state laws. (District 7)

In this excerpt, the district specifically requires both teachers and administrators to implement state law within that district.

In contrast to the specific and clear policy provision above, the following provision references the same concept more indirectly.

> Ultimately, the AIG County Coordinator, other Central Office Staff and school-based administrators are responsible for ensuring effective implementation of the county AIG plan. (District 15)

The district policy states that administrators are responsible for effective implementation of district policies, which alludes to alignment with state policy. However, adherence to state policy itself is not directly mentioned in this district policy.

Overall, district policies in this area are toward alignment with recommended practices.

Equitable allocation of resources. Under this criterion, two district policies have specific provisions about equitable allocation of resources, two at least mention the practice, and four do not have any policies related to this criterion. In the following example, the district policy delineates gifted services as a fiscal priority.

> All budget expenditures are allocated to accomplish the program's goals and objectives, reflecting integration with the total school curriculum. The budget aligns completely with the program's gifted services, and is monitored regularly for accuracy and accountability. (District 3)

The second district with policy provisions about allocation of funds for gifted services is as follows:

> Funding provided through the state is augmented by significant local support and as such requires diligence and good stewardship of funds to ensure high quality AIG programming within District 8. (District 8)

Each of the districts with policies about equitable funding indicate specific budgets for gifted services are a priority (e.g., “budget aligns completely with the program’s gifted services” and “good stewardship of funds to ensure high quality AIG programming).

While three district policies clearly identify equitable allocation of resources as a requirement, others are less clear about the distribution of resources. One district states,

"The funding allotted for the local AIG program will be used to provide the maximum instructional experiences for students within the AIG program" (District 12). In contrast to the previous examples where the district provides specific connections between the use of funds and gifted program goals, this policy only alludes to the connection. The policy states funding will be used to "provide maximum instructional experiences" for gifted students, which means that funds are certainly provided for gifted services, but the extent to which that funding is equitably allocated for gifted programs is not fully clear.

The other four district policies do not include specific information about resource allocation and are classified with weak alignment. In North Carolina, sample district policies are partially aligned with recommended practices on this criterion.

Educators collaboratively plan, develop, and implement services. When it comes to including collaboratively planned and implemented services, all sample district policies in North Carolina mention this criterion. One example of a policy provision indicating collaborative implementation follows:

> The county provides professional development days which allow for AIG teachers to collaboratively plan together. Monthly AIG teacher meetings incorporate time for professional learning communities to develop and revise curriculum and share best practices. (District 3)

The excerpt above demonstrates teachers in the division will meet and collaboratively implement policy provisions.

Another example of the way district policies include provisions for collaborative implementation is seen in District 8 with the statement, "This collaborative environment ensures state policy is followed." This statement comes after a thorough description of

the ways collaboration will occur in the district and how that collaboration must inform district practices (District 8).

In general, sample district policies in this category are fully aligned with recommended practices.

Expenditures are tracked at school level. Some North Carolina district policies in the sample have language indicating school-level budget reporting is required. One district clearly requires the practices, three mention it, and four do not indicate whether the district requires school-level reporting of expenditures. In the district that requires the practice, the policy states the district must, "Budget appropriate funding in school level AIG plans for faculty to attend the regional and state AIG conference on a rotational cycle" (District 11). The policy is clear about the requirement for school-level reporting in the budget.

Three districts mention the practice of school-level expenditure tracking. For example:

> As funds are available, schools have the discretion to provide tuition reimbursement support for teachers seeking this license while employed in an AIG position within the district. (District 8)

In this district, the policy indicates schools make the decision as to whether to provide tuition reimbursement for AIG courses. This implies that there is some form of tracking of school-level AIG expenditures, but the policy does not specifically provide a provision for it. District policies in North Carolina about tracking school-level AIG expenditures are partially aligned with recommended practices, since only one district requires school-level reporting and half do not mention the criterion.

Policies/procedures to guide/sustain all program elements. Each AIG Standard required by the state of North Carolina is mentioned in each district plan (i.e., student identification, differentiated curriculum and instruction, personnel and professional development, comprehensive programming within a total school community, partnerships, and program accountability). Much like the case of Colorado, some program elements are delineated by clear procedures while other program elements receive passing references within in the same policy.

In District 4, the policy clearly delineates identification procedures, but not curriculum and instruction practices. The policy states:

> Student must achieve all of the following indicators (Individual assessments must be administered by a psychologist.):
>
> -Achievement and Aptitude: Standardized IQ and achievement test at 98% or above.
>
> -Motivation: Ratings of 98% on all behavior scales; adaptability in new setting
>
> -Performance: Grade of A in all subjects (or in subject for Subject Skipping).
>
> -Interest: Self-interest in acceleration.
>
> -Observation: A minimum rating of 98% on the Gifted Rating Scale completed by the AIG teacher. (District 4)

The above policy on identification provides specific procedures to be followed by the district.

In contrast, the following excerpt describes the curriculum and instructional practices in the same district:

> The AIG teacher and regular classroom teacher will work cooperatively to provide activities to challenge students and to recognize potential academic strengths. The regular classroom teacher will differentiate instruction to meet the needs of students. (District 4)

Where the district policy clearly delineates the identification practices, the language in the policy about curriculum and instruction is less specific. Each school district in North Carolina mentions each standard. Though the level of specificity given to each standard varied, sample policies in North Carolina districts are fully aligned on this criterion.

Human/material resources for professional development. Most districts either mention or ensure the availability of resources for professional development (5 of 8). For example, the following district policy requires the resources to:

> Provide ongoing PD for all AIG program staff on the strategies and teaching models provided in this plan to support school level professional development. Provide instructional resources for all AIG program staff to support school level professional development. (District 7)

Not all district policies that mention human and/or material resources for professional development explicitly require it as in the above example. One district states they will, "Employ an AIG-licensed coordinator to guide the AIG faculty in the writing, revision, and implementation of the plan, plan and coordinate staff development opportunities" (District 4). This is partial evidence of a provision for human resources (i.e., an AIG coordinator to conduct professional development), but does not fully encompass the requirement for policy to ensure both human and material resources for trainings and is categorized as moving toward alignment.

Two districts did not specifically ensure availability of resources for professional development. For example, one district policy says, "When funding is available, teachers will be reimbursed for classes taken for AIG certification" (District 11). This policy does not indicate any funding is required for professional development, just that it is allowable. There were no additional references about resources and professional development in this plan.

Many of the district policies are aligned with recommended practices on this criterion, while a few (three) are only weakly aligned. This means overall, the sample district policies are moving toward alignment on this criterion.

Identification (ID)

Colorado. Across the districts in Colorado, there are elements of identification very much aligned with recommended practice and others that are not. In general, sample districts in Colorado are categorized as moving toward alignment in Identification. A display of the full analysis for each district on this and all the criteria for identification is located in Table 22.

Committee review. All eight district plans in Colorado mention the use of a committee or identification team, though some have more thorough descriptions of what the committee tasks and responsibilities are throughout the identification process. The following example demonstrates how one district utilizes the identification committee in the review process:

> This committee reviews the Student Profile Form (including supporting body of evidence), completes the Scoring Key for GT Checklists, determines if adequate data is available for an appropriate balance of reliable and valid quantitative and

> qualitative measure, identifies students meeting criteria and begins to enter data on the GT Student Database. (District 10)

Another district clearly requires review of identification information by a committee, though the process and specific data reviewed are less clear than in the previous example:

> Review Team Procedures: The body of data is reviewed at the school level by the gifted education contact or site-based RtI problem solving team. The classroom teacher and an administrator are consulted to provide data to guide the decision-making process. (District 5)

Again, each district policy indicates review of identification by a committee is required as part of the identification procedures, which means Colorado sample district policies are fully aligned on this criterion.

Universal screening. Every sample district policy in Colorado indicates a universal screening procedure is used. One district policy states it includes, "The nomination component consists of a standard protocol to review assessment scores of all students utilizing a universal assessment" (District 14). Another example of the policy language about universal screening is:

> All students in grades 3, 5 and 7 are formally screened for TAG consideration using ability testing, multiple achievement measures, parent recommendations, and teacher recommendations. (District 6)

These two examples are indicative of the other policy excerpts about universal screening procedures in Colorado district policies. Though these two districts state the idea of universal screening procedures differently (i.e., one district screens all students with the same "universal" assessment while the other screens using multiple measures), both

policies clearly employ some form of universal screening procedure. Since all district policies in Colorado included language about universal screening procedures, the policies are fully aligned with recommended practices in this area.

Appeals procedure. All sample district policies examined in Colorado contain some form of appeals or disagreement resolution procedure. For example, one district states:

> Families of students who are not identified in the highly gifted process may discuss or appeal the decision by phone or in person at any time and all are invited to a meeting to discuss the assessments, results and decision process with an opportunity to meet one-on-one with GT staff. (District 1)

Other districts are more specific in the exact steps one must take through the appeals procedure. Take for instance District 10, whose policy states:

> Disputes are best handled and resolved as close to their origin as possible. Therefore, the proper channeling of complaints involving identification and/or programming are as follows:
>
> Building or District GT Coordinator
>
> Superintendent
>
> AU Director
>
> The matter should be discussed with the building or district GT Coordinator. If no agreement is reached between the parties, the disputed issue(s) shall be put in writing, dated, and signed by the parent […]. (District 10)

The district policy goes on to state each follow step, the timeline under which those steps must be completed, and the specific criteria that must be met under each step (e.g., disputes shall be submitted in writing) (District 10).

In contrast to the specific example of disagreement resolution requirements seen in the above policy example, one district is less direct about appeals provisions. This district policy states, "An appeals process is available for families who disagree with the initial placement recommendation" (District 6). Since all sample district policies include provisions for an appeal procedure, the districts are fully aligned with recommended practices.

Student reassessment. No sample district plans contain policies that provide provisions about student reassessment.

Locally developed norms. No policies in the sample district plans mention or requirement using local developed norms in the identification process.

Use of multiple assessments. Each district policy reviewed in Colorado contains identification processes provisions for using multiple measures. For example, in one district the policy states:

> Students may be identified through a universal screening, RtI and/or IMAP process, and/or oral or written referral from the classroom teacher, administrator, community member, parent or student. (District 13)

An example from another district states, "Students are identified for high potential/gifted programming using multiple criteria including research-based, culture-free assessments as endorsed by the district" (District 2).

These two examples are indicative of the language in the rest of the policies about identification that requires the use of multiple assessments in the process. District policies in this area are fully aligned with recommended practices.

Qualitative and quantitative measures. There is evidence of the use of both qualitative and quantitative measures in each of the eight district program plans in Colorado. The decision about whether the specified measure is qualitative or quantitative is left to interpretation. Consider the example below:

> Assessment data used includes the CogAT [Cognitive Abilities Test], Naglieri [Naglieri Non-Verbal Abilities Test], DRA2 [Developmental Reading Assessment, 2nd edition], Kathy Richardson math assessments, MONDO assessments, Investigations end -of-unit assessments, place value assessments, interim assessments, CELA [Colorado English Language Assessment] scores, TCAP [Transitional Colorado Assessment Program] scores, report card grades, writing samples, student interest inventories, parent surveys, gifted behavioral checklists, and any other student related evidence. (District 2)

Several different types of measures are indicated in this example, including quantitative ability (e.g., CogAT, Naglieri) and achievement (e.g., TCAP scores) tests, as well as qualitative measures (e.g., writing samples, gifted behavioral checklists, student related evidence). If a measurement is based on qualitative data (e.g., observations) but is clearly reduced to a specific score (e.g., must score 90% or higher on teacher checklist), I did not consider this qualitative information.

There is evidence of the use of both qualitative and quantitative measures in the identification process policies for every sample district, therefore the policies in this area are in full alignment with recommended practices.

Assessments that allow above grade-level performance. I found no policies in district plans that indicate any assessments in the identification process must allow for above grade-level performance.

Student profiles to expand identification pool. Each comprehensive program plan in Colorado mentions the use of student profiles or the "body of evidence" in the identification process. However, the districts do not specify that the intention/use of these profiles is to expand the pool of students for identification. For example, in the following case, evidence from the program plan is toward alignment with recommended practices. The plan states:

> […] body of evidence may include, but is not limited to, ability test scores, formal and informal classroom and district assessments such as DRA2/SRI [Developmental Reading Assessment/Scholastic Reading Inventory] or other reading inventory, KOI [Kingore Observation Inventory], CSAP [Colorado Student Assessment Program]/TCAP [Transitional Colorado Assessment Program] scores within the last two years, parent and teacher or specialist checklists, products or performances, and student interviews. Both ability and achievement data are considered. (District 1)

In assessing the level of alignment of this particular excerpt, I evaluate to what extent the policy clearly mandates the idea put forth by NAGC (2010) with regard to recommended practice. In the case of this district, and for all the districts, the policies were categorized

as “XXX,” or toward alignment, because while it does mention the body of evidence/student profile idea, it is not fully clear that this profile is used to expand the identification pool specifically. Additionally, elsewhere in the same policy it states, “Three indicators are needed for GT identification” (District 1), so the idea of student profiles is there and emerging, but it is unclear whether the policy is fully aligned through requiring implementation of the body of evidence as a way to expand or restrict the pool of students.

Since each district mentions the use of student profiles or the body of evidence in the identification process, Colorado district-level policies are moving toward alignment in this category.

North Carolina. In North Carolina identification polices at the district level are moving toward alignment. A display of the full analysis for each district on all criteria for identification is located in Table 23.

Committee review. The lack of requirement for an identification team at the state level is not relevant to whether the district policies include this additional element of recommended practice. All eight sample districts include a policy requiring an AIG identification team or committee review as part of the identification process. The following excerpt provides an example of the language in a district plan about committee review. It is exemplary of the policies across the eight districts.

> Each school within the District 11 School system will have a committee to serve as an identification placement team. These committees will consist of: Academically/Intellectually Gifted Coordinator (Building and/or LEA Level); Principal and/or designee; School Counselor’ At least one regular teacher

representative from the grade spans (K-2, 3-5, 6-8, 9-12) of the school. (District 11)

The district policy states that the district will have an identification team (ie., "identification placement team"), and lists who should make up the members of the team (i.e., AIG coordinator, principal/designee, school counselor, and at least one regular teacher). Each district policy has a similar statement requiring the inclusion of a committee to review students as part of the identification process, therefore district policy in North Carolina is fully aligned with this area of recommended practice.

Universal screening. Universal screening procedures are seen in the majority of the eight sample district policies (5 of 8).

In one example it is clear that a universal assessment is distributed to all students at a given grade level. It states, "All 3rd grade students will be screened for Aptitude; Teachers/parents can provide nominations of students from all populations" (District 11). The following example shows a similar case, where district policy requires universal screening, "[…] group Cognitive Abilities Test given to all students in the spring of the third grade" (District 16).

Some districts indicate they require "on-going" screening rather than administering a specific assessment at a specific time. These districts were deemed as "partially" aligned with recommended practices.

The first example of the policy language about ongoing screenings does not clearly delineate what exactly the screening process should entail, just that it will be ongoing. It states, "The screening process is ongoing and should be addressed several times during the year, to include students who may have moved into the school since the

beginning of the year" (District 4). Another example of a policy that describes general screening without specified parameters is seen in the following excerpt, "General screening occurs in grades K-3" (District 7). Sample districts that mention a "screening" process but do not indicate whether it is universal are only partially aligned with recommended practices.

Policy about screening procedures in District 8 exemplify how a screening procedure may be in place, but not be "universal."

> Annual system-wide screening will occur in the spring for grades 3-7. Student nominations for screening will be sought from teachers based on classroom performance and/or behavioral characteristics. […] Students in grades 3-7 who score 85th percentile or higher on an above level achievement or full scale aptitude test will be screened. When available, both local norms and national norms will be used. (District 8)

Taken together, we can see this district uses a combination of achievement test scores and teacher referral to create a pool of students to follow-up with for identification. This is not fully aligned with the recommended practice for universal screening procedures since the district only uses achievement test data and teacher referrals for their "screen" (rather than a screening test given to all students). Overall, North Carolina district policies are moving toward alignment in this category.

Appeals procedure. Each school district in North Carolina provides policies about an appeals procedure, typically called the "Procedure to Resolve Disagreements" (e.g., District 3).

Some of the program plans include the full, multi-step resolution procedure within the program plans. For example, in District 7, when a parent appeals the decision not to identify a student as gifted, these steps are followed. First, the parent can "make a written request for a conference with the School Based Committee for Gifted Education (SBCGE) to discuss concerns about the recommendation for identification or services" (District 7). If the appeal is not resolved at this stage of the process, the next step if for the parent to, "make a written request within thirty days for a conference with the principal" (District 7). Then, if the appeal is still not settled, parents may, "appeal in writing to the AIG Program Director" (District 7). If the disagreement is not yet resolved, the parent may, "appeal in writing to the Senior Director of APS" (District 7). The next stages for parent appeal are through the Area Superintendent and then through the overall Superintendent (District 7). When disagreements are not solved through this process, the next step is to present the appeal in writing to the District 7 Board of Education. The final step in the grievance process is to move the disagreement to the state level. "In the event that the grievance procedure fails to resolve the disagreement the parent may file a petition for a contested case hearing" (at the state level) (District 7).

In general, each school district has a similar appeal process. The only differences across districts are the number of local system administrators the appeal process must move through. In smaller districts (e.g., District 11), there are not two sets of upp-level administrators (e.g., director of instruction and superintendent), so the chain of command moves through less total people before the case is moved forward to the state-level for resolution.

The district policies in North Carolina are fully aligned with recommended practices in the area of identification appeals processes.

Student reassessment. Only two district policies mention the implementation of a specific student reassessment procedure.

> Students on the nurture list will be reassessed at regular intervals to determine eligibility for AIG services. Students identified AIG in one area will be reassessed at regular intervals to determine eligibility for AIG services in the non-identified area. (District 11).

The policy states that students will be reassessed both for the nurture list (k-2 preparation program) as well as to determine eligibility in other strength areas.

The only other district policy that mentions an appeals procedure indicates it exists in an additional available document, "[…] parents/families will receive the written handbook which will include the process of identification and placement, reassessment procedures, […]" (District 12).

While two districts mention reassessment procedures, all other sample district policies in North Carolina did not specifically mention such a process. Policies examined in this area are partially aligned with recommended practices.

Locally developed norms. Only one district policy in the North Carolina sample mentioned the use of local norms. The policy states, "When available, both local norms and national norms will be used" (District 8). Since this is the only district policy that mentioned the practice, the policies overall are only partially aligned with this area of recommended practice.

Use of multiple assessments. Every district policy in North Carolina requires the use of multiple assessments in the identification process. Each district varies in the number and type of assessment required, but all districts include more than one form of measurement. For example, one policy says they include:

> classroom performance; student work samples; consistent high achievement on achievement measures (both objective and authentic); grades from class work; achievement records; authentic assessment; anecdotal records of student motivation and achievement; competitions, contests and awards; standardized assessments of ability and achievement; and extracurricular activities. (District 15)

The above excerpt demonstrates the extensive lists of multiple measures district policies indicate are to be used in the identification process. In another example, the district lists each of the types of assessment and indicates that a student can meet qualification on any of the measures but does not have to achieve on all measures. The policy list is as follows:

> Student aptitude, as indicated by group Cognitive Abilities Test given to all students in the spring of the third grade and by individual psychological assessments OR,
>
> Student achievement, as measured by End of Grade Tests, End of Course Tests, and standardized achievement tests OR,
>
> Student performance, as demonstrated by grades, portfolios, projects, and other work samples OR,

> Student interest and motivation, as indicated by various indicators, including oral and written testimonials from teachers, parents, peers, and the student; samples of student work; and other appropriate documentation. (District 16)

Since each district policy provides provisions to include multiple measures in the identification process, North Carolina district policies are fully aligned with recommended practices in this category.

Qualitative and quantitative measures. All district policies in North Carolina except one specifically require some form of both qualitative and quantitative measures. For example, one district policy indicates:

> Both objective and subjective indicators will be used. Objective indicators will include the group Cognitive Abilities Test given in the spring of the third grade year and the End of Grade Tests in mathematics and reading given in spring of the third grade year. Subjective indicators include grades, checklists, and teacher and parent referrals. (District 16)

In the example above, the policy clearly states both objective and subjective measures are used and lists the specific types of each measure that is included in the identification process. Most of the district policies include specific language like the example above to delineate whether measures used are both quantitative and qualitative.

The district that did not mention both qualitative and qualitative measures indicate, "The District 11 School System has a variety of non-traditional and traditional standardized measures that we use in the identification of students." Each measure listed under this statement in the district policy provides only quantitative information about gifted students (i.e., primary test of cognitive skills, Naglieri Non-verbal Ability test

(NNAT), Woodcock Johnson IIII, Gifted Rating Scales (GRS), and Scales for Identifying Gifted Students (SIGS)). It is unclear from the policy whether the district uses the information from the rating scales qualitatively or includes only the scored scale.

Though one district policy is weakly aligned with recommended practices in this area of identification, the rest are fully aligned. Therefore, North Carolina sample district policies overall are moving toward alignment in this category.

Assessments that allow above grade-level performance. No district level policies provide provisions that ensure assessments allow for above-grade level performance as part of the identification process. No policies specifically prevent the practice.

Student profiles to expand identification pool. All school districts in North Carolina except one mention the use of student profiles. However, like in Colorado, it is not clear from the policy language whether these student profiles must be applied to expand identification practices. For example, one district states:

> Screening creates a list of students who may be in need of differentiated services beyond those provided by the regular classroom. If there are students recommended for screening who do not fit into any of the referral criteria, the AIG Needs Determination Team still includes the student on the list and reviews student anecdotal data. This process ensures that a broad-based pool of students is screened for identification. (District 3)

In the case of the district above, not all students in the "screening pool" are subsequently referred for further identification testing. Even though student profiles are used to create a wider screening pool net, the policy does not require all students in the pool to receive ability testing. Further, elsewhere in the same district policy the district indicates students

must meet minimum cut-score criteria on the identification measure a student only has access to if he or she has moved beyond the screening pool tier of identification. In this way, it is not clear the policy is in place to actually expand the identification process and so is moving toward alignment with recommended practices.

There are additional district policies that do not directly ensure the creation of student profiles are used to expand the identification process. For example:

> […] provides clear evidence of multiple criteria for student identification, including measures that reveal student aptitude, student achievement, or potential to achieve in order to develop a comprehensive profile for each student. (District 15)

In the above excerpt, it is clear student profiles are created, but it is not clear exactly how those profiles are used within the stages of the identification procedure overall.

Across the criteria in North Carolina district policies, some aspects of recommended practices are followed while others are not yet aligned. Thus, the category of district policy on identification is moving toward alignment.

Professional Development (PD)

Colorado. For professional development, district-level policy is partially aligned with recommended practices across the sample districts in Colorado. No policies in the program plans were fully aligned recommended practices in professional development. Many policies do mention the criteria, and those districts are reviewed below. See Table 24 for a visual display of the analysis for the level of alignment for each sample district in Colorado.

Educators understand the need for both solitude and social interaction. No district policies in Colorado mention professional development for any category of social or emotional needs for gifted students, including particular social interaction needs.

Professional development is ongoing and research-based. Several district policies (5 of 8) mention that professional development should be research-based and/or ongoing. For example, "District 5 acknowledges the need for continued professional development for teachers of gifted students and offers opportunities for professional learning." In this excerpt, the policy states professional development is "continued." It is clear the district policy probably means the professional development should be ongoing but the provision does not indicate whether the training should be research-based.

The following example is another instance where a district policy indicates professional should be continual, but is not necessarily research-based. The policy states:

> On-going coaching will occur in assisting with the implementation of differentiated instruction, on-going progress monitoring, higher order thinking skills, implementation of tiered programming and data driven dialogue. (District 10)

In the excerpt above, the district policy specifically indicates that "on-going coaching will occur." In addition to the mention of the ongoing nature of the training, specific research-based practices (e.g., tiered programming, differentiated instruction) are included in the types of training offered. Though those specific classroom practices are research-based, this does not mean the professional development is.

The previous two examples are indicative of policies in the other four districts who also had policies that require either ongoing or research-based professional

development, but did not include specific provisions for both. Overall, district policies in Colorado are moving toward alignment in this area.

Training addresses multiple aspects of giftedness and gifted programs. The majority (5 of 8) of gifted program policies at the district level mention that professional development should include multiple aspects of giftedness and gifted programs. For example:

> Topics considered for ongoing professional development include: programming strategies and resources (areas of math, reading and writing), characteristics/identification of underrepresented populations and students demonstrating exceptionality in the visual and performing arts, data/student monitoring, writing ALPs, best evidence based strategies, higher order thinking skills and tiered lessons. (District 9)

The above policy excerpt demonstrates a wide range of topic areas to be covered in professional development sessions, including at least one aspect of giftedness (e.g., characteristics of underrepresented populations) and multiple aspects gifted programming (e.g., data monitoring, tiered lessons, multiple subject areas).

The District 1 program plan also provides an example of how policies delineate topic areas for training sessions. The policy states:

> Professional development will focus on: Understanding gifted screening assessments for administration and using results for programming and strategies for growth of identified gifted students or those with gifted potential; ALP reporting and cycle of reporting growth to staff and parents, Programming tools such as curriculum extensions, compacting, acceleration, differentiation, etc;

> Educator Effectiveness Evaluation support; training GT representatives on how to provide professional development to school and their communities. (District 1)

In this example, multiple aspects of giftedness are not specifically mentioned. However, multiple aspects of gifted programming are clearly mentioned (e.g., curriculum extensions, acceleration).

Each of the other three district policies mention the inclusion of either multiple aspects of giftedness or multiple gifted programing topics as part of professional development, but not both. Three (of 8) sample district policies do not mention the inclusion of multiple areas of giftedness at all. Since two district policies are fully aligned, three are toward alignment, and three are weakly aligned, the policies in this category overall are moving toward alignment.

Trainers provide models for how to develop learning activities. Only three out of the eight Colorado districts have policy provisions that may include the modeling of how to develop learning activities in professional development. No policies provide clear requirements for inclusion of the practice. For example, District 10 states:

> On-going coaching will occur in assisting with the implementation of differentiated instruction, on-going progress monitoring, higher order thinking skills, implementation of tiered programming and data driven dialogue.

In this excerpt, the policy indicates several aspects of the professional development will be connecting to on-going progress monitoring and implementation of key strategies (e.g., tiered programming). Additionally, the policy uses the word "coaching," which may indicate a reciprocal relationship between AIG staff and regular education classroom

teachers. Since the policy implies modeling may occur, it is partially aligned with recommended practices.

Another example of a district policy that alludes to the use of modeling strategies in professional development is as follows:

> Several workshops specific to gifted education have been provided to teachers and administrators in the AU through these collaborative efforts. Some of the topics covered have included differentiated instruction, characteristics of gifted learners, training for a specific curriculum. (District 9)

In this example, the policy indicates professional development workshops include "collaborative efforts" on topics including, "training for a specific curriculum." If the district is training teachers on a specific curriculum, this means there is a model for learning activities (i.e., the specific curriculum) to follow. The teachers are being trained on that specific curriculum, thus being trained with modeling. The other district policy that mentions modeling of learning activities also references training on a specific curriculum using similar language (District 14).

Overall, only three district policies include references to the inclusion of modeling learning activities for teachers as part of professional development sessions. Five out of the eight districts do not reference the practice at all. Colorado district policies are partially aligned with recommended practices in this category.

Training addresses anti-intellectualism/current trends in gifted education. No program plans indicate district policies that ensure professional development includes topics about anti-intellectualism or current trends in gifted education.

