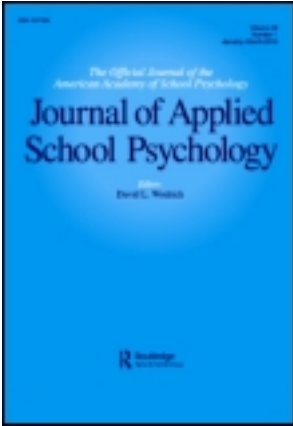


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Identification of Gifted Students in the United States Today: A Look at State Definitions, Policies, and Practices

Mary-Catherine McClain^a & Steven Pfeiffer^a

^a Florida State University, Tallahassee, Florida, USA

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Identification of Gifted Students in the United States Today: A Look at State Definitions, Policies, and Practices

MARY-CATHERINE McCLAIN and STEVEN PFEIFFER
Florida State University, Tallahassee, Florida, USA

Definitions of what constitute students who are gifted and talented as well as policies and procedures to identify these high-ability students play a critical role in determining which individuals actually receive gifted services. This article reports on a national survey of how state policies and practices define giftedness, identify gifted students, and accommodate for gifted minority group students. Results indicate substantial changes in definitions and categories of giftedness over the past decade. Results also reveal variability in identification methods, with a majority of states using a 3–5% cutscore for demarcating giftedness while endorsing a multiple cutoff or averaging approach to gifted decision making. Most noteworthy is the fact that at present, no state advocates using a single-score decision-making model for gifted classification. The authors discuss the implications for school psychology.

KEYWORDS *gifted, gifted identification, gifted policy, alternative assessment*

Students who are gifted and talented are by definition a statistically uncommon and, many would argue, uniquely valuable human resource. Gifted and talented students exhibit outstanding intellectual ability, or promise, and are capable of extraordinary performance and accomplishment. These individuals are also highly creative, innovative, and motivated thinkers who represent great intellectual capital (Gallagher, 2008; Pfeiffer, in press-a; Sternberg, 2004).

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Address correspondence to Mary-Catherine McClain, Florida State University Career Center, 100 South Woodward Ave., Tallahassee, FL 32306, USA. E-mail: mcmclain@gmail.com

Since the beginning of the 20th century, the concept of giftedness has been associated with high intelligence and exceptional performance (Gottfredson, 1997; A. Robinson & Clinkenbeard, 2008). Largely in response to the launch of the Sputnik satellite by the Soviet Union in 1957, the federal government directed funds to identify and counsel bright students in fields related to math and science. This unfortunately short-lived but nonetheless significant attention to and infusion of financial resources for the gifted helped create gifted education practices and beliefs.

Almost 40 years ago, a seminal report authored by Sydney Marland, then Commissioner of Education, profoundly influenced how giftedness was conceptualized and defined. Included in what became known as the Marland Report (1972) was the statement encouraging states to identify a minimum of 3–5% of the school population as gifted. Some experts have suggested that the 3–5% estimate was proposed as a minimum upper limit and not a specific threshold, thus preventing any superintendent from claiming that their district had no gifted students (Borland, 2003). However, the 3–5% upper limit for defining gifted students became, in the minds of many, including state education policymakers, something real (Pfeiffer, 2003, in press-b).

Toward the end of the 20th century, and into the first decade of the 21st century, gifted authorities recognized serious limitations in utilizing only an IQ test score to identify gifted students. Authorities have advocated for a more comprehensive, conceptually sophisticated, and diagnostically defensible approach that includes multiple criteria (Borland, 2003; Pfeiffer, 2003; VanTassel-Baska, Feng, & Evans, 2007). Concerns over best practices in gifted diagnosis or classification have been accompanied by recommendations for increased, expanded, and differentiated programming services for the gifted (Feldman, 2003; Tomlinson, 2003, 2009).

How giftedness is defined and conceptualized has undergone significant change over the past two decades, particularly in the professional literature (Horowitz, Subotnik, & Matthews, 2009; Moon & Dixon, 2006). However, all too often, and as observed in school systems today, giftedness continues to be viewed as something identified primarily by a score on an IQ test (Borland, 2009; Edwards, 2009; Ford, 2010; Worrell, 2009). This IQ score continues to reflect a 3–5% cutscore suggested 40 years ago by Marland (1972).

The Education Amendments of 1969 (U.S. Congress, 1970) published one of the first federal definitions of giftedness. Three years later, and again in 1978, Superintendent Marland modified the federal definition. After several revisions, the U.S. Department of Education, Office of Educational Research and Improvement (1993) published a definition that reflects contemporary understanding of gifted students:

Children and youth with outstanding talent perform or show the potential for performing at remarkably high levels of accomplishment when compared with others of their age, experience, or environment. These

children and youth exhibit high performance capability in intellectual, creative, and/or artistic areas, possess an unusual leadership capacity, or excel in specific academic fields. They require services or activities not ordinarily provided by the schools. Outstanding talents are present in children and youth from all cultural groups, across all economic strata, and in all areas of human endeavor (p. 26).

Originally, educators defined *gifted* or *talented* more narrowly and only considered the constructs of achievement and/or intelligence—which increased the probability that certain youth with nonacademic gifts would be excluded from gifted consideration. However, over the past two decades, definitions of giftedness have broadened to include abilities related to leadership, creativity, and the arts. The term *gifted* has been removed from many current definitions, reflecting a more contextual, developmental, and talent development perspective (Cramond, 2004; Stephens, 2008; Stephens & Karnes, 2000).

Procedures used for identifying gifted students have largely been based on individual scores on standardized IQ tests (N. M. Robinson, 2005; Worrel, 2009). For example, a student is typically labeled as gifted and talented upon obtaining a score of 120, 125, or 130 on the Stanford-Binet or Wechsler Intelligence Scales. A student referred for gifted identification who does not obtain a preestablished cut score on an IQ test is often deemed “not gifted” or ineligible for gifted programming and services (Brown, Renzulli, Gubbins, Zhag, & Chen, 2005; Pfeiffer, 2008, in press-a). There is an extensive research literature supporting the validity of IQ scores predicting academic achievement, as well as job performance, social-economic status, and other important life outcomes (Duckworth, Matthews, Kelly, & Peterson, 2007; Neisser et al., 1996; Rushton & Jensen, 2010). Consequently, the belief remains in the minds of many educators, psychologists, and policymakers that an IQ score provides *the* metric to define giftedness (Borland, 2009; Cramond, 2004; Pfeiffer, in press-a, in press-b).

