

Callahan, C. M., Renzulli, J. S., Delcourt, A. B., & Hertberg-Davis, H. L. (2012). Considerations for identification of gifted and talented students: An introduction to identification. In C. M. Callahan & H. L. Hertberg-Davis (Eds.), *Fundamentals of gifted education: Considering multiple perspectives* (pp. 83–91). New York: Routledge.

Considerations for Identification of Gifted and Talented Students: An Introduction to Identification

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The term *identification* is very broad and encompasses processes that might be in place for deciding which students will be offered particular services within a school or school district, which students might be selected for a special school (e.g., a residential program in the arts or in mathematics, science, and technology), or who is give the option of attending a summer governor’s school. Before any program personnel can determine who would be selected for participation, the definition must be clear and agreed upon.

Because of the many conceptions of giftedness found in the theoretical and research literature, the first and most important decision that should be made regarding practical procedures for identification is to select a conception or definition of giftedness to guide decision-making. Once consensus is reached on a definition of giftedness it provides the guidance in determining who needs to receive special services and the way we will select those students. The process of identification will, of course, vary considerably depending on which definition is adopted by a school district. But in any identification plan, a common set of questions can be used to guide how decision makers respond to the recurring and problematic questions surrounding identifying students for special programs and services. These questions reflect the practical, political, and psychometric complexities of the issue:

1. How do we ensure that we have given every student equal opportunity to be considered for the services?
2. How do we ensure we will gather the data that will allow for an appropriate match between the student and curricular and programming options?
3. Will this identification system be applicable to diverse school populations and groups of students that have been historically underrepresented in programs for the gifted?
4. How will we “label” students identified for these programs?
5. Will the system be economical, but effective, in terms of the personnel time, group and individual testing costs, and other resources necessary to identify our students?

6. Will the system be flexible enough to accommodate talent potentials across different domains such as music, art, drama, technology, and other non-verbal or mathematical talent areas that we have included in our definition?
7. Will the system be flexible enough to make changes if student performance warrants a reexamination of selection or rejection decisions?
8. Does the system reflect regulations of the state department of education (especially in those cases where some level of financial reimbursement is provided by state agencies for each identified gifted student)?
9. Is the system legally defensible?
10. Is the system defensible to our constituents (parents, teachers, administrators)?

Regardless of the definition of giftedness espoused, adequate answers to these questions require acceptance of some fundamental tenets.

Guiding Principles

Axiom 1: There Is no Such Thing as a Perfect Identification System!

Every identification system reflects decisions about instruments and criteria used to screen, identify, and place students in educational programs. Instruments, both objective tests and human evaluations of performance always contain some error. Further, the ways data from the various types of information are interpreted and weighed in the decision-making process are also subject to error.

Postulate 1. The Various Components of a Definition Should Lead to Independent, District Identification Procedures

When the definition of “gifted” is translated into a process for identification, each aspect of giftedness should include tests, rating scales, observational protocols, etc., that are valid and reliable for assessing the construct under consideration. For example, tests of verbal intellectual ability are not appropriate for assessing specific academic abilities in mathematics.

Postulate 2. The Identification Process Should Be Flexible and Not Reflect a Decision That Cannot Be Reconsidered

Because the process cannot be perfect, identification processes and procedures should always include mechanisms for consideration of additional information and for appeals to an alternative set of reviewers who have not already formed opinions about a student.

Postulate 3. Identification Procedures Should Contain Multiple, Specific Means by Which Students Can Enter the Pool for Consideration at Various Points in Their School Careers

A comprehensive and defensible identification plan will recognize developmental differences in children. The operational interpretation of this postulate is providing multiple pathways to bring student gifts and talents to the attention of a screening committee. Too often only one screening

mechanism is in place. In some cases, teachers are asked to nominate students. In other cases, a general ability test is used to screen students. Either of these options have limitations; hence program personnel should consider several sources of data in determining who will receive further consideration. In addition, a child who may not have exhibited gifted behaviors in 1st grade may emerge as very talented in 4th grade and merit consideration for placement. Therefore, an exemplary practice is to allow for ongoing identification by designing a means through which students, whose talents emerge after the first screening and identification takes place, can be given consideration for receiving gifted services.

