

human nature say, "This is how God created us." The more science-based work in evolutionary biology suggests that the most probable cause for our male-female brain difference lies in the millions of years of human evolution, during which humans primarily hunted and gathered.

Because males mainly hunted, they needed to develop a more spatial-mechanical brain. They needed to see well, but did not need fine detail sensory awareness as much as did females, who cared far offspring. The male brain was wired, therefore, for more physical movement—with more blood flow in the brain stem than the female brain has—but for less verbal input and output. (Words weren't needed much during the hunt.)

Whether you choose a religious or scientific explanation, the new brain technologies allow us to see the differences for ourselves between male and female in the brain. And even if you don't have PET scan equipment in your living room—none of us does!—you can still see what the geneticists, biologists, and sociologists are getting at.

III. ENDING THE MYTH OF GENDER PLASTICITY AND SUPPORTING THE WAY BOYS ACTUALLY LEARN

Given the biological and social evidence of male-female brain difference, can a nurturing community, a school, a family, a culture make a boy change the gender of his brain? Can a typical mom, by just talking to or reading to an average little boy, force his verbal centers to be like an average girl's? Should a school compel a boy to become the kind of learner it has decided will be "easiest to teach"?

The new sciences now challenge all of us—moms, dads, grandparents, teachers, policymakers—to come to an informed conclusion about the relationship between a boy's nature, his nurtured life, and his cultural experience. We spend only a few years in a close, day-to-day supervisory relationship with our children: how do we

want to spend those years? What kind of care do we want to give to their very human nature, their wonderful minds?

The new scientific research merits concluding that, although all children are unique and individual, and although everyone is constantly learning new skills and developing new modes of communication, *the gender of the human brain is not plastic, not a new skill to be learned, not a new mode of communication.* It is as hardwired into the brain as a person's genetic personality. In the same way that you cannot change a shy person into an extrovert, you cannot change the brain of a boy into the brain of a girl.

The idea that not all elements of the brain—especially not gender—are plastic is very important to our dialogue about the state of boyhood in education. Our educational system has bought into the idea of "overall neural plasticity." Because of this mythical concept of the brain as a magical, changing device, very few academic institutions train teachers in the neural sciences of gender. This aspect of human development is ignored, and young teachers, like young parents, are taught that being a "boy" or a "girl" is culturally insignificant in education, that basically all kids learn the same way and can be educated in a way that ensures gender-exclusive, predictable results.

Research from the new gender and brain sciences begs us to move beyond this myth. The move constitutes a second major step toward solving the crisis of male education. As step two finds its way into schools of education, young teachers will be shown PET scans, SPECT scans, and MRIs of the male and female brain and be trained to understand the gender reality we all experience.

You as an individual—and your school as a collective—can become a leader in making this happen. Because our biological sciences are now able to use PET scans, MRIs, and other tests, we can now discern how gender is marked into our genomes from millions of years of human development and still lights up the individual brains of boys and girls. You can bring this