**IGNITESTEM** 

## **THOUGHT** PIECES



## RESILIENCE

Resilience—the ability of each of us to "bounce back stronger, wiser, and more personally powerful" (Nan Henderson); "not only survive, but also learn to thrive" (Bonnie Benard); or even to "bungy jump through the pitfalls of life" (Andrew Fuller)—is more than a trait: it's a process that can and should be taught, learned, and required. Being resilient helps youth navigate the world around them, and schools and classrooms are becoming more attuned to providing the cognitive, emotional, and developmental supports needed for resilience to prosper and grow in each of us.

In The Power of Resilience, Drs. Robert Brooks and Sam Goldstein explain:

Resilient individuals are those who have a set of assumptions or attitudes about themselves that influence their behaviors and the skills they develop.

Resilience is a key skill acquired through hands on learning - especially hackathons.

## MENTORS ARE CRUCIAL FOR RESILIENCE

Children look up to the adults around them for guidance and, good or bad, accept those adult behaviors as the standard, and pattern their own speech and actions after those adult models.

Brooks and Goldstein refer to these models as charismatic adults. These people could be teachers, administrators, coaches, parents, older siblings or friends, but the important thing is that the student forms a meaningful relationship with the charismatic adult. When that happens, the student has a resource when questions arise. He or she has a support when work gets difficult or life presents challenges. At hackathons, schools can bring in dozens of eager and encouraging volunteers to help make a difference in students' experiences by augmenting their resilience by letting kids grow through partial failure and then ultimately success.

## BUILDING RESILIENCE TAKES PERSONAL GROWTH

Another factor in supporting resilience in a student is the concept of personal control. As students develop an understanding of their own competence, they feel more in control. They feel like they can make more of their own decisions and take pride in their accomplishments. Students who are allowed to make significant choices regarding their own educations are more likely to feel some control or ownership of their own lives. This sense of control is powerful in supporting a resilient mindset. At hackathons, students come up with an appealing idea entirely on their own. The whole hackathon is there to help edit, tweak and improve on their idea.

Providing choice to students is critical. In Why We Do What We Do: Understanding Self-Motivation, author Edward Deci argues:

The main thing about meaningful choice is that it engenders willingness. It encourages people to fully endorse what they are doing; it pulls them into the activity and allows them to feel a greater sense of volition; it decreases their alienation.

A choice may be as simple as giving options on how to complete an assignment or letting students choose the topics of their writing assignments. That sense of autonomy helps them feel like they are involved.

In a classroom, there are many variables that a teacher cannot control, such as parental involvement, poverty, nutrition and chemical influences. However, within the classroom, a teacher can become a charismatic adult and model a resilient mindset, and give them a sense of autonomy and choice in the work they do. A teacher can instill this resilient mindset but facilitating hands on learning events for their students. Come join us at IgniteSTEM this April 8th to learn more!

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