EDUCATION WEEK

COMMENTARY

# The Brain Science Is In: Students' Emotional Needs Matter

## What the neuro-, cognitive, and behavioral research says about social-emotional learning

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Among policy elites and pundits in education, the urgency to improve academic achievement has stoked a raging debate. On one side are those who prioritize rigorous cognitive and academic development; on the other, those who care most about students' noncognitive skills and the physical, social, and emotional needs of the whole child. To many teachers, the debate seems ridiculous—because they have long known the answer is "both." Now, science is on their side.

Teachers, like parents, have always understood that children's learning and growth do not occur in a vacuum, but instead at the messy intersection of academic, social, and emotional development. And they know that students' learning is helped (or hindered) by the quality of students' relationships and the contexts in which they live and learn. Working to weave those threads, skilled teachers often have yearned for schools—and policy approaches—that understand this complex reality.

Such approaches will get a major boost from a sweeping review of scholarship contained in a pair of **new studies on the science of learning** and **development released earlier this year.** The researchers—Turnaround for Children's Pamela Cantor and Lily Steyer; American Institutes for Research's David Osher and Juliette Berg; and Harvard Graduate School of Education's Todd Rose—offer reason for enormous optimism about what's possible for all children, and especially those who have faced adversity and trauma.

—Getty

These two metanalyses (which were informed by the Science of Learning and Development interdisciplinary working group supported in part by the Chan Zuckerberg Initiative, whose education work I lead) drew on neuro-, cognitive, and behavioral science. In doing so, they brought together research on learning and development, which we oddly and unfortunately often separate in education, contrary to the urging of psychologists and child development specialists.

In public appearances, Pamela Cantor has distilled these consequential findings to four specific insights:

• **Malleability:** Genes are not destiny. Our developing brains are largely shaped by our environments and relationships—a process that continues into adulthood.

• **Context:** Family, relationships, and lived experiences shape the physiological structure of our brains over time. Healthy amounts of challenge and adversity promote growth, but toxic stress takes a toll on the connections between the hemispheres of our brain.

• **Continuum:** While we've become familiar with the exponential development of the brain for young children, it continues throughout life. The explosion of brain growth into adolescence and early adulthood, in particular, requires putting serious work into much more intentional approaches to supporting that development than is common today.

• **Integration:** Over time, different parts of the brain should develop more complex interconnections supporting the development of the whole person—and positive and negative emotional experiences can greatly influence that process. Yet, adverse effects of negative experiences and stress can be buffered and reversed by trusting human relationships. Children who have faced adversity, and whose brains lag in development, can recover—if schools recognize these challenges and take timely action.

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