Adding Methods of Testing Gifted Children

to Promote Multiplicity in Learning

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Abstract

There are a plethora of cognitive and intelligence tests used to identify gifted children. Debate has raged regarding the use of tests and their value. Howard Gardner’s theory of Multiple Intelligence (MI) has been touted as a more inclusive approach to identifying giftedness. However, some critics are convinced that the more traditional tests have a scientifically proven basis while MI does not. Tests such as the Screening Assessment for Gifted Elementary Students (SAGES) are often chosen over MI. But Gardner and his proponents would argue that some gifted children are being overlooked and therefore neglected in the traditional testing. In order to best serve all gifted children, a balance between MI and traditional testing methods is proposed.
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Educating and identifying gifted and talented children has not always occurred without debate. For years students were tested on their intelligence quotient (IQ) and the results of the exam led to placement in accelerated programs. But concerns have been raised regarding the validity of testing students solely on their IQ. Intelligence tests are used to identify students for gifted programs, where they must score a 130 or better to qualify (Kornhaber, 1999). But what about those who score 129? Questions such as this led psychologists and educators to find new means of testing a student’s capability for gifted programs beyond Spearman’s g, or general intelligence (Fasko, 2001).

Harvard professor Howard Gardner proposed his theory of Multiple Intelligences (MI) in the early 1980’s, beginning a whirlwind debate regarding intelligence testing that still remains. While there are a number of methods of testing students for giftedness, the focus of this paper will be a comparison of Gardner’s theory of Multiple Intelligences and the Screening Assessment for Gifted Elementary Students (SAGES). The premise is that neither test on its own is a valid test of giftedness; rather, utilizing a combination of such tests gives a better indication of students’ abilities. A brief synopsis of MI Theory and its implications on the classroom is presented in the following section.

MI Theory

According to Collins (1998), Gardner believes that intelligence is multifaceted, that it is not “a single faculty that is accurately measured by an IQ test” (p. 94). Intelligence then, involves more than mere cognitive ability. Gardner’s theory of MI argues that there are different aspects to intelligence, eight in all.
In studying brain function, Gardner recognized that “the human mind is better thought of as a series of relatively separate faculties, with only loose and unpredictable relations with one another, rather than as a single, all-purpose machine” (Raeburn, 1999, p. 36). Thus, eight distinct intellectual capacities or intelligences developed. These include linguistic, logical-mathematical, musical, bodily-kinesthetic, spatial, interpersonal, intrapersonal, and naturalist (Collins, 1998). How can these eight intelligences apply to gifted students? This has occurred in part by the implementation of Gardner’s theory in schools.

*Implementation*

MI theory has been put to use in several schools. The results have been mixed, although many positive effects have been documented. In a study by Mettetal, Jordan, and Harper (1998), the implementation of MI theory had an impact on both teachers and students. Teachers noted that they “now thought of ability in an entirely different way” (Mettetal et al., p. 121) while students derived a different impact; they “embraced the concept because it celebrated their diverse talents” (p. 121). The application of MI theory led to a greater confidence in each student as they recognized the distinct abilities they possessed. The children essentially felt better about themselves, not focusing on their lack of ability but rather their strengths.

While there were positive findings in the studies, there was also a great deal of debate over the implementation of Gardner’s proposed intelligences. Some critics say that MI theory has not been sufficiently tested (Oliver, p. 64). Additionally, even a well implemented MI theory does not guarantee gains in the classroom (Fasko, p. 128). Fasko (2001) found that while students often felt better about themselves, there were cases of “no significant effect on the achievement of students who were in the MI classrooms” (p. 128).
The progressive ideas proposed by Gardner spawned a number of schools based on his philosophy. But, according to Traub (1998), Gardner had no philosophy, yet “his reticence about the world of practice had the effect of vindicating almost any departure from the traditional curriculum or traditional pedagogy made in his name” (p. 22). This left Gardner shaking his head at the curriculum of schools based on his MI theory. In fact, he has begun to “speak out against some of the more extreme uses of his theory” (Traub, 1998, p. 23).

SAGES

The SAGES contains three subtests, outlined by Moore (1993) as Reasoning, School-Acquired Information, and Divergent Production. Reasoning involves assessing a child’s ability to “perceive new relations and learn new tasks using classification and analogy tasks” (Moore, 1993, p. 54), which essentially shows the child’s cognitive ability. The second subtest measures the child’s academic achievement and the third measures fluency (Moore, p. 54). The content of the SAGES is based in part, says Moore (1993) on “standardized instruments which are already popular in the identification of gifted students” (p. 55). These standardized instruments include commonly used tests such as the Iowa Tests of Basic Skills (Moore, 1993). The use of such instruments provides a level of solidarity for the SAGES in the educational community. It is based on skills common to frequently used IQ tests; therefore, its validity is less likely to be questioned.

