



Children, Learning, and Gender Differences: 6 Strategies to Support Your Child's Learning Style

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Have you ever heard a teacher say, "These rambunctious boys are getting on my last nerve!" or "These girls aren't interested in participating in physical education." Some people might say science and math activities appeal to boys, and girls prefer literature and art. Is that really an accurate statement? How did these stereotypes emerge anyway?

Boys and girls learn differently, and now we have more scientific evidence to support this view. Recent science advancements have allowed us to study the brains of both boys and girls using PET and MRI technology, and evidence shows that there is indeed a difference. Be careful not to confuse learning style with cognitive ability (a set of mental skills responsible for problem-solving, decision making, and critical thought). Many studies found no difference in comparing cognitive abilities in males and females, and recent studies have even indicated that the differences are not only minor but have been shrinking.

Gender, birth sex, gender roles, and research

To analyze the difference between the learning styles of boys and girls, we must first understand some basic definitions of gender and sex and how it applies to scientific research. Gender identification is commonly confused with birth sex; however, birth sex is defined by physical characteristics like external genitalia, sex chromosomes, sex hormones, and reproductive organs. Birth sex is binary (male/female). A person's internal sense of gender may or may not match their sex at birth, which is known as gender identity. When we talk about gender identity, we mean how we see ourselves in relation to our gender, which can remain fluid throughout life.

Gender roles are the stereotypes or expected norms about how men and women should behave, think, and expect to be treated based on their sex. Psychologists may separate gender differences (such as social roles) from sex differences, which only affect physiology and anatomy, to make things more clear. Teachers' responses and interactions with children can impact gender role differences.

Scientific research referenced in this article on brain differences in males and females focuses on birth sex to analyze data. Even though we can scientifically see that there are

specific differences between the brains of males and females, this does not imply that all groups learn similarly or that all boys, girls, or other identified genders are entirely the same, even within their group. It can be challenging to serve all forms of learning in the classroom or at home. A clearer picture of these distinctions can guide parents in identifying solutions by adjusting the environment to fit different learning styles.



Structural and metabolic differences in the brain: How they affect learning

There are biochemical contrasts between male and female brains. The "nurturing" hormone oxytocin is released in girls' brains from an early age. It influences her hippocampus and serotonin production in her brain. Because a girl's limbic system is more developed than that of her male peers, she can experience more complicated emotions; she will be able to listen for more extended amounts of time, sit more in her seat, or avoid being sidetracked.

The cerebral cortex (responsible for memory, attention, cognition, and language) is allocated to verbal tasks in girls' brains. The hippocampus, which stores verbal memory,

develops earlier and is larger than boys, boosting their language and writing skills. Girls have more significant neuronal connections in their temporal lobes than boys. More detailed memory storage, improved listening abilities, and greater ability to distinguish between different tones of voice are all facilitated by these connections in the brain. This can make literacy activities easier.

Serotonin and oxytocin, two chemicals associated with feelings of well-being, are lower in boys. When it comes to spatial and mechanical reasoning, boys employ more of their brain's cortical regions. A girls' prefrontal cortex is more active and develops earlier than males. As a result of this and higher serotonin in their blood and brain, girls tend to be less impulsive than boys. Boys can be physically more active than females and more restless if forced to sit for lengthy periods.

While the female brain uses more cortical regions for verbal and emotionally-driven activities, it uses less for physical-spatial tasks like monitoring and controlling objects moving through space and abstract mechanical ideas. Contrary to this, boys have a more significant portion of their cerebral cortex dedicated to spatial relations. As a result, boys pick up information quickly and simply by moving about and using visuals rather than relying on verbal instruction. Boys are twice as likely as girls to suffer from language and literacy difficulties, while they tend to outperform girls in [math](#) and [science-related](#) schoolwork generally.

Remember that while these are “typical” patterns, human behavior itself is represented as a spectrum. The differences within each gender group are often far more significant than the differences between genders.

Beware of stereotyping: both sexes have people who do not fit into distinct groups. Individual students who defy gender stereotypes may benefit from teachers' emotional support or reassurance since they are less likely than the average student to get these needs met somewhere else. This risk of negatively affecting mental health, in turn, can disturb their ability to concentrate or focus on crucial cognitive growth. Although there are no gender differences in what a child may learn, there are significant differences in how they learn and absorb information.



How can we, as parents, support all learning styles?

1. Avoid completing homework right after school. Children need a break from the long day of learning – and can better process and retain more information when given access to regular, short breaks. Encourage your child to be active during these breaks; exercise boosts blood flow, decreases stress, and promotes cognitive activity.
2. Try using active motions, exercise moves, or a ball to enhance their study skills. Strategies that use multiple senses are the most effective for children when learning new information.
3. Encourage all children to play with toys and activities that allow them to manipulate tools to enhance their spatial relationship skills, like puzzles and building blocks. All children should engage in activities that promote creativity, literacy, and art. These mind-expanding activities should not be limited to a designated group.
4. Be sure to help your child maintain the organization of their school supplies and scheduled assignments by using a clear, easy-to-use system. Children who have problems with executive functioning (a set of mental skills that allow people to complete everyday tasks) need extra help staying on top of their responsibilities.
5. Think of flexible ways to meet your child's learning style and allow them to access all learning opportunities fully. Try a small fidget toy or sitting on a bouncy ball to enhance focus during sit-down activities and assignments. Ask your child's teacher

if they will accept alternative presentations of projects to show their learning, such as a type-written paper instead of a handwritten piece or a voice recording.

6. Talk to your child's teacher to make sure they support your child's learning style. Advocating for students that don't fall into majority groups within learning environments cultivates inclusivity, critical thought, recognition of diversity, and creativity. This enriches everyone's learning experience.

There is no one-size-fits-all strategy to teaching children. Knowing how girls and boys learn, you'll be more equipped to help your child succeed in school. [Kids Academy](#) also has an enormous [library of videos](#) and activities that will be sure to meet your child's style of learning. Check us out!

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