Educators are made aware of organizations and publications in gifted education. A few (2 of 8) district policies indicate educators in their divisions are encouraged to attend or are allowed to attend state or national conferences for gifted education. The first district states, "District 5 will also sponsor attendance for teachers of gifted learners at NAGC [National Association for Gifted Children] (2012) and CAGT [Colorado Association for the Gifted and Talented] (yearly)." Since the district is sponsoring attendance at professional organization gatherings, we can assume that most educators in the district are aware of the professional organizations themselves. However, this policy provision, and others in the district policy, do not indicate whether educators are made aware of publications in gifted education through professional development opportunities. This means the policy is moving toward alignment.

The second district policy about professional organizations states, "BOCES GT Director attends State and National conferences related to gifted education as well as all State GT director meetings" (District 14). Again, state and national conferences are clearly mentioned, though publications in the field are not, which means the policy is toward alignment.

Other than the two previous examples provided, no district policies specifically mention professional organizations or gifted education publications. Five out of eight sample districts do not provide policy provisions that ensure educator knowledge of professional organizations and publications. Overall, district policies are partially aligned with this criterion for recommended practice.

Training addresses support of social and/or emotional needs of gifted students. No district policies in Colorado mention professional development for any category of social or emotional needs for gifted students.

Professional development allows teachers to assess and revise their own instructional practices. Only one district policy mentions the idea of teacher self-reflection, and this mention is very indirect. The policy states:

> Two of our districts this school year have made Differentiation the focus of their professional development for ALL staff. They have had two nationally known speakers come to our region and present to the combined staffs. One district[3] is going further with this training and having one of the speakers back for direct, in-class support for all teachers. (District 14)

Though the policy does not directly state that teachers are able to reflect on their practices and evaluate their own instruction, it does state that teachers will have "direct, in-class support" from a trained professional in one of the member districts. Since the policy does not directly state the requirement for reflection and alteration of one's own instructional practice, it is only partially aligned with recommended practices. With seven of eight policies in this category weakly aligned with recommendations and one that is partially aligned, policies in this category overall are only partially aligned on this criterion.

Training is sustained over time and includes follow-up on effects on teacher practices. No district policies include the amount of time (e.g., hours) or number of times (e.g., twice per year) required for professional development, nor do the policies require assessment of follow-up effects on teacher practices.

[3] It is not clear from the BOCES plan which of the member districts this is in reference to.

North Carolina. In the North Carolina districts, policy in the area of professional development is partially aligned with recommended practices. A display of the full analysis for each district on the criteria for professional development are located in Table 25.

Educators understand the need for both solitude and social interaction. Many (5 of 8) district policies mention that professional development about social and emotional needs of gifted students in general should be covered, but not the specific ideas of solitude versus social interaction. For example, the policy in District 12 states:

> The professional development sessions will include: introduction to the gifted learner, differentiating instruction for the gifted learner, and meeting the social/emotional needs of the gifted learner. (District 12)

Though the policy does indicate professional development should cover "meeting the social/emotional needs" of gifted students, the specific topic area of social interaction is not mentioned. While 5 out of 8 policies did mention the need to include social and emotional topics in professional development sessions, 3 out of 8 did not mention the practice at all. As a result, policy in this area is partially aligned with recommended practices.

Professional development is ongoing and research-based. There are no district policies in North Carolina that require professional development to be both ongoing and research-based. Half (4 of 8) of the school districts do have policies that mention the need for professional development to be either ongoing or research-based, while the other half of sample policies do not mention this criterion. Districts that are partially aligned with recommended practices have policies such as the following, "Conduct professional

development on research-based practices and strategies" (District 4). While the excerpt indicates professional development should be research-based, it does not indicate whether it should also be on-going. Policies across this category follow a similar format, where a provision for "research-based" training is not included or undefined and/or "on-going" or "yearly" implementation of the professional development is not identified as a requirement. Overall, North Carolina policies in this category are partially aligned with recommended practices.

Training addresses multiple aspects of giftedness and gifted programs. Most sample districts in North Carolina (6 of 8) mention they include either multiple aspects of giftedness or multiple aspects of gifted programs as part of the professional development provisions. For example:

> Professional development clearly matched to the goals and objectives of the plan, the needs of the staff providing services to academically or intellectually gifted students, the services offered, and the curricular modifications. (District 4)

The excerpt from District 4's policy, above, addresses both the needs of gifted students, generally, and gifted programming as topics to be included in professional development. It does not specifically indicate the need to include multiple aspects of giftedness as part of the training, though it implies this inclusion. This policy excerpt is in-line with the other policies that mention this practice and are moving toward alignment with recommended practices. District policies in this area are moving toward alignment with recommended practices.

Trainers provide models for how to develop learning activities. Only one district in North Carolina alluded to this aspect of professional development. The policy states:

> AIG teachers will be provided opportunities to create differentiated lesson plans as part of professional development provided at the district level. In this design, the use of assessment data will help determine which instructional practices should be used within their classrooms. (District 8)

In the excerpt, it is clear the district policy provides provisions for creation of differentiated lesson plans. However, it is not clear whether trainers provide models for how to develop learning activities for those plans. Since no other district policies even allude to this practice, North Carolina districts are only partially aligned with recommended practices on this criterion.

Training addresses anti-intellectualism/current trends in gifted education. No district policy specifically mentions the topic areas of anti-intellectualism or current trends in gifted education.

Educators are made aware of organizations and publications in gifted education. Professional organizations are mentioned in all but two district policies. For example, one district policy states a professional development goal is, "To attend state and national conferences to network and increase resources to more appropriately serve gifted students" (District 7). In another example, the district policy indicates,

> AIG Personnel as well as other stakeholders are highly encouraged to attend regional, state, and national conferences and professional development opportunities that promote and support gifted education. (District 3)

This excerpt is similar to the first, in that both district policies state it is a goal of the LEA to encourage participation in professional organization events. Neither of the examples, and none of the district policies, mention a provision about access to or awareness of

publications in gifted education. Overall, North Carolina district policies are moving toward alignment with recommended practices in this area.

Training addresses support of social and/or emotional needs of gifted students. Several (5 of 8) district policies mention the practice of including social and/or emotional needs of gifted students in professional development trainings. Many do not go beyond simply mentioning in a list of topics, for example:

> Teachers will participate in professional development in the field of gifted education to provide knowledge and implementation of the current and best practices defined in the field, the characteristics of gifted learners, and their related social and emotional development. (District 11)

We see similar evidence of policy mentioning social and/or emotional development of gifted students in the following excerpt:

> The professional development sessions will include: introduction to the gifted learner, differentiating instruction for the gifted learner, and meeting the social/emotional needs of the gifted learner. (District 12)

The excerpts presented are indicative of the way the other policies in this category are written. Overall, district policies on this criterion are partially aligned with recommended practices.

Professional development allows teachers to assess and revise their own instructional practices. No district policies identified teacher self-assessment and revision of instruction practices as a required programming component for professional development.

Training is sustained over time and includes follow-up on effects on teacher practices. Only one program plan in North Carolina mentions these practices. The policy states:

> Over the next three years, PD courses, including follow-up activities will be offered to personnel involved with AIG programs and services, including classroom teachers, exceptional children's personnel, counselors, and school administrators. (District 7)

Since only one district policy mentioned the criterion, and the rest did not mention the practice at all, North Carolina is partially aligned with recommended practices in this area.

Service Delivery Model/Program (SDM/P)

Colorado. Policies about service delivery models/programming at the district level in Colorado are moving toward alignment with recommended practices. See Table 26 for a a display of the full analysis for each district on all the criteria for service delivery models/programming.

Continuum of services. Three of the sample district policies fully require a continuum of services, four mention or allude to the idea, and only one district program plan does not mention the practice. The first district policy indicates the "continuum of services" exists as part of the ALP (Advanced Learning Plan) development process.

> A continuum of services is available to all gifted students through the implementation of the Advanced Learning Plan. The level of services is determined by the academic/affective needs of the student. (District 2)

The plan goes on to mention specific service options that are available as part of this continuum, including content or grade-based acceleration, grouping in the regular classroom, pull-out, or "other" service options (District 2).

Policy in District 6 delineates a range of services to be provided for gifted students more generally rather than only as part of ALP development. The policy states:

> District 6 provides a rich array of multiple programming options for students, ranging from early access into kindergarten to post secondary partnerships with higher education. Acceleration practices in Mathematics and Language Arts are utilized to meet advanced student needs. Additional programming practices include radical acceleration, ability grouping, pull-out and push-in services, enrichment opportunities, differentiation, content extensions, honors classes and International Baccalaureate at multiple school levels. (District 6)

The policy above lists several service options (e.g., acceleration, ability grouping) that are provided by the district. In both examples above, both the language of the policy (i.e., "continuum" or "range" of services) and the listing of services (i.e., pull-out, push-in, acceleration) indicate evidence for a continuum of services.

In contrast to the previous policy examples, which were fully aligned with recommended practices, the following excerpt is toward alignment on the criterion.

> A continuum of programming for gifted learners in the identified area(s) of strength is in place in the District 5. Universal and targeted programming is facilitated in the neighborhood schools at the elementary level, with a self-contained magnet program located regionally in the district to provide intensive programming. (District 5)

Some (5 of 8) district policies, like the one above, mention the idea of a "continuum" or "range" of services, but do not provide specific information about what those services actually are. In the example, the district policy says a continuum of services are provided and that "universal and targeted" programming is in place, but it is not clear from the rest of the policy whether or not this is the case. There are no listings of services provided under the continuum other than those excerpts indicated above.

Overall, the majority of district policies are either toward or fully aligned with recommended practices on this criterion, so are moving toward alignment.

Acceleration allowed. One district policy provides specific provisions about acceleration, six mention the idea and may allow either whole *or* subject-based acceleration, and one does not currently have policy provisions for acceleration

The following policy excerpt provides evidence from District 2 about the use of multiple types of acceleration in the district. The policy states:

> […] acceleration plans are considered for every identified student. If a student requires grade skipping, a set of criteria is considered and the Iowa Acceleration Scale is used. Other acceleration options include, but are not limited to, curriculum compacting, tiered assignments, telescoping, early entrance, concurrent enrollment, etc. (District 2)

The district policy excerpt indicates the district not only allows for whole-grade acceleration, but also for other types of acceleration including early entrance and curriculum compacting.

In the following AU policy example, the district allows whole grade acceleration, but does not mention subject-based acceleration. "The district employs a whole grade

acceleration process guided by the Iowa Acceleration Scale" (District 5). Conversely, another AU program plan categorized as moving toward alignment with recommended practice indicated that content-acceleration is explicitly allowed, but full-grade acceleration is not. The policy says, "Flexible instruction that allows for acceleration in content areas (not across grade levels) is available to gifted students at the elementary level" (District 14).

The policy examples are indicative of the inconsistencies in providing acceleration policy across the eight districts in this sample. Districts sampled in Colorado are moving toward alignment with recommended practices in this area.

Multiple grouping options. Two district-level policies in Colorado include provisions that require multiple grouping options for gifted students, and the rest allude to the practice in some way. For example, District 6 offers, "[…] ability grouping, pull-out and push-in services," which are three different possible grouping options. The following policy example also demonstrates the inclusion of multiple grouping options:

> Programming options include: Accelerated content, affective guidance, cluster grouping, competitions or advanced clubs, cross age grouping, curriculum compacting, in-class enrichment, pull-out enrichment, and independent study (District 14).

The provision lists "cluster grouping," "cross age grouping," and "pull-out enrichment" as different grouping options provided by the district.

While the policies above clearly state the use of multiple grouping options, others are less clear about grouping provisions. For example, in two of the larger districts, highly gifted magnet schools are part of the continuum of services offered to elementary

students (District 1 & District 5). In those cases, students are identified early and tracked into gifted magnet elementary schools for the highly gifted. At these schools, students are served only by endorsed teachers who are highly qualified in their content area, and are served for the full school day (District 1). Students served at the highly gifted magnet school are homogeneously grouped by ability, but students who do not qualify or do not apply to the school are not served by this grouping option. Neither district listed other grouping options at the school level in their policies aside from the magnet school.

Overall, since some district policies were fully aligned and the rest were toward alignment with recommended practices, the policies are moving toward alignment on this criterion.

Multi-year program plans. Every district has a multi-year program plan, as these are the district-level program policies and the basis for the current analysis. I accessed and read the program plan for each of the 8 districts in Colorado. District policies are fully aligned with this recommended practice.

Includes mentorships, internships, and/or vocational experiences. All districts except one provide policy provisions that list mentorships/vocational experiences as part of their service delivery options. For example, one plan states:

> "They [options offered] are: project based learning, advanced placement courses, establish concurrent enrollment, online extension courses, mentorships, flexible grouping, extension programming, replacement programming using resources from William & Mary, Jacob's Ladder, curriculum compacting and differentiating instruction (DI), and 21st Century skills" (District 13).

In the excerpt above, the policy clearly identifies mentorships as a service offering. This example is indicative of all the examples, where the district clearly mentions or lists "mentorship" in a list of service options.

Since each district policy except one mentions the practice of mentorship, policies are moving toward alignment in this area.

North Carolina. The district policies about service delivery and programming in North Carolina are also moving toward alignment with recommended practices overall. A display of the full analysis for each sample district on the criteria for service delivery models/programming is located in Table 27.

Continuum of services. Across district plans from all sample districts in North Carolina, policies provide some level of provisions for a continuum of services as programming for gifted students. For example,

> In this blended service model, the AIG teacher may serve AIG students by going into the classroom to work with the regular teacher with differentiation/planning instructional units and by consulting with the teacher to prepare differentiated units. The AIG teacher also serves AIG identified students by pulling them out of the cluster classroom to participate in units of study, which extend the NC Standard Course of Study. (District 3)

The district policy indicates AIG teachers will provide services in a variety of ways, including in the regular classroom through push-in and/or cluster grouping services, as well as pull-out services.

Another example of district policy language about gifted services is as follows:

> Our AIG School Coordinators may offer pull out services for enrichment, inclusive services, and consultative services for our teachers to ensure appropriate programming and instruction for our identified students. (District 15)

While the first excerpt specifically describes how each element of the continuum of services operate in conjunction with one another, the excerpt from District 15 uses language that is less specific like "inclusive services," "ensure appropriate programming," and "may offer."

Overall, district policies in North Carolina about service continuums are moving toward alignment with recommended practices.

Acceleration allowed. All district program plans specifically include policy allowing (7 of 8), or at least addressing (1 of 8), acceleration as a service delivery option. For example, about highly advanced students a district states, "For these students, a case study is prepared, using specific criteria for subject and grade advancement" (District 3). The same district plan also states:

> If an AIG student requires subject or grade acceleration or parents of an AIG student request acceleration, the AIG teacher and school must follow the procedure outlined in the Local Plan (District 3)

In another district the policy is to:

> Provide various service delivery options for acceleration; Investigate individual test scores for achievement and aptitude; Consult with school administrator to determine acceleration options. (District 4)

Each of the above policy examples indicate the use of multiple or specific types of acceleration (e.g. "determine acceleration options," "subject and grade advancement").

One district policy indicates that, while they do not currently have a policy about acceleration, they are working toward one in the future. The program plan states:

> The AIG coordinator and teacher will research effective policies for accelerative instruction at each grade level beginning with grade 3. The AIG advisory board will review recommended policies and determine a most appropriate policy that will address the needs of the district. (District 12)

Since all district policies were aligned with recommended practices except one, the polices are moving toward alignment in this area.

Multiple grouping options. Each sample district had policy provisions about multiple grouping options. First, District 15 states, "These [gifted] students are moved in and out of flexible-groupings as their abilities and needs merit. They are also clustered with students of like ability or interest." The policy mentions both ability and interest-based groupings as well as the possibility of movement in and out of the groups depending on student need.

Another example of a fully aligned policy under this criterion states:

> Cluster grouping for students who demonstrate high potential based upon benchmark assessments, classroom performance, etc. In-Class/Across Class flexible grouping (student movement based upon current data to encourage development of potential. (District 7)

In order to be fully aligned with recommended practices, a policy must state specific different types of grouping. The example above notes "cluster grouping" and "in-class/across class flexible grouping" as specific grouping options for students.

In contrast to the fully coherent policy excerpts above, some (3 of 8) district plans indicate grouping options re available, but do not provide specific examples of the grouping options. For example, one states:

> […] services are provided within the regular classroom, in pull out groups and in individual student sessions that will address academic as well as social/emotional needs. The program services are designed to fit the needs of students based on what instructional strategies are used within the regular classroom. (District 12)

Though pull-out and regular classroom instruction are mentioned, the plan does not specifically state whether any type of grouping should occur in the regular classroom. Policies such as this one, which does not clearly specify multiple grouping options, are partially aligned with recommended practices.

Overall, the district policies in this category were primarily fully aligned with recommended practices with one policy that is partially aligned. Thus, overall the policies are moving toward alignment.

Multi-year program plans Every district has a multi-year program plan, as these are the district-level program policies and the basis for the current analysis. I accessed and read the program plan for each of the 8 districts in North Carolina. District policies are fully aligned with this recommended practice.

Includes mentorships, internships, and/or vocational experiences. Each district except one listed mentorships as a service delivery options. As was the case in the Colorado sample of district policies, mentorships are simply listed as service option. For example, one district states they will,

> Continue to grow partnerships with institutes of higher education and community agencies and businesses to provide enrichment opportunities such as career exploration and mentoring opportunities. (District 8)

The excerpt above lists "mentoring opportunities" as an element of pursuit of community partnerships. Across each district the case was similar, where mentorships are listed as part of a "programming such as" list. Offering this as a service option is in full alignment with recommended practices.

Since district policies are primarily aligned with recommended practices (aside from one), polices are toward alignment on this criterion.

Curriculum and Instruction (CI)

Colorado. Overall, classroom practices were the least described components in Colorado program plans and are partially aligned with recommended practices. For a display of the full analysis for each district in the criteria for curriculum and instruction, see Table 28.

Beyond instructor implementation. Three sample districts mention a method of curricular implementation that goes beyond reliance on the instructor, and five districts did not mention this practice at all.

The major way district policies indicate some alignment with recommendations to go beyond full reliance on instructor-based implementation is to mention the use of curricular units designed for gifted students. For example, one district states that gifted teachers may use, "curricular materials such as William and Mary Units, Junior Great Books" (District 5). In the case of this example, the policy is not fully aligned with

recommended practices since the extent to which the listed resources are used is not provided.

Only three AU policies mention provisions about curricular or instructional methods that go beyond instructor based implementation, but those that do are moving toward alignment with recommended practices. Five out of eight policies do not mention the practice and are only weakly aligned. Overall, Colorado sample district policies are partially aligned with recommended practices in this area.

Assessment used to inform instruction. One district policy provides provisions both to use assessment generally, but also provides specific ways assessment should be incorporate into classroom practices. The policy describes the type of instruction the assessments should inform in the following excerpt:

> Standards-based tiered curriculum and instruction is based on summative, interim and formative assessments. Assessments are identified and in place to monitor progress (included in the District 10 RtI Plan) so instructional and programming decisions can be made within a more efficient time frame. (District 10)

The district above also indicates how instruction should be altered based on assessments:

> Teachers administer pre-assessments to determine the student's level of knowledge and then adjust their level of instruction and pacing based on the individual student data. (District 10)

The combination of the two policy excerpts from District 10 demonstrate both the use of assessments (e.g., "summative, interim, and formative assessments") and the way the results of those assessments must alter instruction (e.g., "adjust level of instruction and pacing based on the individual student data").

While the district above has clear policy provisions for assessment informed instruction, other (2 of 8) policies indicate only that assessments should be used but not how they should be used, or include only standardized achievement data to inform instruction. Four district policies mention the use of assessment, but not the actions that should be taken as a result of those assessments. For example, one policy states districts should use, "Formative assessment (diagnostic or pre-assessment), progress monitoring, summative assessment (post-assessment)" (District 1). One district policy mentioned the use of assessment to inform instruction, but did not go beyond standardized achievement data with this statement ("This data is further disaggregated at the district level to assist in informing instruction and programming appropriately" (District 9).)

Since many district policies in Colorado are either partially (2 of 8) or fully (6 of 8) aligned with recommended practices, overall the policies in this category are moving toward alignment.

Advanced content based on expanded standards. Two of the eight sample districts provide provisions for curriculum that includes advanced content based on expanded standards. In the first example, the policy indicates the district implements, "Standards-based tiered curriculum and instruction" (District 10). The policy provision indicates alignment with the recommended practice.

The second example is not as clear as the first about the alignment between the curriculum and general education standards, but the term "extension" does imply that the standard curriculum is what is being expanded. The policy states "Curriculum suggestions and extensions are available for GT staff in the schools on the GT web page

and in monthly staff development" (District 1). Because of the lack of clarity in whether standards specifically extended, this policy example is toward alignment

The criterion of advanced content based on standards is not evident in any of the other six Colorado sample policies. Sample district policies in Colorado are partially aligned with recommended practices on this criterion.

Content organized conceptually. No district policies in Colorado indicate content must be organized conceptually.

Curriculum aligned with real-world outcomes. No district policies in Colorado indicate content must be aligned with real-world outcomes.

Flexible classroom approaches to student learning. Seven out of the eight Colorado sample districts have policies about flexible approaches to student learning. One Colorado district policy includes requirements for flexible classroom approaches to student learning, which are as follows:

> Flexible instruction that allows for acceleration in content areas (not across grade levels) is available to gifted students at the elementary level. Programming options include classrooms with flexible grouping, general education with cluster grouping, differentiated instruction, and content extension which are based on each students, strengths, interests, and needs. (District 10)

The district policy excerpt reflects the inclusion of different types of grouping (e.g., cluster grouping) and instruction (e.g., differentiated instruction), which are indicative of flexible classroom approaches to student learning.

Four districts received ratings as toward alignment with recommended practices for the use of multiple grouping options. For example, policy about grouping in District 6

states they offer, "[…] ability grouping, pull-out and push-in services," which are three different possible grouping options. Policies such as this, that only mention multiple grouping practices but do not identify specific curricular modifications based on those groups, were toward alignment with recommended practices.

The other four district policies do not have provisions about using flexible approaches in student learning. Overall, Colorado district policies are toward alignment with recommended practices.

North Carolina. In the North Carolina districts policies examined, classroom practices are moving toward alignment with recommended practices for gifted students. See Table 29 for a display of the full levels of alignment analysis for each district on the criteria for curriculum and instruction.

Beyond instructor implementation. Half of the district policies in the North Carolina sample are rated as partially in alignment with recommended practices through policy indicating use of curricular units for gifted students. Some plans include reference to the use of "Jacob's Ladder" and "William and Mary Units" as units that are used with gifted students (e.g., District 4). Beyond this, two of the larger school divisions sampled in North Carolina indicate in their plans that they have an online collection of pre-developed curricular units which are available as a resource for AIG teachers. For example, one of the larger district plans includes this statement:

> AIG resources are embedded in District 7's Curriculum Management Application, allowing all teachers opportunities to enrich and extend the Common Core Curriculum. (District 7)

Since only half of the district policies mentioned elements of ciurriculum implementation that go beyond the instructor themselves, district policies overall were partially aligned with recommended practices on this criterion.

Assessment used to inform instruction. Each district in the North Carolina sample mentions the use of on-going assessments. For example, one district states:

> Our program maintains this practice so that formative and summative assessments benefit our students in strengthening their weaknesses and pursuing their strengths. We also implement our own observations along with formative test data to provide a diverse range of instruction to meet the needs of our students. (District 4)

In the excerpt above the district policy delineates both the type of assessments used as well as the specific purpose and use of those assessments in the classroom. This policy is deemed in full alignment with recommended practices.

Another example of the district policies that were categorized as aligned with recommended practices is as follows:

> Pre-assessments, when appropriate, can be used to help teachers determine which content can be compacted for some and provided through direct instruction for others. In many cases, AIG teachers need to create their own benchmark assessments since the sequence of instruction in an AIG classroom does not always follow the regular classroom. (District 8)

The district policy excerpt indicates assessments "can be used to help teachers determine which content can be compacted." Additionally, the policy indicates AIG teachers do not have to follow the same sequence of instruction as regular classroom teachers and can

create their own benchmark assessments. This policy is fully aligned with recommended practices.

While the two examples above are fully aligned with recommended practices, other policies are not as clearly in alignment with recommended practices. Several districts state they use formative assessments as part of a list of assessments used, but do not indicate how data are used nor did their descriptions go beyond just listing the use of formative assessment as an option (e.g., District 15). Since all districts are partially or fully aligned with recommended practices, the sample of North Carolina district policies are moving toward alignment in this area.

Advanced content based on expanded standards. In the sample district policies in North Carolina, curriculum is described as including advanced content based on standards. One of these district policies states:

> The NC Standard Course of Study (SCOS) will be adapted accordingly to address a range of advanced ability levels in language arts, mathematics, and other content areas as appropriate in order to ensure maximum growth in intellectual areas and/or specific academic fields. (District 12)

In the above excerpt, the policy specifically states the standards will be adapted to "ensure maximum growth" to address "advanced ability levels." The policy in this excerpt is fully aligned with recommended practices

The following example is of a district policy that indicates moving toward alignment with recommended practices:

> Services within the AIG Program build on the Standard Course of Study by incorporating 21st Century Skills to modify and supplement the academic knowledge attained at all grade levels. (District 11)

Similar to the full alignment example, the excerpt indicates the North Carolina standards will be modified to supplement academic knowledge. However, there is no specific reference in the excerpt that specifically indicates the standards should be "extended" or modified to make content more "advanced" in anyway. Thus, this is an example of a policy that is toward alignment.

Overall, district policies were classified as toward or fully aligned, with the exception of one district policy that did not mention the practice and therefore was weakly aligned. District policies in this category are moving toward alignment.

Content organized conceptually. There are no district policies in the sample from North Carolina that indicate content should be organized conceptually.

Curriculum aligned with real-world outcomes. Only two district policies in the North Carolina sample mention the pursuit of real-world knowledge or outcomes specifically in their policy about curriculum. An example of full alignment follows:

> These services enrich and extend the North Carolina Standard Course of Study and span grades K-12 in Language Arts and Mathematics through real world applications. (District 7).

In this excerpt, the policy indicates curriculum should extend the standards through "real world" applications.

Another example of a district policy incorporating real world outcomes statements reads as follows:

> Students will be provided opportunities and resources to work in groups to collaborate and communicate with one another to produce presentations that demonstrate real-world learning. (District 8)

The provision indicates presentations of knowledge should demonstrate real-world learning. Hence, the policy is fully aligned.

No other policies in the NC sample include the notion of aligning curriculum with content and outcomes that professionals in a field (i.e., "real world") would experience. So, overall, district policies in this category are partially aligned with recommended practices.

Flexible classroom approaches to student learning. Each sample district policy mentioned flexible classroom approaches to student learning in some way. Some policies are in full alignment with recommended practices. For example, one policy says:

> This assessment process includes both formal and informal methods of assessment. In this way, the individual student's strengths and needs are evident. This provides a basis for other instructional decisions such as flexible grouping, curriculum compacting and related extensions. (District 8)

The policy excerpt indicates that educators in the district should use approaches such as flexible grouping, curriculum compacting, and related extensions. This example is fully aligned with recommended practices.

Some district policies provide even more thorough examples of the specific flexible strategies that are to be used with students. For example:

> Teachers use pretests, surveys, portfolios, and inventories to make curriculum and instructional decisions. Curriculum compacting, tiered assessments and flexible

grouping are strategies planned from assessment results. ClassScape and Write-to-Learn are two successfully used programs in District 16. (District 16)

In the excerpt, several flexible strategies are recommended practices, including curriculum compacting, tiered assessments, and flexible grouping. This policy is fully aligned with recommended practices.

Overall, each district policy sampled from North Carolina is either partially, toward, or fully aligned with recommended practices in this category. Therefore, the district polices overall are moving toward alignment on this criterion.