Postulate 4. In Selecting Instruments for Assessing Types of Giftedness, Reliability and Validity Are Critical, but Consideration of Norms—Both the Populations on Which the Test Was Normed and When the Norming Occurred—Are Also Very Important

Any instruments adopted—a test, a rating scale, an observational protocol, or a portfolio rating scale—should be examined for current psychometric data that verify their reliability and validity. For standardized, published instruments, the technical manuals will usually provide some data, but consultation with reviews of the tests in publications such as *Mental Measurements Yearbook* will be very informative. If using rating scales or other protocols for which the psychometric data are not available, the data must be collected locally to defend the use of the instrument.

Axiom 2: What Is Good for the Goose Is Not Good for the Gander

While sharing any information on what works or does not work can provide useful background, each and every program, school and school district is unique and careful consideration of the combination of demographics, values, and beliefs that led to the accepted definition of giftedness should guide the development of the identification process. Even when school districts have the same or similar definitions of giftedness, the population of the school district may differ substantially suggesting that alternative instruments or criteria are warranted.

Axiom 3. Both Objective and Subjective Instruments Can and Should Provide Useful Data in the Identification Process

Standardized tests of cognitive ability and /or academic achievement are frequently used as primary sources of data in the identification process and are considered objective because they rely on direct reflections of student performance rather than the judgment of others. But some question the objectivity of these tests because the decision to use them is, in and of itself, a subjective (and sometimes questionable act). Imagine, for example, using an IQ test to select students for an advanced music or drama program. Others question scores on such tests because of concerns about whether or not a one-hour “glimpse” into a young person’s overall potential can be considered an objective appraisal of a student’s total capacity for high-level performance. Almost all other criteria (e.g., teacher, parent, peer, or self-ratings, portfolio or writing sample assessments, or grades earned in school subjects) are considered to be subjective as their use implies that the persons offering judgment may be open to personal bias, an idiosyncratic view of

giftedness, or inconsistent grading standards. And yet, others will argue that these types of criteria enable us to see other signs of potential such as motivation, creativity, leadership, and executive functions (initiation, execution, and completion of tasks), and intense interest in a topic not reflected in more objective cognitive ability tests.

Postulate 1. The Reliability and Validity of the Instrument Are More Important Than Whether or Not It Is Objectively Scored

Use a combination of types of instruments to make screening, selection, and placement decisions. Every instrument chosen, however, should be subject to consideration of the degree to which it meets the criteria for quality decisions relating to the category of giftedness being considered. Non-test assessments are often criticized for lack of objectivity, but careful training of the raters can mitigate bias and, when used with other instruments, they can provide valuable insights into student performance and potential in areas not assessed by standardized tests.

Axiom 4: People, Not Instruments, Make Decisions so It Is Critical That They Have the Knowledge and Skills to Make Good Decisions

Regardless of the number or types of instruments used in a multi-criteria identification system, instruments only provide data—they do not make decisions. It is therefore important:

1. to establish criteria used to select persons who will be involved in the information-processing and decision-making process that reflect skills and background knowledge in interpreting test and non-test data; and
2. to provide orientation and training to those on selection committees on the specific tests and non-test instruments used, the standard error of measurement on the tests, the relative importance of data from the assessments, the criteria for decision making, and the services to be offered.

Cautionary measures should be taken to ensure some criteria are not given too much weight at the expense of others. For example, a decision to use two or three cognitive ability and/or achievement measures (e.g., aptitude test, achievement test, and course grades), and only one measure of creativity (e.g., a creativity test or a teacher rating) may result in under-valuing the creativity criterion. This consideration is important in both the design of the identification system and in the interpretation and direction provided to the committee who will review students' records and subsequently make decisions.

