Saint
Maximilian Kolbe School
A National Blue Ribbon School of Excellence

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Principal's Post

Growth Mindset

"Education is not the filling of a bucket, but the lighting of a fire."
William Butler Yeats.

What do kindergarteners know about neuroscience? How can understanding how the brain works affect learning outcomes? Surely it seems like a very difficult topic for young children to grasp. But researchers have discovered that helping children understand at an early age just how their brains work has a beneficial effect on their attitudes toward learning, Understanding the brain shapes students' behaviors toward learning new concepts, increases their motivation, and their willingness to persist with difficult tasks.

Neuroscience tells us that intelligence is not a fixed ability. Through neuroscience,the study of the brain, we know that the brain is made up of billions of nerve cells called neurons that are connected to one another to create a complex communication network that shares information with one another and with all the nerve cells throughout the body. These neurons interpret information from the senses and control movement and thoughts. The brain changes through learning. The neuro connectors develop patterns that strengthen, grow and change ***as we learn***. That means that learning makes our brains grow! So learning, studying, and practicing actually change the brain and increase our capabilities.

In her well known study conducted over thirty years ago, Stanford University psychologist, Carol Dweck, showed that teaching students about how their brains work—in particular, that the brain is pliable and can develop new capacities with effort and practice—makes a big difference in how well kids deal with mistakes and setbacks, and how motivated they are to persist until they achieve mastery. (*ww2.kqed.org-What Kids Should Know About Their Own Brains*)

Through her research, Dr. Dweck developed the concept of ***Growth Mindset.*** which is the idea that most abilities are developed through hard work, practice and dedication.

Growth mindset refers to a way of thinking about intelligence and ability. It's opposite concept would be ***Fixed Mindset*** - the belief that intelligence and ability are predetermined and cannot be changed.

Growth Mindset has become an important understanding in education. It engenders an entire language to help shape student thinking about how they learn. For instance, a student will say, "I'm not good at math." to which an astute teacher will reply "Yet. You're not good at math YET, but we will practice and work on different strategies and you will get better." Helping students to understand that their brains are always learning and that the brain does not have a fixed idea of its capacities makes a big difference in how a student approaches new learning tasks.

A growth mindset empowers students to take ownership for their learning. Asking "What can you do to grow your brain?", then working with students to assemble a large tool kit of practices and strategies for learning builds confidence and enhances motivation. Students are able to see practice as valuable. Growth mindset enables students to see learning as continuous. They measure learning in terms of making steady progress not reaching an end result. Growth Mindset promotes curiosity and creative problem solving.

So teaching kindergartners about their brains, and helping them to adopt a growth mindset is a very good idea. It frees them to work toward a fulfilling life long pursuit of brain growth through learning.