

Emotional Fuel and the Power to Motivate Students

by Robert Sun

Most people think raw intellectual talent is the primary marker for academic success among children. But new insights are proving that motivation is perhaps even more important to learning than innate intelligence.

One widely cited study, recently published in the journal *Child Development*, supports the view that motivation and cognitive learning strategies outweigh intelligence as the top factors driving long-term achievement, particularly in math. Led by Kou Murayama, a post-doctoral psychology researcher at the University of Munich, the study measured gains in math proficiency over a five-year period among 3,500 German students in grades five through ten. The study also asked the participants about their attitudes toward math.

For purposes of the study, Murayama and his team defined motivation as having three distinct components: intrinsic motivation, or the willingness to engage in a task for its inherent pleasure and satisfaction; extrinsic motivation, driven by expected short-term benefits (e.g., good grades); and perceived control, or the level of expectation that one's efforts will produce a desired outcome.

While the study acknowledged that initial levels of achievement among children in the study were related to intelligence, the level of motivation and the use of cognitive strategies were better predictors of growth over time for academic success. The researchers concluded that intrinsic motivation, in particular, was key, stating that the trait "seems ideally suited to benefit enduring, long-term learning."

Classroom innovators are also discovering how programs that foster intrinsic motivation can make a huge difference in academic success. Select schools in the northeastern U.S. are engaging in what is known as "deeper learning," wherein normal

classroom studies are supplemented with group projects that elaborate on current curriculum, often spanning multiple subject areas.

Administrators are finding that such programs help students to believe in their capacity to learn. Once they understand that they can achieve through effort, they will keep trying. As they succeed in learning, they find the joy and self-satisfaction that comes from mastering new skills. The approach mirrors what Stanford University psychologist Carol Dweck, in her landmark book *Mindset*, says: that a growth mindset, rather than a fixed mindset, is essential to personal development.

So how do we sustain this new-found intrinsic motivation in our children? What drives some individuals naturally to persevere?

Intrinsic motivation is propelled by emotion. Examine a person's personal ambition to succeed and you will always find an attitude or experience—perhaps several—that drives it. Children need this "emotional fuel" to propel them toward mastery, overcoming the many obstacles and setbacks they encounter along the way. Without emotional fuel, they easily give up when the going gets rough.

Emotional fuel is generated when we experience a moment or event that changes us at our core. It is formed either through positive experiences, such as when we receive inspiration, kindness, or love, or through negative experiences resulting from extreme adversity, disappointment, or loss. Newly created fuel



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can drive a person in multiple ways: to overcome hardship when subjected to adversity; to prove oneself and be recognized, even after repeated indignities and humiliations; or to survive when our lives are continuously threatened.

For children in urban areas, loss is a familiar part of life. These kids are often filled with the kind of emotional fuel that, without intervention, can channel itself into destructive attitudes and actions. Without opportunities to taste success, they don't know how to direct that energy in a positive fashion. As a result, they are likely to expend their "fuel" in entrenched habits of disruptive behavior, confrontation, violence, and crime.

But we can change that. When inner-city students are offered a vehicle that allows them to take ownership and control over the learning process, when they are vitally engaged, when they can experience success in immediate as well as short-term and

long-term goals, that negative energy can be funneled into productive pursuits.

As parents and educators, we have the ability to influence that kind of positive, intrinsic motivation. Methods and tools exist to give these children a taste of success; self-directed online learning, for one, used as a classroom supplement, allows kids to get immediate feedback in a fun, familiar, and structured environment. We need to encourage the use of techniques like these as a regular part of the educational process.

If children—especially those in urban areas—are provided with the means to transform their emotional fuel into resolve and positive action, our national drive for academic excellence will have taken a major step. In an era when competition for jobs and resources occurs on a global scale, these wellsprings of personal success mustn't be squandered.