Program Evaluation (EVAL)

Colorado. In the Colorado sample school district policies, program evaluation is only partially aligned with recommended practices. There are many areas of district policy in Colorado that are only weakly (e.g., time/resources, program effects) or partially (e.g., measures affective growth) aligned with recommended practices. The areas of strength in evaluation are measurement of student growth and disaggregating assessment data. Since there are more weakly and partially aligned criteria than strength areas, the sampled Colorado district policies are only partially aligned with recommended practices. An analysis of each criterion in this category follows. See Table 30 for a visual display of the full analysis for each district.

Assesses student progress with multiple indicators. Every CO program plan sampled mentioned measuring student progress with more than one indicator. For many districts, this means using multiple standardized achievement tests. One district indicates they utilize:

> […] multiple data sources such as Scantron, the [AU] Reading Assessment, ITBS [Iowa Test of Basic Skills] , CSAP [Colorado Student Assessment Program], and ACT [American College Testing], the results of which are stored in Infinite Campus. (District 6)

In District 2, "MAP [Measures of Academic Progress] data is used to measure student growth, identify 'level' of ability and inform intervention strategies." In addition to MAP testing, District 2 also uses the Colorado English Language Assessment (CELA), Transitional Colorado Assessment Program (TCAP), District reading assessment, and other locally developed measures (e.g., ongoing formative classroom assessment) to assess student progress (District 2).

All district policies sampled were either toward alignment or fully aligned with recommended practices, so overall, the policies were toward alignment on this criterion.

Measures student achievement growth. All district policies sampled from Colorado are fully aligned with this criterion. Each district mentioned specific measures for student achievement growth. One district states growth goals for their students as follows:

> 100% of gifted students in grades K-2 will show at least a full year's growth as measured by current Curriculum Based Assessments in Reading and Math. 80% of gifted students in grades 3-10 will score in the "advanced" category on Colorado State Assessment in their identified area(s). (District 14)

Not only does the district policy state achievement growth must be measured, it also indicates the specific achievement tests to be used. This policy is fully aligned with recommended practices.

In another example of district policy, the language is less specific but the policy is still fully aligned with recommended practices. The policy states:

> Each site looks at growth data for its TAG [Talented and Gifted] identified population of students at least 3 times per year. Each fall teachers review the CSAP [Colorado Student Assessment Program]/TCAP [Transitional Colorado Assessment Program] data for their previous students and, in the spring, schools set increased learning goals. (District 6)

Though the district policy does not provide goals that are as specific as the previous example, it still indicates that achievement growth is to be measured. The policy states that the district looks at growth data for TAG identified population and indicates a measure of academic achievement (i.e., CSAP/TCAP), which means it is fully aligned with recommended practice.

The sample district policies from Colorado are fully aligned with recommended practices on this criterion.

Measures student affective growth. Only two of eight sample district policies include provisions for measuring student affective growth. Six out of eight sample districts do not provide policy provisions about student affective growth measures. Both policies with provisions for measuring affective growth use the ALP individualized plan as a way to ensure this type of growth is measured. For example, one district indicates, "Affective goals are measured through the ALP. The number of affective goals attained are collected and tabulated" (District 9). This excerpt shows the measurement of attained affective goals as part of Advanced Learning Plan for students, and is in full alignment with recommended practices.

The second example of district policy is similar to the first. It states, "The ALP also includes how monitoring of student achievement and completion of affective goals will occur" (District 13). The policy includes measurement of affective goals as part of the ALP monitoring process, and is in full alignment.

Since 6 of 8 district policies provide no policy provisions about affective growth monitoring and only two DO provide provisions, the district policies examined in Colorado are partially aligned with recommended practices on this criterion.

Measures high level thinking skill growth. No sampled district policies from Colorado include descriptions of measurement of high level thinking skill growth.

Assesses the quantity, quality, and appropriateness of the program. No district policies are fully aligned with recommended practices on this criterion. Several district policies are moving toward alignment. Many (5 of 8) district plans indicate staff should perform some method of data collection (e.g., surveys, meetings) to assess stakeholder satisfaction with the gifted program and services. For example, one district plan states, "[the district will] conduct an annual survey to monitor our effectiveness at communication and use the results to modify communication methods as needed" (District 13). In another district this statement is made:

> Informal feedback from gifted program leaders, administrators, classroom teachers, parents and students is accepted and encouraged, throughout the school year, to assist in self-evaluation of gifted programming. (District 2)

While some district policies do indicate that feedback about the program is encouraged, the policies are not fully aligned with recommended practices. Eliciting feedback from stakeholders is useful in gaining some information about the quality, quantity, and

appropriateness of the gifted programming, but satisfaction is not the only data of importance according to the standard.

In three district policies, there is no mention of assessing quantity, quality, or appropriateness of program elements. Since most of the policies are classified as moving toward alignment (5 of 8) and no policies prevent alignment, the sample of Colorado district policies are moving toward alignment with recommended practices on this criterion.

Disaggregates yearly assessment data and makes results public. All district policies sampled from Colorado indicate assessment data are disaggregated yearly. For example, one policy states:

> GT student data is disaggregated to inform instruction for individual students at the school level. GT data is disaggregated for the district to determine disparities in district demographics. Identification is reported to CDE (Colorado Department of Education) in state identification categories. (District 1).

Since each district policy mentions the requirement to disaggregate assessment data, the policies are fully aligned with recommended practices in this area.

Provides time and resources for evaluation. No policies include provisions to ensure time and resources are provided for program evaluation.

Evaluates how student outcomes are affected by program elements. No district policy mentions evaluating how student outcomes are affected by specific program elements.

Each AU plan sampled from Colorado responds to the section for program evaluation in their comprehensive program plan template with the creation of "SMART"

goals. However, it is clear from the program plans that AUs interpret this to mean all goals should be based on student achievement growth only. For example, one AU lists the following goal for evaluation purposes:

> The AU will increase the median growth percentile by 1% point per year of this plan in reading, math and writing. The increase will be based on the 2011 median growth percentile data collected from CSAP [Colorado Student Assessment Program] 2011 of: reading 54%, writing 50% and math 45%. Additional data will be collected and evaluated from ongoing TCAP [Transitional Colorado Assessment Plan]. (District 13)

In addition to these achievement-based goals that each AU sets, some plans also indicate the evaluation of individual student toward ALP (Advanced Learning Plan) goals would be monitored yearly. No specific examples of an ALP goal or what progress toward an ALP may look like are included in the district policies.

While the district plans examined–representing the policies of the district -- do call for measurement of student outcomes (e.g., achievement growth), there is no indication in any of the examples that program elements and their effect on those outcomes are measured. District policies in this area are weakly aligned with recommended practices.

North Carolina. District policies sampled in North Carolina are moving toward alignment with recommended practices in the area of evaluation. See Table 31 for a display of the full analysis for each district in the criteria for program evaluation.

Assesses student progress with multiple indicators. Nearly all district policies (7 of 8 sampled) in North Carolina include provisions for multiple indicators to measure

student progress. The district policies list the indicators used to assess student progress and program accountability. For example, in one district policy, "State and national assessments, benchmarks, and grade reports serve as part of the evaluation data to be collected, disseminated, and analyzed" (District 3) In this excerpt the policy lists not only state benchmark assessments, but also national assessment and grade reports, which shows the policy is fully aligned with recommended practices.

Since most districts are fully aligned with recommended practices to include multiple indicators to measure student progress, and there is only one school district that is not, the policies are moving toward alignment on this criterion.

Measures student achievement growth. Each sample district policy except for one specifically includes reference to the measurement of student achievement growth. Some districts provide provisions to include multiple measures as part of that measurement, as in the following example:

> Gather, analyze and share AIG student growth and achievement data, including EOG [North Carolina End-of-Grade Tests] , EOC [North Carolina End-of-Course Tests], SAT, AP [Advanced Placement], ACT , PLAN and other qualitative data.
>
> Disaggregate data regularly to determine AIG student needs. (District 12)

Other district policies are not specific about the exact measure to be used to measure student growth. For example, in one district, "AIG student academic growth is one evaluative tool in measuring AIG Program strengths and opportunities for growth" (District 3).

Though these excerpts differ in specificity, they are still both in full alignment with recommended practices. Since most policies on this criterion are fully aligned and one policy is weakly aligned, overall the policies are moving toward alignment.

Measures student affective growth. No district policies indicate specific provisions to measure student affective growth.

Measures high level thinking skill growth. No district policies indicate specific provisions to measure student growth in high level thinking skills.

Assesses the quantity, quality, and appropriateness of the program. All district policies refer to assessment of the quantity, quality, and appropriateness of the program. Three school district policies are fully aligned with recommended practices. For me to assign the category of fully aligned, the policy had to go beyond surveying for satisfaction. For example, one policy states:

> Ensuring fidelity for all AIG components will require a collective effort from all teachers and administrators. Improving the services and support offered to the gifted student will be an ongoing process. The AIG Advisory Council will meet three times per school year to review the goals and current assessment, enrollment, and survey data (District 8)

Since the policy uses the term "fidelity," indicates a goal is to "improve the services and support efforts," and assessment includes monitoring of annual goals, enrollment, and survey data, the policy is fully aligned with recommended practices in this category.

While some policies are fully aligned with recommended practices on this criterion, others are less specific about the multi-faceted nature of the assessment of the program. For example, here is an instance of a less specific statement: "We will continue

to use annual surveys to ensure the AIG program is effectively meeting the needs of the gifted learner" (District 11). This district policy provides provisions for administering and discussing survey results, but it is not clear whether the surveys go beyond satisfaction (vs. quality, appropriateness) of the program. Therefore, this example is moving toward alignment.

Since some policies are fully aligned while others are not, district policies in North Carolina were moving toward alignment on this criterion.

Disaggregates yearly assessment data and makes results public. Each of the sampled districts from North Carolina incorporates mention of the disaggregation of yearly assessment data. Here is one example of a policy fully aligned with recommended practice.

> The data will also be used to assess program effectiveness and formulate strategies on an annual basis. The data will be disaggregated by grade, gender, and other areas that may be helpful in planning. (District 12)

In this excerpt, it is clear from the policy that data will be disaggregated, as well as that this will happen yearly (i.e., "on an annual basis").

Other districts, while not fully aligned with the recommended practice, are moving toward alignment. For example, one plan includes this statement:

> Although only on grade level achievement is available through state testing, the ability to disaggregate data is now available through various data systems such as EVASS. These systems make information more readily accessible. (District 8)

The policy indicates disaggregated data is accessible, but does not indicate or imply whether it is reported yearly or publically. The next example provides a similar

distinction in stating, “The Director of Curriculum, Instruction and Testing will disaggregate state testing information to analyze growth for AIG students and Cohort Graduation Rate Data” (District 11). Much like with the previous excerpt, this policy indicates data will be disaggregated but not whether this will happen annually or if results will be reported publically. Both of these policies are moving toward alignment with recommended practices.

The district policies on the criterion for disaggregated data annually and reporting results publically are, overall, moving toward alignment with recommended practices.

Provides time and resources for evaluation. Only one district policy examined alludes to the provision for both the time and resources for evaluation.

In this district, there is an extensive evaluation plan in place. The policy states:

GUIDELINES FOR ASSESSING THE AIG PROGRAM

- Evaluate the program annually through the Review Team discussions and every three years through surveys of all stakeholders, including parents, teachers, administrators, and students.
- Evaluate the three-year Plan by reviewing success in achieving the annual goals outlined for each year. Use both oral and written assessments.
- Conduct an annual review of each student's performance. Write a review of each student using grades, End of Grade (EOG), and teacher recommendation.
- Track long-term students' performance on EOG and End-of-Course (EOC) tests as one measure of academic growth.

- Ensure that evaluation of student performance measures growth in the option assessed. In other words, measure growth of a student receiving special services in mathematics by his progress in mathematics. (District 16)

Though the excerpt does not specifically state that all the time and resources for the evaluation will be provided, the policy on evaluation is thorough and specific. It includes elements like "review team discussions" and written reviews of each student's grades, EOG (North Carolina End-of-Grade tests), and teacher recommendations. In addition to the evaluation information provided above, the district also has a month by month plan is in place for each step of a full-scale evaluation, including a gifted education advisory board, surveys of all stakeholders (i.e. AIG teachers, regular teachers, parents, students), consideration of achievement and performance data in student areas of strength, and so-on (District 16). Inclusion of each of these provisions leads to the conclusion that the district will also provide the time and resources to carry out the detailed evaluation plan. But because the plan does not state this specifically, we can only say the policy is toward alignment with recommended practices.

Since most (7 of 8) policies do not provide provisions under this criterion, the policies overall are only partially aligned with recommended practices.

Evaluates how student outcomes are affected by program elements. District policies about program evaluation that connect program elements to student outcomes are mentioned in two policies. One district policy indicates the student outcome measure should be connected to the programming offered to the student. It states the district will:

> ensure that evaluation of student performance measures growth in the option assessed. In other words, measure growth of a student receiving special services in mathematics by his progress in mathematics. (District 16)

The excerpt indicates district policy requires student outcomes be connected to specific program offerings. However, it is not fully aligned with recommended practices because the policy does not mention effects of other program elements (e.g., identification) on student outcomes. The policy is moving toward alignment with recommended practices.

The following excerpt also provides evidence of a policy that is toward alignment with recommended practices:

> An external audit of the AIG program was conducted to evaluate current programming and effectiveness. Audit findings resulted in recommendations for improvement. All suggestions were taken into consideration as multiple drafts were created. (District 7)

The policy includes provisions for evaluating the program and effectiveness generally, which implies but does not directly state each program element will be evaluated. Further, the policy does not mention specific student outcomes, but does say "effectiveness" is evaluated. Since the policy does not connect evaluation of programming to student outcomes, it is partially aligned with recommended practices.

Since only two districts mention evaluation of programming and its effect on student outcomes, policies in this area are partially aligned with recommended practices

District/School Reports and Recommended Practices

I derived district and school reported practices from the self-reported practices provided on the surveys completed by district coordinators of the gifted and school-level

teachers or administrators who were responsible for delivery of instruction at the school level. District and school survey results are found in Tables 33-38.

Notably, the survey data for this component did not provide enough detail to warrant the same point by point analysis of each criterion as the state and district policy documents provided. For this section of the results report only those criteria for which relevant data are available will be considered. Rather than repeatedly reporting "no data available" the other criteria will simply not be mentioned. Additionally, the category of "policy" was excluded from this portion of the analysis since this section is only about enacted practices.

Identification (District Report)

Data on reported practices about identification were only collected on the district-level survey.

Colorado. For the eight sample districts, students are typically identified as gifted in is either 2nd or 3rd grade. In Colorado, five out of eight districts reported use of a selection committee to make identification decisions, which I categorized as moving toward alignment because recommended practices indicate a selection committee should be included in the identification process. Next, seven out of eight district reports indicate they use a universal screening procedure, which is a recommended practice and means these districts overall are moving toward alignment –even more closely on this criteria. Each sample respondent indicates they use more than one measure in the identification process, which is fully aligned with recommended practices. Additionally, each sample district indicates the use of both qualitative and quantitative measures in their identification process, which is fully aligned with recommended practices. While in one

of the eight districts the only qualitative piece of information included in the identification process is teacher referral, all the others (7 of 8) use teacher referral in combination with student work samples and/or performance-based assessments in the identification process.

Half of the districts did report the use of matrices (4 of 8) and three of eights report using cut-scores in their identification process. These practices are not aligned with recommendations, but all sample districts indicated the use of other practices in conjunction with these methods. For example, one district indicated they use a selection committee, multiple measures that are both qualitative and quantitative, a matrix, and cut-scores. Though some report the use of practices that are not recommended, they are not the only practices used.

On the identification criteria with available data from the sample districts, Colorado is moving toward alignment with recommended practices. See Table 33 for a summary of Colorado district sample responses.

North Carolina. Across the eight sample districts in North Carolina, students are typically identified in is 3rd or 4th grade. District reports indicate half (4 of 8) of the sample districts currently employ a selection committee as part of the identification process. Since only half the districts sampled employ this strategy, overall, the districts are partially aligned with recommended practices. Universal screening procedures are reportedly used in five out of the eight in North Carolina sample districts, which puts them in the category of moving toward alignment. Every sample district in North Carolina reports using multiple measures in the identification process, which is fully aligned with recommended practices, and all districts report using both qualitative and

quantitative measures for their identification methods. Most (6 of 8) indicate the use multiple qualitative measures including teacher referral, student work samples, and performance-based measures, as well as multiple quantitative measures including ability tests and achievement tests. Overall, the districts sampled in North Carolina are in full alignment on this criterion.

The pattern of the districts sampled in NC resembles the pattern of sampled districts from CO in the use of matrices and cut-scores. The use of matrices is reported by four of eight of the districts and the use of cut-scores is reported in five of eight districts in the identification process. Though these practices are not aligned with recommendations, all sample districts do indicate the use of other practices in conjunction with these methods. For example, one district indicates they use universal screening, a selection committee, multiple measures that are both qualitative and quantitative, a matrix, and cut-scores.

On the identification criteria with available data from the sample districts, North Carolina is moving toward alignment with recommended practices. See Table 36 for a summary of North Carolina district sample responses.

Professional Development (District and School Report)

Reports about current professional development practices are from both the district and school level surveys.

Colorado. Five out eight Colorado sample districts report they provide annual professional development for teachers on the use of rating scales or referral processes. This is a form of on-going training, and it is possible the training is research-based which means this practice is at least partially aligned with recommended practices.

At the school level, reports indicate that 8 out of 11 schools provide professional development for regular education teachers. Of these 8 that provide training for regular education teachers, half (4 of 8) report that training is more than one-hour long. Additionally, 6 out of 11 schools indicate professional development is provided for gifted education teachers, and 4 out of 6 of those indicate the training is longer than one hour.

No school or district reports of professional development practices provide information about the content of the sessions beyond the referral process, so a statement about alignment with content and any of the related recommended practices criteria cannot be made. Overall, with the information provided, the sample districts and schools in Colorado are at least partially aligned with recommended practices in professional development.

North Carolina. Half of the North Carolina sample districts (4 out of 8) report they provide annual professional development for teachers on the use of rating scales or referral processes. This is a form of on-going training, and it is possible the training is research-based which means this practice is at least partially aligned with recommended practices.

School reports indicate that 7 out of 13 schools provide professional development for regular education teachers. Of these 7 that provide training for regular education teachers, 3 report that training is more than one-hour long. Additionally, 9 out of 13 schools indicate professional development is provided for gifted education teachers, and 4 out of 9 of those indicate the training is longer than one hour.

As with Colorado, there are no survey reports of the content of professional development sessions aside from annual referral training reported at the district level.

Therefore, a statement about alignment of content and any of the content related recommended practices criteria cannot be made. Overall, with the information provided, the sample districts and schools in North Carolina are at least partially aligned with recommended practices in professional development.

Service Delivery and Programming (District and School Report)

Colorado. Overall, district and school reported practices are partially aligned with recommended practices. At the district level, self-reports about service delivery practices indicate a range of time devoted to gifted services by a designated gifted coordinator. In total, only half (4 of 8) of Colorado sample districts report their gifted coordinator is more than half-time. One district, a small, low resource district, indicates there is no designated gifted coordinator/director in their district.

The creation and submission of multi-year program plans is a district-level policy and we already know each district is required to, and has, submitted such a plan. Additionally, no survey questions provided data about mentorship offerings.

Continuum of services. Most school survey reports in Colorado (8 out of 11) indicate that gifted students are served in the regular classroom throughout the majority of the school day. This result is from both a direct question on the survey (e.g., How many hours per day do gifted students usually spend in the regular mathematics classroom?), as well as the report that the service delivery model for the districts is pull-out classes for one hour or less per week.

A total of 6 of the 11 schools report providing pull-out services at part of their programming for gifted students. Of those 6, half indicated their pull-out programs provide 2 hours or less of service per week. To complement these pull-out practices, most

sample schools reported the use of cluster grouping students during the regular school day (9 out of 11). All sample schools who use cluster grouping also report they use tiered assignments with those groups frequently or always.

Since many districts/schools in the Colorado sample indicated the use of both pull-out and cluster grouping, we can say they are partially aligned with recommended practices for offering a continuum of services.

Acceleration allowed. According to district report, all eight AUs in Colorado consistently implement acceleration policies. Only one AU reported only implementing one type (subject-based) acceleration. the rest reported allowing both subject- and whole-grade acceleration.

School-level reports of acceleration practices were not as consistent as at the district level. In total, 2 out of 11 sample schools report they allow both whole-grade and subject-based acceleration, 6 of 11 allow either whole-grade or subject-based, and 2 of 1l do not allow acceleration. Since the majority of district and school reports indicate acceleration is allowed, the practices are partially aligned with recommended practices for acceleration.

Multiple grouping options. As discussed previously, districts/schools in Colorado report providing both pull-out and cluster grouping as options for service delivery. This means the practices are at least partially aligned with recommended practices.

North Carolina. District/School practices in the North Carolina sample are moving toward alignment with recommended practices. At the district level, self-reports about practice indicated a range of time devoted to gifted services by a designated gifted coordinator. In total, seven districts indicated their gifted coordinator is full time.

Continuum of services. Like with Colorado, most North Carolina sample school survey reports in Colorado (11 out of 13) indicate that gifted students are served in the regular classroom throughout the majority of the school day. Again, this information is a combination of schools' response to a direct question on the survey ("e.g. How many hours per day do gifted students usually spend in the regular mathematics classroom?), and the report that the service delivery model across the schools is pull-out classes for one hour or less per week.

A total of 12 of the 13 schools report providing pull-out services at part of their programming for gifted students. Of those 12, almost all (10 of 12) indicated their pull-out programs provide two hours or less of services for students per week. To complement these pull-out practices, slightly less than half sample schools reported the use of cluster grouping students during the regular school day (6 out of 13). All sample schools who use cluster grouping also report they sometimes use tiered assignments with those groups.

Since many districts/schools in the North Carolina sample indicated the use of both pull-out and cluster grouping, we can say they are at least partially aligned with recommended practices for offering a continuum of services.

Acceleration allowed. In North Carolina, the district reports of acceleration practices were varied with two divisions not allowing any type, two only allowing subject-based, and half (4 of 8) allowing both types. The school-level reports of acceleration in North Carolina indicate inconsistent implementation of the practice. Only one out of 13 sample schools allows both whole-grade and subject-based acceleration, 7 of 13 allow either whole-grade or subject-based, and 5 of 13 do not allow acceleration. Since most sample schools indicate they do not allow any type or only allow one type of

acceleration, district and school practices in the North Carolina sample are partially aligned with recommended practices.

Multiple grouping options. As discussed previously, sample districts/schools in North Carolina report providing both pull-out and cluster grouping as options for service delivery. This means the practices are at least partially aligned with recommended practices.

Curriculum and Instruction (School report)

District and school-survey questions about curriculum and instruction did not provide thorough information about the nature of practices occurring in classrooms.

Colorado. Schools reported on the content emphasis of their gifted programming by using a sliding scale from 0-100 to indicate the degree of focus for each particular content area for gifted students in in their schools. Across the 11 schools, the main focus areas were math and reading, while technology literacy/skills and critical thinking skills (e.g., problem solving, decision making) were also indicated as primary foci in several school responses. Additionally, 5 of 11 Colorado sample schools reported a gifted specific curriculum in language arts, and 2 of 11 schools reported a gifted specific curriculum in mathematics.

The extent to which the practices in sample districts and schools in Colorado are aligned with curriculum and instruction recommended practices is not clear from data collected.

North Carolina. Similar to findings in Colorado, all 13 schools note math and reading are a curricular focus in instruction for gifted students, while technology literacy/skills and critical thinking skills (e.g., problem solving, decision making) are also

indicated as primary foci in some schools. In the North Carolina sample, 5 of 13 schools provide a gifted specific curriculum in language arts and 5 of 13 schools report a gifted specific curriculum in mathematics.

Overall, I was not able to make clear assertions from the data about what classroom practices look like in these school divisions. The extent to which the practices in curriculum and instruction are aligned with recommended practices is not clear from data collected.

Evaluation

Evaluation questions were not included in the district or school-level survey questions.

State/District Policy Alignment

See Table 32 for a visual representation of the overall State and District policy cross-level alignment in each of the six categories. Throughout these sections assertions are made without specific recommend policy criteria to avoid verbiage that is distracting from the generalizations. In each section an overall assessment is made of areas in which there is complete alignment across state and district policy and those areas separated by more than one category (fully aligned/weakly aligned, fully aligned/partially aligned, moving toward alignment/weakly aligned). Please refer to Tables 33-45 for the specifics and all other comparisons

Policy (POLICY)

Colorado. The findings indicate that state policy is more closely aligned with recommended practices than district policies. At the state level, provisions for many of the recommended criteria are moving toward alignment or fully aligned with

recommended practices. In contrast, at the district level the policies are only partially aligned on the same criteria. Hence, Colorado state policy and sampled district policy in Colorado are not closely aligned with each other

North Carolina. In North Carolina, policies overall at both the state and district levels are moving toward alignment with recommended practices and, thus, are aligned with each other .

Identification (ID)

Colorado. In Colorado, both state and district policies overall are moving toward alignment with recommended practices. As the summary in Table 32 indicates, there is variation on alignment on some individual policies, but the overall alignment is in accord. The consistency of policy alignment with recommended practice between the state and district level in this category, however, does not mean that the policies are moving toward alignment with recommended practice across all categories. The policies for provisions of committee review, use of an appeals procedure, using multiple assessments, and using qualitative and quantitative data in decision-making are fully aligned at both the state and district level. But, both state and district level are weakly aligned on the criteria of student reassessment, use of locally developed norms, and use of above-grade-level assessments.

North Carolina. As with the case for the state of Colorado and the sample districts from Colorado, both North Carolina state and district sample policies are moving toward alignment with recommended practices. While, overall the alignment with the state and districts policies is close, notable discrepancies exist on the provision for

committee review and student reassessment with state policy fully aligned and district policy only weakly aligned.

Professional development (PD)

Colorado. Both state policies and the district level policies sampled in the study are partially aligned with recommended practices overall. The state policy is fully aligned on two of the professional development criteria. However, the sampled district policies are only weakly aligned on the criterion of providing staff development for supporting the social and/or emotional needs of gifted children. See table 37 for complete Colorado professional development state/district policy alignment results.

North Carolina. Policy in the area of professional development is moving toward alignment in the sample districts in North Carolina. That is, policies in the sample districts are more aligned with recommended practices than state level policies. State policy is only more than partially aligned on two criteria which are ongoing, research-based professional development and address multiple indicators of giftedness. District policy is partially and moving toward alignment on the same criteria, respectively. State policy is only weakly aligned on the criterion for awareness of organizations/publications in gifted education, yet is moving toward alignment on this criterion at the district level. See Table 38 for complete North Carolina professional development state/district policy alignment results.

Service delivery model/programming (SDM/P)

Colorado. At the state-level policies are in full alignment in the service delivery model/programming area, while sample district policies are moving toward alignment. Policies are fully aligned at both the state and district levels on the criteria of creation of

multi-year programming plans and providing mentorships, internships, and vocational experiences. All other criteria are fully aligned at the state level, and moving toward alignment at the district level. See Table 39 for complete Colorado service delivery/programming state/district policy alignment results.

North Carolina. As in Colorado, state policies in North Carolina are fully aligned with recommendations while sample district policies are moving toward alignment. Both the state and sample district policies are fully aligned with recommended practices of creation of multi-year programming plans and providing mentorships, internships, and vocational experiences Again, all other criteria are fully aligned at the state level and moving toward alignment at the district level. See Table 41 for complete North Carolina service delivery/programming state/district policy alignment results.

Curriculum and Instruction (CI)

Colorado. State policies in Colorado are weakly aligned with recommended practices, and district policies are partially aligned. Colorado does not provide state policy about curriculum and instruction, and is weakly aligned on each criteria. At the district level, one key criterion is moving toward alignment with recommended practices, assessment used to inform instruction, while all others only partially aligned with recommendations. See Table 42 for complete Colorado curriculum and instruction state/district policy alignment results.

