CHAPTER FOUR

IQ Testing and Gifted Education

Answers to the Questions Parents Ask Most

What score is needed for placement in a gifted program?

Generally, a child needs a full-scale IQ score that is in the 98th percentile or better to be considered gifted. This means that a child’s score has to be higher than 98% of those in the sample on which the test was developed. On most IQ tests this means a score of 130 or higher.

Do all districts use these same cut-off scores?

Most do, since an IQ score in the top two percent is a commonly accepted criterion for giftedness. However, keep in mind that in many districts an IQ test score is only one criterion out of several used when considering placement in a gifted program. A child who doesn’t quite make the cutoff may still be placed if she meets other selection criteria like high achievement test scores or strong teacher recommendations. See Chapter Three for a more complete description of other selection criteria that districts may use.

Do districts always use the full-scale score when making placement decisions?

The full-scale score takes into account more aspects of intelligence than subscale scores and is considered to be the most reliable score obtained on an IQ test - the score that is most accu-
rate and least likely to change. For this reason, most districts use the full-scale score when making placement decisions.

However, there are occasions when districts will use subscale scores in place of the full-scale score. For example, if the child has limited English skills, it would be unfair to base a placement decision on an IQ score that was lowered due to language barriers. In this case, placement decisions should be based on IQ scores that are not affected by verbal ability. In fact, districts that serve a large population of students from non-English-speaking backgrounds may make it a policy only to consider the nonverbal sections of an IQ test for all students they test. These districts may also use a nonverbal, individually administered IQ test - such as the Ravens Progressive Matrices or the Universal Nonverbal Intelligence Test - in place of a comprehensive individually administered IQ test when testing for giftedness.

On the other hand, verbal subscale scores may be used in place of the full-scale score for children with visual problems. Nonverbal IQ subtests often involve tasks like putting blocks together to match a design, or figuring out a pattern in a series of pictures. A child’s performance on such subtests will be affected by a problem with vision. A child has to be able to see what he is doing and interpret what he is seeing in order to do well on these tests. A child who is visually impaired, or a child with a learning disability in a visual-perceptual area, would be at a disadvantage on these tests. In such cases, the child’s verbal IQ subscale scores would be a better gauge of ability, and would likely be used in placement decisions.

Nonverbal subtests also often involve fine-motor ability - the test taker needs to move things around with his hands. Verbal subtests involve no such motor tasks. So, verbal subscale scores may also be used when testing a child who has a fine-motor disability.
Is the score my child received on a group IQ test likely to be similar to the score she receives on an individually administered IQ test?

Group tests are typically highly correlated with individually administered IQ tests - meaning that those that do well on one generally do well on the other. Yet, the scores are not likely to be identical.

They could be different for a number of reasons:

- Group tests may measure fewer aspects of intelligence. For example, in order to be fair to children who speak English as a second language, some districts choose to give group tests, or sections of group tests, that primarily measure nonverbal skills. A child with a strength in this area is likely to do well on such a test, even if she has relatively weaker verbal skills. However, if the same child takes an individually administered test which measures both verbal and nonverbal skills, her score may not be as high, since her verbal skills will be factored into the results.

- A child may do better on an individually administered test because of the individual attention he receives. Some children, particularly those who have problems with attention or organization, may benefit from having someone there to help them focus or provide extra support and encouragement.

- Kids with good reading skills have an advantage when taking a group test since they may need to independently read and understand test questions. Those who are behind in reading, or those with a learning disability in reading, will have a hard time working independently on such tests. These children may have a higher score on an individually administered IQ test where questions are asked orally by the examiner.
An IQ score is going to differ from test to test, no matter how highly correlated the two tests are. In fact, even if someone takes the same test on two different occasions, the scores will almost certainly be at least a little different. Why? Because all tests contain error. Scores will be affected by a variety of conditions, including how the examiner administers the test and how the child is feeling on that particular day.