On the other hand, there is a growing consensus in the gifted field that advocates using multiple and alternative approaches to identifying gifted students. Authorities in the gifted field report, however, that school districts nationwide have been slow to adopt new and alternative identification procedures (Callahan, 2009; Reis & Renzulli, 2009; VanTassel-Baska & Stambaugh, 2005). One goal of the present study was determining whether the perception of gifted authorities is valid. In particular, we were interested in learning whether change in adopting new definitions for and ways of conceptualizing giftedness at the state level have been slow or faster than gifted authorities suspect.

Cassidy and Hossler (1992) conducted a nationwide survey of state definitions of giftedness, in part to determine whether definitions changed since an earlier report published in 1985. Surveys were sent to each state

department of education and findings showed that the majority of states defined giftedness using a one-dimensional model and single criterion (e.g., the IQ score). It was also reported that states continued to rely heavily on the 1978 federal definition. Furthermore, 30 states had made no revisions to their respective definitions in more than a decade. Almost 10 years later, Stephens and Karnes (2000) also conducted a survey to analyze state definitions. Similar to Cassidy and Hossler (1992), the 2000 national survey was distributed to each state department of education to collect state definitions for gifted and talented. State definitions were compared with categories found within the federal definition of giftedness as well as compared with those definitions reported by Cassidy and Hossler (1992). Stephens and Karnes (2000) also presented each state's 1990 and 1998 gifted definitions as a means of comparing specific changes. The reported findings illustrated a wide discrepancy among statewide definitions for gifted and talented students, with some states adopting definitions from the Jacob K. Javits Act (1988), others using Renzulli's (1978) three-ring model of giftedness, and some states providing no definition of giftedness. Furthermore, although states acknowledged the existence of more than one type of giftedness, the 1978 federal definition continued to be represented in a majority of state definitions. Stephens and Karnes (2000) concluded that more recent definitions and conceptual models (e.g., Gardner, 1993; Sternberg, 2005) were often overlooked by states and were not adequately reflected in state definitions. They also concluded that eligibility for gifted services continued to be heavily influenced by the federal definition.

PRESENT RESEARCH STUDY

This article reports on a national survey which examined each of the 50 states' specific policies and procedures specific to gifted identification. The survey examined state definitions for the gifted, screening procedures and identification practices—specifically addressing whether states established or recommended specific test cutscores for identifying gifted students. The study also explored whether states advocate the use of one or more different gifted decision-making models and whether they have policy or procedures designed to increase racial, ethnic, or cultural diversity among their gifted student population. Findings from the present national survey are further compared with the study conducted by Stephens and Karnes (2000). One of our goals was to determine the extent of change that has occurred in gifted policies and practices over the past decade, particularly focusing on the state level.

We developed a seven-item, open-ended survey (Appendix A) to specifically answer five research questions:

1. Which definitions and categories of giftedness are promulgated by each state?
2. What specific screening and gifted identification practices are used to identify gifted students?
3. Do any states endorse specific decision-making models for gifted eligibility determination?
3. Do states recommend test scores and specific cutscores when determining eligibility for gifted services?
4. Do states provide flexibility for students from typically underrepresented racial, ethnic, cultural, and linguistically diverse gifted populations?

METHOD

Participants

We visited each state's Department of Education website, accessing publically available information to help answer the seven survey items and address our five research questions. Contact information, including phone numbers and e-mail addresses, was also obtained for each state's gifted coordinator. All 50 state gifted coordinators were contacted and invited to participate in the study. Specifically, the coordinators were encouraged to clarify and elaborate upon any state information that helped the researchers create a more complete and accurate national picture on state policy and practices pertaining to the gifted. At the time of the study, the state gifted coordinator position for two states, Rhode Island and Arkansas, was vacant. Consequently, we collected information from these two states by contacting members of the respective state associations and/or department of education. A total of 48 state gifted coordinators participated in the study (100% participation). Each state gifted coordinator was individually interviewed to corroborate, clarify, or expand upon information on the website concerning each state's gifted practices and policies. Telephone interviews generally lasted from 20 to 40 min.

Procedure

To develop the questionnaire for determining how states define, identify, and select gifted students, we searched published literature for studies which discussed definitions and categories of giftedness. Specifically, searching ERIC, MEDLINE, PsycINFO, and Google Scholar using the following keywords: *gifted*, *academically talented*, *intellectually superior*, *gifted definitions*, *gifted identification*, *gifted assessment*, and *gifted and talented*. We also examined the reference lists of these publications to identify other relevant resources. On the basis of a review of the extant literature, a survey questionnaire was created that included the following sections: state definitions, required types of gifted assessment, cutoff criterion scores, implementation of teacher rating

scales, and the identification of underrepresented gifted and talented populations. The questionnaire included forced-choice and open-ended items, all of which focused primarily on gifted definitions and identification practices. Domains related to gifted funding, accountability, programming, and professional development were intentionally not examined. The data were collected using the following three-step procedure:

STEP 1

Information was gathered by navigating through each state's Department of Education website. From each website, information was collected on current gifted education policies and procedures, specifically data on defining giftedness, identification criteria, and assessment techniques. The National Association for Gifted Children (2009) website (<http://www.nagc.org>) provided sufficient information for answering the first survey item for all 50 states. For example, the National Association for Gifted Children website indicated whether the state mandated gifted identification, noted the presence or absence of a state definition, and also provided a description of the areas addressed within each state's definition. Information obtained from the association's website and each state's department website were subsequently clarified, if needed, when the researchers implemented Step 2—ultimately providing direct correspondence with state gifted coordinators to ensure accurate and up-to-date information on the seven questionnaire items.

STEP 2

We followed-up with any state in which there was no posted policy or procedure for gifted education on the website or if the information on the website was insufficient in providing enough information to answer any of the five research questions. Interviews with gifted coordinators were conducted to obtain information on specific identification methods, use of specific test scores for determining eligibility, whether prespecified cutscores qualified students for services, whether the state recommended the use of teacher rating scales, and if the state included exceptions to identifying gifted students to increase the number of racial, ethnic, and culturally diverse gifted students. Follow-up interviews with the gifted coordinators were required because much of the information that was sought was not publically accessible. For example, information on the use of teacher rating scales to help identify gifted students was rarely available on the state's Department of Education website. If gifted coordinators reported that their state did not require or mandate the use of teacher rating scales, we asked them whether teacher rating scales were recommended by their state as part of the gifted assessment process. During Step 2, gifted coordinators were given the option

of answering the seven survey questions through e-mail or by telephone interview. In addition, each gifted coordinator was asked to submit electronic documents and Internet website links relevant to their state's gifted policies and procedures for identifying gifted and talented students. Last, all gifted coordinators were asked to confirm data collected during Step 1—mainly information regarding state definitions, assessment procedures, and identification criteria.