North Carolina. In North Carolina, both state and district policies are moving toward alignment with recommended practices. On the criterion for beyond instructor-based implementation, state-level policy is weakly aligned where as district policy is moving toward alignment. As the summary in Table 43 indicates, there is variation on

alignment on some individual policies across the other criteria, but the overall alignment is in accord.

Program Evaluation (EVAL)

Colorado. Both state and sample district policies in Colorado are moving toward alignment with recommended practices. The program evaluation criteria relating to measuring student growth and disaggregating assessment data are fully aligned at both the district and state levels. State policy is fully aligned on the criteria of measuring student affective growth and evaluating how student outcomes are affected by program elements, but are only partially or weakly aligned at the district-level. See Table 44 for complete Colorado program evaluation state/district policy alignment results.

North Carolina. As with Colorado, both state and sample district policies in North Carolina are moving toward alignment with recommended practices. On three criteria, assesses student progress with multiple indicators, measures student achievement growth, and assesses quantity, quality, and appropriateness of program, state level polices are fully aligned where sample district policies are moving toward alignment. There are two state criteria where the district-level polices are slightly aligned than the state policy. At the state level, time/ resources for evaluation in place and evaluates how student outcomes are effected by program elements criteria are weakly aligned with recommended practices and the district-level polices under the same criteria are partially aligned. See Table 45 for complete North Carolina program evaluation state/district policy alignment results.

State/District/School Practices Alignment

Data from district and school-level practices do not provide enough evidence about practices to draw conclusions in the curriculum and instruction (CI) and evaluation (EVAL) categories. Additionally, the policy (POLICY) category is not included in this analysis since the focus is on alignment of practices.

Identification (ID)

Policy and practices are well aligned for identification practices. In both states, at either the state or district level, policies on identification require the use of multiple measures, student profiles, universal screenings, and a selection committee for identification. All school districts reported using multiple measures in their identification process and universal screenings occurred in most districts. A little over half (9 of 16) of the school districts reported incorporating a selection committee into their identification practice. However, half of the districts, despite state and district policy that encouraged bodies of evidence or student profile creation, indicate they use a matrix or specific cut-off score to determine identification.

Professional development (PD)

Reports of practices from both states are aligned with state and district policies that are partially aligned with recommended practices. Districts and schools, overall, do require at least some form of professional development, but it is not clear whether the content and structure of that training is aligned with recommended practices. Regular classroom teachers who receive an hour or less of professional development are likely not receiving important elements of recommended gifted education training and training is not likely in-depth. Reflective reassessment of teaching practices and training with models of lessons based on frameworks in gifted education would likely take more than a

single one-hour session to implement and complete. It is promising to note that gifted education professionals across the districts and schools indicate receiving more hours in professional development. However, I did not have evidence of the content of the professional development sessions to assess as part of this analysis. While professional development practices are aligned with state and district policy, they are only partially aligned with recommended practices.

Service delivery model/programming (SDM/P)

Though district policies include the requirement or need for a continuum of services provided at the school level, services across the sample schools are primarily characterized by pull-out and regular classroom instruction, along with varying levels of implementation of acceleration policy. Though policies at the state and district level on service delivery models are fully aligned with recommended practices, the connections between policy and practice in this area are somewhat inconsistent, which means this connection is moving toward alignment.

Curriculum and Instruction (CI)

In the area of curriculum and instruction, I did not have enough classroom-level evidence to draw conclusions about policy-practice alignment.

Program Evaluation (EVAL)

Data about the current evaluation practices in schools and districts was not sufficient to draw conclusions about the connections between policy and practice in this category.

Results Summary

State-level policies, in general, are in alignment with recommended practices. In the areas of policy, service delivery models, programming, and evaluation, state-level policies are either fully aligned or moving toward alignment. Weak areas in state policy are curriculum and instruction for Colorado, and professional development for both states.

At the district-level, sample districts are generally moving toward alignment or fully aligned with recommended practices. This is true for every category except for professional development, which is only partially aligned with recommended practices.

Overall, policies at the state and district level are mostly aligned, with some exceptions. State and district level policies are mostly in alignment both across levels and with recommended practices in the areas of policy, identification, service delivery model/programming, and evaluation. North Carolina is also mostly in alignment across levels and with recommended practices in the area of curriculum and instruction, but Colorado is only weakly to partially aligned in this area. Alignment across levels and between policies and recommended practices is the least strong for the professional development category.

Reported practices, overall, are in alignment with recommended practices in the area of identification, but are only weakly or partially aligned for professional development and service delivery model/programming. While states and districts do have policy that is aligned with recommended practices across many categories, data I was able to retrieve on current practices indicate those recommended practices and policies are not fully translating into districts and schools.

CHAPTER V: DISCUSSION

The primary purpose of this study was to examine state and district policies along with district and school practices and their alignment with recommended practices, as well as with each other. In answering the research questions guiding this study, I reached the following conclusions for each area of recommended practice.

Conclusions

Policy (POLICY)

According to recommended practice, gifted education policy should set up environments for gifted education programming where educators can collaboratively plan develop and implement services for gifted students (Standard 5.2.1., NAGC, 2010). Policies should ensure human and material resources for professional development and gifted education services are provided, and educators should be able to understand and implement district and state policies (NAGC, 2010). Although there was evidence of consistent communication between the state and districts about policies across both states, in some cases, there was evidence that policies still did not fully translate into implemented practices for gifted students.

The policies in both states, at the both the state and district levels, create a space where programming that is aligned with recommended practices can happen. For example, at the state and district level, policies in program evaluation, curriculum, and service delivery models for gifted students are moving toward alignment with recommended practice recommendations. Further, across the two states, there is a clear

understanding of what is required to be in compliance with identification practices. The regulations correspond with nearly full consistency in that sample districts report their policies align with state law.

Though these polices are toward alignment with recommended practices, the aligned policies are not always implemented as intended. For example, in the case of acceleration policy, reports at the school-level indicate a lack of implementation of these policies. With identification, district-level reports of practice indicate some districts still use cut-scores despite state and/or district policy encouraging the creation of student profiles and team-based identification decision-making. For professional development, reported practices indicate minimal hours spent on training. With program evaluation, accountability measures are used but the evaluation of the influence of specific programmatic elements on student outcomes are not a focus. So, while state and district policies do not prevent quality programming from happening, policies in most areas (i.e., identification, professional development, service delivery, and curriculum and instruction) could be strengthened in order to ensure more schools are implementing practices aligned both with policy and recommended practice.

Policy alone cannot solve all the challenges related to alignment between enacted and recommended practices. In comparison to many other states across the country (CDSPG & NAGC, 2015), elements of gifted education programming regulated by the are much more extensive in both Colorado and North Carolina. For example, both states include the requirement for public reporting of gifted students' growth as an accountability measure. In Colorado, C-GER audits of comprehensive program plans, an annual UIP update, the considerable body of supplemental documents supporting ALP

design, program design, and the state evaluation process all provide a framework that supports gifted education programming from the top down (CDE, OGE, 2016). In North Carolina, requirements to report gifted student growth, AIG standards with supplemental resources, as well as annual program plan submission, review, and feedback from the State Board of Education also provide, at the state level, an environment that is supportive of gifted programs aligned with recommended practices. Despite the extensive accountability checks in place for local school divisions, reports of enacted practices were still not fully aligned with recommended practices (and district policies). State-level gifted education program policy messages are being received by district-level policy makers, but are not being fully translated into enacted practices. In this study, there is evidence for consistent policy messages between the state and district policymakers, but perhaps communication between policymakers and policy implementers at the district- and school- levels needs attention.

Overall, the two states in the study are providing a policy environment for schools and districts that is supportive of gifted education programming as well as an environment within which continuous growth toward more quality practices is encouraged. Many state- and district-level polices in the sample include evidence of recommended practices. Again, national surveys suggest that many other state and district policies in gifted education are unregulated at the state level, with local education agencies left with a large amount of autonomy in designing and implementing gifted programs (CDSGPG & NAGC, 2015; Callahan et al., 2013). In the case of other states where local education agencies do not have to submit program plans for approval by the state, it is difficult to hold districts accountable for their gifted programming activities. In

general, the policy structure of these two states provides an environment where good gifted education can (and does, at least in some areas) exist.

Identification (ID)

In general, policy and practices specifically about identification in Colorado and North Carolina are moving toward alignment with recommended practices. At both the state and district levels, policy for using multiple measures is in place. Additionally, district survey reports indicate multiple measures are now being used in practice.

While multiple measures are being used, the implementation of guidance to create student profiles and use a committee to make identification decisions is not as prevalent. First, many districts report using a matrix and/or a specific cut-score for identification decisions. One district even wrote a comment that indicates they use a lower cut-score than suggested by the state (District 1). Despite a movement in gifted education toward eliminating the use of cut-off scores and matrices in identification processes, as well as in the states' own state policies, several sample districts continue to employ these methods in their identification procedures. Also, district policies across both states indicate the use of an identification team or committee in the decision making process, yet reported practices indicate use of this practice is only occurring in half of the sample districts.

Evidence of district use of matrices, cut-off scores, and failure to fully adhere to a decision-team model may indicate that the direction to appropriately use multiple measures to create a student profile for the decision making process is not fully translating down to the individuals at the district and school levels responsible for identification. Both states provide additional documentation specifically about identification processes that were recently (2016) updated. Despite language that

encourages student profile based identification practices and team decisions, the use of cut-scores as a guideline are still mentioned even in those most recent versions of these materials (e.g., Colorado Gifted Education Unit [COGEU], 2016). Both state guidebooks indicate the "cut" scores should be thought of as a range or guideline, but nonetheless, a specific score (e.g., 95th percentile or above) is still listed in the documentation provided by the state.

Professional Development (PD)

Across every system-level in both policy and practice I found that professional development is an area that is only partially aligned with recommended practices. According to recommended practices, professional development is an important element of gifted education programming (NAGC, 2010). The literature in staff development suggests that in order to be successful in influencing teacher beliefs and changing practices of teachers serving gifted students, professional development should be structured in particular ways (Bangel et al, 2010; Rubenstein et al., 2015). For example, simply informing teachers about gifted students and providing support in implementing the differentiated instruction philosophy is not effective in changing classroom practices (e.g., Brighton et al., 2005). In contrast, providing teachers with units to implement and experiences with gifted students in the classroom does have the potential to influence teachers' underlying beliefs and practice (e.g., Bangel et al, 2010; Rubenstein et al., 2015).

Though policies about professional development exist across both districts and states, those policies did not always clearly delineate what specific topic areas must be included in the professional development or how that information should be delivered.

Additionally, the amount of time districts or schools must provide teachers for professional development was not specified, just that adequate professional development should be implemented. According to district and school-level surveys results, it is uncommon for districts and schools to provide professional development for more than one hour per year. This minimal time spent on professional development, regardless of the specific topic area, is not nearly in alignment with recommended practices. Modeling of services for gifted students, practicing methods, and teacher reflection (NAGC, 2010), all require significantly more time to work through than just one hour per year.

Service Delivery Model/Programming (SDM/P)

At the state and district levels, policies indicate alignment with recommended practices. However, school-level reports of practices indicate there is not always evidence of alignment with recommendations. In general, students in the sample districts are served primarily by pull-out services for two hours or less per week, with the bulk of their academic day spent in the regular education classroom. Some schools do indicate that students are served through cluster grouping and tiered assignments in the regular classroom, but this is not the primary case across the sample schools. Overall, general education alone has been called weak treatment (Gallagher, 1998). The treatment is even weaker when teachers only offer such limited instructional time ($\leq$ 2 hours/week) with the potential to be specifically differentiated to the level of curriculum appropriate for gifted students. In general, state and district policies indicate gifted programming is guided by a continuum of service offerings, but the school-level surveys reveal this may not be the case. Further, evidence from both school surveys and district-level policies indicate a lack of full-time class offerings for gifted students, an overall lack of full-time

schools for gifted students, and do not report the use of mentorships and other services aligned with real-world modeling.

Personnel. A large number of survey responses indicate one individual is either the only gifted teacher in their school, the only gifted coordinator in the district, or in some cases, the only gifted coordinator across multiple districts (e.g., in a BOCES). In many cases, gifted teachers (or coordinators) may be serving their students as sole agents of instruction. Unlike other areas of education where a whole grade level or whole subject area may have multiple teachers involved, gifted education programs in this study are characterized by personnel who must act alone. While some individuals have support systems at the district level with multiple personnel on staff with responsibilities for gifted education, many do not have the same support at the school level where there is one person reported who is dedicated to gifted services in a particular school, and in others were the only person with training in gifted education serving students across several districts (e.g., BOCES level, Colorado).

Acceleration. All AUs in the Colorado sample are now implementing at least some form of acceleration (according to the district survey responses). The program plans were not as clear about district acceleration practices, and the state released an addendum to the ECEA in 2013 specifically requiring AUs to address acceleration practices in their gifted programming (HB13-1023, 2013). It appears as though implementation of this new policy has been effective in ensuring acceleration policies exist at the AU level. North Carolina district level reports of practice and district-level policies are also aligned in providing the opportunity for schools to use at least some form of acceleration.

However, acceleration at the school level appears to be highly inconsistent. Although district-level reports indicate acceleration is a utilized practice, school-level reports show that this policy message may not be reaching into schools where comprehensive acceleration is rarely reported. There appears to be a disconnect between state and district beliefs about acceleration as reflected in policy and practices and school level beliefs as reflected by interpretation and implementation of those policies. In past studies, researchers have demonstrated that educators believe acceleration is a practice that will ultimately harm gifted students in some way despite extensive evidence to the contrary (Siegle, Wilson, & Little, 2013; Southern, Jones, & Fiscus, 1989). It is possible that these deep-seated beliefs about the educational practice of acceleration still play a major role in the inconsistent implementation of acceleration policies, especially at the school level.

Curriculum and Instruction (CI)

In the category of curriculum and instruction policies, the two states were different in their overall alignment with recommended practices. In Colorado, state and district policies on curriculum and instruction and/or classroom practices for gifted students were only weakly aligned with recommended practices. At the state level in Colorado, the only reference to classroom practices is that differentiated instruction should be included. At the district level, this was the area of policy given the least of attention and many of program plan provisions provided are vague.

In contrast, the North Carolina AIG standards include an entire category of standards devoted to curriculum and instruction practices, include the use of assessments to inform advanced instruction, and mention including advanced level content based on

standards as criteria. At the district level, curriculum and instruction policy is also connected to recommended practice, with each district policy indicating a response to every AIG curriculum standard. Even though some of the responses are vague, the district policies are, overall, toward alignment with recommended practices.

The weak alignment at the state level and partial alignment at the district level in Colorado led to the expectation that reported practices would also be weakly or only partially aligned with recommended practice. Given the higher level of alignment in North Carolina state and district policy, one might expect practices reported at the school level in that state may be more aligned with recommended practice. Results from the surveys indicate gifted students spend most of their school day in the regular classroom with an educator who may or may not have had approximately an hour of professional development on serving gifted students. Additionally, many schools reported having one or no teachers dedicated to gifted services at the elementary level.

Though survey reports do not provide a clear window into classroom practices, drawing conclusions from the other data that is reported (i.e., the amount of time typically devoted to professional development for regular education teachers), odds are against gifted students receiving differentiated instruction in the regular classroom at an advanced level. Differentiated instruction is a challenging philosophy to implement without thorough training, and even with high support, well-intentioned attempts may still fall short especially for the most advanced students (e.g., Brighton, et al., 2005).

In some cases, district-level policy reports indicate pre-developed units are used with gifted students. Additionally, some school survey respondents indicate they use a specific curriculum for gifted students in either math, language arts, or both. The survey

questions did not ask respondents to provide information about what constitutes "gifted curriculum," nor do we know to what extent gifted education teachers are implementing the pre-developed units with fidelity. Further, students typically only spent a few hours per week receiving instruction from gifted education personnel while the majority of their school day is spent in the regular education classroom. While it is not clear from district and school reports what classroom instruction is like in the general education classroom, it is safe to say that, in general, it is likely not fully aligned with recommended practices.

Evaluation (EVAL)

Though I was not able to thoroughly examine data related to evaluation practices through the survey data, I can still draw conclusions from both the state and district-level evaluation policies.

Many policies across states and sample districts are fully aligned or moving toward alignment with recommended practices in evaluation. Both states require disaggregating gifted student achievement data and require reports on their growth specifically as a sub-group. Additionally, both states include this data as part of each schools' publically available annual report card. Though there are fewer aligned policies on some criteria at the state and district levels, these evaluation policies are more aligned than many state and district policies across the country. In many other states, accountability for the education of gifted students is sparse and the number of students passing minimum benchmarks is the only focus of data reported to the state (CDSGPG & NAGC, 2015).

Concept of Alignment

As we know from policy researchers, coherence is a construct that includes alignment between policies and implemented practices, but also goes beyond alignment to a broader concept about consistent policy messages from multiple stakeholders and the policy environment in general (e.g., DeArmon et al., 2012). Coherence is about consistency in policy messages, both direct and in-direct, that school personnel receive throughout the process of implementation. In my study, I found that alignment, as an element of coherence, is a complex benchmark to evaluate. There really is not a "yes" or "no" classification of alignment to be found, as it was challenging to talk about alignment solely in terms of the whether or not a policy was aligned in a yes or no sense. Instead, I found that alignment was really about a level of or degree of alignment.

I found no clearly unaligned or distinctly opposing policies between state and district policies or between policies and recommended practices. The policies across both states were mostly moving toward alignment, with a few categories of recommended practices showing partial or weak alignment. Each state and each set of district policies have some aspects of the policy categorized in alignment with each larger category of recommended practices (i.e., policy, identification, professional development, service delivery/programming, curriculum and instruction, and program evaluation).

There were at least a few instances of weak alignment between district policies and implemented practices. For example, though the message from district policy is that gifted students will receive rigorous, targeted instruction, evidence suggests a low number of reported professional development hours for both gifted and regular education teachers, low numbers of staff (if any) dedicated to serving gifted students at the school level in some schools, and few reports of rigorous curriculum adopted for

implementation. These reported practices indicate there may be a lack of alignment between what the district policy indicates should happen and what school level personnel can realistically provide. Lack of accountability for regular classroom education teachers, despite school reports indicating this is where the students spend most of their time, is also concerning.

Examining the degree to which policies and practices are aligned with recommended practices is really a process of first determining what the true meaning behind a recommended practice or standard is and then determining to what degree a policy or practice portrays or exemplifies that idea. For example, what is the purpose of including "ongoing assessments" in the NAGC and AIG standards? According to scholars (e.g., Hockett, 2009; Tomlison & Jarvis, 2009), the purpose of ongoing assessment is to ensure gifted students are concretely and consistently experiencing curriculum that meets their needs. Meeting the needs of gifted students means teachers use assessment as an informational tool to alter instruction and allow students to pursue ever increasing levels of challenge through varied content, process, and products within their area of strength in all classroom settings. So, when examining policies for alignment with this idea, it was necessary to consider how the language in the policy or practice promotes and ensures the recommended practice is being implemented as intended.

Variation by size and resources

Very few patterns based on district size or district resources were evident. Budget was one area in which there was some variability by size. In Colorado, larger school division program plans have provisions for collaboration in place whereas smaller districts do not mention this practice. Some of the larger school divisions in Colorado

have specific policies about school-level budget reporting practices. District 1, 2, and 6 describe the requirement for school-level expenditure reports. While tracking school-level expenditures is common in larger school division policies, this is not true for the smaller sized sample districts. In the budgets submitted for these smaller school divisions, District 9, 10, 13, and 14, there were no policies that explicitly require school-level budget information.

In general, across both states, each sample district policy has a similar appeal process. The only differences across districts are the number of local system administrators the appeal process must move through. In smaller districts, for example (e.g., District 11), they did not have multiple district-level administrators (e.g., director of instruction, superintendent), so the chain of command moves through fewer people before the case is moved forward to the state-level for resolution

In the North Carolina sample, only large school division policies included provisions for curriculum implementation that went beyond instructor-based delivery. Meaning, the few district plans that mentioned this practice through the offering of pre-developed units were part of the large school division group. No small school divisions included curriculum implementation through pre-developed units in the North Carolina sample.

While Baker (2001a; 2001b) and Kettler et al. (2015) found variation in gifted education services by district/school size or available resources, other than the cases mentioned above, this was not the case in the sample states and districts in this study.

Comparison to previous gifted education policy studies

In previous gifted education policy research, investigators discovered a disconnect between state and district policies (e.g., Gallagher & Coleman, 1992). Results from this study do not line up with these previous conclusions, as many aspects of state and district policies were aligned across levels. This may reflect the national versus more local nature of this study. The most recent national survey of gifted education program state policies (CDSPG & NAGC, 2015) indicated most local school divisions have a high level autonomy and lack state-level accountability for their policy implementation. This was not the case in the two study states and sample districts. State policies in both states require the periodic submission of district gifted education policy in the form of comprehensive program plans. Both states provide districts with specific requirements for the program plans and one of the states (Colorado) employs a period on-site evaluation of the implementation of the program plans.

For the case of policy regarding identification procedures, results of this study are aligned with those from previous surveys (e.g., Callahan et al., 2013) where results demonstrated identification practices are the most clearly delineated elements of gifted education policies. Aside from both states and districts having clearly delineated identification practices and showing alignment across levels, the policies were also characterized, generally speaking, by relative alignment with recommended practices. This is contrast to previous findings by McClain and Pfeiffer (2012) who concluded that no identification policies and procedures across their national survey of state policies were in alignment with current gifted education practice recommendations.

Limitations

The two states and associated sample districts examined in this study are not representative of the typical context of gifted education policy across the United States. In order to conduct a detailed document analysis of both state and district-level policies, the sample states had to have a policy that requires local education agencies to submit program plans about gifted education programming at the district level. Very few states across the U.S. met this minimal criterion. As such, the results of this study are only representative of the two states that have such policies and were not selected to be example cases that could be generalized nationally.

I had limited access to classroom-level documents and data, so the district and school practices portion of the analysis is not as strong as the state and district policy analysis. This is especially true of both the Curriculum and Instruction category and the Evaluation category. Though many state and district policies support classroom-level practices, especially in North Carolina, it was hard to obtain a true understanding of what these polices actually look like in practice without experiencing or observing the classroom itself. As a result, I was unable to draw clear conclusions about school-level practices, especially in curriculum and instruction or evaluation

The nature of the document-based analysis is challenging. It is difficult to uncover the full context and deeper meaning of some of the documents, even with verification from the state consultant in gifted education or in some cases district, staff. Without a solid sense of which documents are typically used and accessed by actual gifted education personnel, I did not get a clear vision of which documents most personnel are drawn to use, which they have consulted and why, and how they get their information about additional documents to reference.

Along with the previous limitation of the documents being disjointed from their context, conducting the policy document analysis from the top down perspective may also have contributed to the lack of clarity in school-level practices. Examining the policies from the top down perspective by starting at the state level, looking through the district level, and then down through school-level practices, may have led to results that overemphasized the state and district level policies and under-emphasized the school-level data. It is important to note that both forms of analysis (top down and bottom up) provide useful data about practices, and each type should be used to inform the other.

Implications

Possible factors in the disconnect between policy and practice

In general, I saw that state- and district-level policies about gifted education programming were in alignment, while district- and school-level reported practices were less aligned. Though the specific reasons for this lack of alignment were not directly investigated in this study, there are several possible reasons for it to occur. First, previous findings about practices in gifted education (e.g. Kettler et al., 2015) indicate the amount of funding available in any given school and/or district can influence the type and availability of gifted education services. The amount of funding available can influence key programming elements like the availability of staff for providing gifted education services, for example.

In addition to possible funding differences, local environments may also vary in terms of the level of sociocultural support for gifted education programs. According to Gallagher (2008), policy consists of "the rules and standards by which scarce resources are allocated to almost unlimited social needs" (p. 513). At the state and district levels,

policy seems to be moving toward alignment with recommended practices, and therefore, demonstrates support of gifted education as a social need. However, the social environment may differ in practice at the district and school levels where implementation of these policies ultimately occurs. Historically, the level of value placed on gifted education services in society is not consistent and it is reasonable to expect the level of support may differ by locality. Implementation of policies in support of gifted education programs is determined by the ability of advocates (e.g., local gifted education personnel) to match the goals of gifted education with the currently trending societal value (equity or excellence) (Gallagher, 2002).

As described above, policy implementation is, at least in part, the responsibility of local gifted education personnel. From the sample district and school reports about enacted practices, we know that minimal dedicated staff are available. Some districts do not have a full-time coordinator; many districts do not have a one-to-one gifted teaching staff to school ratio. Given that so much depends on the advocacy abilities of a single individual, this staff availability issue may contribute to the challenges of fully realizing gifted education policies into enacted practices.

A final factor that may contribute to lack of implementation of recommended practices despite policy alignment is the lack of time devoted to professional learning experiences about gifted education within both general and gifted education. We saw from both the district- and school-level survey responses that both entities reported minimal hours of professional development offerings specifically devoted to gifted education. Also, neither state requires pre-service general education teachers or administrators to receive any professional learning experiences about gifted education. In

some districts, it was clear principals made the ultimate decisions about using acceleration practices at the school level, acting as a gatekeeper to the practice. Though principals may be ultimately responsible for implementation of gifted education policies like acceleration in their individual schools, special requirements to educate administrators about gifted students and associated services were not evident in the districts and schools in the sample.

Changing beliefs

In general, teachers are susceptible to under-estimating the ability of students in their classrooms. Tieso (2001) found that, in implementing mathematics units, regular education teachers often expressed reservations about whether their students would be able to master the advanced content of the unit. Further, the teachers were constantly amazed at how capable of success their students were, and they were especially surprised at the accomplishments of the more-able students (Tieso, 2001). While this is true for regular education teachers, the level of content that students are able to attain can even take educators of gifted students by surprise. For example, Feng, et al. (2004) showed that when interviewing teachers about the effectiveness of their curriculum unit for gifted students, many expressed surprise at the level of work the students were capable of attaining. This underestimation of ability was especially true for the highest ability students in their classrooms (Feng et al., 2004).

The above cases demonstrate why a lack of training and experience with gifted students and curriculum that meets the needs of these students is concerning. For teachers who have not had experience with gifted students, giftedness, or writing advanced curriculum, it may be difficult to overcome beliefs that students are not as capable as they

really are of grasping advanced material at a younger age and faster pace far beyond the teacher's typical expectations.

The importance of professional learning experiences for all staff who interact with gifted students is clear from the literature, however, state and district policies do not yet match up with these recommendations. While state and district policies in this study, overall, suggest at least some professional development about gifted students, there is little in-service training offered to regular education classroom teachers. Across the sample district, regular classroom teachers spent about one hour or less per year in professional development about gifted students, despite service delivery models that indicate students spend the majority of the school day in those teachers' classrooms. Again, neither of the states in the study require pre-service training for regular education teachers or administrators as part of initial certification programs. Care should be taken by policymakers to ensure all personnel who interact with gifted children during the school day have at least a minimal level of training about gifted students, including behaviors, challenges, and potential needs. This implication is explored further below.

Personnel Support

There are many beliefs about giftedness and gifted education that still exist and have implications for gifted education services. If we hope to ensure recommended practices are implemented at all levels of the education system, it is important to acknowledge beliefs (such as underestimation of ability and disbelief in acceleration) and seek ways to change beliefs, or at least to change behaviors that reflect underestimation of capabilities. Given the results that indicate gifted students are spending most of their time with individuals who have minimal formal training or experience with gifted

students, the support and training of these educators is especially important. Also, as part of working through the beliefs of the regular education teachers, we also need to equip the trained gifted education staff, who are the district and school voice for gifted education, to be able to serve in this role effectively. There are implications for professional development in schools and pre-service or endorsement training in gifted education.