It is also true that group IQ tests may under-identify gifted children, significantly underestimating the IQs of those at the upper extremes of giftedness.

Reasons for this include:

- Gifted children may find the group testing experience uninteresting, and therefore tune out and not do their best.
- Gifted children might read too much into test questions, coming up with creative or novel answers that may be correct, but are not scored as such due to the strict objective scoring criteria used on group tests.
- Some group tests have lower “ceilings” - or highest possible scores - than some individually administered tests. If a gifted child bumps against that ceiling by topping out on several subtests or sections within the test, then her true IQ cannot be determined. For example, if the IQ score on a given group test only goes up to 150, there is no way for that test to truly measure the potential of a child whose IQ is actually much higher. It’s like trying to measure a 7 foot basketball player with a four-foot tape measure - it can’t be done.
Because group test scores are not perfect predictors of the score a child may get on the more reliable individually administered IQ test, many districts use group test results as only one criterion among several when selecting children for a gifted program or for further testing with an individually administered IQ test.

Why do schools wait until a child is in the second or third grade to start testing?

Most districts do not have programs for gifted children before this time, so there is no practical reason for schools to start testing at an earlier age. Also, earlier testing tends to be less reliable as some children’s cognitive development is slower to come together than others. Any kindergarten teacher can tell you that at the beginning of the school year some kids arrive ready to learn while others are still in the preschool mode—they have trouble focusing, prefer to play alongside rather than with others, and are just not ready for a traditional school experience. Yet, by the end of the year, many of the less mature classmates have made great gains and are doing as well as some of the early bloomers. As time goes on, these variations in development tend to become even less pronounced. By the second or third grade children are more similar in terms of maturity and development and IQ scores are more likely to reflect the child’s ongoing ability. In general, the older the child, the more reliable the IQ score.

Are there circumstances where a child should be tested before starting school?

There are circumstances when it is better to test a child at an earlier age, even with the understanding that early developmental differences may make the score less reliable.

Two reasons you might want to get an earlier assessment are:

- Your young child is showing signs of giftedness and you
want to confirm her IQ so you can consider placement in a gifted preschool or primary school program. Since most school districts do not start special programs for gifted learners until second or third grade, you'll probably need to explore private programs for such early intervention.

Your child is showing early signs of giftedness and has also been showing signs of a behavioral or emotional problem, or has been having difficulty relating to other children her age. Such problems are not uncommon among children with high IQs. Characteristics of giftedness can be misinterpreted by overzealous or misinformed professionals as symptoms of ADHD, bipolar disorder, depression, or even a form of autism. While gifted children can certainly have these conditions, differentiating between gifted behaviors and the traits associated with such disorders can be tricky. The more information you and others have about your child's development, the better position you're in to identify the underlying causes behind any unusual behaviors. See Chapter Six for more on the potential emotional and social implications of giftedness.

Two common individually administered IQ tests used for children who have not yet reached school age are the Stanford-Binet Intelligence Scale and the Wechsler Preschool and Primary Scale of Intelligence.

**Why is my high-achieving child not being considered for the gifted program?**

There are lots of high-achieving kids who are better off in a general education classroom than in a gifted program. Gifted programs are designed for students who truly learn differently and need a different kind of school experience. So, how do you tell a high-achieving or bright child from a gifted child, without administering an IQ test?
You often can’t, but here are some possible clues:

» Bright children often appear challenged and engaged by what’s going on in the classroom and feel good about their classroom achievements. Bright kids often fit in well with others in the class too. They may enjoy working in groups and hanging out with others of their own age.

» Gifted children may appear bored or disinterested in the classroom curriculum. They sometimes crave more information or stimulation than the teacher can easily provide. Gifted children can also be perfectionist and self-critical, always wanting to do more or learn more. They may also have a hard time connecting with other kids in the class, preferring to hang around older kids or adults.

