

- read early and may be self-taught; read enthusiastically and widely, often above grade level; select reading material purposefully and enjoy challenging books
- understand language subtleties and use language for humor
- write words and sentences early and produce superior creative writing (poetry, stories, plays)
- display verbal ability in self-expression, choice of colorful and descriptive phrasing, and ease in learning a second language

To challenge and nurture verbal abilities, gifted students need to do the following:

- use their full vocabulary and develop it further with intellectual peers
- read books at an appropriate intellectual and emotional level
- be introduced to books that represent a variety of literary conventions and styles and that use language gracefully
- express ideas verbally and in depth by writing or speaking with others who challenge and thus refine their views and concepts

Thought-Processing Characteristics and Needs

Most gifted children display the following traits in thought processing:

- enjoy experimenting and can generate original ideas and solutions
- give evidence of divergent thinking, offering responses that are atypical rather than the convergent answers expected of most children and found in the teacher's answer book
- accept open-ended situations and questions at an early age and do not require immediate solutions; can accept ambiguity
- enjoy complexity and may try to create it—for example, by adding rules to games

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- have unusual power to process information, using logic, abstract thinking, and symbolic thought
- show flexibility of thought and seek alternatives; are able to see all sides of an issue
- synthesize well, seeing relationships that others miss; transfer past learning to new situations and draw generalizations

To develop thought-processing potential, gifted students need to do the following:

- consider alternatives and possible consequences of choices in an accepting environment
- be exposed to a great variety of vicarious experiences
- test new ideas without required conclusions or products
- discuss ideas with intellectual peers
- be exposed to many ideas at different levels of challenge and complexity
- take plenty of time for incubation of ideas

Performance Characteristics and Needs

In their performance, gifted children:

- show great curiosity and unusual persistence in efforts to gain answers
- possess a wide range of interests and information
- comprehend new concepts rapidly at an advanced level; have little or no need for drill
- display creativity and imagination; enjoy fantasies and science fiction; may have an imaginary playmate in their preschool years; can develop a variety of solutions to problems; generate original ideas
- are persistent and goal-directed; have a long attention span and may want to spend more than the time allotted to complete a project

- show unusual intensity regarding school projects, political or environmental issues, religion, world events, intellectual inquiry into an area of special interest, interpersonal relationships, and abstract values

To enhance performance characteristics, gifted students need to do the following:

- have curiosity met with exposure to varying styles of life, values, and approaches to problems
- be exposed to new information and new issues
- be presented with material at their own rate of learning
- develop skills in creative thinking and problem solving
- pursue interests beyond the time desired by most students
- learn skills for dealing with intensity by exploring ways in which others cope with it

Responding to the Needs

Unfortunately, the ideal conditions described above are not uniformly available to our bright and gifted children, and it is still true that many gifted children are not ever identified by the schools as gifted—particularly those who are nonconformist, rebellious, have learning disabilities, or who come from minority groups or from backgrounds of poverty.¹⁸

Teachers and parents of gifted children are usually dedicated, persistent advocates for these children. In recent years, we have seen a steady flow of new books from authors who approach giftedness from various viewpoints—note the wide range of topics discussed in books, articles, and Internet sites listed in the Reference section of this book, or that of a comprehensive work on gifted children such as *A Parent's Guide to Gifted Children*.¹⁹ Leading textbooks in the field record the progress made over the last half century, including new research findings and innovative techniques. The gifted education movement continues to grow.

Based on these new resources, the rest of this chapter will highlight characteristics of an optimal learning environment for gifted children, obstacles that hinder efforts, how schools are currently responding, and how parents can fill in any gaps—including the role of books and reading.

Optimal Learning Environment

Children who are gifted show signs of their high ability very early. Preschool gifted children often talk early, may jabber incessantly, enjoy wordplay, may have long conversations with their dolls or play figures, may question parents about road signs until the parents realize that their child has learned to read, or may invent stories or songs.

Once these children start school, their abilities set them apart from their classmates. They learn differently—not only more and faster, but also, as Dr. Barbara Kerr points out, “in different modes and at greater depth.”²⁰ Kerr asserts that “capable learners learn most effectively when appropriately challenged and tend to become bored and frustrated when the *pace* and *complexity* of material is below their ability”²¹ (emphasis added).

In addition to appropriate pacing of complex material, gifted children need to be with others of their own ability level. Grouping gifted children together is controversial, but research indicates that it provides the optimum learning situation for them.²²

These children also need teachers trained in gifted education and who are familiar with any of several systems for teaching thinking skills.²³ For example, in working with gifted students, a teacher using Bloom’s Taxonomy would rely on the higher levels of thinking—that is, on analysis, synthesis, and evaluation, rather than primarily on knowledge, comprehension, and application.²⁴ An example of the use of Bloom’s Taxonomy is found in Chapter 5.