Professional Development (in-service). According to the results from this study, time devoted to professional development in schools and the required content of professional development lack specificity except in it very brief duration. The literature suggests professional development in schools should include a modeling component and a self-reflection component in order to be effective in changing beliefs (e.g., Bangel et al., 2010; Rubenstein et al., 2015). Further, schools must increase the time allocated for professional development for both regular education and gifted education teachers about gifted students and services. This is especially true in cases where services for gifted students are primarily provided in the regular education classroom. Of course, one might also consider the option of providing services in other settings for greater periods of time with highly trained teachers.

Going it alone. In both of the study states, like in many states across the country, regular education teachers are not required to receive training on gifted populations as part of their teaching certification. Further, administrators are also not required to receive training in gifted education. This creates a scenario where, especially in smaller districts, not only is there only one person certified or endorsed in gifted education, but often this is the only person with any formal training on the existence of giftedness and services for

gifted students. Given that gifted education personnel are often the lone expert with knowledge of giftedness in their school or district, it may be useful to incorporate skills and strategies for working with this reality (of being without a network of support) throughout endorsement or certification courses for future gifted personnel.

Along with preparing gifted education staff to be the solitary voice for gifted education, creating electronic (or physical) support networks specifically for gifted education support and exchange of ideas may prove to be a useful strategy. According to researchers (Coburn, 2001, 2005; Spillane, 1998; Spillane et al., 2002), teacher networks provide environments both for general support as well as for new policy implementation support. In many of the schools and districts in this study, even in larger districts, gifted education personnel indicated they were the only individuals responsible for gifted services in their school or district. Though educators from larger districts had a full team of support at that level, they were still often the only gifted education representative at their school or sub-set of schools. In gifted education endorsement courses, it would be wise to prepare gifted personnel for this experience. Also, the creation of a well-known, teacher friendly networking system could be a very important element missing from the strong state-level gifted education presence. The policy frameworks to support recommended gifted education practices are in place, but the translation and support at the teacher/school level could be strengthened.

While helpful for all teachers, it may be especially important for gifted educators to pre-emptively assess and think about how they as educators of gifted students may influence policy in the larger school organization (e.g., Kristof, 1996; Youngs, Pogodzinski, Grogan, & Perrone, 2015). Assessing the local environment and fit between

an educator of gifted students and the rest of the school is especially essential in gifted education due to the wide range of beliefs about giftedness and gifted education, which can vary from simply uninformed beliefs to volatile anti-intellectualism (e.g., Finn, 2014). These educators can, if they are provided the tools to assess and understand their local environment, potentially affect change directed toward implementing gifted programming in their school or district that is increasingly coherent with recommended practices in the field.

Emphasis on Evaluation

Even though both Colorado and North Carolina have fairly detailed state policy requirements on program evaluation, those policies did not get fully translated into district level policies. Districts received the message that disaggregation of student achievement data is an important and required element of program evaluation. However, there seems to be a disconnect between the state policies in program evaluation that go beyond the reporting of student achievement growth data and district level policy or practice in using that disaggregated data on gifted students to direct program development and improvement. They also did not report use of evaluation data from assessing program context, input, or process across program components to determine effective practices.

There are two potential reasons for this disconnect. First, districts may simply need more clarity in both how to use student data to affect program change and the broader evaluation procedures they should follow. A step-by-step program evaluation process for aspects of programming other than student achievement data may help. Second, the current education environment itself emphasizes achievement testing and

accountability (e.g., Every Student Succeeds Act of 2015). Districts may simply emphasize the testing portion of the evaluation process over the other aspects because testing is emphasized in every other area of education. Regardless of the reason for more limited evaluation procedures, the importance of this element for gifted education personnel needs attention for policy implementation.

In Colorado, the implementation guidance recently released with regard to the ALP is a step toward re-emphasis on the less prominent aspects of program evaluation. The state guidebook on creating and measuring progress toward ALP goals provides clear guidance for AUs about how to ensure high quality, individualized goals are set for each gifted student (ALP guide, 2016). An additional element of the guidebook is that it provides direction for how to monitor student progress toward the high quality goals. Colorado is on the way to re-emphasizing the evaluation process, while North Carolina is not providing increased focus on program evaluation. In general, gifted education policies need to re-emphasize evaluation as strong, central element to continued success in implementing gifted education programming (Avery et al., 1997; Callahan & Reis, 2004; Callahan & Hertberg-Davis, 2013). States should re-emphasize that evaluation is about more than just student accountability on growth measures, or student satisfaction, but is about encouraging programs to specifically re-examine their program goals, the services aligned with those, and their influence on outcomes for gifted education students.

Directions for Future Research

Future research should focus specifically on the classroom manifestation of how policies are translated into programming for gifted students and why they are effectively

translated or why they are not effectively translated. Even in two states where policies overall are toward alignment with recommended practices, school-level implementation was not totally aligned with those practices.

Along with future research that focuses on classroom practices for gifted students, we also need to examine how district and school-level gifted education practitioners experience being alone as local gifted education advocates in their districts or schools. Results from studies such as these would better inform training programs for gifted educators and provide direction as to where gifted education program improvement efforts should be targeted (i.e., specific policies, administrator education, network support, etc.).

Finally, future research should further explore exemplary cases of gifted programming to better understand how those programs manifest. We should pay specific attention not only to the nature of the exemplary cases of gifted programming, but also to whether there is something other than a single person (e.g., great teacher or committed gifted coordinator) that is the reason the gifted program is so coherent with recommended practices. If there is just one individual that the quality programming stems from, then we should look to gain strategies we can use to cultivate more people like "that person" and apply those to preparation programs and practices.

Summary

Largely, the policies and practices across these two states and districts are moving toward alignment with recommendations in gifted education. While some policies in some areas, including curriculum and instruction in Colorado and professional development across both states were only weakly or partially aligned with recommended

practices, at least one criterion under each recommended practice category was evident at the district level. Meaning, at the district-level, sample policies contain at least one criterion under each over-arching area that is in full or toward alignment with recommended practices in that area.

The policies at the state a district level were strong in service delivery models/programming, but reported practices were not as strong in this area. A lack of evidence at the school-level contributed to a lack of findings about classroom practices, but the general trend seemed to be toward implementation that may not be aligned with recommended practices. Additionally, many district and school reports provided numbers of gifted education staff that indicate gifted students are served by a small number a staff, regardless of the district size.

Findings from these two states and associated sample districts provide promising insight into gifted education policy systems that are consistent across levels. Though this cross-level consistency has been improved relative to previous research in the area in the samples in these two states, there is still inconsistency in the implementation of those policies into practices.

Policy systems about gifted education, where they exist, play an integral role in guiding gifted education programming for students. It is important to continue to seek a better understanding of where the challenges are for gifted education practitioners in implementing recommended policies so educators can do a better job of equipping future educators to ensure gifted students receive the education they deserve.

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Appendix A
Additional Tables

Table 14
State policy and recommended practice: POLICY

	Educators understand/ implement district and state policies	Equitable allocation of resources	Collaboratively plan develop and implement services	Track expenditures at school level	Polices/ procedures to guide/ sustain all program elements	Human/ material resources needed for professional development
Colorado	XXXX	XXXX	XXX	XX	XXXX	XXXX
North Carolina	XXXX	XX	XXXX	XX	XXXX	XX

Note: XXXX = Fully aligned, XXX = Toward Alignment, XX = Partially aligned, X = Weak alignment/no evidence

Table 15
State policy and recommended practice: ID

	Committee Review	Universal Screening	Appeals procedure	Student reassessment	Locally developed norms	Uses multiple assessments	Qualitative/ Quantitative measures	Assessments allow above grade-level performance	Student profiles expanded pool
Colorado	XXXX	XXX	XXXX	X	XX	XXXX	XXXX	X	XXXX
North Carolina	X	X	XXXX	XXXX	X	XXXX	XX	X	XXXX

Note: XXXX = Fully aligned, XXX = Toward Alignment, XX = Partially aligned, X = Weak alignment/no evidence

Table 16
State policy and recommended practice: PD

	Educators understand need for solitude and social interaction	Ongoing, research-based professional development	Addresses multiple aspects of giftedness and gifted programs	Models how to develop learning activities	Addresses anti-intellectualism/ current trends in gifted education	Awareness of organizations/ publications in gifted education	Support social/ emotional needs of gifted students	Assess/ revise own instructional practices	Sustained over time including follow-up on teacher practice effects
Colorado	XX	X	XXXX	X	X	X	XXXX	X	X
North Carolina	X	XXX	XXX	XX	XX	X	XX	XX	XX

Note: XXXX = Fully aligned, XXX = Toward Alignment, XX = Partially aligned, X = Weak alignment/no evidence

Table 17
State policy and recommended practice: SDM/P

	Continuum of services	Acceleration allowed	Multiple grouping options	Multi-year program plans	Mentorships, internships, & vocational experiences
Colorado	XXXX	XXXX	XXXX	XXXX	XXXX
North Carolina	XXXX	XXXX	XXXX	XXXX	XXXX

Note: XXXX = Fully aligned, XXX = Toward Alignment, XX = Partially aligned, X = Weak alignment/no evidence

Table 18
State policy and recommended practice: CI (Key areas)

	Beyond instructor-based implementation	Assessment used to inform instruction	Advanced content based on expanded standards	Organized conceptually	Curriculum aligned with real-world outcomes	Flexible classroom approaches to student learning
Colorado	X	X	X	X	X	X
North Carolina	X	XXXX	XXXX	X	XXX	XXX

Note: XXXX = Fully aligned, XXX = Toward Alignment, XX = Partially aligned, X = Weak alignment/no evidence

Table 19
State policy and recommended practice: EVAL

	Assesses student progress with multiple indicators	Measures student achievement growth	Measures student affective growth	Measures high level thinking skill growth	Assesses quantity, quality, and appropriateness of program	Disaggregates yearly assessment data & makes public	Time/ resources for evaluation in place	Evaluates how student outcomes are effected by program elements
Colorado	XXXX	XXXX	XXXX	X	XXXX	XXXX	XX	XXXX
North Carolina	XXXX	XXXX	X	X	XXXX	XX	X	X

Note: XXXX = Fully aligned, XXX = Toward Alignment, XX = Partially aligned, X = Weak alignment/no evidence

Table 20
Colorado district policy and recommended practice: POLICY

	Educators understand/ implement district and state policies	Equitable allocation of resources	Collaboratively plan develop and implement services	Track expenditures at school level	Polices/ procedures to guide/ sustain all program elements	Human/ material resources needed for professional development
District 1	X	X	XXXX	XXXX	XXXX	XXX
District 2	X	X	XXXX	XXXX	XXXX	X
District 5	X	X	XXX	XXX	XXXX	XXX
District 6	X	XXXX	XXXX	XXXX	XXXX	X
District 9	XXX	X	X	X	XXXX	X
District 10	X	X	X	X	XXXX	X
District 13	X	X	X	X	XXXX	X
District 14	X	X	X	X	XXXX	X
	PARTIAL	**PARTIAL**	**PARTIAL**	**PARTIAL**	**FULL**	**PARTIAL**

Note: XXXX = Fully aligned, XXX = Toward Alignment, XX = Partially aligned, X = Weak alignment/no evidence

Table 21
North Carolina district policy and recommended practice: POLICY

	Educators understand/ implement district and state policies	Equitable allocation of resources	Collaboratively plan develop and implement services	Track expenditures at school level	Polices/ procedures to guide/ sustain all program elements	Human/ material resources needed for professional development
District 3	XXX	XXXX	XXXX	X	XXXX	XXXX
District 4	XXXX	X	XXXX	X	XXXX	XXX
District 7	XXXX	XXXX	XXXX	XX	XXXX	XXXX
District 8	XXX	XXXX	XXXX	XXX	XXXX	XXX
District 11	XX	X	XXXX	XXXX	XXXX	X
District 12	XX	XXX	XXXX	XX	XXXX	XXX
District 15	XXX	X	XXXX	X	XXXX	X
District 16	XXXX	X	XXXX	X	XXXX	X
	TOWARD	**TOWARD**	**FULL**	**PARTIAL**	**FULL**	**TOWARD**

Note: XXXX = Fully aligned, XXX = Toward Alignment, XX = Partially aligned, X = Weak alignment/no evidence

Table 22
Colorado district policy and recommended practice: ID

	Committee Review	Universal Screening	Appeals procedure	Student reassessment	Locally developed norms	Uses multiple assessments	Qualitative/ Quantitative measures	Assessments allow above grade-level performance	Student profiles expand ID pool
District 1	XXXX	XXXX	XXXX	X	X	XXXX	XXXX	X	XXX
District 2	XXXX	XXXX	XXXX	X	X	XXXX	XXXX	X	XXX
District 5	XXXX	XXXX	XXXX	X	X	XXXX	XXXX	X	XXX
District 6	XXXX	XXXX	XXXX	X	X	XXXX	XXXX	X	XXX
District 9	XXXX*	XXXX*	XXXX	X	X	XXXX	XXXX*	X	XXX
District 10	XXXX	XXXX	XXXX	X	X	XXXX	XXXX	X	XXX
District 13	XXXX	XXXX	XXXX	X	X	XXXX	XXXX	X	XXX
District 14	XXXX	XXXX	XXXX	X	X	XXXX	XXXX	X	XXX
	FULL	**FULL**	**FULL**	**WEAK**	**WEAK**	**FULL**	**FULL**	**WEAK**	**TOWARD**

Note: XXXX = Fully aligned, XXX = Toward Alignment, XX = Partially aligned, X = Weak alignment/no evidence
*Information derived from policy referenced attachment or appendix

Table 23
North Carolina district policy and recommended practice: ID

	Committee Review	Universal Screening	Appeals procedure	Student reassessment	Locally developed norms	Uses multiple assessments	Qualitative/ Quantitative measures	Assessments allow above grade-level performance	Student profiles expand ID pool
District 3	XXXX	XXXX	XXXX	X	X	XXXX	XXXX	X	XXX
District 4	XXXX	XX	XXXX	XXX	X	XXXX	XXXX	X	XXX
District 7	XXXX	XXXX	XXXX	X	X	XXXX	XXXX	X	XXX
District 8	XXXX	XX	XXXX	X	XXXX	XXXX	XXXX	X	XXX
District 11	XXXX	XXXX	XXXX	XXXX	X	XXXX	X	X	X
District 12	XXXX	XXXX	XXXX	X	X	XXXX	XXXX	X	XXX
District 15	XXXX	XX	XXXX	X	X	XXXX	XXXX	X	XXX
District 16	XXXX	XXXX	XXXX	X	X	XXXX	XXXX	X	XXX
	FULL	**TOWARD**	**FULL**	**PARTIAL**	**PARTIAL**	**FULL**	**TOWARD**	**WEAK**	**TOWARD**

Note: XXXX = Fully aligned, XXX = Toward Alignment, XX = Partially aligned, X = Weak alignment/no evidence

Table 24
Colorado district policy and recommended practice: PD

	Educators understand need for solitude/ social interaction	Ongoing, research-based professional development	Addresses multiple aspects of giftedness and gifted programs	Models how to develop learning activities	Addresses anti-intellectual-ism/ current trends in gifted education	Awareness of organizations/ publications in gifted education	Support social/ emotional needs of gifted students	Assess/ revise own instruction practices	Follow-up on teacher practice effects
District 1	X	XXX	XXX	X	X	X	X	X	X
District 2	X	XXX	XXX	X	X	X	X	X	X
District 5	X	XXX	XXX	X	X	XXX	X	X	X
District 6	X	X	X	X	X	X	X	X	X
District 9	X	XXX	XXX	XX	X	X	X	X	X
District 10	X	XXX	XXX	XX	X	X	X	X	X
District 13	X	X	X	X	X	X	X	X	X
District 14	X	XXX	X	XX	X	XXX	X	XX	X
	WEAK	**TOWARD**	**TOWARD**	**PARTIAL**	**WEAK**	**PARTIAL**	**WEAK**	**PARTIAL**	**WEAK**

Note: XXXX = Fully aligned, XXX = Toward Alignment, XX = Partially aligned, X = Weak alignment/no evidence

Table 25
North Carolina district policy and recommended practice: PD

	Educators understand need for solitude/ social interaction	Ongoing, research-based profess-ional develop-ment	Addresses multiple aspects of giftedness and gifted programs	Models how to develop learning activities	Addresses anti-intellectual-ism/ current trends in gifted education	Awareness of organizations/ publications in gifted education	Support social/ emotional needs of gifted students	Assess/ revise own instructional practices	Follow-up on teacher practice effects
District 3	X	XXX	X	X	X	XXX	X	X	X
District 4	X	X	XXX	X	X	XXX	X	X	X
District 7	X	XXX	XXX	X	X	XXX	X	X	XXX
District 8	XX	X	XXX	XX	X	XXX	XXX	X	X
District 11	XX	X	XXX	X	X	XXX	XXX	X	X
District 12	XX	XXX	XXX	X	X	X	XXX	X	X
District 15	XX	X	X	X	X	X	X	X	X
District 16	XX	XXX	XXX	X	X	XXX	XXX	X	X
	PARTIAL	**PARTIAL**	**TOWARD**	**PARTIAL**	**WEAK**	**TOWARD**	**PARTIAL**	**WEAK**	**PARTIAL**

Note: XXXX = Fully aligned, XXX = Toward Alignment, XX = Partially aligned, X = Weak alignment/no evidence

Table 26
Colorado district policy and recommended practice: SDM/P

	Continuum of services	Acceleration allowed	Multiple grouping options	Multi-year program plans	Mentorships, internships, & vocational experiences
District 1	XXX	XXX	XXX	XXXX	XXXX
District 2	XXXX	XXXX	XXX	XXXX	XXXX
District 5	XXX	XXXX	XXX	XXXX	X
District 6	XXXX	XXXX	XXXX	XXXX	XXXX
District 9	XXX	XX	XX	XXXX	XXXX
District 10	X	XX	XX	XXXX	XXXX
District 13	X	X	XXX	XXXX	XXXX
District 14	XXXX	XX	XXXX	XXXX	XXXX
	TOWARD	**TOWARD**	**TOWARD**	**FULL**	**TOWARD**

Note: XXXX = Fully aligned, XXX = Toward Alignment, XX = Partially aligned, X = Weak alignment/no evidence

Table 27
North Carolina district policy and recommended practice: SDM/P

	Continuum of services	Acceleration allowed	Multiple grouping options	Multi-year program plans	Mentorships, internships, & vocational experiences
District 3	XXXX	XXXX	XXXX	XXXX	XXXX
District 4	XXXX	XXXX	XX	XXXX	X
District 7	XXXX	XXXX	XXXX	XXXX	XXXX
District 8	XXXX	XXXX	XXXX	XXXX	XXXX
District 11	XXX	XXXX	XX	XXXX	XXXX
District 12	XX	XX	XX	XXXX	XXXX
District 15	XXXX	XXXX	XXXX	XXXX	XXXX
District 16	XXXX	XXXX	XXXX	XXXX	XXXX
	TOWARD	**TOWARD**	**TOWARD**	**FULL**	**TOWARD**

Note: XXXX = Fully aligned, XXX = Toward Alignment, XX = Partially aligned, X = Weak alignment/no evidence

Table 28
Colorado district policy and recommended practice: CI (Key areas)

	Beyond instructor-based implementation	Assessment used to inform instruction	Advanced content based on expanded standards	Organized conceptually	Curriculum aligned with real-world outcomes	Flexible classroom approaches to student learning
District 1	X	XXXX	XXXX	X	X	XXX
District 2	X	XXXX	X	X	X	X
District 5	XXX	XXXX	X	X	X	XXX
District 6	XXX	XXXX	X	X	X	XXX
District 9	XXX	XXXX	X	X	X	XX
District 10	X	XXXX	XXXX	X	X	XXXX
District 13	X	XX	X	X	X	XXX
District 14	X	XX	X	X	X	XX
	PARTIAL	**TOWARD**	**PARTIAL**	**WEAK**	**WEAK**	**TOWARD**

Note: XXXX = Fully aligned, XXX = Toward Alignment, XX = Partially aligned, X = Weak alignment/no evidence

Table 29
North Carolina district policy and recommended practice: CI (Key areas)

	Beyond instructor-based implementation	Assessment used to inform instruction	Advanced content based on expanded standards	Organized conceptually	Curriculum aligned with real-world outcomes	Flexible classroom approaches to student learning
District 3	XX	XX	XXXX	X	X	XXXX
District 4	XX	XXXX	X	X	X	XXXX
District 7	XX	XXXX	XXXX	X	XXXX	XXXX
District 8	XX	XXXX	XX	X	XXXX	XXXX
District 11	X	XXXX	XXX	X	X	XXXX
District 12	X	XX	XXXX	X	X	XX
District 15	X	XXXX	X	X	X	XXXX
District 16	X	XXXX	XXXX	X	X	XXXX
	PARTIAL	**TOWARD**	**TOWARD**	**WEAK**	**PARTIAL**	**TOWARD**

Note: XXXX = Fully aligned, XXX = Toward Alignment, XX = Partially aligned, X = Weak alignment/no evidence

Table 30
Colorado district policy and recommended practice: EVAL

	Student progress assessed w/ multiple indicators	Measures student achievement growth	Measures student affective growth	Measures high level thinking skill growth	Assess the quantity, quality, and appropriateness of program	Disaggregate yearly assessment data & make public	Time/ resources for evaluation in place	Evaluates effects of program elements on student outcomes
District 1	XXXX	XXXX	X	X	XXX	XXXX	X	X
District 2	XXXX	XXXX	X	X	XXX	XXXX	X	X
District 5	XXXX	XXXX	X	X	X	XXXX	X	X
District 6	XXXX	XXXX	X	X	XXX	XXXX	X	X
District 9	XXXX	XXXX	XXXX	X	XXX	XXXX	X	X
District 10	XXXX	XXXX	X	X	X	XXXX	X	X
District 13	XXXX	XXXX	XXXX	X	XXX	XXXX	X	X
District 14	XXX	XXXX	X	X	X	XXXX	X	X
	TOWARD	**FULL**	**PARTIAL**	**WEAK**	**TOWARD**	**FULL**	**WEAK**	**WEAK**

Note: XXXX = Fully aligned, XXX = Toward Alignment, XX = Partially aligned, X = Weak alignment/no evidence

Table 31
North Carolina district policy and recommended practice: EVAL

	Student progress assessed w/ multiple indicators	Measures student achievement growth	Measures student affective growth	Measures high level thinking skill growth	Assess the quantity, quality, and appropriateness of program	Disaggregate yearly assessment data & make public	Time/ resources for evaluation in place	Evaluates effects of program elements on student outcomes
District 3	XXXX	XXXX	X	X	XX	XXXX	X	X
District 4	X	X	X	X	XX	XXXX	X	X
District 7	XXXX	XXXX	X	X	XXXX	XXXX	X	XXX
District 8	XXXX	XXXX	X	X	XXXX	XXX	X	X
District 11	XXXX	XXXX	X	X	XXX	XXX	X	X
District 12	XXXX	XXXX	X	X	XX	XXXX	X	X
District 15	XXXX	XXXX	X	X	XX	XXXX	X	X
District 16	XXXX	XXXX	X	X	XXXX	XXXX	XXXX	XXXX
	TOWARD	**TOWARD**	**WEAK**	**WEAK**	**TOWARD**	**TOWARD**	**PARTIAL**	**PARTIAL**

Note: XXXX = Fully aligned, XXX = Toward Alignment, XX = Partially aligned, X = Weak alignment/no evidence

Table 32
Cross-level alignment for state and district policies - Overall

Recommended Practice	Policy (a)	Alignment	Cross-level (a/b)	Alignment	Policy (b)
POLICY	CO - State	Toward	+/-	Partial	CO - District
ID	CO - State	Toward	+/+	Toward	CO - District
PD	CO - State	Toward	+/-	Partial	CO - District
SDM/P	CO - State	Full	++/+	Toward	CO - District
CI	CO - State	Weak	--/-	Partial	CO - District
EVAL	CO - State	Toward	+/+	Toward	CO - District
POLICY	NC - State	Toward	+/+	Toward	NC - District
ID	NC - State	Toward	+/+	Toward	NC - District
PD	NC - State	Partial	-/+	Toward	NC - District
SDM/P	NC - State	Full	++/+	Toward	NC - District
CI	NC - State	Toward	+/+	Toward	NC - District
EVAL	NC - State	Toward	+/+	Toward	NC - District

Note: a/b (a = state alignment, b = district alignment); ++ = full alignment with recommended practice; + = toward alignment; - = partial alignment; -- = weak alignment.