Axiom 5: Avoid the Multiple Criteria Smokescreen and the Matrix Mirage

Most identification systems utilize a traditional nomination/screening/selection approach, and at least part of the multiple criteria screening process is usually based on non-test information (e.g., teacher nominations and/or ratings) with data from tests and non-test data entered into a matrix with scores assigned to given levels of performance. There are two potential problems which

may arise from this process. First, if only one process (teacher nomination or testing alone) qualifies a student for further screening, many potentially gifted students may be missed. If the nomination or screening process only determines which students will be eligible to take an individual IQ test or a more advanced cognitive ability test and the test score is then used alone to determine placement, the test becomes the ultimate “gatekeeper.” In other words, a teacher nomination or high ratings is only used as a “ticket” to take an individual or a group ability test, but it is not used as “real data.” Even when decision-makers use a matrix to make decisions with the belief that adding all scores together gives them equal weight, they are deluding themselves and still missing the intent of using multiple criteria. Without going into great detail, this process is simply not warranted for statistical reasons hidden behind a guise of fairness and equity. Not only is it not a good practice to add together test scores measuring different constructs and based on differing normative samples, it is likely that any highly positive attributes that might have been the basis for a teacher nomination, or favorable information discovered in the screening process, are likely not really influencing the decision-making because of the lack of variability in those scores. The danger here is, of course, that we may be systematically excluding high potential students from different backgrounds or students who have shown signs of high potential in other than the high verbal, mathematical, or analytic skills measured by standardized tests. What appears to be a multiple criteria approach ends up being a smoke screen for a more traditional cut-off score approach.

The multi-criteria smokescreen has other unintended side effects. Often, attempts to give the *impression* of a more flexible approach result in so much paperwork that it becomes inordinately time consuming, expensive, and unwieldy. In other cases, the smokescreen could be used to give the *appearance* of concerns for equity when such concerns don't really exist.

Postulate 1. The Use of Multiple Criteria Is Important, but Exercise Caution in how Data Are Considered and Weighed in the Decision-Making Process

As noted before, the criteria developed for screening and identification must be carefully developed to ensure profiles of students are developed that reflect the best possible picture of student talent and to guide the best match to educational programming.

Axiom 6: The Screening and Identification Process Is Not for Labeling

Traditionally, the process of identification has simply resulted in labeling all selected students as “the gifted;” thereby relegating all others to a non-gifted category. In recent years, however, a large body of research has argued very forcefully against such a broad stroke labeling process (Frasier, García, & Passow, 1995; Gardner, 1983; Renzulli & Reis, 1997; Sternberg, 1985; Winner, 1996), and in some cases recommendations have been made to do away with any labeling altogether (Borland, 2004). A more current trend is to document specific student strengths by preparing student profiles (Renzulli & Reis, 2007; Field, 2009). This strength-based profile can be used for making more personalized decisions about the types of resources and activities recommended for talent development. Behavioral definitions (i.e., targeting specific

strengths) are considered to be important because if we know and can document particular strengths there is a greater likelihood that schools will attempt to cultivate these strengths in targeted students. This approach also helps to introduce an element of accountability into programming and it gives direction to efforts that schools should take in evaluating their programs (Delcourt, 2007).

Labeling of any kind is always a controversial issue. It would be “nice” to think that we can do away with any kind of labeling whatsoever, but the reality is that we can’t make accommodations for students if we don’t recognize individual strength areas. And experience has shown that far too many schools claiming to “differentiate” for all students have, in reality, provided minimal or no advanced level opportunities for high potential students.

Postulate 1. In the Consideration of Instruments for Inclusion in the Identification Process, Seek Instruments That Will Provide Data Leading to Appropriate Education Decisions Related to Services, Curriculum, and Instruction and Then Use Those Data

Congruence between identification and programming is so important that it might be viewed as “the golden rule” of gifted education. For example, identification for advanced courses in some subject areas such as mathematics is best accomplished through mathematics testing, examination of previous mathematics grades, teacher recommendations or ratings on mathematical skills, and perhaps even estimates of a student’s motivation to work hard in math. A problem arises, however, when students identified as mathematically talented are placed in what might be called an “all purpose” gifted program. An even more important issue is how much flexibility and individualization is provided in such programs. If the program has a prescribed curriculum, or if individual teachers in the program prescribe most of the activities (e.g., the teacher’s favorite Rain Forest Unit or play production), then we must raise the question of whether or not we are respecting the students’ ability and prior knowledge, interest, learning styles, or preferred modes of expression that fall outside of these areas. In other words, the material covered in the special program may be different from the regular curriculum, but the prescriptive nature of what is to be learned remains essentially the same approach to teaching used in regular classrooms. Therefore, a related decision in developing an identification system is the selection of a *pedagogical* programming model that will be used to guide direct and indirect services to students regardless of how they are grouped or organized for special program services. While organizational models must be considered in order to match students with opportunities, the teaching/learning process within any predetermined organizational arrangement should be the focus of the decision-making.