Pace of learning, complexity of material, being with other bright learners, and instruction in thinking skills comprise four fundamental intellectual needs, and books and book discussion can meet these special needs in bright and gifted children. A reader can choose his own pace of reading, books are available at every degree of complexity, a

discussion group can bring together learners of like ability (just two, a child and an adult, are enough), and the discussion questions can elicit higher levels of thinking.

Obstacles in the Way

Most educators want to do all they can to meet the educational needs of every student, and in many schools, there is awareness that this should include the special needs of gifted children. But sympathetic teachers and administrators often run into difficulties as they attempt to do this. Economic barriers and prevailing social influences are some of the obstacles.

Economic Barriers

Despite reports such as *National Excellence*,²⁵ which (with perhaps not enough fanfare) called the neglect of our most promising students a “quiet crisis,” the federal government largely ignores gifted education, providing no requirements and almost no funding. Thus, the financial responsibility falls on state governments and school districts. In 2004, only 29 states funded gifted education at all, and their budgets for gifted programs ranged from “roughly \$100 million a year to nothing”²⁶—a startling indication of the disparity that families find as they seek an appropriate school for their gifted children. The economic crisis since that time has made the situation even more dire.

Since programs for mentally and physically handicapped youngsters are mandated by federal and state governments, they cannot be cut; however, gifted programs are open and vulnerable as one of the few ways that school districts can reduce costs. Parents and teachers have seen gifted programs trimmed or eliminated as state aid designated for them is frozen or dropped entirely.

Parents and educators may wish to know more about local and state policies and laws that affect gifted students. Questions could include whether your state mandates education for gifted students, the amount that the state budgets for gifted education, and whether there are schools for gifted students in your state. To learn about federal and

state policies on education for the gifted, visit the website of the National Association for Gifted Children (www.nagc.org) or see the policy section of www.GeniusDenied.com, a website established by the Davidson Institute for Talent Development.

Parents who watch their gifted children move rapidly through their school years during a time of financial retrenchment occasionally resort to legal action as they attempt to force school systems to meet their children's special needs. Areas of potential litigation include early admission, provision of programs and appropriate curriculum, racial balance in gifted programs, gifted disabled students, transportation, and homeschooling. A report from Karnes and Marquardt, who have followed and recorded legal action and decisions, may be of interest.²⁷

Social Influences

Alarming statistics revealing disturbing social trends in our children's lives and schooling are reported so relentlessly that we may become numb to them. Without question, children's potential for intellectual development is affected by divorce, poverty, malnutrition, a lack of health care, struggling single parents, frazzled parents in two-income families, and other social problems, including safety in schools. In her book, *Endangered Minds: Why Children Don't Think—And What We Can Do about It*,²⁸ Jane Healy looks behind these factors and expresses deep concern that the stresses and deprivations that our children experience—particularly the rapid pace of living and the reliance on instant sensory gratification—are actually changing their brains and their capacity for sustained analytical thought. Citing research into physical changes that occur in the brain as a result of learning, Healy suggests that our processing of language—an important part of the development of our ability to think—is at risk if appropriate language experiences are not available at the optimum moment in the brain's developmental schedule and then reinforced through practice. Among her concerns is the interplay between the developing brain and reading.

With this in mind, let's look at how two major contemporary forces, television and video games, affect our children's reading and thinking—and the implications for their intellectual growth.

Television

Without even considering the questionable *content* of many television programs, two compelling objections are immediately obvious to many experts: (1) watching television is passive, and (2) it steals time in which a child could be active. By contrast, reading is active, requiring the brain's involvement to interact with the words and to create our own mental images.

Reading triggers certain experiences in the brain that just don't happen if you don't read. I think our brains are designed to symbolize and represent information in the way that we call language. If we don't exercise it, we lose it. Television, even Sesame Street, is not very symbolic. It makes things very tangible and easy to understand, but reading is the kind of exercise that causes the brain to develop differently because it uses that symbolic capability.²⁹

To the extent that children commit time looking at TV, they're not spending time reading. When a child reads a novel, he has to self-create whole scenarios, he has to create images of who these people are, what their emotions are, what their tones of voice are, what the environment looks like, what the feeling of this environment is. These self-created scenarios are important, and television leaves no room for that creative process. I think brains are designed to meet cognitive challenges. It's just like muscles; if you don't exercise them, they wither. If you don't exercise brains, they wither.³⁰

Weakened reading and analytical skills present a serious problem on a national level. "The survival of our kind of democracy requires the...active mind that the print culture produces and that [the]