The SAGES is either administered in groups or individually (Moore, 56). When an individual is given the test, the examiner is “encouraged by the manuals to probe student understanding by asking questions about student responses and probing student thinking” (Moore, 1993, p. 57). As in other IQ tests, the importance of cognitive ability is stressed. IQ tests are often centered on logical-mathematical and linguistic skills (Fasko, 1999). These skills
are regarded as highly important in many schools. Students utilize language and logical skills when they interact with others in their environment.

**Implementation**

While the SAGES measures linguistic and logical ability, it does not necessarily always ascertain the identity of highly capable students. Identifying gifted students by utilizing only this criteria leaves a number of highly capable students in mainstream classrooms, often bored because they are not being stimulated. For example, musically gifted students “may be overlooked for gifted programs or may be placed in a special education class because they do not have the required math or language scores” (Brualdi, 1998, p. 28). The intent of intelligence testing is to identify gifted children in order to better meet their educational needs, to challenge and nurture their abilities. In limiting the variety of intelligence tests to children, educators are essentially stressing cognitive ability and de-emphasizing other areas of giftedness.

**Gifted Needs**

Giftedness does not constitute purely high academic achievement. According to Smutny (2000) it is “more than developing skills faster or going through the developmental milestones earlier” (p. 1). In fact, it can often put children at risk for a variety of disturbances such as boredom, frustration, and depression (Smutny, p. 1). Boredom in the classroom can lead to any number of behaviors such as acting out or becoming disruptive. Not only does this delay the development of the child acting out, it can also impede the learning of other children in the classroom.

In a sense, gifted children have special needs just as developmentally delayed children. They need nurturing and care so they do not become casualties of these disturbances. Their abilities present challenges to educators. How is it possible to hold their attention in class?
Addressing their educational needs is the primary means by which to first approach the issue. Children who are bored or upset act accordingly. Recognizing their need to be challenged, to use their talents is a starting point to fostering a sound educational environment.

*Perspective*

Two factors in designing educational programs for gifted children include social-emotional and motivational (Porath, 1996). Programs need to be matched to the student. But if those programs do not motivate the student or stimulate the child’s interest, they will be in vain. The ultimate goal is to further the talents of the child instead of hampering his or her natural ability. In order to facilitate this goal, it is necessary to recognize the need of more than mere testing.

Perspective is the key to this dilemma. Gifted children benefit from multiple perspectives on giftedness (Porath, 1996). This means that not only should teachers consult intelligence tests, but also the child and the parent. Intelligence tests may provide some quantitative measure of a child’s abilities, however those abilities change with time. If nurtured, they have the opportunity to grow and flourish, but if left on their own they may wither up.

And educators can impact gifted children in many ways. One is to provide them supplemental educational experiences appropriate to their abilities and interests. Intellectual challenge and high expectations will most likely be included in this. The recognition that this is an ongoing process rather than a one time event is also necessary in this. It is a “long range process in which parents, school personnel, and the students themselves recognize, understand, and work together to facilitate the development of the students’ unique talents” (Feldhusen, 2001, p. 2).
Discussion

In studying both Gardner’s MI theory and SAGES, it is apparent that there are benefits and detriments to both. Ideally, a combination of the two will provide the gifted child with the best opportunity for a challenging, yet rewarding education. Cognitive ability must be addressed as it is in the SAGES. Gardner’s concept of intelligences also provides a framework for better understanding the needs of a gifted child. Ultimately, it is the role of the educator to inform the parent and child of their options. The gifted mind should not be left stagnant, lest it become bored and depressed. Formulating a plan collectively is key to understanding and assessing the gifted child.

Incorporating the views of studious people such as Gardner, teachers, parents, and children provides an integral view of gifted education. It takes more than just one to create a cohesive, stimulating learning environment. No longer is it about adding; rather, it is about multiplying. Multiply the knowledge and experience of Gardner to an educator, then multiply by the giftedness of the child, and multiply that by the willingness of a parent to spur their child on. It then becomes an exponentially growing entity of its own. Educators and theorists need to put down their respective opinions and weapons; instead of trying to add of their own accord, they need to learn from others in order to multiply.
References