Table 33
State policy and District policy: COLORADO (POLICY)

	Educators understand/ implement district and state policies	Equitable allocation of resources	Collaboratively plan develop and implement services	Track expenditures at school level	Polices/ procedures to guide/ sustain all program elements	Human/ material resources needed for professional development
State-level	XXXX	XXXX	XXX	XX	XXXX	XXXX
District-level	XX	XX	XX	XX	XXXX	XX

Note: XXXX = Fully aligned, XXX = Toward Alignment, XX = Partially aligned, X = Weak alignment/no evidence

Table 34
State policy and District policy: NORTH CAROLINA (POLICY)

	Educators understand/ implement district and state policies	Equitable allocation of resources	Collaboratively plan develop and implement services	Track expenditures at school level	Polices/ procedures to guide/ sustain all program elements	Human/ material resources needed for professional development
State-level	XXXX	XX	XXXX	XX	XXXX	XX
District-level	XXX	XXX	XXXX	XX	XXXX	XXX

Note: XXXX = Fully aligned, XXX = Toward Alignment, XX = Partially aligned, X = Weak alignment/no evidence

Table 35
State policy and District policy: COLORADO (ID)

	Committee Review	Universal Screening	Appeals procedure	Student reassessment	Locally developed norms	Uses multiple assessments	Qualitative/ Quantitative measures	Assessments allow above grade-level performance	Student profiles expanded pool
State-level	XXXX	XXX	XXXX	X	XX	XXXX	XXXX	X	XXX
District-level	XXXX	XXXX	XXXX	X	X	XXXX	XXXX	X	XXX

Note: XXXX = Fully aligned, XXX = Toward Alignment, XX = Partially aligned, X = Weak alignment/no evidence

Table 36
State policy and District policy: NORTH CAROLINA (ID)

	Committee Review	Universal Screening	Appeals procedure	Student reassessment	Locally developed norms	Uses multiple assessments	Qualitative/ Quantitative measures	Assessments allow above grade-level performance	Student profiles expanded pool
State-level	X	X	XXXX	XXXX	X	XXXX	XX	X	XXXX
District-level	XXXX	XXX	XXXX	XX	XX	XXXX	XXX	X	XXX

Note: XXXX = Fully aligned, XXX = Toward Alignment, XX = Partially aligned, X = Weak alignment/no evidence

Table 37
State policy and District policy: COLORADO (PD)

	Educators understand need for solitude and social interaction	Ongoing, research-based professional development	Addresses multiple aspects of giftedness and gifted programs	Models how to develop learning activities	Addresses anti-intellectualism/ current trends in gifted education	Awareness of organizations/ publications in gifted education	Support social/ emotional needs of gifted students	Assess/ revise own instructional practices	Sustained over time including follow-up on teacher practice effects
State-level	XX	X	XXXX	X	X	X	XXXX	X	X
District-level	X	XXX	XXX	XX	X	XX	X	XX	X

Note: XXXX = Fully aligned, XXX = Toward Alignment, XX = Partially aligned, X = Weak alignment/no evidence

Table 38
State policy and District policy: NORTH CAROLINA (PD)

	Educators understand need for solitude and social interaction	Ongoing, research-based professional development	Addresses multiple aspects of giftedness and gifted programs	Models how to develop learning activities	Addresses anti-intellectualism/ current trends in gifted education	Awareness of organizations/ publications in gifted education	Support social/ emotional needs of gifted students	Assess/ revise own instructional practices	Sustained over time including follow-up on teacher practice effects
State-level	X	XXX	XXX	XX	XX	X	XX	XX	XX
District-level	XX	XX	XXX	XX	X	XXX	XX	X	XX

Note: XXXX = Fully aligned, XXX = Toward Alignment, XX = Partially aligned, X = Weak alignment/no evidence

Table 39
State policy and District policy: COLORADO (SDM/P)

	Continuum of services	Acceleration allowed	Multiple grouping options	Multi-year program plans	Mentorships, internships, & vocational experiences
State-level	XXXX	XXXX	XXXX	XXXX	XXXX
District-level	XXX	XXX	XXX	XXXX	XXX

Note: XXXX = Fully aligned, XXX = Toward Alignment, XX = Partially aligned, X = Weak alignment/no evidence

Table 40
State policy and District policy: NORTH CAROLINA (SDM/P)

	Continuum of services	Acceleration allowed	Multiple grouping options	Multi-year program plans	Mentorships, internships, & vocational experiences
State-level	XXXX	XXXX	XXXX	XXXX	XXXX
District-level	XXX	XXX	XXX	XXXX	XXX

Note: XXXX = Fully aligned, XXX = Toward Alignment, XX = Partially aligned, X = Weak alignment/no evidence

Table 41
State policy and District policy: COLORADO (CI [Key areas])

	Beyond instructor-based implementation	Assessment used to inform instruction	Advanced content based on expanded standards	Organized conceptually	Curriculum aligned with real-world outcomes	Flexible classroom approaches to student learning
State-level	X	X	X	X	X	X
District-level	XX	XXX	XX	X	X	XX

Note: XXXX = Fully aligned, XXX = Toward Alignment, XX = Partially aligned, X = Weak alignment/no evidence

Table 42
State policy and District policy: NORTH CAROLINA (CI [Key areas])

	Beyond instructor-based implementation	Assessment used to inform instruction	Advanced content based on expanded standards	Organized conceptually	Curriculum aligned with real-world outcomes	Flexible classroom approaches to student learning
State-level	X	XXXX	XXXX	X	XXX	XXX
District-level	XX	XXX	XXX	X	XX	XXX

Note: XXXX = Fully aligned, XXX = Toward Alignment, XX = Partially aligned, X = Weak alignment/no evidence

Table 43
State policy and district policy: COLORADO (EVAL)

	Assesses student progress with multiple indicators	Measures student achievement growth	Measures student affective growth	Measures high level thinking skill growth	Assesses quantity, quality, and appropriateness of program	Disaggregates yearly assessment data & makes public	Time/ resources for evaluation in place	Evaluates how student outcomes are effected by program elements
State-level	XXXX	XXXX	XXXX	X	XXXX	XXXX	XX	XXXX
District-level	XXX	XXXX	XX	X	XXX	XXXX	X	X

Note: XXXX = Fully aligned, XXX = Toward Alignment, XX = Partially aligned, X = Weak alignment/no evidence

Table 44
State policy and district policy: NORTH CAROLINA (EVAL)

	Assesses student progress with multiple indicators	Measures student achievement growth	Measures student affective growth	Measures high level thinking skill growth	Assesses quantity, quality, and appropriateness of program	Disaggregates yearly assessment data & makes public	Time/ resources for evaluation in place	Evaluates how student outcomes are effected by program elements
State-level	XXXX	XXXX	X	X	XXXX	XX	X	X
District-level	XXX	XXX	X	X	XXX	XXX	XX	XX

Note: XXXX = Fully aligned, XXX = Toward Alignment, XX = Partially aligned, X = Weak alignment/no evidence

Table 45
District Reported Practices-Colorado

	1ST ID	Universal Screen	Selection Committee	Multiple Measures	Qual/ Quant Measures	Matrix	Cut Score	Referral PD	GT % time	Elementary Teachers	Accel-eration
District 1	3	X	-	X	XX	-	X	-	> 95%	XXX	XX
District 2	2	X	X	X	XX	-	-	X	< 10 %	XX	XX
District 5	3	X	X	X	XX	-	-	X	> 95%	XXX	XX
District 6	3	X	-	X	XX	X	-	X	70-84%	XXX	XX
District 9	-	-	X	X	XX	X	X	-	< 10%	-	XX
District 10	3	X	X	X	X	-	-	-	0	-	X
District 13	2	X	X	X	XX	X	-	X	> 95%	-	XX
District 14	3	X	-	X	XX	X	X	X	40-55%	-	XX

Note: For column 1, numbers indicate grade of typical first gifted identification. All X's indicate "presence" or "non-presence" of the indicated column except for the following: Qual/Quant: XX = Referral + Work Sample + Performance, X = Referral; Elementary Teachers: X=1 teacher; XX=2-20 teachers; XXX=20+; Acceleration: X = 1 form of acceleration, XX = subject- and whole-grade acceleration.

Table 46
School Reported Practices – Colorado

	GT Specific Curriculum: LA	GT Specific Curriculum: Math	Pull out	Cluster	Tiered Assignments	Gifted Teacher	Gifted Teacher PD	Regular Teacher PD	Acceleration
School 1a	X	X	XX	X	XX	X	-	X	X
School 1b	-	-	X	X	XX	-	-	XX	X
School 2	X	-	-	X	X	-	-	X	-
School 5a	-	-	X	X	X	-	XX	XX	-
School 5b	X	-	-	X	XX	-	XX	XX	X
School 6a	-	-	XX	X	XX	XX	XX	XX	XX
School 6b	-	-	XX	-	-	X	-	-	XX
School 9	-	-	-	X	XX	-	X	X	X
School 10	-	-	-	X	MISSING	MISSING	MISSING	MISSING	MISSING
School 13	X	-	-	X	XX	-	X	X	X
School 14	X	X	X	-	-	X	XX	-	X

Note: Pull-out: X= 1-2 hrs/week, XX = More than 2 hrs/week; Tiered Assignments: X= Sometimes, XX = Frequently or always; Gifted Teacher: X = 1 teacher, XX = > 1 teacher; Gifted Teacher PD: X = 1 hr PD, XX= > 1 hr PD; Regular Teacher PD: X = 1 hr PD, XX= > 1 hr PD; Acceleration: X = 1 form of acceleration, XX = subject- and whole-grade acceleration

Table 47
Reported Practices and Recommended Practices Alignment – Colorado

	Identification	Professional Development	Service Delivery/ Programming
District 1	XXX	XX	XX
District 2	XXXX	XX	XX
District 5	XXXX	XXX	XX
District 6	XXX	XXX	XXXX
District 9	XXX	XX	XX
District 10	XXXX	XX	MISSING
District 13	XXXX	XXX	XX
District 14	XXX	XX	XX

Note: XXXX = Fully aligned, XXX = Toward Alignment, XX = Partially aligned, X = Weak or no evidence

Table 48
District Reported Practices-North Carolina

	1ST ID	Universal Screen	Selection Committee	Multiple Measures	Qual/ Quant Measures	Matrix	Cut Score	Referral PD	GT % time	Teachers	Accel-eration
District 3	3	-	X	X	X	-	X	X	85-94%	XXX	X
District 4	3	-	X	X	XX	-	X	X	> 95%	XX	X
District 7	3	X	-	X	XX	-	X	X	> 95%	XXX	XX
District 8	3	X	-	X	XX	X	-	-	40-55%	XXX	XX
District 11	4	X	X	X	XX	X	X	-	10-24%	-	XX
District 12	3	-	-	X	XX	X	-	X	> 95%	X	XX
District 15	3	X	-	X	XX	X	-	-	10-24%	X	-
District 16	3	X	X	X	X	-	X	-	> 95%	-	-

Note: For column 1, numbers indicate grade of typical first gifted identification. All X's indicate "presence" or "non-presence" of the indicated column except for the following: Elementary Teachers: X=1 teacher; XX=2-20 teachers; XXX=20+; Acceleration: X = 1 form of acceleration, XX = subject- and whole-grade acceleration.

Table 49
School Reported Practices – North Carolina

	GT Specific Curriculum: LA	GT Specific Curriculum: Math	Pull out	Cluster	Tiered Assignments	Gifted Teacher	Gifted Teacher PD	Regular Teacher PD	Acceleration
School 3a	X	X	X	-	-	X	XX	XX	-
School 3b	-	-	X	X	X	X	XX	X	-
School 4a	X	X	X	-	-	X	X	-	X
School 4b	X	X	X	-	-	X	X	-	X
School 7a	-	-	X	X	X	X	-	-	XX
School 7b	-	-	X	-	-	X	-	X	-
School 8a	X	X	XX	-	-	X	XX	XX	X
School 8b	X	X	XX	X	X	X	XX		X
School 11	-	-	-	-	-	-	-	-	X
School 12	-	-	X	X	X	X	X	-	-
School 15a	-	-	X	X	X	X	X	X	X
School 15b	-	-	X	X	X	X	X	X	-
School 16	-	-	X	-	-	X	-	XX	X

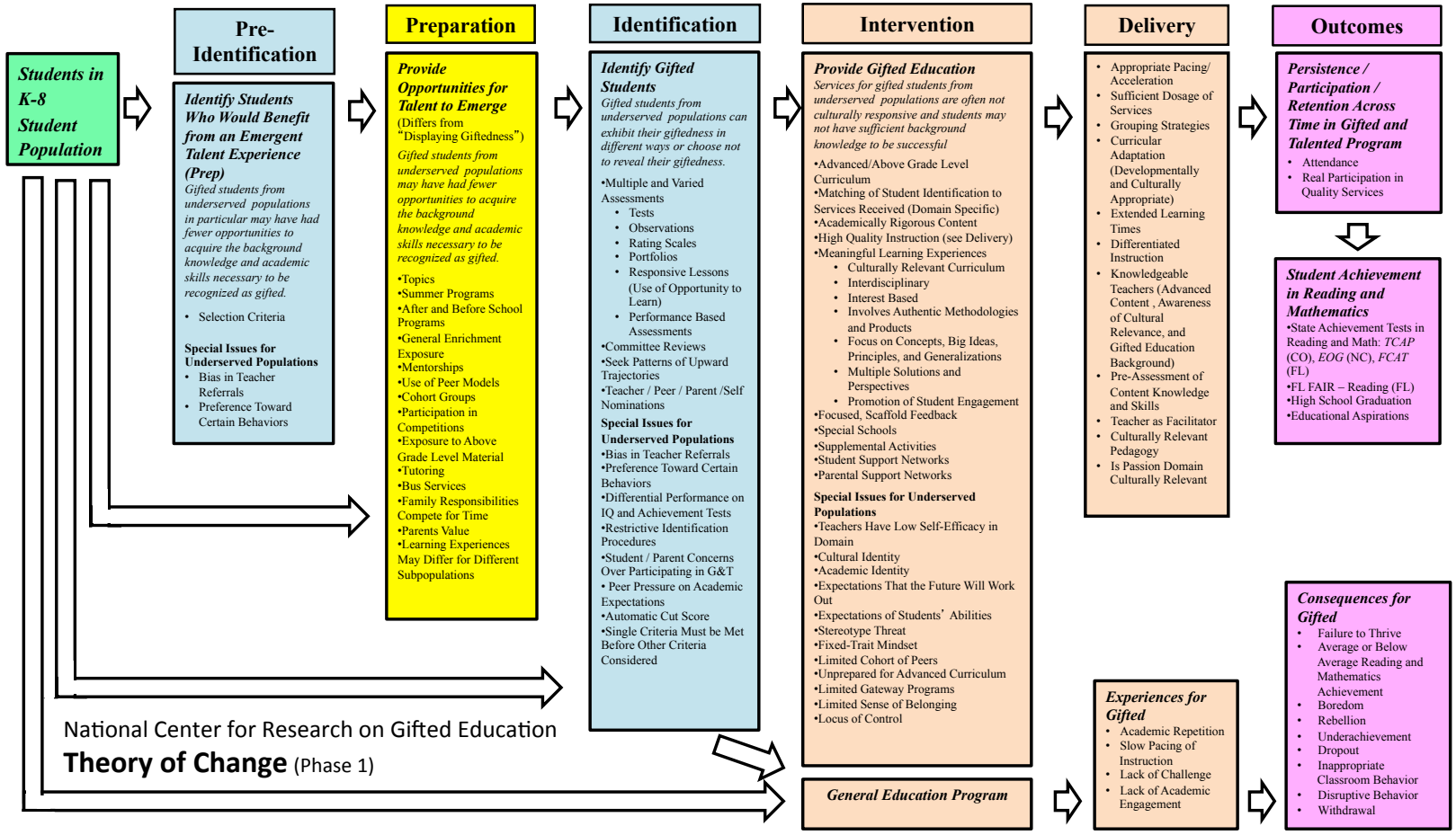
Note: Pull-out: X= 1-2 hrs/week, XX = More than 2 hrs/week; Tiered Assignments: X= Sometimes, XX = Frequently or always; Gifted Teacher: X = 1 teacher, XX = > 1 teacher; Gifted Teacher PD: X = 1 hr PD, XX= > 1 hr PD; Regular Teacher PD: X = 1 hr PD, XX= > 1 hr PD; Acceleration: X = 1 form of acceleration, XX = subject- and whole-grade acceleration

Table 50
Reported Practices and Recommended Practice Alignment – North Carolina

	Identification	Professional Development	Service Delivery/ Programming
District 3	XXX	XXX	XX
District 4	XXX	XX	XX
District 7	XXX	XX	XX
District 8	XXX	XX	XX
District 11	XXXX	X	XX
District 12	XXX	XX	XX
District 15	XXX	XX	XX
District 16	XXXX	XX	XX

Note: XXXX = Fully aligned, XXX = Toward Alignment, XX = Partially aligned, X = Weak or no evidence

Appendix B
NCRGE Study – Theory of Change



Appendix C
NAGC Pre K-12 Gifted Programming Standards

2010 *Pre-K-Grade 12 Gifted Programming Standards*

Gifted Education Programming Standard 1: Learning and Development

Introduction

For teachers and other educators in PreK-12 settings to be effective in working with learners with gifts and talents, they must understand the characteristics and needs of the population for whom they are planning curriculum, instruction, assessment, programs, and services. These characteristics provide the rationale for differentiation in programs, grouping, and services for this population and are translated into appropriate differentiation choices made at curricular and program levels in schools and school districts. While cognitive growth is important in such programs, affective development is also necessary. Thus many of the characteristics addressed in this standard emphasize affective development linked to self-understanding and social awareness.

Standard 1: Learning and Development

Description: Educators, recognizing the learning and developmental differences of students with gifts and talents, promote ongoing self-understanding, awareness of their needs, and cognitive and affective growth of these students in school, home, and community settings to ensure specific student outcomes.

Student Outcomes	Evidence-Based Practices
1.1. Self-Understanding. Students with gifts and talents demonstrate self-knowledge with respect to their interests, strengths, identities, and needs in socio-emotional development and in intellectual, academic, creative, leadership, and artistic domains.	1.1.1. Educators engage students with gifts and talents in identifying interests, strengths, and gifts.
	1.1.2. Educators assist students with gifts and talents in developing identities supportive of achievement.
1.2. Self-Understanding. Students with gifts and talents possess a developmentally appropriate understanding of how they learn and grow; they recognize the influences of their beliefs, traditions, and values on their learning and behavior.	1.2.1. Educators develop activities that match each student's developmental level and culture-based learning needs.
1.3. Self-Understanding. Students with gifts and talents demonstrate understanding of and respect for similarities and differences between themselves and their peer group and others in the general population.	1.3.1. Educators provide a variety of research-based grouping practices for students with gifts and talents that allow them to interact with individuals of various gifts, talents, abilities, and strengths.
	1.3.2. Educators model respect for individuals with diverse abilities, strengths, and goals.
1.4. Awareness of Needs. Students with gifts and talents access resources from the community to support cognitive and affective needs, including social interactions with others having similar interests and abilities or experiences, including same-age peers and mentors or experts.	1.4.1. Educators provide role models (e.g., through mentors, bibliotherapy) for students with gifts and talents that match their abilities and interests.
	1.4.2. Educators identify out-of-school learning opportunities that match students' abilities and interests.
1.5. Awareness of Needs. Students' families and communities understand similarities and differences with respect to the development and characteristics of advanced and typical learners and support students with gifts and talents' needs.	1.5.1. Educators collaborate with families in accessing resources to develop their child's talents.
1.6. Cognitive and Affective Growth. Students with gifts and talents benefit from meaningful and challenging learning activities addressing their unique characteristics and needs.	1.6.1. Educators design interventions for students to develop cognitive and affective growth that is based on research of effective practices.
	1.6.2. Educators develop specialized intervention services for students with gifts and talents who are underachieving and are now learning and developing their talents.
1.7. Cognitive and Affective Growth. Students with gifts and talents recognize their preferred approaches to learning and expand their repertoire.	1.7.1. Teachers enable students to identify their preferred approaches to learning, accommodate these preferences, and expand them.
1.8. Cognitive and Affective Growth. Students with gifts and talents identify future career goals that match their talents and abilities and resources needed to meet those goals (e.g., higher education opportunities, mentors, financial support).	1.8.1. Educators provide students with college and career guidance that is consistent with their strengths.
	1.8.2. Teachers and counselors implement a curriculum scope and sequence that contains person/social awareness and adjustment, academic planning, and vocational and career awareness.

Gifted Education Programming Standard 2: Assessment

Introduction

Knowledge about all forms of assessment is essential for educators of students with gifts and talents. It is integral to identification, assessing each student's learning progress, and evaluation of programming. Educators need to establish a challenging environment and collect multiple types of assessment information so that all students are able to demonstrate their gifts and talents. Educators' understanding of non-biased, technically adequate, and equitable approaches enables them to identify students who represent diverse backgrounds. They also differentiate their curriculum and instruction by using pre- and post-, performance-based, product-based, and out-of-level assessments. As a result of each educator's use of ongoing assessments, students with gifts and talents demonstrate advanced and complex learning. Using these student progress data, educators then evaluate services and make adjustments to one or more of the school's programming components so that student performance is improved.

Standard 2: Assessment

Description: Assessments provide information about identification, learning progress and outcomes, and evaluation of programming for students with gifts and talents in all domains.

Student Outcomes	Evidence-Based Practices
2.1. *Identification*. All students in grades PK-12 have equal access to a comprehensive assessment system that allows them to demonstrate diverse characteristics and behaviors that are associated with giftedness.	2.1.1. Educators develop environments and instructional activities that encourage students to express diverse characteristics and behaviors that are associated with giftedness.
	2.1.2. Educators provide parents/guardians with information regarding diverse characteristics and behaviors that are associated with giftedness.
2.2. *Identification*. Each student reveals his or her exceptionalities or potential through assessment evidence so that appropriate instructional accommodations and modifications can be provided.	2.2.1. Educators establish comprehensive, cohesive, and ongoing procedures for identifying and serving students with gifts and talents. These provisions include informed consent, committee review, student retention, student reassessment, student exiting, and appeals procedures for both entry and exit from gifted program services.
	2.2.2. Educators select and use multiple assessments that measure diverse abilities, talents, and strengths that are based on current theories, models, and research.
	2.2.3 Assessments provide qualitative and quantitative information from a variety of sources, including off-level testing, are nonbiased and equitable, and are technically adequate for the purpose.
	2.2.4. Educators have knowledge of student exceptionalities and collect assessment data while adjusting curriculum and instruction to learn about each student's developmental level and aptitude for learning.
	2.2.5. Educators interpret multiple assessments in different domains and understand the uses and limitations of the assessments in identifying the needs of students with gifts and talents.
	2.2.6. Educators inform all parents/guardians about the identification process. Teachers obtain parental/guardian permission for assessments, use culturally sensitive checklists, and elicit evidence regarding the child's interests and potential outside of the classroom setting.
2.3. *Identification*. Students with identified needs represent diverse backgrounds and reflect the total student population of the district.	2.3.1. Educators select and use non-biased and equitable approaches for identifying students with gifts and talents, which may include using locally developed norms or assessment tools in the child's native language or in nonverbal formats.
	2.3.2. Educators understand and implement district and state policies designed to foster equity in gifted programming and services.
	2.3.3. Educators provide parents/guardians with information in their native language regarding diverse behaviors and characteristics that are associated with giftedness and with information that explains the nature and purpose of gifted programming options.
2.4. *Learning Progress and Outcomes*. Students with gifts and talents demonstrate advanced and complex learning as a result of using multiple, appropriate, and ongoing assessments.	2.4.1. Educators use differentiated pre- and post- performance-based assessments to measure the progress of students with gifts and talents.
	2.4.2. Educators use differentiated product-based assessments to measure the progress of students with gifts and talents.
	2.4.3. Educators use off-level standardized assessments to measure the progress of students with gifts and talents.

	2.4.4. Educators use and interpret qualitative and quantitative assessment information to develop a profile of the strengths and weaknesses of each student with gifts and talents to plan appropriate intervention.
	2.4.5. Educators communicate and interpret assessment information to students with gifts and talents and their parents/guardians.
2.5. *Evaluation of Programming*. Students identified with gifts and talents demonstrate important learning progress as a result of programming and services.	2.5.1. Educators ensure that the assessments used in the identification and evaluation processes are reliable and valid for each instrument's purpose, allow for above-grade-level performance, and allow for diverse perspectives.
	2.5.2. Educators ensure that the assessment of the progress of students with gifts and talents uses multiple indicators that measure mastery of content, higher level thinking skills, achievement in specific program areas, and affective growth.
	2.5.3. Educators assess the quantity, quality, and appropriateness of the programming and services provided for students with gifts and talents by disaggregating assessment data and yearly progress data and making the results public.
2.6. *Evaluation of Programming*. Students identified with gifts and talents have increased access and they show significant learning progress as a result of improving components of gifted education programming.	2.6.1. Administrators provide the necessary time and resources to implement an annual evaluation plan developed by persons with expertise in program evaluation and gifted education.
	2.6.2. The evaluation plan is purposeful and evaluates how student-level outcomes are influenced by one or more of the following components of gifted education programming: (a) identification, (b) curriculum, (c) instructional programming and services, (d) ongoing assessment of student learning, (e) counseling and guidance programs, (f) teacher qualifications and professional development, (g) parent/guardian and community involvement, (h) programming resources, and (i) programming design, management, and delivery.
	2.6.3. Educators disseminate the results of the evaluation, orally and in written form, and explain how they will use the results.

Gifted Education Programming Standard 3: Curriculum Planning and Instruction

Introduction

Assessment is an integral component of the curriculum planning process. The information obtained from multiple types of assessments informs decisions about curriculum content, instructional strategies, and resources that will support the growth of students with gifts and talents. Educators develop and use a comprehensive and sequenced core curriculum that is aligned with local, state, and national standards, then differentiate and expand it. In order to meet the unique needs of students with gifts and talents, this curriculum must emphasize advanced, conceptually challenging, in-depth, distinctive, and complex content within cognitive, affective, aesthetic, social, and leadership domains. Educators must possess a repertoire of evidence-based instructional strategies in delivering the curriculum (a) to develop talent, enhance learning, and provide students with the knowledge and skills to become independent, self-aware learners, and (b) to give students the tools to contribute to a multicultural, diverse society. The curriculum, instructional strategies, and materials and resources must engage a variety of learners using culturally responsive practices.

Standard 3: Curriculum Planning and Instruction

Description: Educators apply the theory and research-based models of curriculum and instruction related to students with gifts and talents and respond to their needs by planning, selecting, adapting, and creating culturally relevant curriculum and by using a repertoire of evidence-based instructional strategies to ensure specific student outcomes.

Student Outcomes	Evidence-Based Practices
3.1. *Curriculum Planning*. Students with gifts and talents demonstrate growth commensurate with aptitude during the school year.	3.1.1. Educators use local, state, and national standards to align and expand curriculum and instructional plans.
	3.1.2. Educators design and use a comprehensive and continuous scope and sequence to develop differentiated plans for PK-12 students with gifts and talents.
	3.1.3. Educators adapt, modify, or replace the core or standard curriculum to meet the needs of students with gifts and talents and those with special needs such as twice-exceptional, highly gifted, and English language learners.
	3.1.4. Educators design differentiated curricula that incorporate advanced, conceptually challenging, in-depth, distinctive, and complex content for students with gifts and talents.
	3.1.5. Educators use a balanced assessment system, including pre-assessment and formative assessment, to identify students' needs, develop differentiated education plans, and adjust plans based on continual progress monitoring.
	3.1.6. Educators use pre-assessments and pace instruction based on the learning rates of students with gifts and talents and accelerate and compact learning as appropriate.
	3.1.7. Educators use information and technologies, including assistive technologies, to individualize for students with gifts and talents, including those who are twice-exceptional.
3.2. *Talent Development*. Students with gifts and talents become more competent in multiple talent areas and across dimensions of learning.	3.2.1. Educators design curricula in cognitive, affective, aesthetic, social, and leadership domains that are challenging and effective for students with gifts and talents.
	3.2.2. Educators use metacognitive models to meet the needs of students with gifts and talents.
3.3. *Talent Development*. Students with gifts and talents develop their abilities in their domain of talent and/or area of interest.	3.3.1. Educators select, adapt, and use a repertoire of instructional strategies and materials that differentiate for students with gifts and talents and that respond to diversity.
	3.3.2. Educators use school and community resources that support differentiation.
	3.3.3. Educators provide opportunities for students with gifts and talents to explore, develop, or research their areas of interest and/or talent.
3.4. *Instructional Strategies*. Students with gifts and talents become independent investigators.	3.4.1. Educators use critical-thinking strategies to meet the needs of students with gifts and talents.
	3.4.2. Educators use creative-thinking strategies to meet the needs of students with gifts and talents.
	3.4.3. Educators use problem-solving model strategies to meet the needs of students with gifts and talents.

	3.4.4. Educators use inquiry models to meet the needs of students with gifts and talents.
3.5. *Culturally Relevant Curriculum*. Students with gifts and talents develop knowledge and skills for living and being productive in a multicultural, diverse, and global society.	3.5.1. Educators develop and use challenging, culturally responsive curriculum to engage all students with gifts and talents.
	3.5.2. Educators integrate career exploration experiences into learning opportunities for students with gifts and talents, e.g. biography study or speakers.
	3.5.3. Educators use curriculum for deep explorations of cultures, languages, and social issues related to diversity.
3.6. *Resources*. Students with gifts and talents benefit from gifted education programming that provides a variety of high quality resources and materials.	3.6.1. Teachers and administrators demonstrate familiarity with sources for high quality resources and materials that are appropriate for learners with gifts and talents.

Gifted Education Programming Standard 4: Learning Environments

Introduction

Effective educators of students with gifts and talents create safe learning environments that foster emotional well-being, positive social interaction, leadership for social change, and cultural understanding for success in a diverse society. Knowledge of the impact of giftedness and diversity on social-emotional development enables educators of students with gifts and talents to design environments that encourage independence, motivation, and self-efficacy of individuals from all backgrounds. They understand the role of language and communication in talent development and the ways in which culture affects communication and behavior. They use relevant strategies and technologies to enhance oral, written, and artistic communication of learners whose needs vary based on exceptionality, language proficiency, and cultural and linguistic differences. They recognize the value of multilingualism in today's global community.

Standard 4: Learning Environments

Description: Learning environments foster personal and social responsibility, multicultural competence, and interpersonal and technical communication skills for leadership in the 21st century to ensure specific student outcomes.