During Step 3, a follow-up question (Appendix B) was developed after initial findings were collected. Specifically, all 50 gifted coordinators and/or department of education employees were sent an e-mail asking for information on whether their state advocated the use of one or more of five gifted identification decision-making models. We decided to include this additional research question at the suggestion of a colleague who felt that this was an important yet underresearched topic in gifted assessment practice. Last, the authors established thresholds for evaluating level of change: *negligible change* if 4 or fewer states (less than 10%) made modifications over the past decade; *small change* if 5–7 states made changes (11–15%); *moderate change* if 8–10 states (16–20%) implemented changes; and *large or substantial change* evidenced by 11 or more states (20% or greater). These thresholds are consistent with estimates of significant or meaningful change in the social sciences (Glass & Hopkins, 1996).

RESULTS

Gifted Definitions

TERMINOLOGY

Of the 50 states, 48 (96%) have established definitions of giftedness. Massachusetts and South Dakota represent the two states that have no current definition for gifted and talented students. However, significant variation in how states identify or categorize what constitutes gifted and talented was found; the terminology *gifted and talented* is used in 27 state definitions (54%), whereas 18 states (36%) use only the term *gifted*. The remaining three states (Indiana, Nebraska, and Washington; 6%) use the term *high-ability student* in their state definition.

Several states have made definitional changes when compared with the results reported by Stephens and Karnes (2000). For example, Kentucky, Minnesota, New Hampshire, and New Jersey added and/or changed their terminology to state *gifted and talented*; Indiana's definition changed from *gifted and talented* to *high-ability student*; and at present, Kansas uses *gifted* instead of *exceptional* when referring to gifted and talented children. A total of 24 states have changed or modified their definition of giftedness over the past decade. On the basis of the thresholds that were set a priori for

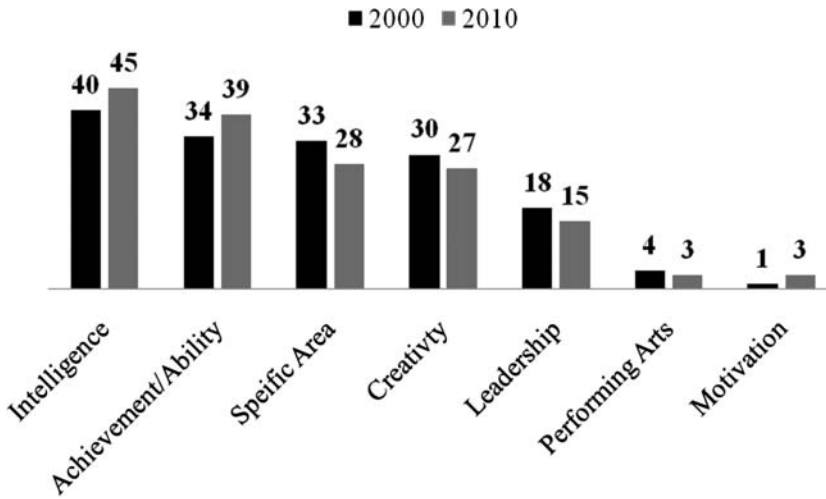


FIGURE 1 Required identification methods and domains.

judging the amount of change over time, we concluded that states have demonstrated a substantial level of change over the past 10 years in terms of gifted terminology. A substantial level of change represents 11 or more of the 50 states (20% or greater) evidencing change. To address our second research question, we examined state definitions in terms of which specific areas or categories of giftedness were included in the definition.

CATEGORIES/TYPES OF GIFTEDNESS

As seen in Figure 1, 45 of the state definitions (90%) include intelligence as an area or category of giftedness. Thirty nine state definitions include high achievement (78%), and 27 state definitions include creativity (54%). In addition, 28 states (56%) include a specific category of giftedness (e.g., artistic talent), 15 states (30%) include the category leadership or leadership ability in their definition, and 3 states list motivation (6%).

In comparison with the gifted categories reported by Stephens and Karnes (2000), eight states have either added or eliminated specific categories within their definitions. On the basis of our a priori thresholds for level of change, this indicates moderate change as 8–10 states (16–20%) have implemented changes over the past decade. For example, Alabama and Kansas now include academic domains in their state definitions; Georgia and Indiana's definitions now include the category of motivation when determining individual classification for giftedness. Maryland has incorporated leadership as a gifted category, and South Carolina has added intellectual and artistic ability.

Overall, 24 states (48%) modified their definition of gifted and/or altered specific terminology within the definition. Applying our study's same

decision rule for judging amount of change, the present findings indicate that states nationwide have implemented substantial change over the past decade in modifying their definitions of gifted and talented. For example, Indiana uses *high ability* rather than *gifted and talented* to describe its gifted students; Kansas recently replaced *exceptional children* with *gifted* [National Association for Gifted Children, 2005, 2009b, p. 143]. Furthermore, more than 10 years ago, Stephens and Karnes (2000) reported that five states did not have a state definition for the gifted. Since 2000, three of these five states—New Jersey, New Hampshire, and Minnesota—have developed state definitions for giftedness.

Figure 1 illustrates the shifts that have occurred over the past decade in gifted definitions and specific terminology. Specifically, 24 states revised their definitions (48%), 11 states (22%) added other gifted areas or categories in their state definition, and 15 states (30%) narrowed gifted areas or deleted terminology in their respective state definitions. For example, Maryland added the category of *leadership*, whereas Georgia removed the areas of *leadership* and *artistic* from their state definition. Five states (10%) modified their gifted definition with minor changes in wording. Since the Stephens and Karnes (2000) survey, Mississippi narrowed its definition by removing the full descriptions of intellect, academic, creative, and artistic abilities; Colorado removed any mention of specific categories of giftedness (at present, it states “outstanding in particular areas”).

Additional changes in state definitions include referencing identification criteria, mentioning student age ranges, and including information on children from diverse social, economic, and cultural backgrounds. For example, Illinois’ current gifted definition explicitly states that students identified as gifted must score in the top 5% in a specific area of aptitude. Over the past two decades, Hawaii, Michigan, Delaware, and West Virginia have revised their state definitions to include age ranges (i.e., 4–20 years old). Oklahoma and Colorado removed specific age ranges from their state definitions. Last, Alabama, Illinois, and Maryland added specific mention of socioeconomic status and cultural background over the past 10 years.

