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# Myth 2: The Gifted Constitute 3% to 5% of the Population. Moreover, Giftedness Equals High IQ, Which Is a Stable Measure of Aptitude

## Spinal Tap Psychometrics in Gifted Education

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The myth that gifted children constitute 3% to 5% of the school population was addressed in the 1982 issue of the *Gifted Child Quarterly* by Joe Renzulli, a fact that is more than a little intimidating to one charged with addressing the same myth 27(!) years later. In his 1982 article, Renzulli interpreted the 3% to 5% myth as an implicit endorsement of the belief that giftedness equals high IQ, which he rightly took pains to refute. Moreover, consistent with his Three-ring Conception of Giftedness (e.g., 1978), of which “above-average ability” is a major (and salutarly radical) component, Renzulli argued that “high levels of creative productivity can be achieved by students below the top 5% if we use a more flexible identification process” (p. 13).

Because more than a quarter of a century has passed, the belief that 3% to 5% of the school population is gifted and the belief that giftedness can be reduced to a high score on an IQ test must now be mere historical curiosities from the Reagan years, as outdated as Cabbage Patch Dolls, Milli Vanilli, and supply-side economics. Alas, this is not the case. Both myths still flourish, apparently invulnerable to reason and the lessons of experience.

Thinking about these myths brought to mind Rob Reiner’s “mockumentary” *This is Spinal Tap* (1984). A highlight of this sidesplittingly hilarious account of the misadventures of a fictional English heavy metal band whose members are, by all appearances, unencumbered by talent, taste, or intelligence occurs when the lead guitarist, one Nigel Tufnel, played by Christopher Guest, proudly shows off his most prized possession, a guitar amplifier. What makes

this amplifier special is that, whereas all other amplifiers have volume controls that range from 1 to 10, the control on this one goes up to 11. Asked why this is noteworthy, Tufnel patiently explains, “It’s one more.”

What makes this scene so funny, in addition to Guest’s dead-on embodiment of drug-addled vacuity, is the juxtaposition of the guitarist’s smug pride and the arbitrary, meaningless nature of the object of his pride. And it is just those terms, *arbitrary* and *meaningless*, that come to mind when I think of the myths that are the focus of this article.

I cannot count how many times someone with a smidgen of knowledge of our field has said to me, in an authoritative tone of voice, “Well, we know that 3% to 5% of the kids in school are gifted.” My typical response is, “We do?” At this point, my interlocutor becomes convinced that he or she is talking with someone with severely limited reasoning ability and glances nervously around the room in search of someone to converse with who is at least within shouting distance of the aforementioned 3% to 5%.

We owe the ubiquity of this widespread belief to the seminal Marland Report (1972) and its profoundly influential definition of giftedness. At the end of that definition, there is a statement that, if the definition were to be adopted, a minimum of 3% to 5% of the school population would be found to be gifted (note

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the use of the word *minimum*). I am certain that the committee that developed the definition included this to send the message that gifted students are not as rare as many educators at the time thought (keep in mind that the same Marland report revealed that more than half the school superintendents in the country believed that there were no gifted students in their districts). Whether it was meant to be prescriptive or, as I believe, suggestive, the 3% to 5% range stuck in peoples' minds, and, in many cases, it is still stuck there.

If, as I have repeatedly and tediously argued (see, e.g., Borland 2003, 2005, 2009), giftedness is not a fact of nature but, instead, a social construction, then the notion of a certain percentage of the population being gifted as a matter of empirically verifiable fact is logically incoherent. Stating that 2% of the world's population has green eyes makes sense because eye color is an observable physical trait, a fact of nature, and thus the statement is falsifiable. The 3% to 5% range found in the Marland report, on the other hand, because there is nothing in the physical world to test it against, is not. It was the result of a compromise reached by the committee responsible for the report, and it reflects the committee's desire to send the message that giftedness involved more than scoring two standard deviations above the mean on an IQ test. It was a reasonable compromise, but it should not be misinterpreted as specifying that an exact percentage of the school population is gifted.

The IQ myth is not necessarily tied to the 3% to 5% myth. One could base identification of gifted students on something, or some things, other than IQ and still identify 3% to 5% of the student population as gifted. And one could—sadly, some in our field do—talk about the “highly gifted,” the “severely gifted,” the “profoundly gifted,” and so on, based solely on IQ scores, extrapolated IQ scores at that, and be talking about a much smaller percentage than the magical 3% to 5%.

I honestly do not know how to dispel the belief that giftedness consists of achieving a high-enough score on an IQ test. Eradicating this belief among the laity is probably impossible. One routinely hears statements to the effect that so-and-so “has an IQ” of whatever as if IQ were an appendage or internal organ with which all humans were equipped. Were one to state that Abraham Lincoln did not have an IQ, most people would think that one were slandering the Great Emancipator instead of making an unexceptionable observation about the history of testing. Moreover, remarkably few Americans include volumes such as Sternberg and Davidson's *Conceptions*

*of Giftedness* (2005) among the books they tote to the beach, and thus they are unaware that very few within our field define giftedness as high IQ. But my concern is less with what the “average American” believes about IQ and giftedness than it is with what certain educators who cling to the giftedness-equals-high-IQ myth believe.

In educational practice, the idea that giftedness either equals or requires a high IQ is far from dead. This is one of the causes of the chronic, severe underrepresentation of lower-socioeconomic status children and children from racial, ethnic, and linguistic minorities in gifted programs in this country. This in itself, because it is our greatest failing as a field, should be sufficient to persuade anyone who does not believe that giftedness is a predominantly White middle- and upper-middle-class phenomenon that using IQ as a determiner of giftedness or as a gatekeeper for gifted programs is a seriously misguided practice.

Equating IQ and giftedness is problematic for other reasons as well. The quantitative nature of IQs seems to beguile certain people into taking them far too seriously. It is not uncommon for educators to establish inflexible IQ cutoff scores for admission to gifted programs. This can result in absurdities such as admitting (and, thus, labeling as “gifted”) a student with a score of, say, 130 on an IQ test and not admitting (and, thus, labeling as “not gifted”) a student with a score of 129. Readers of this journal know that those scores are, owing to the standard error of measurement, effectively equal. Nonetheless, the first student becomes gifted and the second does not because, well, “It's one more.”

I could go on, but I am preaching to the choir. At this stage of our history, the choir is probably as tired of the sermon as the preachers are of delivering it. However, it is very frustrating to encounter the same benighted beliefs again and again and, more important, to see the harm they do. It is enough to make one want to throw up one's hands and shout, “How can something be true if almost nobody who has studied the issue believes it?” and then go home and sulk. But that would be irresponsible. Instead, we must soldier on and continue to try to convince people, educators especially, that these myths are just that: myths. Maybe they will hear us if we turn the amp up to 11.

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**James H. Borland** is a professor of education in the Department of Curriculum and Teaching at Teachers College, Columbia University, where he directs the graduate programs in the Education of Gifted Students. The author of numerous books, book chapters, journal articles, and miscellanea, he is also editor of the "Education and Psychology of the Gifted" series of Teachers College Press. He was editor of the Section on Teaching, Learning, and Human Development of the *American Educational Research Journal* from 1993 to 1995 (with two Teachers College colleagues), and he has served on the editorial boards of the *Gifted Child Quarterly*, *Roeper Review*, and *Journal of Secondary Gifted Education*. He has won two Paper of the Year awards from the *Gifted Child Quarterly* (with Lisa Wright and with Lisa Wright and Rachel Schnur) and has twice won the Award for Excellence in Research from the Mensa Education and Research Foundation. He has lectured and consulted on the education of gifted students across the United States and abroad.