Student Outcomes	Evidence-Based Practices
4.1. *Personal Competence*. Students with gifts and talents demonstrate growth in personal competence and dispositions for exceptional academic and creative productivity. These include self-awareness, self-advocacy, self-efficacy, confidence, motivation, resilience, independence, curiosity, and risk taking.	4.1.1. Educators maintain high expectations for all students with gifts and talents as evidenced in meaningful and challenging activities.
	4.1.2. Educators provide opportunities for self-exploration, development and pursuit of interests, and development of identities supportive of achievement, e.g., through mentors and role models.
	4.1.3. Educators create environments that support trust among diverse learners.
	4.1.4. Educators provide feedback that focuses on effort, on evidence of potential to meet high standards, and on mistakes as learning opportunities.
	4.1.5. Educators provide examples of positive coping skills and opportunities to apply them.
4.2. *Social Competence*. Students with gifts and talents develop social competence manifested in positive peer relationships and social interactions.	4.2.1. Educators understand the needs of students with gifts and talents for both solitude and social interaction.
	4.2.2. Educators provide opportunities for interaction with intellectual and artistic/creative peers as well as with chronological-age peers.
	4.2.3. Educators assess and provide instruction on social skills needed for school, community, and the world of work.
4.3. *Leadership*. Students with gifts and talents demonstrate personal and social responsibility and leadership skills.	4.3.1 Educators establish a safe and welcoming climate for addressing social issues and developing personal responsibility.
	4.3.2. Educators provide environments for developing many forms of leadership and leadership skills.
	4.3.3. Educators promote opportunities for leadership in community settings to effect positive change.
4.4. *Cultural Competence*. Students with gifts and talents value their own and others' language, heritage, and circumstance. They possess skills in communicating, teaming, and collaborating with diverse individuals and across diverse groups.[1] They use positive strategies to address social issues, including discrimination and stereotyping.	4.4.1. Educators model appreciation for and sensitivity to students' diverse backgrounds and languages.
	4.4.2. Educators censure discriminatory language and behavior and model appropriate strategies.
	4.4.3. Educators provide structured opportunities to collaborate with diverse peers on a common goal.
4.5. *Communication Competence*. Students with gifts and talents develop competence in interpersonal and technical communication skills. They demonstrate advanced oral and written skills, balanced biliteracy or multiliteracy, and creative expression. They display fluency with technologies that support effective communication	4.5.1. Educators provide opportunities for advanced development and maintenance of first and second language(s).
	4.5.2. Educators provide resources to enhance oral, written, and artistic forms of communication, recognizing students' cultural context.
	4.5.3. Educators ensure access to advanced communication tools, including assistive technologies, and use of these tools for expressing higher-level thinking and creative productivity.

[1] Differences among groups of people and individuals based on ethnicity, race, socioeconomic status, gender, exceptionalities, language, religion, sexual orientation, and geographical area.

Gifted Education Programming Standard 5: Programming

Introduction

The term programming refers to a continuum of services that address students with gifts and talents' needs in all settings. Educators develop policies and procedures to guide and sustain all components of comprehensive and aligned programming and services for PreK-12 students with gifts and talents. Educators use a variety of programming options such as acceleration and enrichment in varied grouping arrangements (cluster grouping, resource rooms, special classes, special schools) and within individualized learning options (independent study, mentorships, online courses, internships) to enhance students' performance in cognitive and affective areas and to assist them in identifying future career goals. They augment and integrate current technologies within these learning opportunities to increase access to high level programming such as distance learning courses and to increase connections to resources outside of the school walls. In implementing services, educators in gifted, general, special education programs, and related professional services collaborate with one another and parents/guardians and community members to ensure that students' diverse learning needs are met. Administrators demonstrate their support of these programming options by allocating sufficient resources so that all students within gifts and talents receive appropriate educational services.

NAGC Standards

Standard 5: Programming

Description: Educators are aware of empirical evidence regarding (a) the cognitive, creative, and affective development of learners with gifts and talents, and (b) programming that meets their concomitant needs. Educators use this expertise systematically and collaboratively to develop, implement, and effectively manage comprehensive services for students with a variety of gifts and talents to ensure specific student outcomes.

Student Outcomes	Evidence-Based Practices
5.1. *Variety of Programming*. Students with gifts and talents participate in a variety of evidence-based programming options that enhance performance in cognitive and affective areas.	5.1.1. Educators regularly use multiple alternative approaches to accelerate learning.
	5.1.2. Educators regularly use enrichment options to extend and deepen learning opportunities within and outside of the school setting.
	5.1.3. Educators regularly use multiple forms of grouping, including clusters, resource rooms, special classes, or special schools.
	5.1.4. Educators regularly use individualized learning options such as mentorships, internships, online courses, and independent study.
	5.1.5. Educators regularly use current technologies, including online learning options and assistive technologies to enhance access to high-level programming.
	5.1.6. Administrators demonstrate support for gifted programs through equitable allocation of resources and demonstrated willingness to ensure that learners with gifts and talents receive appropriate educational services.
5.2. *Coordinated Services*. Students with gifts and talents demonstrate progress as a result of the shared commitment and coordinated services of gifted education, general education, special education, and related professional services, such as school counselors, school psychologists, and social workers.	5.2.1. Educators in gifted, general, and special education programs, as well as those in specialized areas, collaboratively plan, develop, and implement services for learners with gifts and talents.
5.3. *Collaboration*. Students with gifts and talents' learning is enhanced by regular collaboration among families, community, and the school.	5.3.1. Educators regularly engage families and community members for planning, programming, evaluating, and advocating.
5.4. *Resources*. Students with gifts and talents participate in gifted education programming that is adequately funded to meet student needs and program goals.	5.4.1. Administrators track expenditures at the school level to verify appropriate and sufficient funding for gifted programming and services.
5.5. *Comprehensiveness*. Students with gifts and talents develop their potential through comprehensive, aligned programming and services.	5.5.1. Educators develop thoughtful, multi-year program plans in relevant student talent areas, PK-12.
5.6. *Policies and Procedures*. Students with gifts and talents participate in regular and gifted education programs that are guided by clear policies and procedures that provide for their advanced learning needs (e.g., early entrance, acceleration, credit in lieu of enrollment).	5.6.1. Educators create policies and procedures to guide and sustain all components of the program, including assessment, identification, acceleration practices, and grouping practices, that is built on an evidence-based foundation in gifted education.
5.7. *Career Pathways*. Students with gifts and talents identify future career goals and the talent development pathways to reach those goals.	5.7.1. Educators provide professional guidance and counseling for individual student strengths, interests, and values.
	5.7.2. Educators facilitate mentorships, internships, and vocational programming experiences that match student interests and aptitudes.

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Gifted Education Programming Standard 6: Professional Development

Introduction

Professional development is essential for all educators involved in the development and implementation of gifted programs and services. Professional development is the intentional development of professional expertise as outlined by the NAGC-CEC teacher preparation standards and is an ongoing part of gifted educators' professional and ethical practice. Professional development may take many forms ranging from district-sponsored workshops and courses, university courses, professional conferences, independent studies, and presentations by external consultants and should be based on systematic needs assessments and professional reflection. Students participating in gifted education programs and services are taught by teachers with developed expertise in gifted education. Gifted education program services are developed and supported by administrators, coordinators, curriculum specialists, general education, special education, and gifted education teachers who have developed expertise in gifted education. Since students with gifts and talents spend much of their time within general education classrooms, general education teachers need to receive professional development in gifted education that enables them to recognize the characteristics of giftedness in diverse populations, understand the school or district referral and identification process, and possess an array of high quality, research-based differentiation strategies that challenge students. Services for students with gifts and talents are enhanced by guidance and counseling professionals with expertise in gifted education.

Standard 6: Professional Development

Description: All educators (administrators, teachers, counselors, and other instructional support staff) build their knowledge and skills using the NAGC-CEC Teacher Standards for Gifted and Talented Education and the National Staff Development Standards. They formally assess professional development needs related to the standards, develop and monitor plans, systematically engage in training to meet the identified needs, and demonstrate mastery of standard. They access resources to provide for release time, funding for continuing education, and substitute support. These practices are judged through the assessment of relevant student outcomes.

Student Outcomes	Evidence-Based Practices
6.1. *Talent Development*. Students develop their talents and gifts as a result of interacting with educators who meet the national teacher preparation standards in gifted education.	6.1.1. Educators systematically participate in ongoing, research-supported professional development that addresses the foundations of gifted education, characteristics of students with gifts and talents, assessment, curriculum planning and instruction, learning environments, and programming.
	6.1.2. The school district provides professional development for teachers that models how to develop environments and instructional activities that encourage students to express diverse characteristics and behaviors that are associated with giftedness.
	6.1.3. Educators participate in ongoing professional development addressing key issues such as anti-intellectualism and trends in gifted education such as equity and access.
	6.1.4. Administrators provide human and material resources needed for professional development in gifted education (e.g. release time, funding for continuing education, substitute support, webinars, or mentors).
	6.1.5. Educators use their awareness of organizations and publications relevant to gifted education to promote learning for students with gifts and talents.
6.2. *Socio-emotional Development*. Students with gifts and talents develop socially and emotionally as a result of educators who have participated in professional development aligned with national standards in gifted education and National Staff Development Standards.	6.2.1. Educators participate in ongoing professional development to support the social and emotional needs of students with gifts and talents.
6.3. *Lifelong Learners*. Students develop their gifts and talents as a result of educators who are life-long learners, participating in ongoing professional development and continuing education opportunities.	6.3.1. Educators assess their instructional practices and continue their education in school district staff development, professional organizations, and higher education settings based on these assessments.
	6.3.2. Educators participate in professional development that is sustained over time, that includes regular follow-up, and that seeks evidence of impact on teacher practice and on student learning.
	6.3.3. Educators use multiple modes of professional development delivery including online courses, online and electronic communities, face-to-face workshops, professional learning communities, and book talks.
	6.3.4. Educators identify and address areas for personal growth for teaching students with gifts and talents in their professional development plans.
6.4. *Ethics*. Students develop their gifts and talents as a result of educators who are ethical in their practices.	6.4.1. Educators respond to cultural and personal frames of reference when teaching students with gifts and talents.
	6.4.2. Educators comply with rules, policies, and standards of ethical practice.

Appendix D

District Plan Coding Scheme (North Carolina Version)

Note: Only difference in schemes by state is the included state definition

			Coding Scheme-North Carolina	**Definition/Clarification**
			Unless otherwise indicated: 1=Present 0=Not present	Early Access program is NOT preparation in CO; When USTARS or USTARS~PLUS are used, pay careful attention to the details of implementation to see if they include ID or ID + Programming, etc; If a plan notes information is an appendix we don't have access to, we must code "0" and put in comments that the plan states it's in the "appendix"; Words like "we plan" or "will develop" indicate a future plan and we should code as "0".
	STATE DEFINITION-State Definition of AIG Students, Article 9B (N.C.G.S. § 115C-150.5) **Academically or intellectually gifted (AIG) students perform or show the potential to perform at substantially high levels of accomplishment when compared with others of their age, experiences or environment. Academically or intellectually gifted students exhibit high performance capability in intellectual areas, specific academic fields, or in both the intellectual areas and specific academic fields. Academically or intellectually gifted students require differentiated educational services beyond those ordinarily provided by the regular educational program. Outstanding abilities are present in students from all cultural groups, across all economic strata, and in all areas of human endeavor.**			Only 1 of these items can be coded as "1"; If no definition and no mention of state gifted standards, Code all "0"; Vision = Definition in NC
1			State definition in full	If they use state definition in full or refer to state level standards, code "1"
2			Part of state definition	If they use part of state definition, but add elements, or leave out elements, code "1"
3			Own district definition	If they use no part of state definition, but have district definition, code "1"

	SECTION A: PREPARATION (Any organized set of activities that are designed to enhance the knowledge and academic skills necessary for a student to be recognized as gifted)			Any organized activities that occur prior to formal identification. These activities may be offered to the general student population or targeted at a group or groups of historically underrepresented students in the school population. There must be clear evidence that the activities are offered in a systematic way to students prior to any kind of identification. This category does not apply to programs or services that are offered to students identified at an early age as exceptional.
4			Preparation/talent development activities/programs	Deliberate approach to providing opportunities for future possibility of getting into gifted programming. Getting service for preparation (ex. Discover level = preparation program) --Can part of gifted program, but it is prior to official identification. Can be administered by gifted program, but not yet identified as gifted
5			Special preparation/talent development activities/programs for historically underrepresented populations	If this item is coded as "1", something in 6-13 should be scored as one. If it a population is not specified, then 13 should be "1"
6			*• students from low-income families*	
7			*•African American students*	
8			*•Hispanic or Latino students*	
9			*•Native American students*	
10			*•English Language Learners*	
11			*•Twice-exceptional students (those with both potential gifts and talents and disabilities)*	
12			*•Other specific group of focus mentioned (e.g., "Minority" or "Moldavian")*	

13			•*Not specified (no example of population given)*	If it doesn't say specifically under preparation program which groups are specified, then must code "not-specified" – needs to be a clear association with a prep. program
14			Preparation/talent development programs during school day	If the plan states there is pre-identification, but does not specify where/when it takes place code 14 as "1" and then code 15 as "0" and code 16 as "0".
15			• within general education classrooms	
16			• special classes outside of general education classroom	
17			Preparation activities outside of the regular school day (e.g., after school summer)	
18			• Transportation, such as bus services	
19			A curriculum on general enrichment	
20			A specific curriculum	It is possible to have more than one item coded as"1"; To qualify as "specific curriculum" must be a name package with specific goals, objectives, activities, and outcomes; Look up any unknown terminology or programs, keep log of web addresses found.
21			•*reading/English language arts*	
22			• *mathematics*	
23			• *above grade level content*	
24			• *process skills (e.g., thinking skills, problem solving skills, creativity training)*	
25			Tutoring for preparation activities	

	SECTION B: PRE-IDENTIFICATION (Any screening process that sorts subgroups of students for preparation services)			Formally identifies subset of students who would participate in a preparation program prior to full gifted program identification. This section does NOT refer to or include a nomination process leading to formal identification. - (Items 26-31) If the identification process isn't specifically and clearly linked with a "preparation program" or "pre-identification", then we cannot code it "1" – it must be a clearly separate identification process from the main identification.*NOTE: If a district has pre-identification, something should also be checked in Part A: Preparation.
26			Standardized test data	Commercially available standardized test (refer to the list of measures)
27			Teacher nominations/referrals	Must identify *who* is nominating a student to count as nomination
28			Parent nominations/referrals	Must identify *who* is nominating a student to count as nomination
29			Observation tools or checklists	Must have the word **observation** in the description before we can code it is an observation scal (ex. TOPS – teacher observation scale). If **observation** not present, only counts as teacher nomination/referral
30			Performance-based assessments	Performance-based assessments could be an essay developed by the school system and used to assess, task provided to students with a scoring rubric, a unit project.
31			Non-verbal assessments	Non-verbal tests can be standardized or non-standardized

	SECTION C: IDENTIFICATION (The processes and procedures used to select students to receive services beyond those offered in the general education curriculum**)**			Note: If "U-STARS" is used, take note in margin
32			Identify students for general intellectual ability across subject areas (i.e., a student is either identified as gifted or not)	If a test of general intellectual ability is included in the decision making process then you can assume they identify across subject areas.
33			Identify students in reading/English language arts (e.g., a student is identified as gifted in reading/ELA, but not necessarily gifted in other areas)	Student could be identified in both reading and math, or just one
34			Identify students in mathematics (e.g., a student is identified as gifted in mathematics, but not necessarily gifted in other areas)	Student could be identified in reading and math, or just one
35			A test as a **universal screening procedure** (i.e., administer one test to all students at a given grade level to screen for giftedness)	
36			Identification at specific grade levels (e.g., Pre-K, 1, 2, 3, 4, 5)	("all-grades" is a non-example) Code "1" if there is a specific grade stated and "0" if no specific grade is stated. *NOTE: Make a marginal note of the grade level at which identification begins if that is indicated in the plan. And make marginal notes if identification varies from level to level.
37			**Parent nominations/referrals** as part of the identification process	Must identify *who* is nominating a student to count as nomination
38			**Teacher nominations/referrals** as part of the identification process	Must identify *who* is nominating a student to count as nomination
39			**Teacher rating scale**	Teachers evaluate students based on their general perceptions of students; specific observations are not necessary.
40			**Student work samples** (including portfolios)	
41			**Cognitive ability tests (IQ tests)**	
42			**Achievement tests**	
43			State Test (developed only for that state)	
44			Standardized Test (e.g.,. MAP, ITBS)	

45			**Observation tools** in the identification process	Individuals go into classrooms and make observations of students under certain circumstances; direct observation component required; may be done by teachers while someone else teaches or by someone from outside; Plan description must clearly delinate **observation** in the description.
46			**Dynamic assessment** (i.e., A skill is tested, taught, and retested in one-on-one teacher-student session assessing the speed and degree in which mastery occurs)	
47			Standardized (e.g., CITM-Children's Inferential Thinking Modifiability Test)	
48			Local	
49			**Performance based assessments** in the identification process	Could be an essay developed by the school system and used to assess, task provided to students with a scoring rubric, a unit project, interview.
50			**Non-verbal assessments** as part of the screening in the identification process	If they explicity identify the use of a non-verbal subtest, code "1"; If not specified (ex. "CogAT") code "0"
51			**Creativity test** in the identification process	
52			Standardized (e.g., Torrance Tests)	
53			Local	
54			**Self-nomination**	Must identify *who* is nominating a student to count as nomination
55			**Selection committee or student study team** to make decisions to select and place students in the gifted program	
56			**A matrix** with a cut-off score to make decisions to select and place students in the gifted program	Can be used alone, as sole identifier or in conjunction with other options to score “1”
57			**A specific cut score** on one test that students must meet to qualify for gifted program services	It is possible to have “1” in both “one test” and “two or more.” For example, CMS has 4 gateways to entry. 1 is a matrix, one is a single score, one is an average of two scores, and one is a 2 out 3 option .

58			Must meet **specific cut scores** on two or more tests	It is possible to have "1" in both "one test" and "two or more."
59			Annual professional development opportunities for elementary school teachers on the use of teacher referral, nomination, or rating scales	Must indicate training happens annually or yearly or on-going; training on "characteristics of gifted" counts as training teachers on referral, nomination, or rating scales.
60			Information on the screening, identification, and placement procedures that is publically available to parents	
61			Data derived from implementation of preparation program used in formal identification	
62			An appeals process for students who were not identified for the gifted program to determine their future eligibility	
63			Re-assessment policy for students who were not identified for the gifted program to determine their future eligibility	
64			Re-assessment policy for students who have been identified for the gifted program to determine continued eligibility	
	SECTION D: DISTRICT COORDINATOR & OTHER STAFF			
65			Has Designated District Coordinator (director, facilitator, department head)	A district coordinator can include part or full time – Indicate as much information as possible in the coding system.
66			• Percentage of time (use 1 or 0)	Unless they say "1 FTE", actual percentage figure, or other specific numerical indication of time, this scores "0"
67			Number of full-time equivalent staff	Just indicate whether or not they talk about the number of staff
	SECTION E: EVALUATION			
68			Mention of overall program evaluation process?	

69			Is there a step-by-step process of overall program evaluation?	Must be a specific process with multiple steps. Steps should be very specific for program outcomes, outcome measures, and allustions to how the data will be matched to program outcome goals, and lead to overall program evaluation. NOTE: EOG in NC refers to state end of grade tests
			Does program evaluation exist for the following specific categories:	
70			• *Metacognitive skills? (e.g., creativity, motivation, 21st Century thinking skills, learning how to learn skills, critical thinking, problem solving, reasoning skills)*	
71			• *Reading/English language arts?*	"Disaggregation of EOG data " NOTE: EOG in NC refers to state end of grade tests
72			• *Mathematics?*	"Disaggregation of EOG data "NOTE: EOG in NC refers to state end of grade tests
73			• *Affective/Social-Emotional? (motivation, attention to underachievers, effectiveness of counseling interventions)*	
74			• *Standardized curriculum for gifted students across schools? (common curricula developed by state, district, or outside publisher used by all teachers involved in gifted programming)*	
75			• standardized curriculum across schools in mathematics	
76			• standardized curriculum across schools in reading/English language arts	ex. We evaluate the effectiveness of the William and Mary units
	SECTION F: INTERVENTION (Any steps taken by a school district to provide curriculum and instruction through a specific delivery model over a set time for gifted students)			Curriculum: planned, prescriptive, clear delineation of activity purposes, and clearly given to or made for students
			Gifted Program Policies and Procedures	
77			District-wide gifted curriculum (same units for all students across schools)	If "0" for this item, then "0" for 78-84 also
78			• *reading/English language arts*	
79			• *mathematics*	

80			• *science*	
81			• *social studies*	
82			• *offer curriculum developed by teachers (unique units developed locally)*	
83			• *Process skills (e.g., thinking skills, problem solving skills, creativity training)*	
84			• *General enrichment (content extensions/expanded learning options)*	This must clearly be district-wide curriculum to count as a district-wide general enrichment curriuclum; must be used for all students across schools.
85			Special content for students from underserved populations (culturally sensitive and relevant curriculum appropriate for the populations)	Content must be specified; Only "providing services" or talking about "more collaboration" does not meet this criteria
86			Remove identified gifted students from gifted program for behavioral reasons (stated policy on exiting the program or services)	Policy must be clearly stated and discuss removal process from program; Implied permanence of gifted label does not count.
87			Remove identified gifted students from gifted program for academic reasons (stated policy on exiting the program or services)	Policy must be clearly stated and discuss removal process from program; Implied permanence of gifted label does not count.
			Mathematics Curriculum & Instruction	
88			Separate mathematics curriculum (purposefully designed curriculum for gifted students)	
89			Regular education mathematics standards for gifted students (e.g., district standards, NCTM standards, Common Core Standards)	Any general statement about following standards can be assumed to include Math. For example, if they say they are using the NC State standards, and we know these standards include Math, then we can give them credit for following standards in Math.
90			More in-depth or greater breadth of coverage in grade level content in mathematics curriculum for gifted students (digging deeper into the content, extended learning mathematics activities, **not covered in the standards**, for gifted students)	
91			Extended or expanded grade level mathematics standards for gifted students (going beyond typical grade level standards)	Extended learning must be clearly attached to a written standard

92			Above grade level mathematics standards for gifted students (choose standards/topics at higher grade level as the math focus)	In NC, the standard course of study (NCSCOS) has above grade standards for gifted students in the pacing guide.
93			Culturally responsive curriculum in mathematics (responsive to students' culture, language, expectations, experiences)	
94			Faster pace of coverage in the gifted mathematics curriculum (acceleration, advanced content in shorter time frame, above grade level curriculum)	Any general statement where the plan says the district provides subject-based acceleration can be assumed to include Math subject-based acceleration. For example, if they say they have subject-based acceleration, and math is a subject taught in that district, then we can give them credit for subject-based acceleration in Math;
95			Pre-assessment of content knowledge and skills in mathematics curriculum for gifted students (use informal or formal assessment techniques; the use of curriculum compacting, may be inferred as using pre-assessment)	
			Reading/English Language Arts Curriculum & Instruction	
96			Separate reading/English language arts curriculum for gifted students (purposefully designed curriculum for gifted students; any time they mention specific units in use such as William and Mary, Jacobs Ladder, Great Books, Michael Clay Thompson's Grammar Units)	Example: If they say we have the William and Mary units we can assume that they use them, even if they don't directly say "we use" or "we implement"; In contrast, if the units are "available as a resource," or there is a laundry list of available curriculum options, we do NOT assume they are being implemented and it does NOT count as a separate curriculum; "We may use...." is a NON-example.
97			Regular education reading/English language arts standards for gifted students (e.g., district standards, Common Core Standards; unless they specify acceleration or use of an above grade level use of standard, assume they are using the regular education standards)	Any general statement about following standards can be assumed to include Reading/LA. For example, if they say they are using the NC State standards, and we know these standards include reading/LA, then we can give them credit for following

				standards in reading/LA.
98			More in-depth or greater breadth of coverage in grade level content in reading/English language arts curriculum for gifted students (digging deeper into the content, extended learning reading/English language arts activities, **not covered in the standards**, for gifted students)	Enrichment
99			Extended or expanded grade level reading/English language arts standards for gifted students (going beyond typical grade level standards)	Extended learning must be clearly attached to a written standard
100			Above grade level reading/English language arts standards for gifted students (choose standards/topics at higher grade level as the reading/English language arts focus)	In NC, the standard course of study (NCSCOS) has above grade standards for gifted students in the pacing guide.
101			Culturally responsive curriculum in reading/English language arts (responsive to students' culture, language, expectations, experiences)	
102			Faster pace of coverage in the gifted reading/English language arts curriculum (acceleration, advanced content in shorter time frame, above grade level curriculum)	Any general statement where the plan says the district provides subject-based acceleration can be assumed to include Reading/LA subject-based acceleration. For example, if they say they have subject-based acceleration, and Reading/LA is a subject taught in that district, then we can give them credit for subject-based acceleration in Reading/LA
103			Pre-assessment of content knowledge and skills in reading/English language arts curriculum for gifted students (use informal or formal assessment techniques; the use of curriculum compacting, may be inferred as using pre-assessment)	

	SECTION G: SERVICE DELIVERY (The grouping arrangement under which curriculum and instruction are delivered)			
104			**Pull-out classes** (students leave regular education classroom and work with other identified gifted students in a separate location)	
105			• *pull-out classes for* ***mathematics***	
106			• *pull-out classes for* ***reading/English language arts***	
107			• *pull-out class for* ***other subject classes/interest area***	If item 104 is "1" but subject not specified, 107 must be "1"
108			Push-in classes (i.e., gifted education and classroom teacher serve as either co-teachers or gifted education teacher works with the gifted students in the regular education classroom)	
109			Cluster grouping (i.e., gifted students stay in the same classroom as the regular education teacher and students, but are purposefully grouped based on ability)	
110			Tiered instructional activities, used with or without cluster groups (teacher creates activities that vary in the depth, complexity, and level of difficulty to meet students' needs)	
111			Opportunities for differentiated instruction (modify the content, process, or product requirements for students)	
			Homogeneous grouping (by ability or achievement level)	
112			• homogeneously grouped students in a ***separate school*** (**e.g. magnet school *for gifted***)	
113			• *Other homogeneously grouped classes* ***full time (e.g., not a separate school, perhaps a gifted class)***	
114			Acceleration as a service delivery option (offer access to advanced content)	
115			• *Accelerated content within the same grade*	
116			• *subject-based acceleration, moving grades*	ex. A 2nd grader going to a 3rd grade math class
117			• *full-grade acceleration*	Iowa Acceleration Scale = full-grade acceleration

118			Support services for students (e.g., tutoring, mentoring, family outreach)	"Family Outreach" describes information the school provides to parents about their student and giftedness in general. Examples include informational websites and other ways of disseminating knowledge to parents; Schools working with the families.
119			Involve **community in providing opportunities for gifted students**	
120			• *community involvement in* ***mentorship opportunities***	Must specifically say or indicate "mentor" activities
121			• *business partnerships* (collaborations with local businesses to support district initiatives)	
122			• ***parents active involvement in gifted program***	"Parents Active Involvement" Presentations created by parents, parents helping out with curriculum; Families working within the classroom (placement meetings do not count)
123			**Outside-of-normal school-day opportunities specifically for gifted students** *(specially designed before school or after school program for gifted students)*	Must be a program provided or funded by the school or school district. Extra-curricular does not necessarily mean before/after school programming.
			BUDGET:	
124		$	*State Funding*	Just interested whether they provide this information, score "0" or "1"; If they say "$0", this is providing information then that is scored a "1"
125		$	District Funding	Just interested whether they provide this information, score "0" or "1"; If they say "$0", this is providing information then that is scored a "1"
			Teachers	
126			Provide number of teachers dedicated to serving gifted students full time (1 if they provide the number; 0 if they do not)	

127			Provide number of teachers who hold a certificate/endorsement in gifted education (1 if they provide the number; 0 if they do not)	
128			Provide information re: all gifted students receiving services from teacher certified/endorsed in gifted education	We only want to know whether they mention certification/endorsement, in general. It does not necessarily need to be that "all" are endorsed; Whoever they say is primarily responsible for delivering gifted services. So if they have pullout, collaborative teaching, full time classes or schools it would be whether they indicate the g/t teacher is endorsed. If differentiation in the regular classroom is the model it would be whether information about all classroom teachers and endrosement is provided.
129			Indicate that a majority of gifted students receive services from teachers who are endorsed or who are supported by gifted endorsed staff	If you can deduce from the plan information provided that a majority of gifted students or majority of teachers must be endorsed, enter "1"; Whoever they say is primarily responsible for delivering gifted services. So if they have pullout, collaborative teaching, full time classes or schools it would be whether they indicate the g/t teacher is endorsed. If differentiation in the regular classroom is the model it would be whether information about all classroom teachers and endrosement is provided.
130			Professional development program related to gifted and talented education for educators working with **gifted and talented students**	Professional development can be in any or all areas of gifted education.
131			Professional development program related to gifted and talented education for **regular education classroom teachers**	Professional development can be in any or all areas of gifted education.