We next report on findings for the second research question: what specific screening and gifted identification practices are used to identify gifted students? Stephens and Karnes (2000), did not report information on this specific question, precluding any evaluation on the degree of change over the past 10 years in terms of screening and gifted identification practices.

Gifted Screening and Identification Practices

STATE MANDATES

At present, 32 states (66%) have specific legislative policy mandating the identification of students who are gifted. In 12 states (24%) there are no state-level mandates for the identification of gifted students, relying on

local school districts and local educational agencies to set gifted policy and procedures. Six states (12%) do not have an established state or local level identification policy or procedure, although the state's gifted coordinators indicated that the majority of schools in their unregulated states are encouraged to provide services for gifted youth. A total of 44 states (88%) use some type of legislation mandating gifted identification. However, a wide range of gifted identification methods and domains exist that vary in categories considered and comprehensiveness.

Although Stephens and Karnes (2000) did not examine the question of gifted screening and identification practices, a report published by the Council of State Directors of Programs for the Gifted (1999) provides information on state policy mandates for the gifted. On the basis of data from 43 states in 1999, 12 states (28%) did not mandate the identification of gifted and talented students. In comparison, only 6 states (12%) at present do not require schools in their jurisdiction to identify gifted students, whereas 12 (24%) allow local educational agencies or districts to decide on specific identification criteria and requirements.

GIFTED IDENTIFICATION METHODS AND DOMAINS

On the basis of responses provided by each state's gifted coordinator, methods and domains used for identifying gifted students were grouped into the following seven categories: intellectual domain (IQ), performance, achievement, creativity, nominations/referrals, behavioral checklists, and rating scales. Figure 2 shows that 16 states (32%) mandate that schools use intelligence tests when identifying gifted students, whereas 17 states (34%) mandate the use of achievement tests, the two most widely required gifted

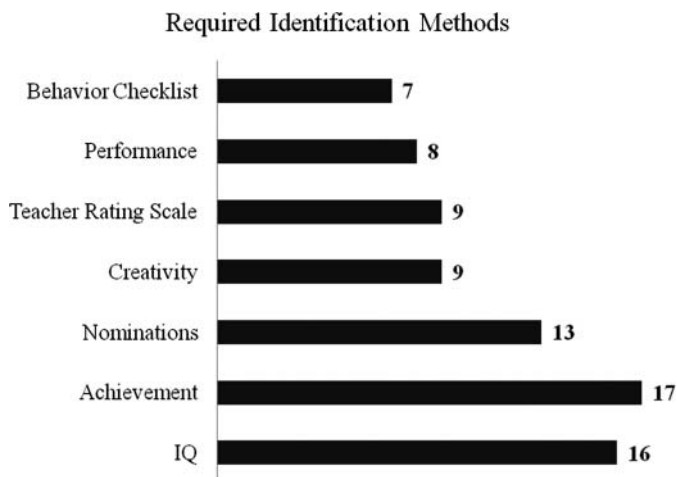


FIGURE 2 Required assessment methods for identifying gifted students.

identification methods/domains. In addition, 13 states (26%) require the use of nominations and teacher and/or parent referrals. Nine states (18%) require the use of a teacher-completed behavior rating scale, whereas seven states (14%) require the use of a behavioral checklist. However, it is likely that there is overlap in terms of these two categories of identification methods. Last, nine states (18%) require the use of creativity tests, whereas eight states (16%) stipulate the inclusion of performance measures to identify giftedness.

Over the past decade, a growing number of states have expanded their identification methods and domains. Since the publication of the Council of State Directors of Programs for the Gifted (1999), one state added intelligence/aptitude assessment, five states mandated achievement tests, and six states incorporated nominations into their identification policy requirements. There has been no change, however, in the total number of states using behavioral checklists.

We also compared the present findings to recent publications disseminated by the Council of State Directors of Programs for the Gifted (2007) and National Association for Gifted Children (2005, 2009b). Four states have added requirements for the utilization of intelligence tests and 3 states have added achievement measures in the gifted identification process. Two states have included nomination and referral procedures as part of the required identification methods. The 2007 publication by the Council of State Directors of Programs for the Gifted did not specify use of behavioral checklists; it is likely that the authors included this identification method under their category of *multiple criteria* or *other* in the 2007 report. Our findings indicate, when compared with previous reports, a small overall change nationwide with respect to mandated identification methods and domains for gifted students. Recall that a small change represents five to seven states (11–15%) having made changes over time, and a negligible change is when four or fewer states (less than 10%) have made changes. We next examined the results of the third research question: Do states endorse specific decision-making models when making gifted eligibility determinations?

Decision-Making Models

We were interested in determining whether states require, endorse, or recommend a particular decision-making model to identify gifted students in their jurisdiction. This question was not examined by Stephens and Karnes (2000), and to our knowledge, has not been investigated in any published research. We felt that it would be informative to examine this question, which gets to the heart of how practitioners determine whether a student is gifted. It is particularly germane to school psychology practice.

Specifically, we examined five gifted decision-making models proposed by Sternberg and Subotnik (2000): (a) *single cutoff*—when a school district uses a single score (e.g., IQ score of 130) to guide decision making

whether a student qualifies for gifted classification and programming; (b) *single cutoff: flexible criterion*—similar to the single cutoff; only one piece of diagnostic information is considered, but school districts can be flexible in terms of which test is acceptable and decide using one criterion from two or more options (e.g., 90th percentile on a creativity scale or 2 *SD* above the mean on an IQ test); (c) *multiple cutoff*—this model requires that a student score above a preselected cut score on two or more different measures (e.g., 95th percentile on IQ and 85th percentile on a creativity test); (d) *averaging*—unlike the previous models, this approach assumes that a student can demonstrate giftedness in different domains and that the student does not have to demonstrate the same level or threshold of giftedness across different domains; and (e) *dynamic*—giftedness is measured by the amount of change (e.g., growth/improvement) over time; the student's score(s) at initial testing are compared with their score(s) at a second testing, and amount of change determines giftedness. For the purpose of this research, we collapsed the multiple cutoff and averaging decision-making models into one category—yielding four models—because the state gifted coordinators found it difficult and confusing distinguishing among these two decision-making models.

Table 1 indicates that more than half of the states (54%) endorse selection of gifted students using a multiple cutoff or averaging approach, 7 states (14%) endorse selection of gifted students using a single cutoff: flexible model, and no state reported using the single cutoff decision-making model or the dynamic decision-making model for identifying gifted students. Sixteen states (32%) indicated that they do not require, recommend, or adhere to any one specific decision-making model.

