

## Mindsets Affect our Ability to Learn

### C. Uhl

Do you sometimes think that you are just not very intelligent? For example, maybe you believe that you are lacking in natural ability when it comes to math or music or foreign languages or creative writing or home repairs. For example, I was labeled as “Johnny One-Note” by my mother when I was little and to this day I carry the belief that I lack the ability to sing. Believing I can’t sing, I don’t bother to try and so my belief becomes a self-fulfilling prophecy.

Stanford professor Carol Dweck, who I introduced in last month’s column on praise (5/5/07) asserts that our beliefs about our intelligence have a profound effect on our capacity to learn.

To see how this works, consider the two statements below and decide which one you believe to be most correct: 1) People can learn new things, but a person **can’t** really change how intelligent he/she is; and 2) People can learn new things and a person **can** substantially change how intelligent he/she is.

If you tended to agree most with Statement 1, you have what Dweck calls the “**fixed mindset.**” Individuals with this mindset believe that traits, like intelligence or musical ability or shyness, are like cards you are dealt and there isn’t much you can do about it.

Now, if you tended to agree more with Statement 2, then you fall into what Dweck has dubbed the “**growth mindset.**” People with this mindset believe that no matter what their traits and abilities are right now these can always be enhanced and improved through effort and that almost anything can be accomplished given enough hard work, passion, and training.

In the context of schooling it comes as good news that students with a fixed mindset need not be stuck with it. Uprooting the fixed mindset involves adopting new ways of thinking about and understanding intelligence. For example, imagine if children from an early age were helped to understand that as they learned new things, the neural connections in their brain multiply and over time, as learning continues, their brains grow stronger, more adaptable and adept. In short, what if parents and teachers introduced children to the notion that intelligence isn’t fixed but expandable?

The remarkable thing is that when students shift their belief about intelligence from the fixed to the growth mindset their ability to learn increases dramatically. This is what Dweck discovered through research conducted in a New York City junior high school.

She began her research with the question, “What would happen if fixed mindset children learned the growth mindset?” With this question in mind she joined with

colleagues to develop a workshop, consisting of eight sessions, designed to teach basic study skills to junior high students. The students were divided in two groups. Those in the first group received the basic study skill workshop. Those in the second group received the exact same workshop but with a twist: In their case, the study skill information was contextualized in terms of the growth mindset and how the brain works. For example, students in this group were told that the brain is like a muscle—i.e., it grows and develops when it is exercised and challenged. All the while, the teachers had no knowledge regarding their students' participation in one or another of these workshops.

Before the workshop the math grades of the students in both groups had been in rapid decline. But afterwards, math grades for the students in the second group (i.e., those given a growth mindset orientation to understand the intelligence) began to rise, while no such improvement was noted for the students in the first group—i.e., the ones who were not helped to think differently about intelligence.

In sum, these findings point to the central role our beliefs play in shaping our learning potential. What we believe can change us—affect our motivation, our aptitudes, our very brain chemistry. Assume the fixed mindset and you live in a world of limits and you have little control. Switch to the growth mindset and desire, motivation and learning are ignited; the world becomes your oyster.