132			Professional development program related to gifted and talented education focusing on **"cultural responsiveness"**	"Cultural responsiveness" is how you develop curriculum in response to students in unique populations. This is a more specific type of professional development, oriented toward curriculum development.
133			Professional development program related to gifted and talented education focusing on any underrepresented population	Underrepresentation in professional development is about identification and program development issues in general with regard to students in this population.

Appendix E

Colorado District Plan Inter-rater Agreement

	District Program Plans	Number of Raters	Inter-rater Agreement
1.	Arapahoe 6-Littleton, CO	4 raters	95.1%
2.	Delta 50J, CO	4 raters	95.9%
3.	El Paso 2 Harrison, CO	4 raters	93.6%
4.	El Paso 12-Cheyenne Mountain, CO	9 raters	92.3%
5.	El Paso 38 Lewis Palmer, CO	4 raters	92.5%
6.	Jefferson County, Golden, CO	4 raters	94.0%
7.	Mesa 51-Grand Junction- BOCES-DeBeque, CO	4 raters	93.2%
8.	Mesa 51-Grand Junction-BOCES-Mesa County Valley, CO	4 raters	91.9%
9.	Mesa 51-Grand Junction-BOCES-Plateau Valley, CO	4 raters	91.4%
10.	Mt. Evans-BOCES-Clear Creek, CO	4 raters	92.9%
11.	Mt. Evans-BOCES-Gilpin, CO	4 raters	92.5%
12.	Mt. Evans-BOCES-Platte Canyon, CO	4 raters	92.9%
13.	Santa Fe Trail-BOCES- Cheraw, CO	4 raters	91.2%
14.	Santa Fe Trail-BOCES-East Otero, CO	4 raters	91.2%
15.	Santa Fe Trail-BOCES-Las Animas, CO	4 raters	91.2%
16.	Santa Fe Trail-BOCES-Rocky Ford, CO	4 raters	91.2%
17.	Santa Fe Trail-BOCES-Swink, CO	4 raters	91.2%
18.	Santa Fe Trail-BOCES-Wiley, CO	4 raters	91.2%
19,	Uncompahgre –BOCES-Norwood, CO	4 raters	90.4%
20.	Uncompahgre –BOCES-Ouray, CO	4 raters	90.4%
21.	Uncompahgre –BOCES-Ridgeway, CO	4 raters	90.4%
22.	Uncompahgre –BOCES-Telluride, CO	4 raters	90.4%
23.	Uncompahgre –BOCES-Telluride, CO	4 raters	90.4%
24.	Weld RE-5J, CO	9 raters	91.3%
25.	Weld RE4 Windsor, CO	4 raters	89.5%

Appendix F

North Carolina District Plan Inter-rater Agreement

	District Program Plans	Number of Raters	Inter-rater Agreement
1.	Bladen, NC	9 raters	82.7%
2.	Chapel Hill-Carrbaro, NC	9 raters	85.3%
3.	Charlotte-Mecklenburg, NC	9 raters	*no IRA was calculated as plan was reviewed as a training. Group decisions are reflected in the summary document.
4.	Granville, NC	9 raters	89.9%
5.	Bertie, NC	9 raters	88.0%
6.	Chatham, NC	9 raters	87.2%
7.	Gates, NC	9 raters	89.5%
8.	Davidson, NC	9 raters	87.9%
9.	Lincoln, NC	9 raters	89.6%
10.	Hoke, NC	9 raters	91.1%
11.	Person, NC	9 raters	87.4%
12.	Nash-Rocky Mount, NC	9 raters	88.2%
13.	Sampson, NC	9 raters	87.1%
14.	Vance, NC	9 raters	87.9%
15.	Yadkin, NC	9 raters	87.1%

Appendix G
District-level Survey

Default Question Block

NCRGE District Survey

NATIONAL CENTER FOR RESEARCH ON GIFTED EDUCATION

Funded by the Institute of Education Sciences, U. S. Department of Education PR/Award # R305C140018

INTRODUCTION
We are collecting information on the service delivery methods and general points of focus for the gifted program in your district. There are no right or wrong answers, and no one gifted program or school is likely to implement all possible variations of all service delivery options. With this in mind, please respond as accurately as possible, and do not feel as if you should be endorsing every option for every question. **Only one person from a district should complete this form**.

You will have the opportunity at the end of the survey to provide clarifications and/or additional information regarding any of the questions.

Please provide the following information:

District Name	
City	
State	
Name of Respondent	
Title	
Email Address	

Section 1: Identification and Selection of Elementary School Students for Gifted Services
The first set of questions is related to the identification processes used in your district for selecting elementary school students (**Kindergarten through 5th grade**) to receive gifted education.

1. Which of the following statements describes the way in which elementary students are *classified* as gifted once they have been identified? (Check all that apply.)

- ☐ Globally (i.e., a student is either identified as gifted or not)
- ☐ Reading/English language arts (e.g., a student is identified as gifted in reading/ELA, but not

necessarily gifted in other areas)

- [ ] Mathematics (e.g., a student is identified as gifted in mathematics, but not necessarily gifted in other areas)
- [ ] Other (explain):

2. At what grade level are students *most commonly* first identified as gifted? (Please choose only one response.)

- ○ Kindergarten
- ○ 1st Grade
- ○ 2nd Grade
- ○ 3rd Grade
- ○ 4th Grade
- ○ 5th Grade
- ○ None of the above

3. Does your district use a test as a **universal screening procedure** (i.e., administer one test to all students at a given grade level to screen for giftedness)?

- ○ Yes
- ○ No

3A. At what grade level(s) do you administer the universal screener to all students to screen for potential giftedness? (Check all that apply.)

- [ ] Kindergarten
- [ ] Grade 1
- [ ] Grade 2
- [ ] Grade 3
- [ ] Grade 4
- [ ] Grade 5
- [ ] None of the above

3B. What type of assessment do you use as a universal screener? (Check all that apply.)

- [ ] A group test of cognitive ability (such as the CogAt, Otis-Lennon, etc.)
- [ ] A non-verbal test of cognitive ability (such as the Naglieri, Raven, etc.)
- [ ] A teacher rating scale or referral
- [ ] A standardized achievement test
- [ ] Other (explain):

4. Which of the following pieces of evidence does your district use as part of the identification process? (Check all that apply.)

- [ ] Parent nominations/referrals
- [ ] Teacher nominations/referrals
- [ ] Teacher rating scale
- [ ] Student work samples
- [ ] Cognitive ability test scores
- [ ] Achievement test scores
- [ ] Observation tools
- [ ] Dynamic assessment (i.e., A skill is tested, taught, and retested in a one-on-one teacher-student session, assessing the speed and degree in which mastery occurs.)
- [ ] Performance-based assessments
- [ ] Non-verbal assessment scores
- [ ] Creativity test scores
- [ ] Self-nomination

5. Does your district assess English language learners in their native language when identifying students as gifted?

- ○ Yes, always.
- ○ Yes, for languages that are commonly spoken in our district (e.g., Spanish).
- ○ Only if specifically requested by a parent or teacher.
- ○ No.

6. Does your district modify the identification process when evaluating students from underserved populations?

- ○ No, we use the same assessment and evaluation process to identify students as gifted, regardless of their background.
- ○ Yes, we do modify the evaluation process for students from underserved populations.

6A. In what ways do you modify the evaluation process for students from underserved populations? (Check all that apply.)

- [ ] We evaluate English language learners in their native language.
- [ ] We use non-verbal assessments to identify underserved students.
- [ ] We are more flexible about the scores that are necessary for identification as gifted for students from underserved populations.
- [ ] We use a "talent pool approach" to identify and/or serve potentially gifted students prior to more formal identification.
- [ ] We give underserved students "extra consideration" during the identification process.
- [ ] We use different weighting of the identification data.
- [ ] Other (explain):

7. Which statements describe your district's decision making process regarding selecting and placing students in the gifted program? (Check at least one option.)

- [ ] Our district uses a selection committee or student study team.
- [ ] Our district uses a matrix.
- [ ] Our district uses a specific cutscore that students must meet to qualify for gifted program services.
- [ ] Our district modifies the traditional identification criteria for underrepresented / underserved students.
- [ ] None of the above.

8. How many times in the past year did your district implement an identification appeals process?

9. Are students who were ***not identified*** for the gifted program re-assessed to determine eligibility? (Check at least one option.)

- [ ] No, once determined ineligible, students are not re-assessed.
- [ ] Yes, students are re-assessed at regular intervals.
- [ ] Yes, students are re-assessed upon request.

10. Are students who have been identified for the program re-assessed to determine continued eligibility? (Check at least one option.)

- [ ] No, once identified for the program, students are not re-assessed.
- [ ] Yes, students are re-assessed at regular intervals.
- [ ] Yes, students are re-assessed on an as needed basis.

11a. Does the district provide ***annual*** professional development opportunities for elementary school teachers on the use of teacher referral, nomination, or rating scales?

- ○ Yes
- ○ No

11b. Does the district provide ***annual*** professional development opportunities for elementary school teachers on how to recognize talent /identify giftedness in students from traditionally underserved populations?

- ○ Yes
- ○ No

Please feel free to provide additional comments on your identification process (optional).

Section 2: Curriculum and Instruction for Gifted Education
The second set of questions is related to the curriculum and instruction used in your district, specifically for ***gifted*** *elementary school students.*

12. Is there a district-wide ***mathematics*** curriculum that is specifically designed for gifted students?

- Yes
- No

12A. Do all elementary schools in your district use this mathematics curriculum with their gifted students?

- Yes
- No

13. Is there a district-wide ***reading/English language arts*** curriculum that is specifically designed for gifted students?

- Yes
- No

13A. Do all elementary schools in your district use this reading/English language arts curriculum with their gifted students?

- Yes
- No

14. Which of the following statements describes your district's use of acceleration as a service delivery option for your ***elementary school*** gifted students? (Check all that apply.)

- Our district does not use acceleration.
- Our district provides the option of subject based acceleration.
- Our district provides the option of full grade acceleration (e.g., early entrance to kindergarten or grade skipping).

15. Is there a designated District Coordinator for gifted services in your district?

- Yes
- No

15A. What percentage of the designated District Coordinator's time is dedicated to gifted services?

16. How many teachers in your district have teaching responsibilities related solely to gifted instruction in the elementary grades?

17. How much autonomy do the teachers have in choosing the content taught to the gifted students in your elementary schools?

- None
- Very little
- Some
- A lot
- Complete

Additional comments on curriculum and instruction (optional).

Section 3: Identifying and Instructing Potentially Gifted Students
The third set of questions is related to special activities, units, and/or interventions used in your district that are designed to provide enrichment experiences to *potentially gifted* elementary school students. These activities may include specialized instruction and/or extended learning opportunities that prepare students to be identified for the gifted program.

18. Does your district offer special activities for potentially gifted elementary school students from **underrepresented populations** (i.e., low income, African American, Hispanic or Latino, Native American, English language learners, twice-exceptional) that prepare them to be identified for the gifted program?

- Yes
- No

18A. For which populations and grade levels do you offer these special activities? (Check all that apply.)

	K	1	2	3	4	5
Low income families	☐	☐	☐	☐	☐	☐
African American	☐	☐	☐	☐	☐	☐
Hispanic or Latino	☐	☐	☐	☐	☐	☐
Native American	☐	☐	☐	☐	☐	☐

English Language Learners	☐	☐	☐	☐	☐	☐
Twice-exceptional students (Those with both potential gifts and talents and disabilities)	☐	☐	☐	☐	☐	☐

18B. Which of the following piece(s) of evidence does your district use when determining which students should participate in these special activities? (Check all that apply.)

- ☐ Standardized tests
- ☐ Teacher nominations/referrals
- ☐ Parent nominations/referrals
- ☐ Observation tools or checklists
- ☐ Performance-based assessments
- ☐ Non-verbal assessment(s)
- ☐ Other (explain):
- ☐ None of the above. All eligible students are invited to participate in the talent pool activities.

18C. When are these special activities generally offered? (Check all that apply.)

- ☐ ***During*** the school day and ***within*** general education classrooms
- ☐ ***During*** the school day and in special classes ***outside*** of the regular classrooms
- ☐ ***Outside*** of the regular school day (e.g., before school, after school, summer)

18D. Does your district use a *specific* curriculum to guide these special activities?

- ○ Yes
- ○ No

18E. Using the slider, indicate the degree to which these activities *focus* on the following: (0=Not a focus, 100=Complete focus). If you wish to record a response of 0, be sure to touch the slider. When you touch the slider, the arrow will darken. Please note that you must TOUCH the slider for it to register a response.

Visual and/or performing arts	
Process skills (e.g., thinking skills, problem solving skills, creativity training)	
General enrichment (content extensions/expanded learning options)	
Above grade level content	
Support services for students (e.g., tutoring, mentoring, family outreach)	

19. Please describe any processes your district uses to identify potentially gifted students within underrepresented populations.

Thank you for your time in responding to this survey. Please feel free to add any comments that would clarify the information that you provided or add to our understanding of your district's gifted practices.

Would you like to be entered into a drawing to win 1 of 10 iPads?

- Yes
- No

Thank you for participating in the District Survey.

Thank you for participating in the District Survey of the National Center for Research on Gifted and Talented. The information you provided will be extremely valuable as we investigate the characteristics of highly effective gifted programs. We hope you will assist us in the next step of our data collection.

In an attempt to glean targeted information about school-related services for gifted students, we will distribute a short survey (12-15 minutes) at each school in your district. Specifically, we will be asking *one* person from each school to respond to the survey. Our goal is that the person at each school with the most knowledge regarding the implementation of the K-5 gifted services will choose to participate. Ideally, this would be a school gifted coordinator or a "lead" teacher of the gifted. However, other knowledgeable personnel, e.g., the school principal, are also appropriate participants.

To help ensure the accuracy and completeness of the responses to the school level surveys in your district, we would like your assistance in compiling an email and phone list of the gifted educators who would be best suited to provide school-specific information regarding gifted services at the elementary level, K-5 (one person per school). In approximately one week, you will receive an email requesting you upload a contact list (Word or Excel). If there is a website or other source where we could find this information, we could use that instead.

Again, we appreciate the time that you are giving to help advance research in gifted education.

NATIONAL CENTER FOR
RESEARCH ON GIFTED EDUCATION

Appendix H
School-level Survey

Default Question Block

NCRGE School Survey

Funded by the Institute of Education Sciences, U. S. Department of Education PR/Award # R305C140018

INTRODUCTION
We are collecting information on the service delivery methods and general points of focus for the gifted program in your school. There are no right or wrong answers, and no one gifted program or school is likely to implement all possible variations of all service delivery options. With this in mind, please respond as accurately as possible, and do not feel as if you should be endorsing every option for every question. **Only one person from a school should complete this survey.**

You will have the opportunity at the end of the survey to provide clarifications and/or additional information regarding any of the questions.

Please provide the following information:

School Name	
District Name	
City	
State	
Name of Respondent	
Title	
Email Address	

Does your school have a gifted and educated program?

- ○ Yes
- ○ No

Section 1: Standards and Curriculum
The first set of questions relates to the standards and curriculum used to guide gifted education in your school. Standards are formal, written descriptions of what students are expected to know and be

able to do at various stages of education, but standards do not describe any particular teaching pedagogy or curriculum. Curriculum, then, includes (a) the planned interaction of students with instructional content and (b) the methods used for evaluating students' attainment of the specified objectives.

1. Indicate the ways in which the regular education reading/English language arts standards are adapted for gifted students. (Check at least one response.)

- ☐ Regular education standards are the same standards that are used for gifted students.
- ☐ Extended learning activities, not covered in the standards, are used for gifted students.
- ☐ Grade level standards are extended or expanded for gifted students.
- ☐ Above grade level standards are used for gifted students.
- ☐ None of the above.

2. Indicate the ways in which the regular education mathematics standards are adapted for gifted students. (Check at least one response.)

- ☐ Regular education standards are the same standards that are used for gifted students.
- ☐ Extended learning activities, not covered in the standards, are used for gifted students.
- ☐ Grade level standards are extended or expanded for gifted students.
- ☐ Above grade level standards are used for gifted students.
- ☐ None of the above.

3. Is there a gifted education **curriculum for reading/English language arts** that is separate from the regular education curricula offered at your school?

- ○ Yes
- ○ No

3A. At what grade levels is *reading/English language arts* gifted curriculum used? (Check at least one response.)

Not used	K	1	2	3	4	5
☐	☐	☐	☐	☐	☐	☐

3B. Which of the following statements describe your school's *reading/English language arts* curriculum for gifted students? (Check at least one response.)

- ☐ The gifted curriculum moves at a *faster pace* than the grade level reading/English language arts curricula.
- ☐ The gifted curriculum provides *more in-depth* coverage of grade level content in reading/English language arts.
- ☐ The gifted curriculum provides *greater breadth* of coverage of grade level content in reading/English language arts.
- ☐ The gifted curriculum provides coverage of *above grade level* content in reading/English language arts.

- [ ] The gifted curriculum focuses on process skills such as creative and critical thinking in reading/English language arts.
- [ ] None of the above

3C. On average, how many hours per week does a gifted identified student spend receiving this *reading/English language arts* gifted curriculum?

▼

3D. On average, how many weeks per year does a gifted identified student spend receiving this *reading/English language arts* gifted curriculum?

▼

4. Is there a gifted education **curriculum for mathematics** that is separate from the regular education curricula offered at your school?

- ○ Yes
- ○ No

4A. At what grade levels is *mathematics* gifted curriculum used? (Check at least one response.)

Not used	K	1	2	3	4	5
☐	☐	☐	☐	☐	☐	☐

4B. Which of the following statements describe your school's *mathematics* curriculum for gifted students? (Check at least one response.)

- [ ] The gifted curriculum moves at a *faster pace* than the grade level mathematics curricula.
- [ ] The gifted curriculum provides *more in-depth* coverage of grade level content in mathematics.
- [ ] The gifted curriculum provides *greater breadth* of coverage of grade level content in mathematics.
- [ ] The gifted curriculum provides coverage of *above grade level* content in mathematics.
- [ ] The gifted curriculum focuses on process skills such as creative and critical thinking in mathematics.
- [ ] None of the above.

4C. On average, how many hours per week does a gifted identified child spend receiving this *mathematics* gifted curriculum?

▼

4D. On average, how many weeks per year does a gifted identified child spend receiving this

mathematics gifted curriculum?

▼

5. Is there a gifted education curriculum for a subject area other than mathematics or reading/English language arts that is separate from the regular education curriculum for that area?

- Yes
- No

5A. In what subject area other than mathematics or reading/English language arts is that curriculum?

5B. At what grade levels is this other gifted curriculum used? (Check at least one response.)

Not used	K	1	2	3	4	5
☐	☐	☐	☐	☐	☐	☐

5C. Which of the following statements describe this other curriculum for gifted students? (Check at least one response.)

- ☐ The gifted curriculum moves at a *faster pace* than the other grade level curricula.
- ☐ The gifted curriculum provides *more in-depth* coverage of grade level content in other subjects.
- ☐ The gifted curriculum provides *greater breadth* of coverage of grade level content in other subjects.
- ☐ The gifted curriculum provides coverage of *above grade level* content in other subjects.
- ☐ The gifted curriculum focuses on process skills such as creative and critical thinking.
- ☐ None of the above

5D. On average, how many hours per week does a gifted identified student spend receiving this other gifted curriculum?

▼

5E. On average, how many weeks per year does a gifted identified student spend receiving this other gifted curriculum?

▼

5AA. Is there a gifted education curriculum for a subject area other than mathematics, reading/English language arts, or the one just indicated that is separate from the regular education curriculum for that area?

- Yes

- ○ No

5BB. In what subject area is this curriculum?

5CC. At what grade levels is this other gifted curriculum used? (Check at least one response.)

Not used	K	1	2	3	4	5
☐	☐	☐	☐	☐	☐	☐

5DD. Which of the following statements describe this other curriculum for gifted students? (Check at least one response.)

- ☐ The gifted curriculum moves at a *faster pace* than the other grade level curricula.
- ☐ The gifted curriculum provides *more in-depth* coverage of grade level content in other subjects.
- ☐ The gifted curriculum provides *greater breadth* of coverage of grade level content in other subjects.
- ☐ The gifted curriculum provides coverage of *above grade level* content in other subjects.
- ☐ The gifted curriculum focuses on process skills such as creative and critical thinking.
- ☐ None of the above.

5EE. On average, how many hours per week does a gifted identified student spend receiving this other gifted curriculum?

5FF. On average, how many weeks per year does a gifted identified student spend receiving this other gifted curriculum?

6. How much autonomy do your school's *teachers of the gifted* have in choosing the content to deliver to the gifted students in the elementary grades?

- ○ None
- ○ Very little
- ○ Some
- ○ A lot
- ○ Complete

Additional comments on curriculum (optional):

Section 2: The Logistics of Your School's Gifted Education Services
The second set of questions is about the logistics of gifted services in your school. Some questions ask about services offered in the regular education classrooms, and some questions deal with gifted education services provided by teachers of the gifted.

7. How many hours a week, if any, does the typical 5th grade gifted (identified as globally gifted or gifted in reading/English language arts) student spend in a regular education reading/English language arts classroom?

8. How many hours a week, if any, does the typical 5th grade gifted (identified as globally gifted or gifted in mathematics) student spend in a regular education mathematics classroom?

9. Do gifted students at your school attend **pull-out classes** for gifted instruction?

- Yes
- No

9A. How many hours per week of pull-out instruction does a typical 5th grade gifted student receive?

9B. Does the subject area of the pull-out program match the subject area of the class from which the student is pulled?

- Yes
- Sometimes
- No
- Don't know

9C. Indicate the subject areas and grade levels in which students receive pull-out gifted instruction. (Check all that apply.)

	K	1	2	3	4	5
Reading/English language arts	☐	☐	☐	☐	☐	☐
Mathematics	☐	☐	☐	☐	☐	☐
Other:	☐	☐	☐	☐	☐	☐

10. Do gifted students at your school participate in **push-in classes**, in which the gifted education teacher either co-teaches or works with the gifted students in the *regular education classroom*?

- Yes
- No

10A. How many hours per week of push-in instruction does a typical 5th grade gifted student receive?

▼

10B. For each subject area, indicate the grade levels that have push-in instruction for the gifted students. (Check all that apply.)

	K	1	2	3	4	5
Reading/English language arts	☐	☐	☐	☐	☐	☐
Mathematics	☐	☐	☐	☐	☐	☐
Other:	☐	☐	☐	☐	☐	☐

10C. Do gifted teachers and regular education teachers who co-teach have common planning time?

- Yes
- No
- Don't know

11. Do gifted students at your school participate in **cluster grouping** (not homogeneous grouping), in which the gifted students stay *in the same classroom* as the regular education teacher and students, but are purposefully grouped based on ability?

- Yes
- No
- Don't know

11A. Are tiered instructional activities used with the cluster groups?

- Never
- Rarely
- Sometimes
- Frequently
- Always
- Don't know

11B. Indicate the subject areas and grade levels that use cluster grouping. (Check all that apply.)

	K	1	2	3	4	5	None
Reading/English language arts	☐	☐	☐	☐	☐	☐	☐
Mathematics	☐	☐	☐	☐	☐	☐	☐
Other:	☐	☐	☐	☐	☐	☐	☐

11C. How many hours per week of cluster grouping does a typical 5th grade gifted student receive in the regular education *reading/English language arts* classroom?

▼

11D. How many hours per week of cluster grouping does a typical 5th grade gifted student receive in the regular education *mathematics* classroom?

▼

12. Do gifted students at your school attend **homogeneously grouped** (by ability or achievement level) classes?

- ○ Yes
- ○ No
- ○ Don't know

12A. For each subject area, indicate the grade levels that have homogeneously grouped classes (by ability or achievement level). (Check all that apply.)

	K	1	2	3	4	5	None
Reading/English language arts	☐	☐	☐	☐	☐	☐	☐
Mathematics	☐	☐	☐	☐	☐	☐	☐
Other:	☐	☐	☐	☐	☐	☐	☐

13. How many teachers in your school have teaching responsibilities related solely to gifted instruction in the elementary grades?

▼

13A. How many of those teachers hold a certification/endorsement in gifted education?

▼

14. For your school, how many hours per year, if any, are allocated to professional development related to the following?

Gifted education for *gifted education teachers* ▼

Gifted education for *regular education classroom teachers* ▾

Gifted education focusing on *underrepresented populations* ▾

15. Which of the following statements describes your school's use of acceleration as a service delivery option for elementary age gifted students? (Check at least one response.)

- Our school does not use acceleration.
- Our school provides the option of subject specific acceleration.
- Our school provides the option of whole grade acceleration (e.g. grade skipping).
- I don't know.

Additional comments on gifted education services (optional):

16. Does your school modify the screening and/or identification process when evaluating students from underserved populations?

- No, we use the same assessment and evaluation process to identify students as gifted, regardless of their background.
- Yes, we do modify the evaluation process for students from underserved populations.

16a. In what ways do you modify the evaluation process for students from underserved populations? (Check all that apply.)

- We evaluate English language learners in their native language.
- We use non-verbal assessments to identify underserved students.
- We are more flexible about the scores that are necessary for identification as gifted for students from underserved populations.
- We use a "talent pool approach" to identify and/or serve potentially gifted students prior to more formal identification.
- We use more different screening criteria or cut-offs for students from underserved populations.
- We give underserved students "extra consideration" during the identification process.
- We use different weighting of the identification data for students from underserved populations.

Section 3: Gifted Education and Instructional Emphases

The last question asks you to indicate the degree to which various activities or goals are a focus of your school's gifted program. The list of activities and goals is extensive, and it is likely that most programs would heavily focus on only a few of the listed items. We are interested in understanding which activities and goals receive greater or lesser emphasis within your school.

17. Using the slider, indicate the degree to which the gifted programming at your school *focuses* on

the following goals and/or activities. (0=**Not a focus**, 100=**Complete focus**). If you wish to record a response of 0, be sure to touch the slider. When you touch the slider, the arrow will darken. Please note that you must TOUCH the slider for it to register a response.

Enrichment in content areas not normally covered within the core academic curriculum	
Acceleration in reading/English language arts	
Acceleration in mathematics	
Interdisciplinary studies of big ideas	
Independent, self-directed projects	
Participation in academic contests (e.g., History Day, Future Problem Solving, Invention Convention, etc.)	
Academic opportunities outside of the normal school day	
College and career readiness	
Leadership skills	
Service learning	

Culturally responsive curriculum and instruction	
The cultivation of cultural identity	
Social and emotional needs specific to gifted students	
Students' academic self-confidence	
Students' academic motivation	
Development of student autonomy	
Advanced learning opportunities for traditionally underserved students	

Thank you for your time in responding to this survey. Please feel free to add any comments that would clarify the information that you provided or add to our understanding of your school's gifted practices.

Would you like to be entered into the drawing for 1 of 10 iPads?

- Yes
- No

Thank you for participating in the School Survey.

Click >> to submit your responses

Appendix I
Example of Colorado District Plan

See http://www.cde.state.co.us/gt/data for publicly available gifted program plans from Colorado.

Appendix J

Example of North Carolina District Plan

See http://www.dpi.state.nc.us/aig/aigplans/ for publicly available gifted program plans from North Carolina.