The interviews with the state gifted consultants revealed that states exhibit a wide variety of approaches and great latitude in terms of application of different decision-making models. For example, Hawaii reported that they “recommend a matrix with at least 5 criteria . . . we suggest that the criteria match the area being identified. If the school is screening for math (giftedness), for example, then only math instruments should be used” (A. Viggiano, personal communication, 2009). North Carolina reported:

Each local educational agency in our state establishes its own identification procedures, and these can vary fairly significantly . . . most school districts identify using both an achievement measure and an aptitude measure . . . some school system also include informal measures . . . parent checklists, classroom grades, end-of-grade tests, and portfolios (J. Brooks, personal communication, 2009).

Similarly, Virginia commented that they don't endorse any one specified decision-making model. On the other hand, “most schools in Virginia operate on the multiple criteria model but there is often a range of acceptable

TABLE 1 State's Decision-Making Model for Identifying Gifted Children

State	Single cutoff	Single cutoff: Flexible	Multiple cutoff or multiple scores: Averaging	Dynamic	No model
Alabama		x			
Alaska					x
Arizona		x			
Arkansas			x		
California			x		
Colorado		x			
Connecticut			x		
Delaware					x
Florida			x		
Georgia			x		
Hawaii			x		
Idaho			x		
Illinois					x
Indiana					x
Iowa					x
Kansas			x		
Kentucky			x		
Louisiana		x			
Maine					x
Maryland					x
Massachusetts					x
Michigan					x
Minnesota					x
Mississippi			x		
Missouri			x		
Montana			x		
Nebraska			x		
Nevada			x		
New Hampshire					x
New Jersey			x		
New Mexico			x		
North Dakota					x
Ohio		x			
Oklahoma		x			
Oregon			x		
Pennsylvania		x			
Rhode Island					x
South Carolina			x		
South Dakota					x
Tennessee			x		
Texas			x		
Utah			x		
Vermont					x
Virginia			x		
Washington			x		
West Virginia			x		
Wisconsin			x		
Wyoming			x		
Total	0	7	27	0	16
%	0%	14%	54%	0%	32%

scores for some measures” (D. Poland, personal communication, 2009). Last, Iowa reported that they consider “portfolios of work, intake interviews, and evidence of gifted characteristics” given that some students may be poor test takers or not perform well on the day that they are tested. Iowa reported that it would adjust test scores and other measures for “students of poverty and minority group students” (G. Kenkel, personal communication, 2009). We now turn to the fourth research question: Do states recommend test scores and specific cutscores when determining eligibility for gifted services?

Test Scores

As mentioned earlier, our national survey found that specific criteria and procedures for how students come to be identified vary considerably by state. A majority of states use intelligence and achievement test scores in identifying gifted students, which is consistent with the data reported by Cassidy and Hossler (1992) and by Stephens and Karnes (2000). However, few states mandate or even recommend the use of specific cutscores to identify gifted students. Table 2 indicates that only 18 states (36%) stipulate specific test scores for students to qualify as gifted in their state. Of the states that have established cutscores to classify gifted students, all 18 states (100%) provide specific cutscores on IQ tests; 15 of the 18 states (83%) provide specific cutscores on achievement measures and 10 of the 18 states (56%) provide specific cutscores in one or more specific domains (e.g., leadership, motivation, creativity). For example, Alabama requires that students score at the 95th percentile or above on an IQ test, whereas Arizona requires that students obtain a cutscore at the 97th percentile on an IQ test. Mississippi requires that students score at or above the 90th percentile on a test of achievement, whereas students in New Mexico must score at or higher than the 95th percentile on a measure of creativity to be eligible for gifted services in their state. It is important to note that the majority of states (64%) do not stipulate specific test or cutscores for gifted eligibility in their state. The final research question examined was whether states provide flexibility for students from typically underrepresented racial/ethnic, cultural, and linguistically diverse gifted populations?

Gifted Exceptions

State gifted coordinators were asked if their state provided any special accommodations or flexibility for special populations who might otherwise not meet state-specified gifted criteria. Slightly more than half of the states ($n = 26$) mandate specific policies for identifying culturally diverse students, whereas the remaining 24 states (48%) have no current mandate or policy

TABLE 2 States Using Specific Scores for the Selection and Identification of Gifted Students

State	Use of specific score	IQ	Achievement	Other area
Alabama	Yes	95th percentile	17 in matrix	Behavioral characteristics
Alaska	No			
Arizona	Yes	97th percentile	97th percentile	
Arkansas	No			
California	No			
Colorado	Yes	95th percentile	95th percentile	95th percentile (leadership, creativity)
Connecticut	No			
Delaware	No			
Florida	Yes			
Georgia	Yes	95th percentile K-2: 99th; Grades 3-12: 96th	90th percentile	Behavioral characteristics
Hawaii	No			
Idaho	No			
Illinois	No			
Indiana	No			
Iowa	No			
Kansas	No			
Kentucky	Yes	96th percentile	96th percentile	
Louisiana	Yes	Pre-K: 99th; Grades 1-12: 95th	Pre-K: 99th; Grades 1-12: 95th	
Maine	No			
Maryland	No			
Massachusetts	No			
Michigan	No			
Minnesota	No			
Mississippi	Yes	90th percentile	90th percentile	Superior range (leadership, creativity)
Missouri	Yes	95th percentile	95th percentile	95th percentile (creativity)
Montana	No			
Nebraska	No			
Nevada	No			
New Hampshire	No			
New Jersey	No			

(Continued on next page)

TABLE 2 States Using Specific Scores for the Selection and Identification of Gifted Students (*Continued*)

State	Use of specific score	IQ	Achievement	Other area
New Mexico	Yes	95th percentile	95th percentile	95th percentile (creativity)
New York	No			
North Carolina	No			
North Dakota	No			
Ohio	Yes	95th percentile	95th percentile	68th percentile (creativity)
Oklahoma	Yes	97th percentile	97th percentile	
Oregon	Yes	97th percentile	97th percentile	
Georgia	Yes	K-2: 99th; Grades 3-12: 96th	90th percentile	
Hawaii	No			
Idaho	No			
Pennsylvania	Yes	98th percentile		
Rhode Island	No			
South Carolina	Yes	93rd percentile	94th percentile	State exam
State	Use of specific score	IQ	Achievement	Other area
South Dakota	No			
Tennessee	No			
Texas	No			
Utah	No			
Vermont	No			
Virginia	No			
Washington	Yes	90th percentile	95th percentile	Evidence of creativity
West Virginia	Yes	97th percentile	90th percentile	
Wisconsin	No			
Wyoming	Yes	95th percentile	95th percentile	Approved score
Total	18	18	15	10
%	36%	36%	30%	20%

