

Studies have shown that babies fed breast milk have IQs that are **3-8 points** higher than formula-fed babies.

Research has shown that a child's capacity for learning is not totally set from birth and can be significantly increased or decreased by how his caregivers interact with him.

Parents' emotional closeness with their baby can strongly influence the child's intellectual development.

Craig Ramey demonstrated that impoverished children, who participated in an early intervention program that exposed them to nurturing and mentally stimulating experiences for **3 years**, had **20%** higher IQs than children in the same neighborhood who did not participate.

? Are there different types of intelligence?

Yes. **Intelligence is not limited to what is tested in IQ tests.** Dr. Howard Gardner, of Harvard University, has listed seven types: of intelligence:

- social**  The ability to notice other people's moods and intentions, and using this knowledge to guide one's actions.
- self-awareness**  The ability to know one's own feelings and emotions, and being able to use this to guide and understand behavior.
- math and logic**  The ability to recognize what can be done with objects and symbols; knowing how to think abstractly, to identify problems, to ask questions and to come to logical conclusions.
- language**  The ability to recognize the sound and meaning of words, and to appreciate how language can be used in different ways.
- spatial**  The ability to perceive the visual world and to understand changes in perception of it; to be able to express visual things in a creative way.
- musical**  The ability to recognize individual musical notes and phrases; to be able to understand how to combine notes, tones, phrases and rhythms, and knowing about the role emotions play in music.
- physical/manual**  The ability to manipulate objects skillfully and to use the body to reach goals or express feelings.

Source: Right from Birth: Building Your Child's Foundation for Life, Craig and Sharon Ramey.

? How can I help my child do well in the classroom?

This is a perfectly natural question for parents to ask. Research points to two factors affecting the growth of your child's intelligence:

1. Parents are the crucial contributors to intellectual development for almost all children. Some research estimates that 50% of IQ is attributed to genes. By age two, many of the intellectual foundations to support a lifetime of learning are in place.

Nurturing has a profound effect on intelligence.

However, there is no study that shows that children who are already in nurturing environments can have their IQ's boosted.

2. No short-term learning program in the first 3 years that concentrates on a single aspect of development has been shown to have lasting benefits. Instead, your child's intelligence is shaped by her experiences over time. Studies with at-risk children show that the compounding of daily experience is the most important factor in shaping a child's intelligence.

Experimental studies in early intervention education for children from low-income families have shown that these programs have been able to boost IQ by as much as 8 points. The 1972-85 Carolina Abecedarian Project found that with these disadvantaged children:

- high-quality preschool programs had positive effects on intellectual and academic achievement.
- as adults, participants reach higher income and education levels and have lower rates of criminal behavior.

Source: Rethinking the Brain: New Insights into Early Development.

What is intelligence?

There are currently two major proponents of intelligence theory: the lumpers and the splitters.

For the **lumpers**, intelligence is defined as a general, unified capacity for acquiring knowledge, reasoning and solving problems.

The **splitters** believe there are multiple, independent intelligences, each guided by its own form of perception, learning and memory.

Source: American Psychologist, Richard Weinberg, PhD.

ACTION ITEMS

Create a learning environment

1 Give your child chances to experiment with new objects and environments.

Novel experiences not only feed your young child's natural curiosity but also spur the growth of new connections in the brain. Exposure to interesting toys and games stimulates her brain, and as it processes new information, its wiring develops.

2 Stop an activity when your child starts to turn his head away or fuss.

When it comes to learning and brain development, beware of too much of a good thing. Avoid overstimulation. Pay attention to your child's cues. Signs like turning his head away or fussing and crying indicate that your child has had enough of an activity and should be given quiet time to rest or digest what he has just experienced.

3 Make time for playtime.

While classes like gymnastics or swimming lessons are great influences on your child's development, too many can have diminishing returns. The reality is that safe, supervised play in an unstructured environment can be as beneficial to her development of creativity, reasoning and understanding.

This does not mean that supervised play groups are not valuable. Watching and playing with others—parents, siblings and peers—floods your young child's mind with new ideas. In social settings like play groups, playgrounds, child care programs or even library reading hours, she'll learn to use objects in new ways and to interact in socially acceptable ways.

4 Don't rush to turn on the computer.

Experts suggest waiting until your child is at least three years old before introducing him to the computer, since children younger than three lack the motor skills or attention span to absorb the benefits of computer learning. Also, no research shows that computer activities give young children a head start in school or are more beneficial than spontaneous play or interaction with others. Instead, young children need to play and explore in three dimensions, not in the two-dimensional world of a computer screen.