Check out Chapter Five for more signs of giftedness. It’s likely that your child was considered for the gifted program at some point, and that the teacher or others at the school concluded that she didn’t fit the profile typical for gifted placement or for further testing. You might ask the teacher whether this is true.

Of course, there are lots of bright and gifted kids who don’t fit the usual patterns. If you still think that your high-achieving child should at least be considered for the gifted program, ask that she be put through the formal screening process. Many districts will screen a child if a parent requests it. Once you have more information, both you and the teacher are in a better position to make an informed decision about placement.

*My child was being considered for the gifted program, but didn’t make it to the point where he was given an individual IQ test. I still think he would benefit from being placed in the program. What should I do?*

Many districts use multiple screening methods to identify
students who are good candidates for an individual IQ test, then make a placement decision based, at least in part, on that score. Even if a child doesn’t do well on one of the screening criterion, such as scoring high on a group IQ test, he might still be recommended for an individual IQ test if he meets other criteria such as exceptional grades and excellent teacher recommendations. See Chapter Three for other criteria that may be used in the selection process.

Yet, there are certain circumstances where the district’s screening process may fail to identify a child who would be a good candidate for further testing.

For example:

• The child has difficulty paying attention in class. Students diagnosed with an attention-deficit hyperactivity disorder (ADHD) or other conditions which may lead to inattentiveness, such as depression or an anxiety disorder, may not do well on group IQ tests. These children often find it difficult to work in large groups, where there are more distractions and less opportunity for an adult to redirect them to what they are supposed to be doing. Consequently, they may perform poorly on a group IQ test and do much better on an individually administered test. Problems with attention may also affect classroom grades or performance on state achievement tests which are often used in the selection process.

• The child has not had a stable school history and his grades and school performance have been negatively affected. If a family has moved around a lot, or if a child has missed long periods of school for other reasons, then selection criteria like grades, teacher evaluations, and state
achievement test results may not truly reflect that child’s ability.

- The child is not engaged by the regular school curriculum because her learning style is not compatible with the teacher’s approach or the general education curriculum itself - she is bored. Some gifted students are turned off by the sometimes repetitive nature of a general education curriculum. They may respond better to an alternative curriculum that allows them to move at their own pace and participate in more self-directed, creative learning experiences. Because they are not fully tuned-in at school, a teacher may misinterpret poor school performance as being due to a lack of ability, and therefore not recommend them for consideration for a gifted program.

Many (but not all) teachers are able to look at each child’s circumstances and pick up on their potential, despite some of the conditions described above. If for some reason the teacher is not aware of special circumstances that may have affected your child’s performance in the screening process, then schedule an appointment and offer a little background. Perhaps with the new information the district will agree to administer the individual test.

If you continue to feel that your child has been overlooked, you may want to consider private testing. However, keep in mind that it is up to the district whether or not they will consider outside assessment. For those that do, some will simply accept the private test score while others may want to validate the score with their own follow-up assessment.

**What should I tell my child if she has questions before the test?**

Answering your child’s questions will help “demystify” the testing
process and allow him to go into the test session feeling more relaxed, focused, and positive.

Here are some things to keep in mind when answering your child’s questions about the testing process.

- Be Calm and Confident. If you feel anxious about the test - possibly because you want your child to do well - he will almost certainly pick up on these feelings, which may create some unneeded anxiety. Some children (and adults) are already predisposed to being a little nervous when they know they are being tested, and seeing you act this way will not help. Your child may pick up more from your demeanor than from what you actually say.

- Give Honest, Open Answers. Answer all of your child’s questions, using age-appropriate language, and let your child know when you don’t have the answers.

- Just Provide the Information that Your Child Wants to Know. Most younger children will have few, if any, questions about the testing process. Most children just want to know what to expect.

Three common questions kids ask, and examples of answers you might give, include:

“**What are we going to do?**” “You're going to work with someone at school - I think they are going to ask you to do things like put puzzles together or work with blocks. They might also ask you some questions.”

