Abstract

A common message being sold to educators and parents these days is that brain-imaging research tells us that there are profound differences between male and female brains. Supposedly, these brain differences mean that boys and girls learn differently, and should therefore be taught in different ways or even in different classrooms and schools. But a look at the complete scientific evidence reveals that research has identified very few reliable differences between boys’ and girls’ brains – and none that is relevant to learning or education. Scientifically, there are three major problems with these kinds of claims made by those who propose sex-specific teaching on the basis of different brains. The first problem is that the supposed sex difference in the brain often doesn’t exist. The second problem is that, even if it did exist, we would have no idea of the implications in terms of thinking, feeling or behaviour – and certainly not educational implications. The third problem is that a colourful brain-scan image showing a supposed difference between a male brain and a female brain can dazzle us so much that we overlook a very important point: boys and girls are far more similar than they are different. Psychologists have been studying gender differences for decades and decades – from maths and verbal skills to self-esteem and leadership style – and in the majority of cases differences between the sexes are either nonexistent, or so small as to be of no practical importance in an educational setting. This presentation travels through the science and pseudoscience of sex differences in the brain.