

The Myth of Learning Styles: Additional Resources

- [Learning Styles: Concepts and Evidence - 2009 LANDMARK MANIFESTO](#)
 - Since the 1970s, systematic research reviews and meta-analyses examining the validity of learning styles and their application to education have come to the same conclusion: ***despite the intuitive appeal, there is little to no empirical evidence that learning styles are real.***
 - Nearly all of the studies that purport to provide evidence for learning styles fail to satisfy key criteria for scientific validity. ***Any experiment designed to test the learning-styles hypothesis would need:***
 - Expected Experimental Proof:
 - 1) Classify learners into categories
 - 2) Randomly assign the learners to use one of several different learning methods, and
 - 3) Take the same test at the end of the experiment.
 - 4) Then learners with a given style should learn better with instruction that meshes with that style.
 - It seems harmless enough, but...
 - when teachers work to accommodate learning styles, which have no empirical support, they divert attention and effort away from instructional strategies that are supported by a substantial body of research.
 - Students may act on their label. If a student believes she or he has a particular dominant learning style, the student may avoid effective learning strategies or even entire subjects they believe are a better fit for a learning style they don't think suits them.
 - Learning styles foster an unwarranted impressions of content mastery - 'feels good misperception'
 - Learning styles shift accountability for learning gains from the teacher to the learner
- [The Stubborn Myth of "Learning Styles" - 2023](#)
 - 29 states, government-distributed test-preparation materials on high-stakes certification exams include the debunked theory of "learning styles,"
 - 2017 - 76% of educators agreed that "individuals learn better when they receive information in their preferred learning style," & 71% agreed that "children have learning styles that are dominated by particular senses."
 - 2017 - 93% of Americans believe in learning styles
 - 2019 - 86% of college students believe in learning styles
 - No less than 71 different models of learning styles have been proposed over the years.
 - Students may act on their label. If a student believes she or he has a particular dominant learning style, the student may avoid effective learning strategies or even entire subjects they believe are a better fit for a learning style they don't think suits them. Moreover, since individuals are able to control the type of

mental processing they use, students who are taught they have a dominant learning style may attempt to process information in their preferred style, even when the method does not fit the task. And teachers who attempt to accommodate multiple learning styles in a lesson, rather than focusing on the most effective methods to present the specific material, can negatively influence student learning by causing cognitive overload.

- [ENDING THE YEAR IN STYLE\(S\) - 2022](#)

- "Leaders" conflating learning styles as a type of diversity effort is brutal
 - ***The idea that accommodating for learning styles is 'good' because it accommodates for diversity, which in turn helps organizations to do better when it comes to inclusion and equity is fundamentally flawed.***
 - Senior leaders who post with good intention yet use a fundamentally flawed approach is highly problematic because they should be advocates for improving (evidence-informed!) learning and development practice, instead of focusing on the superficial message and the 'empathetic' tone without realizing how flawed the resource is that they use to reinforce their message.
 - There's a big underlying assumption here that when we help people to follow their preferences, that that's a good thing. Of course, this isn't necessarily the case. People have food preferences, too! Salty, sweet, fatty or a combination of two or all three (we love sea-salt caramel ice cream)! Should people follow their preferences? Of course not, that wouldn't be healthy! In fact, when it comes to learning, there's a great difference between what people prefer and/or *believe* they need to learn best versus reality.

- [Learning styles: Myth or reality? - 2022](#)

- ***Many myths are propagated because counterevidence is usually extremely difficult to find,*** even for experts protecting the myth from scrutiny. It is like searching for a needle in a haystack! In fact, the threat of scrutiny is extremely low for non testable ideas and you've seen the difficulty of designing a study about learning styles. Combine this with a lack of expert knowledge or training, and the information is missed, misinterpreted, or ignored. The result? An innocent snowball becoming an avalanche, which comes crashing down. The myth remains unchecked, it spreads, and reaches the 21st century.
- Lastly, humans tend to simply accept a very pervasive idea such as different learning styles. Once it spreads amongst individuals and its popularity skyrockets, it is not usually challenged. This can happen even among the scientific community, never mind between nonspecialists.