“**Why am I doing this?**” “Your teacher wants to see how you learn best, to understand the best way to teach you.”

“**How long is this going to take?**” “Probably an hour or two”
Of course, some kids will want more specific information, and you'll need to adjust your language according to the age of your child. Consider letting your older or more inquisitive child look through this book on her own for the specific information she is seeking.

Is there anything I should do to prepare my child before taking the test?

Not really. Just keep routines as normal as possible. Be sure that your child gets plenty of rest the night before, and eats a good meal - just as you would on any school night when you want him to do his best. Avoid going out of your way to “prep” your child by doing things like having him get two extra hours of sleep or giving him an impromptu pep talk. He may interpret this as pressure to perform, which could create undue anxiety.

Where will the test be held?

The psychologist will typically set up a room that is free from distractions, with a small table or work area where he and the child can sit across from each other.

Do I stay with my child when the test is given?

Not usually. Typically, the examiner will greet parents, let them know about how long the test will take, and then take the child to the room where the test will be given. In rare cases, such as when a child is extremely anxious or fretful, a parent may be allowed in the room for at least part of the test session in order to reassure the child. However, this is really up to the examiner, or to district policy if there is one. Because the questions asked during an IQ test are closely guarded, many examiners feel reluctant to have a parent near enough to hear what is being said.

How long will it take?

Individually administered IQ tests take between one and two
hours to give, with most taking about an hour and a half. The
time varies depending on how many responses the child gets cor-
rect (the examiner stops testing when a child misses a certain
number of questions) and how quickly she responds.

**When will I know the score?**

There are generally three ways that scores are reported, depend-
ing on the policy of the district or maybe on the preference of the
examiner.

- Some examiners will score the test immediately after the
test session and then meet briefly with both the parent and
the child (or just the parent, depending on the examiner’s
or parent’s preference) to go over the results.
- Some examiners prefer to score later and then contact the
parent by phone or mail with the results.
- Some districts ask the examiner to give the score to anoth-
er district representative who then makes contact with the
parent to review the test results.

**What if I don’t want to know the score?**

The IQ test score that your child receives is just a snapshot of her
performance on that particular test, at that particular time. Also
keep in mind that your child's true IQ score can never really be
known - just estimated. There is always some error in an IQ score.
It's also true that IQ tests measure only a very narrow aspect of
human ability, not even touching on important traits such as
social skills, motivation, and self-awareness. Knowing this, you
might choose not to be told the score so that you can watch your
child’s gifts and abilities unfold without any potentially mislead-
ing notions about her capabilities or limitations.

Rather, you might ask just to know whether or not your child
met the district criteria for the gifted program. After all, that was
the purpose of the test in the first place. If you want more infor-
mation, you can also ask to be told what range your child’s scores
fell into - average, above average, and so on - or, more important-
ly, what the test results say about your child’s relative strengths
and weaknesses. For example, did she do better in verbal or per-
formance areas? How was her memory? This kind of information
can give you insight into your child’s learning style and interests.
And it’s sometimes interesting to see if your own observations
about your child, gathered over many years, match the examin-
er’s test findings.

*If my child is tested again in a year or two, is the score likely to
be the same?*

IQ scores tend to be reasonably stable after age seven or so. If a
child is tested with a well-recognized IQ test in second or third
grade, and again at ten or eleven, the scores are not likely be
identical, but within a fairly tight range - within ten points or so.

This stability in scores is probably due to the following reasons:

- Cognitive development in younger children can appear to
  be uneven, with periods of apparently slow development
  followed by periods of sudden gains in areas like attention,
  motor ability, reading, and understanding number con-
  cepts. But once children reach age six or seven, most of
  the neurological puzzle pieces are in place, and it’s less
  likely that there will be many major changes in ability.

- IQ tests measure traits that are influenced by both our
  experiences and our genetic endowments. While new
  experiences can lead to improvements in the skills meas-
  ured by IQ tests, our underlying genetic makeup is rela-
  tively fixed.