Note. Kansas, Minnesota, Nevada, and New Jersey require multiple criteria for identification but have not established or specified cutoff scores. New Mexico, Ohio, and Washington are the only three states to incorporate standard error of measurement into a child's cutoff score. South Carolina has adopted a flexible, multiple-criteria model. In essence, students who meet the criteria on any two dimensions are qualified for gifted services (VanTassel-Baska, Feng, & Evans, 2007). Dimension A refers to an aptitude measure, Dimension B is based on a South Carolina State Assessment or nationally normed test, and Dimension C relies on performance tasks. Students must demonstrate high aptitude (93rd percentile) in one or more of the following areas: verbal, mathematical, nonverbal, and/or a composite of all three. However, students who meet or exceed the 96th national age percentile composite score on an ability test are not required to meet any other criteria. In terms of achievement, a student must score at the 94th percentile in reading comprehension and/or at or above the 94th percentile in mathematical concepts.

for identifying typically underrepresented gifted students. During the phone interviews, state gifted consultants reported a variety of approved modifications when testing students from economically disadvantaged homes and/or students of color. For example, Georgia reported:

Rule 160-4-2.38 allows you to utilize a second measure in all areas when there is compelling evidence such as culture, language development, disabling condition, or economic disadvantage, and the initial score is within one standard error of measurement or standard deviation of the qualifying score” (L. Andrews, personal communication, 2009).

Alabama uses a matrix that “was designed and implemented specifically to better enable the identification and services of students from culturally diverse and low [socioeconomic status] backgrounds” (E. Romey, personal communication, 2009). The regulations for South Carolina have also been changed to incorporate more nonverbal and performance-based assessments to “not penalize students for having too few resources or exposure because of low socioeconomic status—ultimately increasing efforts to identify minority students” (R. Blanchard, personal communication, 2009).

Several states noted that *twice-exceptional students*, individuals who have gifts and a comorbid disability (Foley Nicpon, Allmon, Sieck, & Stinson, 2011; Pfeiffer, 2009), were an underserved group that requires flexible identification procedures. Although most states acknowledge the difficulty in addressing the educational needs of these special students, few states have established specific guidelines or policies for identifying such twice-exceptional students. Virginia encourages the identification of gifted students suspected of having a coexisting disability to incorporate a variety of assessments, including student portfolios, work products, teacher checklists, interviews, and standardized test scores. Similarly, Idaho suggests that multiple data sources be examined when identifying twice-exceptional students and that screenings include formal (e.g., standardized tests) and informal (e.g., course work) assessments.

The Stephens and Karnes (2000) study and the report of the Council of State Directors of Programs for the Gifted (2007) did not examine the question of whether states recommend flexibility and accommodations to increase diversity in gifted programs. As a result, we are unable to make comparisons with any earlier published nationwide dataset or comment on possible trends over time. However, at present, approximately half of the states recognize that some groups of students in U.S. schools are less likely to do as well on traditional gifted identification methods and benefit from flexible and nontraditional gifted identification procedures.

DISCUSSION

The purpose of this research study was to obtain updated information on gifted state policies nationwide. We were interested in determining which definitions and categories of giftedness are promulgated by each state, whether specific types of tests are endorsed to identify gifted students, if states establish specific cutscores or advocate for specific gifted decision-making models, and whether states allow flexibility when identifying typically underrepresented groups of gifted and talented students. A final interest was determining the amount of change that has taken place in state gifted policies and procedures nationwide over the past decade.

Contrary to the perception of some authorities in the gifted field that the adoption of new ideas is slow to gain traction (Callahan, 2009; Reis & Renzulli, 2009; VanTassel-Baska & Stambaugh, 2005), our findings indicate that all 50 states have moved beyond the policy of permitting a single IQ score to, alone, determine whether a student is gifted. At present, no state endorses or recommends using the single cutoff decision-making model for gifted identification, which is a marked change from gifted identification practices in the schools only 20 years ago (Pfeiffer, 2002). Our findings further indicate that a substantial number of states have modified or changed their definitions of giftedness as well as altered specific terminology since the Stephens and Karnes (2000) survey.

Decision-Making Models

Our research study examined decision-making models, specifically whether any states endorsed or recommended any one gifted decision-making model (Sternberg & Subotnik, 2000). This represents a relatively new concept in educational research, as evidenced by Sternberg and Subotnik (2000) being unable to locate even one published article on the topic in the gifted field. However, the concept is not new to medicine, where investigators have empirically shown how physicians make clinical decisions (Norcross, Hogan, & Koocher, 2008). On the basis of this practice, we felt that it would be useful to look at whether states recognized or considered utilizing one or more gifted identification decision-making models.

More than half of the states endorse a multiple cutoff or averaging approach. The multiple cutoff approach considers a set of prespecified test scores (e.g., an IQ score, a creativity test score, and a teacher rating on motivation); to qualify as gifted, a student must score above a certain threshold on all of the measures. The advantages of this model are that it incorporates the interactive nature of giftedness and ensures that selected students are at a relatively high level of competence in all domains measured (and hopefully these domains reflect constructs that represent what is important to succeed in the local gifted program). The relative disadvantages of this model are that

it is complex, time-consuming, relatively expensive, and may result in the school district selecting some students who are proficient in multiple areas but not necessarily extraordinary or exceptional in any one.

The averaging approach is similar to the multiple cutoff approach and also considers scores on multiple tests or measures. It differs from the multiple cutoff model in permitting differential weighting of test scores. For example, the New York City Department of Education recently used this decision-making approach for their gifted programs (Pearson Assessment, personal communication, 2008). New York City students' standard scores on two tests were averaged, creating a total score for each gifted candidate as follows: student's total score on the teacher-rated gifted rating scales (Pfeiffer & Jarosewich, 2003) are combined with two times their score on the Otis Lennon Scholastic Achievement Test (Otis & Lennon, 1993). Advantages of this model are that a very high score on one test can compensate for a less impressive score on a second measure, and the model can increase student diversity. Disadvantages of this approach are that students could be selected without being truly outstanding in any one domain and a truly exceptional student could be eliminated because of one low score.