An Introduction to Identification: A Summary

The axioms explored above and their related postulates point out the hazards in the “landscape” surrounding the always complicated and frequently controversial topic of identifying gifted and talented students for services in special programs. This discussion of the issues does not provide ready-made answers to the many challenges of identification system

design, but an understanding of the historically encountered problems may be helpful in avoiding the pitfalls faced by so many persons who have set out on the journey of creating an efficient, effective, and equitable plan for identification and can frame thinking as each of the authors in the chapters which follow offer their point of view on identification.

Definitions and Terms in the Identification Field

Presentations of the various approaches to identifying gifted students in this book or in the other literature in the field of gifted education incorporate certain technical terms. In order to help you prepare for those encounters, we offer these explanations.

High Stakes Tests

When a decision is to be made about a student, a teacher, a school, etc. based in part or whole on the results of a given test we call that a high stakes test. For example, when a student is given a test and the score is used to make a decision about an educational placement that is considered a high stakes test.

Reliability

The estimated reliability of a test or other assessment tool is a measure of the degree to which one might expect a student's score to vary if he or she took the test again. It is a measure of the stability of a test score across testing times, across different versions of a test or both. The factors that affect the reliability of a test are random error effects. For example, if a student feels ill during a test or is tired, she might not perform as well as she does on a different day. When we administer a test and make decisions about a student's educational program, we assume that the score will be reliable—that we would get about that same score if we gave the test tomorrow or next week. It is also important that rating scales and other instruments used in the identification process have inter-rater reliability. That is, we would expect two raters of a student's work to rate that work approximately the same so that whether or not a student is regarded as performing at a high level is not reflective of the bias of the rater.

Validity

A valid test or assessment instrument yields scores that serve the purpose for which we are going to use that score and can be documented to be measuring what it claims to measure. If we are searching for valid measures of giftedness, they must match the definition of giftedness we are using and they must predict success in the placements we have in mind for the services to be offered. A test might be valid for identifying students using one definition of giftedness and for placement in some gifted programs, but not for others. For example, a test that is valid for use in identifying students for advanced work in language arts may not be valid for identifying students for advanced work in mathematics.

Ceiling Effects

On-grade-level testing (given tests that measure the objectives of fourth grade to fourth grade students) are often “too easy” for high performing students who would be able to demonstrate much greater learning if the items on the test were more advanced. When students get all, or nearly all items on a test correct, the test may have a ceiling effect meaning that it did not allow the student to demonstrate learning beyond that level of the test.

Out-of-Level Tests

Out-of-level testing is using a more advanced test than is normally administered to a child of a given age or grade level so that a more accurate measure of the student’s true level of performance can be made.

Regression to the Mean

Students who score very high or very low on a given test on a given on given day are not likely to earn a score at the same level if the same test or another test is given to that student. The student’s score is likely to be closer to the mean on the second testing. This occurs because of random error in tests.

Norming Sample

When standardized tests are created for the purpose of comparing students to one another on some factor, decisions must be made about those to whom they will be compared. Those selected for the comparison group are the norming sample.

Norms, Standard Scores, and Percentiles

Scores on standardized tests are presented in scores that represent a student’s relative standing (compared to the sample used in the norming process or to the school district population). Those scores are often called standard scores, which represent how far above or below the mean a student’s score lies or a percentile which indicates the percentage of the sample that scored at or below that student (e.g., when a student earns a score in the 98th percentile, 98% of the sample scored at or below that student.)

Guiding Questions to Consider Regarding Identification

The chapters in this section of the book include a review of both traditional and non-traditional approaches to identifying and placing gifted students. To focus your reading keep these questions in mind:

1. What definition of gifted would be best served by the approach described?
2. What are the advantages and disadvantages of using the approach or the instruments described?
3. Would students from all populations be well served by this approach?

4. Would you supplement this approach with any other strategy to ensure equity and fairness?

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