**5-4-22 Busting The Myth of Learning Styles**

**Busting The Myth of Learning Styles**

By [Erik Ofgang](https://www.techlearning.com/author/erik-ofgang)published 4 days ago

The idea that different students have different learning styles pervades education, but cognitive scientists say there is no evidence learning styles exist.

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The concept of learning styles is so ingrained that when Polly R. Husmann co-authored a study in 2018 adding to the evidence that it’s a myth, even her mother was skeptical.

“My mom was like, ‘Well, I don't agree with that,’” says Husmann, a professor of anatomy, cell biology and physiology at the Indiana University School of Medicine.

However, [**the data**](https://anatomypubs.onlinelibrary.wiley.com/doi/abs/10.1002/ase.1777) Husmann and her co-author gathered is hard to argue. They found that students generally did not study in accordance with their learning style, and that even when they did, their test scores did not improve. In other words, they didn’t learn any better when attempting to learn in their supposed learning style.

Other research, conducted over the past decade-and-a-half has effectively [**disproven**](https://poorvucenter.yale.edu/LearningStylesMyth) the notion that students fall into different categories of learners such as visual, auditory, or kinesthetic. However, despite this [**well-publicized**](https://www.theatlantic.com/science/archive/2018/04/the-myth-of-learning-styles/557687/) research, many educators continue to believe in learning styles and build lessons accordingly.

Here’s a closer look at how a belief in learning styles became ingrained, why education researchers are confident there’s no evidence for it, and how the idea of learning styles continues to influence educators and students.

**Where Does the Idea of Learning Styles Originate?**

In the early 1990s, an educator named Neil Fleming was [**trying to understand**](http://www.vark-learn.com/wp-content/uploads/2014/08/Educational-Developments.pdf) why during his nine years as a New Zealand school inspector he had witnessed what he deemed good teachers who were unable to reach every student while some poor teachers were able to reach all learners. He struck upon the idea of learning styles and developed the VARK questionnaire to determine someone’s learning style (VARK stands for visual, aural, read/write, and kinesthetic.)

While Fleming did not coin the term or concept of “learning styles,” his questionnaire and categories of learning styles became popular. While it’s unclear exactly why the notion of learning styles took off to the extent it did, it may have been because there was something inherently appealing about the easy-fix it promised.

“I think it's convenient to be able to say, ‘Well, this student learns this way, and this student learns that way,’” Husmann says. “It's a lot more complicated, it's a lot muddier if it's, ‘Well, this student may learn this material this way, but this other material this other way.’ It's a lot harder to deal with that.”

**What Does The Research Say About Learning Styles?**

For a time, belief in learning styles thrived and went largely unchallenged, with most students taking the VARK questionnaire or some similar test over the course of their education.

“In the education community, there was a lot of taking for granted that learning styles was an established scientific fact, that it was a useful way of characterizing differences among people,” says Daniel T. Willingham, professor of psychology at the University of Virginia.

In 2015, Willingham was the lead author of a [**review**](https://journals.sagepub.com/doi/abs/10.1177/0098628315589505) that found no evidence for the existence of learning styles, and has long [**pointed**](http://www.danielwillingham.com/learning-styles-faq.html) out the lack of scientific basis for the concept.

“There are some people who strongly believe that they have a particular learning style, and they will actually try to recode information so that it's consistent with their learning style,” Willingham says. “And in the experiments that have been done [with those who do this], it doesn't help. They don't do the task any better.”

While there are many other learning style models beyond VARK, Willingham says there is no evidence to support any of it.

**Why Does Belief in Learning Styles Persist?**

While Willingham stresses he doesn’t have any research to answer this question, he thinks two main factors might be at play. First, when many people use the term ‘learning styles' they don’t mean it the same way a learning theorist means it, and often confuse it with ability. “When they say ‘I'm a visual learner,’ what they mean is, ‘I tend to remember visual things really well,’ which is not the same thing as having a visual learning style,” Willingham says.

Another factor might be what social psychologists call social proof. “When there's lots and lots of people who believe things, it's kind of weird to question it, especially if I don't have any special expertise,” Willingham says. For example, he says he believes in atomic theory but personally has little knowledge of the data or research that supports that theory, but it would still be strange for him to question it.

**Is Belief In Learning Styles Detrimental?**

Teachers presenting class material in multiple ways is not a bad thing in and of itself, Willingham says, however, the widespread belief in learning styles can place undue pressure on educators. Some might spend time trying to create a version of each lesson for each learning style that could be better used elsewhere. Other educators Willingham has met feel guilty about *not*doing that. “I hate the thought of teachers feeling bad because they're not honoring kids’ learning styles,” he says.

Husmann has found that a belief in learning styles can be detrimental in students. “We get a lot of students who are like, ‘Well, I can't learn like that, because I'm a visual learner,’” she says. “The problem with learning styles is that students become convinced they can only learn in one way, and that's not true.”

Both Willingham and Hussman stress that they are not saying teachers should teach all students the same way, and both advocate for teachers using their experience to differentiate instruction. “For example, knowing that saying ‘good job’ will motivate one child, but embarrass another,” Willingham [**writes**](http://www.danielwillingham.com/learning-styles-faq.html) on his website.

**How Should You Discuss Learning Styles With Educators and Students Who Swear by The Concept?**

Verbally attacking educators who believe in learning styles is [**not helpful**](http://www.danielwillingham.com/daniel-willingham-science-and-education-blog), Willingham says. Instead, he tries to engage in a conversation based on mutual respect, taking an approach of, “I would love to share with you my understanding, but I want to hear your understanding as well about your experiences.” He also makes a point of noting that a belief in learning styles does not equate to bad teaching. “I try to make it very clear, ‘I'm not criticizing your teaching, I don't know anything about your teaching. I'm addressing this as a cognitive theory,’” he says.

So students don’t fall into the habit of falsely identifying their own learning styles and, therefore, establish learning limitations, Husmann recommends educators encourage students at an early age to try different learning strategies so they develop a toolbox of learning methods. “Then when they do come up against those hard topics in the future, rather than just throwing up their hands and saying, ‘I can't do it, I'm a visual learner,’ they have a bigger arsenal of ways they can try to learn that same material,” she says.

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