

# ***Gifted Development Center***

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*1452 Marion Street Denver, CO 80218 (303) 837-8378*

## **Early Signs of Giftedness**

**Linda Silverman, Ph.D.**

When parents recognize the characteristics of a gifted child in the first years of life, they are alerted to the child's need for enhanced stimulation and support. Equally important, it helps them realize that some of the problems they encounter in child-rearing are due to the nature of the child rather than to their inadequacies as parents. So many parents fear that they must be doing something wrong if their child has colic, or doesn't sleep, or is hyperactive. These characteristics may be related to the child's giftedness.

Giftedness is often determined later in life by an individual's achievements. Attempts to trace the early development of such people have necessarily been retrospective in nature. These studies indicate that most eminent individuals showed evidence of superior ability and precocious development early in life (Albert, 1978; Goertzel, Goertzel, & Goertzel, 1978; Pressey, 1955; Terman, 1925).

Newer methods, based on our awareness of the early indications of giftedness, are making it possible for us to identify gifted children much sooner. In one study, 35% of the parents recognized their child's giftedness between ages three and five. The other 65% were either informed or recognized their child's giftedness after age six (Dembinski & Mauser, 1978). Robinson, Roedell, & Jackson (1979, 1980) have been successful at identifying gifted children in the two- to three-year-old range. White indicates that children who are either unusually rapid or unusually slow in their development will show signs of their exceptionality as early as 18 months (White & Watts, 1973). Some precocious children display their giftedness shortly after birth through early alertness, response to caretakers, advanced motor control, early development of intentionality or unusual attention span. Future research may even allow us to recognize the signs of precocious development prenatally (Pines, 1982)!

Recently, I reviewed the parent questionnaires of 40 gifted children who had been referred for testing. The questionnaire asked for early descriptions of superior ability. The most frequent signs of giftedness found in this study included long attention span, excellent memory, early and extensive vocabulary development, curiosity, early reading ability, rapidity of learning, and the ability to generalize concepts (See Table 1). Other studies have revealed additional characteristics: imaginary companions, high activity levels, less need for sleep, ambidexterity, unusual responsiveness to caretakers, allergies, sense of humor, sensitivity, perfectionism, concern with morality and justice, preference for older playmates, and fascination with books.

Although not all gifted children will exhibit the same characteristics, if a child shows some of these early signs, giftedness may be indicated. Development of such children should be followed closely, with careful records, to assist identification. Baby books are a good first step, but they may not be sufficient to capture the full extent of the gifted child's unusual development. Some of the means of

recording early behavior include a journal with descriptive examples, tape recordings of language development, dated photographs of early art work and writing attempts, even films or videotapes. These records of early childhood are useful in establishing giftedness, and they often fascinate the child later in life.

Gifted children tend to be larger and more fully developed as infants than other children (Hitchfield, 1973; Terman, 1925). They may need less sleep than other children (Gaunt, 1989), which can be distressing to the parents. They may be quite active or “hyperactive,” rocking or moving excessively. They may also have unusual sensitivities, responding to emotional tension around them, or developing food allergies or colic. Many gifted children, however, do not show these particular symptoms. None of these signs which appear in infancy is sufficient to indicate giftedness in itself, but each is worthy of noting to see if further signs emerge.

One of the first symptoms which parents notice is their child's unusual alertness (Rogers, 1986). This may begin to appear shortly after birth or it may gradually become more apparent. The child watches and listens intently, absorbing everything that is happening around her. She will focus her eyes on an object for a longer period of time than do other children. This longer attention span will remain characteristic. Parents of older children often mention the intensity of their children's concentration.

As early as one month, the child may follow moving objects with her eyes, smile, or make certain sounds other than crying. At two months, she may search for sounds with her eyes, begin to lift her head and chest, move vigorously, anticipate feedings upon seeing a nipple, begin cooing and chuckling. Some infants evidence extremely precocious behavior. I know of two children who smiled on cue at two days old. A child in my study held his head up and pulled his chest up on his arms almost from birth. He received a “perfect” score on the infant (APGAR) rating scale. This same child waved “hello” at two months of age.

