

The Role of Assessment in the Identification of Gifted Students

Introduction

Assessments serve multiple roles in educational systems: guiding instruction, evaluating outcomes, and supporting critical decisions about placement and services for students. In the context of gifted education, assessment has often been used to determine eligibility for specialized programming. Yet, this traditional function—frequently interpreted as determining who “is gifted”—must evolve in light of contemporary understandings of giftedness as a dynamic, context-dependent, and developmental phenomenon requiring assessment that is focused on identifying the skills and dispositions needed to benefit from gifted services (Subotnik et al., 2011; Worrell et al., 2019).

The conventional practice of identifying the top 2%–5% of students based on national norms of general cognitive ability test scores as gifted has dominated in gifted education practice. This statistics-based practice risks misrepresenting ability as a binary rather than recognizing it as a continuum. Giftedness is not a fixed trait, but an emergent property shaped by opportunity, context, and individual development (Dai & Renzulli, 2008; Dai & Speerschneider, 2012; NAGC, 2019). Further, and particularly in school systems that serve populations skewing significantly above or below national norms, this approach has contributed to a relative lack of access to gifted services in high-need schools and overburdened or rationed services in schools serving a high percentage of students considered “high achieving” or “high performing” on achievement assessments.

NAGC recommends that school systems employ a multifaceted, context-relevant system of assessment that accounts for the diversity and range of readiness of students, and is valid for predicting which students would benefit from particular opportunities, services, and supports.

Research Overview

Using tests to operationally define “giftedness” based on this statistical threshold model continues to have value in research applications by providing an “objective” way to group participants for data analyses. However, this practice is overly simple and problematic for guiding consequential service decisions impacting individual students. (Subotnik et al., 2011; Worrell et al., 2019).

Within a talent development view of giftedness, the purpose of assessing students shifts from determining “who qualifies?” to determining “who is ready for, and would benefit from, advanced learning opportunities?” Assessment should reveal readiness for specific services offered locally, not merely denote a status. Properly designed systems also use assessment data to inform curriculum modifications, understand students’ nonacademic needs, and track student growth over time (Calvert, 2021; Subotnik et al., 2023).

This reframing encourages a broader view of assessment, where the emphasis is not always on labeling students but on aligning educational opportunities with each learner’s readiness and potential for growth in specific settings and curricular experiences. In school settings, the primary purpose of identification should be to match students with instructional opportunities that best meet their demonstrated readiness and potential for more advanced learning. Effective assessment should illuminate how students might benefit from specific instructional modifications or supports, including differentiated curriculum, acceleration, and psychosocial development (Calvert, 2021; Subotnik et al., 2023).

Assessment can also help educators understand and support nonacademic needs that may arise in gifted learners, such as social-emotional complexity, executive functioning challenges, or asynchronous development (Neihart & Yeo, 2018) during childhood and adolescence.

Research-Based Best Practices

School-based assessment processes should adopt a multi-lens, context-sensitive, and talent development-oriented approach to identifying advanced learning needs. This includes:

- Employing a differentiated approach to assessment that prioritizes validity over uniformity. Just as schools must differentiate curriculum and instruction to optimally serve students who come to school with different backgrounds, different interests, different strengths, different opportunities, and different learning needs, assessment approaches must be differentiated for the same reasons. This typically means that “one-size-fits-all” assessment approaches to evaluate students’ needs for advanced learning opportunities and supplemental services are inappropriate.
- Because talent develops over time, assessment should be matched to students’ stages of talent development. At the early stages, before students have had significant exposure to academic learning, assessment may prioritize interest and engagement. At later stages, achievement in a specific subject in which services are offered may be required.
- Schools should prioritize matching students with tests (and testing conditions) that have the best chance of producing a valid and reliable measure of the skills and abilities that are relevant to the program being offered (Peters et al., 2020). This means making targeted use of traditional ability and achievement assessments, strategic use of nonverbal assessments, assessments of spatial ability (Lubinski, 2010), and access to tests that can be administered to students with disabilities with

accommodations that reduce extraneous influences of the disability on the score to increase validity. Schools may need to utilize differentiated assessment toolkits that include validated international versions of tests, nonverbal assessments, and performance assessments and observations to gauge the strengths of linguistically diverse students (Mun et al., 2020).

- In school districts where schools have widely varying levels of average achievement, using local norms to compare students against their immediate peer group rather than national samples better reflects the school context, identifies students who need more advanced learning opportunities, and can support more equitable access to advanced learning opportunities (Peters & Gentry, 2012). Further, it is often more useful for a given student's educators to know how they compare to other students in their setting than to know how the student compares to a nationally representative norming group for applications such as guiding curriculum differentiation or classroom instructional grouping strategies.
- Utilizing multiple assessment tools can include professionally created standardized assessments, curriculum-based measures aligned to articulated school curriculum, student-created artifacts and performances, learning analytics, and other non-test indicators of interests and emerging strengths and needs to create an appropriately three-dimensional view of students and their current strengths and learning needs (Calvert, 2021).
- Providing early enrichment opportunities (Simonsen et al., 2021) to students from less resourced backgrounds to better ensure that students have opportunities to both discover and demonstrate their interests and strengths and to reduce the influence of extrinsic factors on subsequent traditional measures of ability and achievement used to place students in services and advanced instructional settings.
- Prioritizing the alignment between assessment tools and the specific services offered locally (Gubbins et al., 2021). A "valid" assessment process must assess the skills and dispositions needed to benefit from the services in question.
- Assessing the development of malleable psychosocial skills associated with talent development, such as motivation, resilience, and interest, which significantly influence long-term development and achievement (Dai & Speerschneider, 2012; Subotnik et al., 2011).
- Viewing assessment not as a one-time identification event, but an ongoing process that recognizes the dynamic nature of human development and talent

development and focuses on growth and improvement over time (Worrell et al., 2019).

- Using above-grade-level assessments with students who have already demonstrated proficiency with grade-level learning expectations. Most grade-level assessments exhibit "ceiling effects" that limit their ability to accurately measure growth and achievement among advanced learners necessary for understanding the extent of students' needs for modified curriculum and services and evaluating the impact of programming and services (Lupkowski-Shoplik et al., 2025).
- Treating students as full participants in assessment rather than mere objects of assessment (Falchikov, 2004), recognizing that receiving objective feedback, understanding one's own strengths, developing the ability to set and monitor progress toward personal goals, and engaging in intentional and reflective practice are all valuable to talent development. While most teachers will make educational choices on behalf of a student for one or a few years, K-12 students have a lifetime of choices to make and should be given useful and developmentally appropriate information that empowers them to make informed decisions in pursuit of their own goals.
- Regularly evaluating assessment protocols to determine if they are providing appropriate and sufficient information on student learning and needs for the services that are being provided.

Conclusion

Beyond helping answer the question, "Is this student gifted?" a multifaceted approach can help answer important practical questions, including, "How is this student gifted?", "What level of curriculum is in their zone of proximal development?", "What interests does this student have that might be leveraged for learning motivation and academic stretch?", "What barriers and challenges may limit this student's talent development that we can impact?", and, "What psychosocial skills are strengths of this student and in what areas would they benefit from targeted development?" By grounding identification in a broader developmental perspective and integrating it into a Multi-Tiered System of Supports (MTSS), schools can help ensure that all students, including those from historically underserved groups, have equitable access to opportunities for advanced learning and talent realization.

NAGC recommends that school systems employ a multifaceted, context-relevant system of assessment that accounts for the diversity and range of readiness of students, and is valid for predicting which students would benefit from particular opportunities, services, and supports.

Resources

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