Nomanis Notes

Is the concept of learning styles useful?

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Statement of the problem

It is claimed that many students are not learning to their full capacity because instruction is not being adequately tailored to their specific learning styles.

Proposed solution/intervention

Teachers should assess the preferred learning styles of the students in their classes and teach to those styles, thereby ensuring that the instructional needs of all learners are met.

The theoretical rationale

The idea behind learning styles as an educational concept rests on the intuitively appealing (and apparently selfevident) notion that different people learn differently. The theory argues that students' learning will be optimized if their learning styles are taken into account by their teachers. A variety of taxonomies of learning styles has been proposed, a particularly common and popular one being the distinctions between auditory, visual and kinaesthetic (or tactile) learners. It is suggested that teachers should assess their students to determine their specific learning styles and then to structure their instruction to meet the specific learning needs of their students. So, for example, teachers should ensure that kinaesthetic learners have the opportunity to handle and manipulate curriculum materials employing such media as clay.

What does the research say? What is the evidence for its efficacy?

A considerable amount of research has been conducted on learning styles over many years, in many parts of the world. Researchers have sought to demonstrate that learning styles can be adequately assessed and that if students are subsequently taught in a manner capitalizing on their assessed learning style, then they will learn more efficiently. The technical quality of much of the research on learning styles, however, in spite of its profusion, has been seriously questioned, so that it has proved difficult to find sufficient numbers of well-designed studies that put these theories to the test. There is limited evidence that many of the proposed learning styles can be assessed reliably or that they are necessarily stable over time. There is no convincing evidence to support the idea that children learn better if taught by methods consonant with their assessed learning styles.

Conclusion

In spite of its popularity with both researchers and teachers, learning styles as a construct appears to have little to offer classroom practice. The nature of many tasks can dictate the approach the learner needs to take and attempting to constantly tailor instruction to numerous purported learning styles is unlikely to be practical or efficient in a classroom setting. There is little or no convincing evidence to support the notion that taking learning styles into account actually improves student learning. Most students will learn most content with well-planned and clear instruction. Nevertheless, skilled teachers will often need to adjust instruction in response to data on performance for some students, but learning styles assessments do not appear to provide useful guidance in making such adjustments. Moreover, a preoccupation with learning styles may reduce the likelihood that teachers will address aspects of the teaching context over which they have real control using methods for which there is scientific evidence for efficacy.

Key references

Pashler, H., McDaniel, M., Rohrer, D., & Bjork, R. (2009). Learning styles: Concepts and evidence. *Psychological Science in the Public Interest*, 9, 105–119.

Willingham, D.T. (2018). Does tailoring instruction to "learning styles" help students learn? *American Educator, Summer,* 28-32 and 43.

Willingham, D.T., Hughes, E.M. & Dobolyi, D.G. (2015). The scientific status of learning styles theories. *Teaching of Psychology, 42*, 266-271.

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