

What Intelligence Means to You

by Winston Sieck - August 11, 2015

<https://www.globalcognition.org/intelligence-what-it-means-to-you/>

What does *intelligence* mean to you?

Do you believe you were born with a “smartness score” that’s set for life?

Or is intelligence something you can build and grow? Say, by [improving your study skills](#)?

Now, ask yourself another question – *why do you believe that?*

Where did your ideas about the nature of intelligence come from?

There are two main ways that people think about intelligence.

One common view is that intelligence is fixed for each person. You get what you were born with. And it does not change, at least not by normal means.

The second way to think about intelligence is that it can change and grow. The idea is that you can build up your intelligence, just as you can build up your strength or endurance. Doing so will take some effort. But it is very possible to become smarter.

So, which is right?

A better way to think about intelligence

Psychologists and cognitive scientists have studied these different ideas for a long time. Early on, they mostly thought about intelligence as a fixed quantity of a person. Kind of like gravity for a planet.

Why?

It may be partly what the early researchers wanted for psychology as a science. If they could measure people, and assign them a single hard number that doesn’t change, other scientists might take psychology more seriously.

In any case, over time, psychologists’ theories have shifted toward the “growth” view. The current science suggests that intelligence is something that can improve. It does take hard work, but not brain surgery.

Yet, many people still hold on to the idea that intelligence is fixed. They think they’re either smart or not smart. And there’s not much they can do about it.

Hanging on to that “fixed mindset” is a problem. It hurts you.

Folks who think intelligence is fixed tend to give up on tough thinking tasks too soon. Why bother to try, if you believe that you either “get things” or you don’t?

If you don’t realize you can change your intelligence, then you won’t even try. And if you don’t try, your intelligence won’t change.

On the other hand, you are more likely to hang tough on challenging problems if you keep in mind that your intelligence can grow. That you get smarter by making your mind work.

Just as you get stronger by making your body work.

Adopting this growth mindset helps you find your [motivation to study](#).

If a fixed mindset is such a problem, why do people believe it?

Lynsey Burke of the University of Stirling and Joanne Williams of the University of Edinburgh asked this question. They studied middle school students’ beliefs about intelligence. They published their paper, “The impact of a thinking skills intervention on children’s concepts of intelligence,” in the journal *Thinking Skills & Creativity*.

The researchers asked students how much they agreed with statements like:

You have a certain amount of intelligence, and you really can’t do much to change it

You can learn new things, but you can’t really change your basic intelligence

You disagree with both of those statements, right?

Burke and Williams found that most of the students came in to their study believing that intelligence was fixed and inflexible. And it appeared that students’ beliefs about intelligence were shaped in no small part by the educational system.

For many of us, the notion that our intelligence is fixed has been deeply ingrained into our thinking. We were brought up with the idea that we can learn some things, but we can’t really get any smarter.

And that puts us in a mental rut. A habit of the mind that can be tough to change.

How to change your thinking about intelligence

Looking for a bright side, Burke and Williams asked whether [thinking skills](#) training would help students to adopt smarter views of intelligence.

Why should that work?

The idea is that you learn about different [strategies you can use to learn and think](#). You begin to see how some ways of thinking through problems work better than others.

You see how you can become more intelligent by changing up your thinking and learning strategies.

The researchers tested these ideas in school classrooms. Some students took 6-weeks of thinking skills training. Other students were in a control group and did not get the training.

By the end of the experiment, the students who received the thinking skills training shifted towards the view that their intelligence can improve. They adopted a growth mindset.

They also gained some new ideas about intelligence.

When they wrote about what intelligence meant to them, the students showed they had made the link between the nature of intelligence and the use of thinking strategies. They now started to regard effective thinking as being central to intelligence. We use a similar approach in our [study skills course](#) to foster this idea.

It's like a two-for-one deal. An upward spiral. A way to pull yourself up by your bootstraps.

You start to feel that, maybe, just maybe, you really can get smarter.

You pick up some new skills to learn and think better. These help you see that you really can do it.

From there, you find more ways to further build your intelligence.

So, identify and challenge that old fixed mindset within yourself.

It's holding you back.

Root it out, and replace it with the idea that you can improve your intelligence. You can build up your learning and thinking skills. You can stick with tough mental challenges.

You can enjoy learning new things.

Image Credit: [leedsn](#)

Burke, L., & Williams, J. (2012). The impact of a thinking skills intervention on children's concepts of intelligence *Thinking Skills and Creativity*, 7 (3), 145-152 DOI: [10.1016/j.tsc.2012.01.001](https://doi.org/10.1016/j.tsc.2012.01.001)

Retrieved: 05-11-2020

Updated: 05-05-2020

Published: 08-11-2015

globalcognition.org