Motor development is often advanced in gifted children. In a study conducted by Cox (1977), three children were reported to have begun to walk at six months of age, a period at which most children are just learning how to sit up. Over 83% of this sample walked before their first birthday, the typical age at which other babies stand or walk only with support. Many nongifted children, however, also learn to walk between their tenth and twelfth month. Another interesting finding in Cox's study is that many of the children were ambidextrous for some period of time.

The clearest sign of accelerated development is in the area of language. Gifted children tend to speak earlier, use more complex sentence structure, develop a larger vocabulary, show an early interest in books and written works, and express themselves better than other children. In my study, one child said his first word, “hi,” at 4 months of age. One-eighth of the group spoke before their tenth month. Most parents indicated early and extensive vocabulary development. One mother said that her daughter wanted to be read to constantly from the time she “sat up.” Another describes a child who sat for two to three hours listening to books at the age of eighteen months.

There is also the case of the silent gifted child. In this child, language development is atypical. He is unusually quiet after the babbling stage, but manages to communicate all of his needs

nonverbally. He appears to understand everything and will follow lengthy sets of directions, indicating high receptive ability. (If this does not occur, it is necessary to have the child's hearing checked.) The moment of truth arrives when the child decides to speak and comes out with a full sentence - often a complex one - as his first utterance (e.g., "Charlie, would you please pass the salt?"). Some gifted children have been known not to speak until the age of four. One such case was Einstein. But these late speakers most often begin oral communication with fully formed sentences. Children who tend not to speak at all until they have full sentences may also rehearse other activities in their heads until they have perfected the processes. Instead of creeping and crawling and taking a first step, they may break into a run one day with no warning.

Gifted children usually have extraordinary memories. In my study, excellent memory was the most prevalent sign of giftedness reported. Parkinson (1990) reported that all of the gifted children she studied had excellent memories. They may be able to repeat songs or television commercials well before two years of age. They can frequently "read" a story which has been read to them several times because they remember the words on each page. I once saw an 18-month-old do this with a 60-page beginning reader. She was able to recognize several written words at 11 months. Almost half of the children in my study could recognize letters of the alphabet before they were two.

Avid interest in reading prior to school age is one of the signs of giftedness (Gross & Feldhusen, 1990). Half of the children I studied learned to read before they were five. One-fourth of my sample read before their fourth birthday. Many of these children reportedly taught themselves to read. Thirty percent of the group wrote their first word by the time they were four years old. Several were reported to have written their first word at two and a half.

After studying a large group of gifted children in California, Martinson (1961) reported similar findings. Half of her sample had taught themselves to read by the time they entered school, and some had learned as early as two years of age. Goertzel, Goertzel and Goertzel (1978) report that half of the 300 eminent individuals in their study learned to read well before school-age.

Unbounded curiosity is still another sign of giftedness. In my study, curiosity was surpassed only by memory in the frequency with which it was observed by parents of gifted children. Parents also remarked about the quality of children's questions, describing them as "very complex" and "probing." A one-year-old gifted child made the discovery that everything had a name and dragged her mother all over the house for hours, pointing to every object and saying, "Whatsat?" Some children pull things apart to find out how they operate. Other children ask endless questions. Still others have difficulty going to sleep at night for fear that they will "miss something" while they sleep.

Gifted children learn things very rapidly and are often able to generalize their learning to new situations (Rogers & Silverman, 1988). They are amazing problem-solvers. They show evidences of abstract thinking at a very young age. They also have highly active imaginations and are likely to invent imaginary companions (Hollingworth, 1932; Schaefer, 1970). This is a sign of creativity and should not be a cause of alarm to parents.