Seven states reported that they use the single cutoff: flexible model for gifted identification, which only considers a single piece of diagnostic information. However, this model is flexible in that a student can demonstrate his or her gifts by obtaining a high score on one of a number of alternative tests or measures, selected to represent different attributes of giftedness (e.g., intelligence, achievement, leadership, artistic talent). Last, it should be noted that our research did not attempt to verify whether the decision-making models reported by each state are standard practice at the local school district level.

We reiterate that no one decision-making model is correct, or best, and each model has advantages and disadvantages. For example, the single cutoff: targeted criterion approach (e.g., a prespecified IQ score as the criterion for giftedness) has enjoyed a long history in the field and is simple, uncomplicated for teachers and parents to understand, and relatively inexpensive. However, a clear disadvantage of this model is that the single criterion "may not do justice to the full richness of the giftedness construct" (Sternberg & Subotnik, 2000, p. 833). Although the single cutoff: targeted criterion approach to gifted identification has in the past been the predominant model in the United States and around the world, the present study indicates that this decision-making model is no longer advocated by any state and has recently become a historical relic in the United States for gifted classification.

Underrepresented Gifted Populations

Our findings further indicate that at present, approximately half of the states mandate specific policies and procedures for identifying typically

underrepresented groups of minority gifted students. This is clearly a substantial change in gifted identification policy over the past 10–15 years (Bernal, 2003; Ford, 2005; Pfeiffer, in press-b; Swanson, 2006). What we do not know is which alternative assessment tests and/or procedures are being used at the local level to help identify typically underrepresented high-ability minority group students and students of extraordinary potential (Brown et al., 2006; Ford, 1998, 2010; Pfeiffer, in press-a; Worrell, 2009). A related issue is the disquieting concern that few nontraditional and alternative gifted assessment tests and procedures have yet passed muster in terms of evidence of their scientific merit (Jarosewich, Pfeiffer, & Morris, 2002; Lohman, 2005, 2009; Pfeiffer & Blei, 2008). It is clear, however, that there is a growing commitment to greater diversity of gifted students at the state level.

Defining and Assessing Giftedness

Our findings indicate that there continues to be a lack of consensus among policymakers and educators in how to define a gifted student. Significant differences and inconsistencies continue to exist across states in terms of definitions and categorizes of giftedness. Some authorities argue that it might not be critical to reach consensus on one uniform definition of giftedness (Cramond, 2004). We disagree. Recent authors recommend adopting a developmental model of eminence (Subotnik, 2003), or a tripartite model which considers three alternative ways to view giftedness: high intelligence, outstanding academic accomplishments, and/or potential to excel (Pfeiffer, in press-b). Most authorities in the gifted field embrace the following points in conceptualizing giftedness:

- IQ matters, and measures of intellectual ability are good predictors of later academic success and outstanding performance in one or more academic domains.
- However, IQ alone only partially explains a student's ultimate long-term academic and real-world success; other factors such as domain-specific skills, high motivation, passion for a subject matter, commitment, persistence, self-confidence, and opportunity are important contributing factors if one hopes to attain adult excellence or eminence in a field.
- The promotion of talent among students identified as gifted is a long-term, developmental process.
- Assessment should be ongoing, given that talent development is an ongoing process and that not every child identified as gifted at an early age follows the same developmental trajectory.

On the basis of the findings of the present study, most states now recognize at least two or more areas or types of giftedness in their state

definitions and acknowledge that the construct giftedness is multidimensional. However, few states require that local school districts use multidimensional measures when identifying gifted students (Worrell, 2009). Also, no state has yet adopted a policy or procedures consistent with a developmental model of gifted and talented. Such a policy or procedures would reflect recurring assessments and measures of gifted students over the course of their schooling that go beyond general and specific ability to assess psychosocial variables known to influence the ultimate attainment of high levels of talent (Pfeiffer, in press-b).

It is noteworthy that at the present time only 18 states have established specific test cutscores for gifted eligibility. We do not necessarily see this as a policy weakness but do agree with the view that giftedness is a social construction and not something real (Borland, 2009; Pfeiffer, in press-a). The 3–5% threshold, which continues to be the most frequent cutscore advocated by states for identifying giftedness, is nothing more than a useful but clearly inexact estimate for the number of intellectually precocious and highly capable students who might require or benefit from special gifted programs and services not ordinarily provided in their classroom (Borland, 2003; Pfeiffer, in press-b). In some school districts, the 3–5% estimate will grossly underestimate the number of very bright students who are bored in their regular classroom and desperately need a more advanced, fast-paced, challenging and/or differentiated curriculum (Johnson, Haensly, Ryser, & Ford, 2002; Kaplan, 2009; Tomlinson, 2003, 2009; VanTassel-Baska & Stambaugh, 2008). In other districts, the opposite situation may exist.

Limitations and Implications

A limitation of the present study is that our focus and level of analysis is at the state level. The results provide a comprehensive picture of state gifted policies and procedures related to gifted identification nationwide. As a result, the focus was not directed toward collecting data on actual gifted identification practices at the local school district level. Therefore, it is difficult to infer with any degree of confidence whether the gifted identification practices at the local level (in any state) mirror or reflect their state's gifted identification policies and procedures. Furthermore, this study did not collect data on the fidelity or variability of local school district adherence to their state gifted policy, procedures, and guidelines. Authorities in the gifted field suggest noncohesive and inconsistent decisions at the district level (Shaunessy, 2003; VanTassel-Baska, 2009). This may be the case in the real world of educational practice at the local school level. Therefore, the reader should be cautious when drawing conclusions and inferences to local gifted identification practice on the basis of our research findings. A logical next research

study would follow up the present research with a more fine-grained, molecular focus on local gifted identification practices.