- Even though environmental influences - such as greater
access to learning experiences and mentoring from an adult - can positively affect a child’s IQ score, most children’s environments do not change that much from one year to the next.

Of course, while on average IQ scores tend to be fairly consistent, it is possible that an individual child’s IQ score can be quite different from one test to the next. Large differences (more than ten or fifteen points) may occur when a child doesn’t do his best on one of the tests due to poor test conditions, or when a child is immersed in an ideal learning environment between tests. For instance, studies have shown that children from impoverished backgrounds who are adopted into homes that provide lots of love, attention, and learning opportunities can make sizable gains in IQ. See Chapter Ten for more information on environmental and genetic influences on ability.

**How accurate are IQ scores?**

While all test scores contain some element of error, the score on a competently administered IQ test given after age seven or so should be pretty accurate for most children.

However, IQ scores can significantly underestimate the ability of some gifted children due to the effects of test “ceilings.” When administering an IQ subtest, the examiner will stop testing when the test taker has correctly responded to all the test items or has made a certain number of errors - for example, missing four out of five consecutive responses. Extremely gifted children may hit the ceiling, or “top out,” on several subtests because they answer all the questions correctly or because they do not miss the required number of responses before the end of the subtest. When this happens, the child receives a high score on those subtests, but there is no telling how high the scores would have been
if the child had gone farther. The child’s abilities are beyond what can be measured by the test. If the child tops out on two or more subtests, then the full-scale IQ score is best viewed as a low estimate of the child’s ability.

Most IQ tests are simply not designed to accurately assess the abilities of children in the extreme ranges of giftedness. To get a better IQ estimate in these cases, the child would need to be tested by a private practitioner trained in the use of lesser-known tests designed specifically for children and adults with unusually high IQs. There are reports of gifted children who score 50 or more points higher on these specialized tests than on the IQ tests more commonly used in the schools.

If all tests contain error, how can I know my child’s true IQ?
The score that a child gets on an IQ test is called an “obtained score” and should only be thought of as an estimate of her true ability. According to statistical theory, the only way to know a child’s “true score” would be to have her take the test over and over, dozens of times, and then find the average of all of the scores. In reality, however, this can’t be done because the child is likely to do better on the test each time she takes it due to a practice effect.

So how sure can we be that an obtained IQ score is a good estimate of a child’s ability? Fortunately, test manufacturers have a way of estimating the amount of error associated with a certain test for a child of a given age. They then use this information to provide test administrators with tables of “confidence intervals.” A confidence interval is a range of scores likely to contain a true score. This range can be large or small, depending on how certain you would like to be.

For example:
The psychologist administering your child's test may report that the full-scale IQ score is 97 and that the confidence interval associated with a 90 percent degree of certainty is 93 through 101. That is, you can be 90 percent certain that your child's true score is somewhere between 93 and 101.

Similarly, he may report that the full-scale IQ score is 97 and that the confidence interval associated with a 95 percent degree of certainty is 91 through 103 - meaning you can be 95 percent certain that the true score is somewhere in that range.

Again, the more certain you want to be that the true score falls within the confidence interval range, the bigger the range needs to be.

Not all psychologists will report confidence intervals. If yours doesn't, and you'd like that information, just ask. It's likely that the examiner can look it up for you quickly if the test manual is handy.

Do districts take confidence intervals into account when considering cut-off scores for gifted education programs?

Districts usually just use the child's obtained score when looking at eligibility. Of course, it's understood that all tests contain error, but the obtained score is still seen as a good estimate of ability - and that's all an IQ test does, provide an estimate of learning potential.

Also, keep in mind:

- Error works both ways. Your child's true score is just as likely to be slightly lower than her obtained score than higher. To account for this, districts would actually need to raise the cut-off score for placement, say from 130 to
135, to be more certain that children’s true scores fell into the gifted range.

