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Georgia Hall

Kids Wear Genes

The youth we serve in afterschool programs wear blue jeans and genes of another kind – genetics! To work most effectively with children and youth it is helpful to remember how our nature impacts the ways we approach life and learning. Afterschool professionals can benefit from the research data investigating the value of single-sex learning environments by understanding the different genetic and learned ways in which boys and girls process information, develop socially, and express emotions. New research which studies brain imaging strongly suggests boys and girls brains function differently (NCGS, 2006; Sax, 2005) causing them to prefer different contexts and strategies for learning.

The area of the brain that develops spatial relations appears to develop as much as four years earlier in boys and the area of the brain related to literacy develops four years earlier in girls. Also, studies suggest that single-sexed learning environments help create more equitable learning opportunities by breaking down gender stereotypes and opening up opportunities for both sexes to explore activities and learning strategies they might never pursue in co-educational settings (Thompson & Ungerleider, 2004; Sadker & Sadker, 1994; AAUW, 1992). In creating learning experiences for children and youth we benefit from paying attention to the influence the learner's gender has in shaping those experiences. We can use this knowledge to enhance learning experiences in out-of-school time for both boys and girls.

Gender Differences Related to Learning

Numerous studies have been conducted to explore the merits of single-sexed learning environments with a variety of results (Luongo, 2006; NCGS, 2006; Sax, 2005; 2004, DOE, 2004; Sadker & Sadker, 1994; AAUW, 1992). Learning studies generally demonstrate that girls outperform boys in literacy skills and boys outperform girls in math and science. A 2005 report published by the Department of Education reviewed the National Assessment of Education Progress reports and found that on average girls scored 24 points higher in writing and 16 points higher in reading than boys and this gap is distinguishable by the fourth grade. However, when comparing academic achievement between students in single-sexed and coeducational schools, the students in single-sexed schools out perform their peers in all subject matters.

Some of the research findings that could be of interest to out-of-school time professionals are:

Girls tend to learn better in quiet structured environments and boys learn best in an atmosphere high in energy and movement (Froschl & Sprung, 2005; Thompson & Ungerleider, 2004; Pollack, 1998). The chaotic atmosphere preferred by boys and the quiet structured atmosphere preferred by girls appears to stifle each other's learning opportunities. Additionally, girls may feel intimidated in co-educational settings; they are called on less often, reminded to follow the class rules more often and are given less teacher attention with fewer explanations to aid in their learning and have lower levels of self-worth (Sadker & Sadker, 1994). Girls in coeducational setting are more likely to conform to behaviors that society deems appropriate. When girls are in same gendered classes, they ask more questions, engage in the material and are more willing to take risks, and appear to have higher levels of self-esteem.

Boys tend to exhibit their frustrations differently than girls and boys in coeducational settings are twice as likely as boys in single-sex settings to be referred for learning issues and behavioral problems. Many boys are also taught from an early age to repress their emotions and mask their feeling to live up to what society deems appropriate masculine behavior. Because of this stereotype, boys in co-educational settings may be less likely to engage in activities predominantly enrolling females. Boys in same-sex schools may be freer to explore their interests and develop their talents rather than trying to fit within stereotypical behavior. Boys in same-sex learning settings, in fact, out perform their peers in coeducational schools in reading, writing, art and music. They are more engaged in their work, achieve higher academic success, have fewer discipline problems, and have higher levels of self-esteem.

Considering this information we may ask the question, "Is their value to intentionally separating boys and girls into same gender groups during the out-of-school time hours?" There is strong reason to respond, "Yes." The following are some recommendations for practice that may enhance learning experiences for boys and girls by creating supportive settings that allow boys and girls to demonstrate and practice their natural strengths and not be limited by gender influences.

Implications for Practice

- Afterschool programs may want to consider occasionally separating boys and girls for homework groups. Separate groups might reduce disruptive behaviors precipitated by gender differences and allow for learning in settings that are most appealing.
- Since boys and girls seem to prefer different levels of structure in activities, it may be valuable to offer activities with variation in choice, independent work, free-form, and instructional content.
- Since boys and girls in co-educational settings seem to perform differently in key academic areas it may be helpful to provide targeted academic assistance (literacy for boys and math/science for girls) in single-sex settings to promote full engagement and achievement.

- Staff should be encouraged to self-examine in what ways they perpetuate gender stereotypes through their language, choice of teaching styles, and interactions with boys and girls and contribute to a plan for creating a gender-bias free afterschool program setting.
- Boys and girls may be more successfully encouraged to participate in preferred opposite gender stereotypical activities by offering choices in single-sex contexts and providing same-sex instructors.
- Knowing that there are inherent differences in the ways that boys and girls approach learning, we can organize our teaching strategies to “meet youth where they are,” i.e., create an atmosphere that builds self-confidence and self-worth for girls or decreases personal expression boundaries for boys. Having the choice to live out some of their learning and growing experiences in same-sex contexts is a valuable building block for developing youth.

Providing high quality learning experiences for boys and girls in afterschool programs is challenging work! Bringing together and using all the knowledge we can about how boys and girls experience life and learning differently helps us to serve them in ways that are most engaging and productive.

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