The idea of “brain-based learning” is inspired in the conviction that learning strategies which are based on the knowledge of brain function lead to more effective and successful learning. The idea as such is not new, but it has gained increasing currency during the past two decades. This process did not result only from the impulse brain research received during the “Decade of the Brain” of the 1990s, but also from efforts to reform educational systems in order to make them more effective. The presentation will provide an overview of the neuroscience and education debate in public media and in educational science in Germany, and point out what distinguishes it from the debate in the U.K. and the U.S. The question whether brain-based learning is “fact or fashion” will be explored by discussing different pedagogical claims and their supposed connection to neuroscientific findings.