- All standardized test scores contain error - your child’s score and every other child’s score. Everyone is in the same boat, so using the obtained score gives no particular child an unfair advantage.

**My child took the test and I don’t think she was at her best, that day. Should I say anything?**

There are situations that might negatively impact your child’s score. Of course, the best thing to do is to make the examiner aware of these conditions before the test session begins. If your child is sick or on a medication that may decrease her alertness, for example, let the examiner know right away. It is possible that she will want to reschedule the test for a time when your child is feeling better.

Even if you are unaware of something that may impact your child’s test performance, examiners are trained to look for such conditions during the test session. For example, they will observe the child to see if he appears ill, inattentive, excessively nervous, and so on. If an examiner notices something that is likely to affect the test outcome, he will often note this and discuss it with you when reporting the score. He should also report this information to district representatives who are in charge of interpreting test scores and making placement decisions.

If the testing has already occurred and you feel there was something in particular that you or the examiner missed which may have impacted your child’s performance, bring it up for discussion. The district can use this information when considering how to interpret your child’s score. Someone may suggest that a second test be administered at a later date, in order to validate the score on the first test.
Remember, however, that in most districts the IQ score is only one of several criteria used to determine whether a child might benefit from a gifted program. In some districts, children whose IQ scores meet the district criterion may not, in the end, be found eligible for the gifted program, since they did not also meet the other criteria. On the other hand, some students will be found eligible even if they score below the cutoff on an IQ test since they have met the other criteria.

For more information on other selection criteria used for gifted program placement see Chapter Three.

*I still think the score is inaccurate. Should I get a second opinion?*

Paying for a private assessment is always an option. But again, first ask your district representative if they accept outside testing. Many districts do not.

Another alternative is to wait until the following year - or whenever the next round of testing has been scheduled - and ask that your child be retested at that time. At this point, too, it may be good to step back and look at your own motives. If you find yourself getting stressed out over your child’s IQ score, or over whether or not she qualifies for the gifted program, it’s likely that she will pick up on this and start to feel that stress herself. Bear in mind that many children whose IQ measures in the moderately gifted range (130 to 145) can thrive in a general education program. See Chapter Two for more on how to determine if a gifted program is right for your child.

How much will it cost to get a private assessment?

The price will vary from one examiner to the next. You should probably expect to pay between four hundred and eight hundred dollars for an individually administered test which includes
a follow-up report. Some psychologists will charge by the hour, so their fees will vary a bit from child to child. Others will charge a flat fee for the test and report.

Who is qualified to administer IQ tests and how do I find them?

IQ tests are typically administered by a clinical or educational psychologist. While a clinical psychologist is licensed to provide therapy to the general public and to administer certain tests, many of them do not have much practical experience with IQ testing, as this may not be a large part of their practice. If you decide to hire a clinical psychologist, make sure that he or she has an extensive background in administering IQ tests to those in your child’s age group.

Educational psychologists usually have more experience at administering IQ tests to school age kids.

Private practitioners can often be found in the Yellow Pages, in local family-oriented magazines, and through web searches. You might also check with other parents for a reference.

What kind of IQ test should I ask for?

Ask for a comprehensive (measures both verbal and nonverbal areas) individually administered IQ test, such as the most recent versions of the Stanford-Binet Intelligence Scale for Children or the Wechsler Intelligence Scale for Children. These are among the most widely recognized comprehensive tests in the field for school-aged kids.

If my child qualifies for the gifted education program in our district, does that mean she will qualify for this program in another district if our family moves?

Not necessarily. There are no federal laws regulating how districts
identify students for gifted programs. Some districts immediately place a previously identified gifted student in their own gifted program at the parent’s request, while others require additional testing before doing so.

This is not true in the case of children with disabilities since there are federal laws governing how districts identify and serve these students. If your child is identified as having a disability which qualifies her for special education services then wherever you move in the country the new district must immediately honor the previous evaluation and provide the same services.