Another clear sign of giftedness is exceptional aptitude for mathematical reasoning. There are cases of five-year-old children solving square-root problems on calculators, inventing abstract algebraic formulations (e.g.,  $(N \times N) - 1 = (N + 1) \times (N - 1)$ ), learning algebra, adding four-digit numbers mentally, writing simple computer programs, or using calculations in their everyday lives. Since most preschool children are still learning how to count, these feats speak for themselves.

An excellent sense of humor characterizes gifted children. They learn earlier than most other children that humor is based on incongruity, the unexpected or absurd. They also develop an early interest in and facility with puns. One two-year-old was playing under the bed where his mother was lying. He said to her, "Mommy, are you resting?" When she replied, "Yes," he retorted, "Does that mean I'm under a rest?" Incidents such as this one should be recorded. Making a booklet of a child's jokes is a way of encouraging language and cognitive development.

Certain personality traits of the gifted child may appear early in life: perfectionism, emotional sensitivity, compassion, intensity. One-fourth of the sample I studied were described by their parents as "highly sensitive," meaning both easily hurt and sensitive to the feelings of others. These two interpretations of sensitivity appear to be inter-related. Almost all of the children studied appeared to have signs of emotional overexcitability (Silverman, 1981).

Personality characteristics differ markedly among the gifted (Robinson, 1977; Terman, 1925). Some characteristics make the child easy to identify as gifted, whereas others mask the child's special abilities. Since verbal precocity is such a frequent sign of giftedness, the highly verbal child is more likely to be recognized than the nonverbal child. Verbal ability is only one form of giftedness, however. Mathematically talented children, particularly boys, may not have high verbal ability (Stanley, 1981). Artistically, mechanically, spatially, or athletically able children also may not show verbal precocity; nevertheless, they are gifted.

Shy children are likely to be overlooked as well. Gordon and Thomas (1967) studied gifted kindergarten children of different temperaments. Outgoing children who plunged into new activities easily and quickly were thought to be gifted by their teachers, although in fact many of them were average. All of the gifted children who were slow to get involved in new activities were incorrectly judged to be average in intelligence. Roedell, Jackson, and Robinson (1980) warn parents of the necessity of informing teachers that advanced intellectual skills are not always accompanied by outgoing temperaments.

Although signs of high ability are usually present in the child's early years (Robinson, Roedell, & Jackson, 1979), many of the more subtle signs may go unnoticed. A child whose gifts go undetected will probably not receive the kinds of environmental stimulation necessary for early development. If this stimulation should occur later in life, the child is likely to be called a "late bloomer." A late bloomer is a person with high potential who does not actualize that potential, or who is not discovered until later than would be expected.

When opportunities for development are limited to only those children who show early signs of ability or productivity, much potential is missed. Gallagher (1979) reminds us that intelligence is not static; it is capable of both increasing and decreasing. It is important to provide continuous

assessment throughout school in order to find those children whose talents do not manifest until later in life.

### **Early Indications of Superior Ability as Reported by Parents**

**N=40**

Excellent Memory	12
Long attention span and intensity of focus	10
Early and extensive vocabulary development	10
Extreme curiosity, asking complex, probing questions	10
Learns very rapidly	7
Abstract thinking, ability to generalize concepts	7
Recognized letters of alphabet before the age of two	7
Exceptional aptitude for mathematical reasoning	5
Active imagination and creativity	4
Intense interest in books and words	4

Table 1. Summary of the most frequent responses given to the open-ended question: “Describe early indications of superior ability.” The question appeared on a parent questionnaire which was completed by 40 parents who requested that their children be tested for giftedness.