- [The Learning Styles Neuromyth Is Still Thriving in Medical Education - 2021](#)

- As in earlier research on Higher Education, (from 2015-2019 publications) ***we found that the use of Learning Style frameworks persist in education research for the health professions; 91% of 112 recent research papers***

published on Learning Styles are based upon the premise that Learning Styles are a useful approach to education.

- [The Biggest Myth In Education](#) - 2021 YouTube video
- [@learninstyle on Twitter](#) was a great parody account to follow - 2021-2023
- [Dual Coding and Learning Styles](#) - 2019
 - In a survey of average Americans, found that 93% of participants believed in learning styles (1). Surveys of other groups have shown 93% of UK primary and secondary school teachers (2), and 86% of college students believe in learning styles (3).
 - ID RECOMMENDATION: Dual coding is combining words and visuals such as pictures, diagrams, graphic organizers, and so on. The idea is to provide [two different representations of the information, both visual and verbal](#), to help students understand the information better.
- [With 71 Models, Defining Learning Styles Is a Challenge](#) -
 - Coffield et al, [cataloged 71 learning style models in 2004](#), grouping them into five “families” ranging from genetically anchored, to anatomically anchored, to cognitively anchored, to emotionally anchored.
 - How would we tailor our designs to all these options? It’s simply impossible. Even when we just look at one model, we need to ask ourselves: What would accommodating for all these sub-types mean in practice?
 - The enormous number of models and the broad range of factors to which they attribute learning styles should be enough evidence to convince an instructional designer that learners are not hardwired to learn in a particular way and that attempting to tailor lessons to each learner’s style is futile. And, even if they did, Coffield’s extensive research has found “no hard evidence that students’ learning is enhanced by teaching tailored to their learning style.”
- [TAILORING INSTRUCTION TO LEARNING STYLES \(STILL\) DOESN’T HELP STUDENTS - 2018](#)
 - **What are the implications of this new work?**
 - A. One educational implication of this research is obvious: educators need not worry about their students’ learning styles. There’s no evidence that adapting instruction to learning styles provides any benefit. Nor does it seem worthwhile to identify students’ learning styles for the purpose of warning them that they may have a pointless bias to process information one way or another. The bias is only one factor among many that determine the strategy an individual will select – the phrasing of the question, the task instructions and the time allotted all can impact thinking strategies.
 - A second implication is that students should be taught fruitful thinking strategies for specific types of problems. Although there’s scant evidence that matching the manner of processing to a student’s preferred style brings any benefit, there’s ample evidence that matching the manner of processing to the task helps a lot. Students can be taught useful strategies for committing things to memory, reading with comprehension,

overcoming math anxiety or avoiding distraction, for example. Learning styles do not influence the effectiveness of these strategies.

- [Learning styles & the importance of critical self-reflection | Tesia Marshik | TEDxUWLaCrosse](#) - 2015 YouTube video
- [Do Learners Really Know Best? Urban Legends in Education](#) - 2013
 - This article takes a critical look at three pervasive urban legends in education about the nature of learners, learning, and teaching and looks at what educational and psychological research has to say about them.
 - The three legends can be seen as variations on one central theme, namely, that it is the learner who knows best and that she or he should be the controlling force in her or his learning.
 - The first legend is one of learners as digital natives who form a generation of students knowing by nature how to learn from new media, and for whom “old” media and methods used in teaching/learning no longer work.
 - The second legend is the widespread belief that learners have specific learning styles and that education should be individualized to the extent that the pedagogy of teaching/learning is matched to the preferred style of the learner.
 - The final legend is that learners ought to be seen as self-educators who should be given maximum control over what they are learning and their learning trajectory.
 - It concludes with a possible reason why these legends have taken hold, are so pervasive, and are so difficult to eradicate.