On the basis of the overall findings, six implications for school psychologists serving gifted students are warranted:

- The identification of young students who are most likely to make significant contributions to society remains a critically important goal in U.S. education (Pfeiffer, in press-b).
- Gifted assessment should be a recurring phenomena, not a one-shot event; some students who are not identified as gifted at an early age later develop the gifts and talents to make major contributions in innumerable fields, and some young students identified at an early age as gifted, for any number of reasons, fall off of a trajectory of academic excellence.
- Gifted assessment should be multidimensional and multifaceted; school psychologists can play a more central role in gifted identification by conducting a comprehensive assessment that includes measuring not only general ability but also specific abilities, motivation, interest, task commitment, and psychosocial variables known to encourage academic success. A recent report by the National Science Board (2010), *Preparing the Next Generation of STEM Innovators: Identifying and Developing Our Nation's Human Capital*, specifically recommends that educators need to identify all types of talents and nurture potential in all students, including high-ability students (Colangelo et al., 2010). This is clearly an important, new opportunity for school psychologists to assume a key leadership role (Pfeiffer, 2001).
- School psychologists should advocate for any high-ability student who demonstrates uncanny ability or potential to make a mark in an academic field, even if their IQ score falls below the school district's cutscore; there is no single right answer for what IQ threshold or percentage of students should be identified as gifted, and the numbers can change depending on changing criteria of academic excellence and available resources.
- School psychologists should monitor the academic progress of students identified as gifted. Many factors play a role at every stage of the talent development process, and any number of things in a gifted student's life can either enhance or deter the actualization of their potential. The Council of Exceptional Children—The Association for the Gifted (2010) recently released a position statement advocating use of growth models for gifted students. To take advantage of this opportunity, school psychologists need to become familiar with the talent development and expertise literatures (e.g., Ericsson, 1996; Feldman, 2003; Lubinski, 2010; Subotnik, 2003) so that they can design empirically supported progress monitoring protocols and effectively identify opportunities and experiences that promote a high-ability student's path toward excellence and making a mark in society.

- School psychologists can play a key role in advocating for high-ability students who often are not identified or served by gifted programs in the schools—students of color, students from financially disadvantaged families, students from families in which English is not the primary language spoken in the home, and students from rural communities. All too often, marginalized groups of students with uncanny potential to excel are neither identified nor served in gifted programs (Ford, 2010). The Thomas B. Fordham Institute (2008) published a report exploring the effect of the No Child Left Behind legislation on gifted students. The report, *High-Achieving Students in an Era of No Child Left Behind*, concluded that although the nation's lowest performing students have made relatively steady academic gains in reading and math between 2000 and 2007, those students performing at or above the 90th percentile appear to have evidenced minimal gains, and that the excellence gaps have widened among different racial groups and students of high and low socioeconomic status (Plucker, Burroughs, & Song, 2010).

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APPENDIX A

Telephone Survey Interview Questions

- Has the state adopted in its regulations a definition of gifted and talented?
 No _____
 Yes _____
 If yes, how or where would I access it? Is it posted on a web site or can you provide me a copy of the published document? _____
- Does the state have specific policies, procedures, and/or guidelines for gifted screening and/or identification?
 No _____
 Yes _____
 If yes, how or where would I access these policies? _____

3. Do all of the local school districts/local educational units in your state follow policies, procedures, or guidelines re gifted screening/identification promulgated by your state department of education?
 No____
 Please explain_____
- Yes____
4. Does the state have a list of approved tests or procedures acceptable for gifted screening and identification?
 No____
 Yes____
 If yes, how or where would I access a copy of this list?_____
5. Has the state set a specific IQ and/or achievement test score for a student to qualify as gifted and talented?
 No_____
 If no, does the state provide a range or recommended score_____
 Yes_____
 If yes, what is the score for the following: IQ test_____
 Achievement test_____
 Other test(s)_____
6. Does the state have a set of policy and procedures for gifted identification which provides for exceptions or alternative plans for the identification of under-represented gifted students?
 No_____
 Yes_____
 If yes, how or where could I access the information online?_____
7. Does the state recommend or require the use of a teacher rating scale in the identification of gifted students?
 No_____
 Yes_____
 Requires_____
 Recommends_____

APPENDIX B

Follow-Up Questionnaire Item # 8

Dear STATE COORDINATOR NAME,

Hello. Dr. Steven Pfeiffer and I at Florida State University have been researching STATE'S NAME gifted identification procedures. I'm not sure if you recall,

but I contacted you earlier in the fall with regards to a gifted study we are conducting. Thank you for responding to our first query!

Dr. Pfeiffer and I would like to ask you one additional follow-up question. We promise that it will only take 2–3 minutes to answer this follow-up question:

- A. Does your state follow one specific decision-making model in identifying and selecting prospective students for gifted programs?
- B. If so, which model (from the 5 choices below) does your state follow?

Your feedback is very valuable to us because it will help our study accurately represent the specific decision-making model in our research.

Our present study is categorizing gifted decision making using 5 options. The 5 options or models are based on the work of & Subotnik (2000). Below is a very brief description of each of the 5 models. After reading the 5 descriptions, please select which option (or model) most closely represents how your state proceeds in terms of gifted identification.

- 1) Single Cutoff Model: School districts within the state use a single score (e.g., IQ Score of 130; achievement test score 2 standard deviations above the mean) to guide decision making on whether a student qualifies for a gifted program. The specific cut score or criterion is necessary and sufficient for admission into the gifted program.
- 2) Single Cutoff: Flexible Criterion: Like the above, only one score or one piece of information is considered. However, rules/regulations allow flexibility in terms of which test is acceptable (a student can qualify based on a score on an IQ test or a score on a motivation scale). In other words, a state using this option or model would allow school districts to decide using one criterion from 2 or more possible options (e.g., 85th on a creativity scale, or 2 *SD* or above on an IQ test, or 95th percentile on an achievement test).
- 3) Multiple Cutoff: This model requires that a student must score above a prespecified cut score on 2 or more different measures. In other words, each score must be above a certain predetermined threshold to qualify for gifted classification and gifted services. For example, a student must score above the 95th percentile on an aptitude measure and above the 90th percentile on a measure of creativity.
- 4) Averaging: Unlike the previous 3 models, the averaging model assumes that a student can be gifted in different domains and that the student does not have to demonstrate the same level or threshold of giftedness across different domains. This model or approach assumes that a higher score in one or more area(s) (e.g., creativity, artistic talent) can compensate for

a lower score in another area. In other words, selection is based on an average value.

- 5) Dynamic Model: This approach or model does not use multiple cutscore(s) obtained at a single point in time. This approach to gifted identification measures the amount of change (growth, improvement) over time, comparing a second administration with an earlier, initial administration of a test or measure.

QUESTION: Which of the above 5 models or approaches, if any, do you feel most closely represents what your state recommends that school districts follow (Please put an × in the appropriate blank)?

- 1) Single Cutoff Model_____
- 2) Single Cutoff-Flexible Criterion Model_____
- 3) Averaging Model_____
- 4) Dynamic Model_____
- 5) Another Model (please specify what approach your state follows)

NOTE: If there is a website or document that provides specific information in answering this question, could you please provide it:_____

Finally, I would like to follow-up with a personal phone call within the next 2 weeks regarding this request.

Please feel free to contact me at any time if you have any questions or concerns, and thank you again for your help and time—I really appreciate it!

Sincerely,

Mary-Catherine McClain