### **Early Signs of Giftedness**

- ↗ unusual alertness in infancy
- ↗ long attention span in infancy
- ↗ less need for sleep in infancy
- ↗ smiling or recognizing caretakers early
- ↗ advanced progression through developmental milestones
- ↗ high activity level
- ↗ extraordinary feats of memory

- ✎ intense interest in books
- ✎ keen powers of observation
- ✎ ability to generalize concepts
- ✎ recognition of letters before age 2
- ✎ ability to put together a 20-piece puzzle before age 3
- ✎ asks complex, probing questions
- ✎ early interest in time—clocks, calendars
- ✎ imaginary playmates

## REFERENCES

- Albert, R. (1978). Observations and suggestions regarding giftedness, familial influence and the achievement of eminence. *The Gifted Child Quarterly*, 22, 201-211.
- Cox, R. L. (1977). Background characteristics of 456 gifted students. *The Gifted Child Quarterly*, 21, 261-267.
- Dembinski, R. J., & Mauser, A. J. (1978). Parents of the gifted: Perceptions of psychologists and teachers. *Journal for the Education of the Gifted*, 1, 5-14.
- Gallagher, J. J. (1979). Issues in education for the gifted. In A. H. Passow (Ed.), *The gifted and the talented: Their education and development* (pp. 28-44). The 78th yearbook of the National Society for the Study of Education. Chicago: University of Chicago Press.
- Gaunt, R. I. (1989). *A comparison of the perceptions of parents of highly and moderately gifted children*. Unpublished doctoral dissertation, Kent State University, Kent, OH.
- Goertzel, M. G., Goertzel, V., & Goertzel, T. G. (1978). *Three hundred eminent personalities*. San Francisco: Jossey-Bass.
- Gordon, E. M., & Thomas, A. (1967). Children's behavioral style and the teacher's appraisal of their intelligence. *Journal of School Psychology*, 5, 292-300.
- Gross, M. U. M., & Feldhusen, J. F. (1990). The exceptionally gifted child. *Understanding Our Gifted*, 2(5), 1, 7-10.
- Hitchfield, E. M. (1973). *In search of promise*. London: Longman.
- Hollingworth, L. S. (1932). Who is the gifted pupil? *University of Pennsylvania Bulletin*, Nineteenth Annual Schoolmen's Week Proceedings, 32, 239-246.
- Martinson, R. A. (1961). *Educational programs for gifted pupils*. Sacramento, CA: California State Department of Education.
- Parkinson, M. L. (1990). Finding and serving gifted preschoolers. *Understanding Our Gifted*, 2(5), 1, 10-13.
- Pressey, S. L. (1955). Concerning the nature and nurture of genius. *Scientific Monthly*, 81, 123-128.

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- Robinson, H. B. (1977). *Current myths concerning gifted children*. National/State Leadership Training Institute, Gifted and Talented Brief No. 5 (October), 1-11.
- Robinson, H. B., Roedell, W.C., & Jackson, N. E. (1979). Early identification and intervention. In A. H. Passow (Ed.), *The gifted and the talented: Their education and development*, (pp. 138-154). The seventy-eighth yearbook of the National Society for the Study of Education, Part I. Chicago: University of Chicago Press.
- Roedell, W. C., Jackson, N. E., & Robinson, H. B. (1980). *Gifted young children*. New York: Teachers College, Columbia University.
- Rogers, M. T. (1986). *A comparative study of developmental traits of gifted and average youngsters*. Unpublished doctoral dissertation, University of Denver, Denver, CO
- Rogers, M. T., & Silverman, L. K. (1988). Recognizing giftedness in young children. *Understanding Our Gifted*, 1(2), 5, 16-17, 20.
- Schaefer, C. E. (1970). *Biographical inventory-creativity*. San Diego: Educational and Industrial Testing.
- Silverman, L. K. (1981). Early indications of superior ability as reported by 40 parents. Unpublished raw data. Denver, CO: Gifted Child Development Center.
- Stanley, J. C. (1981). A conversation with Julian Stanley. *Educational Leadership*, 39, 101-106.
- Terman, L. M. (1925). *Genetic studies of genius: Vol. 1. Mental and physical traits of a thousand gifted children*. Stanford, CA: Stanford University Press.
- White, B. L., & Watts, J. C. (1973). *Experience and environment* (Vol. 1). Englewood Cliffs, NJ: Prentice-Hall.

**Linda Silverman, Ph.D.**, is a licensed psychologist  
and Director of the *Gifted Development Center* in Denver, Colorado.

