

CONCLUSION

Left Brains, Learning Styles, and Who Cares What Time it is?

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My husband and I were taking a stroll in our neighborhood one summer evening and we saw a jogger trotting up the street toward us. “Do you have a watch on?” she asked as she came closer. “Yes,” replied my husband. Awkward silence for a second, then I nudged him and directed him with a tinge of acrimony, “Tell her what time it is!” By now the runner was jogging in place waiting for a different answer to her question than simply “yes.” I informed her that it was 6:30 pm and she proceeded on her way. After over 20 years of marriage to my husband, I have come to accept these types of responses to questions as the norm from him, a corporate tax attorney and particularly literal. He had heard a specific question and answered it precisely while I, a former musician and teacher, had processed the question in a broader context which included an intuitive guess at why the runner would want to know if we had a watch on in the first place. I didn’t even “hear” the same question that my husband had “heard” although we both claimed that our separate responses were right!

The jogger, in fact, was not interested in whether or not either of us were wearing watches on that summer afternoon; she wanted to know the time of day. And if she were as analytical a thinker as my husband, her second question would probably have been the more salient and succinct one, “Do you know what time it is?” (Evidence that she felt the need to first establish if it were possible that we knew the time hinted that she probably was more like him.) Had she been more like me, she would have “cut to the chase” from the start and simply asked us the time rather than go through step one to find out if it were likely that we knew it. In the context of her activity and perhaps concern for her pace, she could have gotten her answer sooner that way and saved a few seconds in route. But this would have been a more “forest” look at her situation rather than her jaunt through the trees.

After she proceeded along her way, the discussion between my husband and I delved into which answer was correct, mine or his. Naturally he thought that his was right (and I agreed that his answer was correct) but I thought mine was *more* right. We talked through a couple of “what if’s” and he finally relinquished that she probably wasn’t racing to an appointment, she was probably just out getting some exercise, but she probably didn’t view whether or not we were wearing watches as more important than the actual time. Context matters! We concluded that the simple truth (as if there is ever a “simple” truth) depended on what type of assessment was used to evaluate our responses.

My co-editor for this journal issue on the Science of Learning tends to think more like my husband. His wife, an artist and art teacher, more like me. One morning she was racing out the door to go to work and asked Dr. Lambert, a prominent research statistician, if he could please transfer the clothes from the washer to the drier before he left for work later in the morning. He agreed and he did. When she arrived home that evening, she was perturbed to find the clothes

transferred from the washer into the drier, but still wet. She had not specifically instructed that the drier be turned on, only that he transfer the clothes over from the washer to the drier and he had followed her instructions perfectly.

Those of us who have worked in schools for very long have come to know that one size definitely does not fit all in a classroom, regardless of how painstakingly we seek clarity in our teaching. We communicate as a means toward a learning end, and are constantly surprised by the variety of results that occur. Not a year goes by that some seemingly tried and true instructional strategy given within a well-versed lesson plan is interpreted in an entirely new or unintended way by some student that reminds us repeatedly that we do not all process, understand, or learn the same way. Which precise areas or parts of areas or processes in our brains results in these vast differences, whether they be neural networks firing more in a particular hemisphere (left or right), or higher or lower, or deeper or wider, where ever, I have no doubt that neuroscience research will ultimately pinpoint and map these processes. So we'll have the watch on, but what then? While the neuroscientist works to pinpoint and describe each synapse within a learning brain, the educator races to the application of the findings to better lead to learning for more and more students. One snowflake is deeply analyzed finding its complete uniqueness as the others become snow balls and even snowmen rising up along the landscape at lightning speed. If along the way, a misnomer sets in (snowmen are snowflakes, or worse, snowflakes are snowmen!) such as defining "types" of students as having different learning styles, which is more correct, the premise that children (and adults) do not all learn best in the same way, or that teachers are in error for label learning styles. The time spent arguing over what to call an observable reality can distract from the overall objective which for educators is that of improving learning environments for the maximum number of learners in the least possible time. Neuroscientists and cognitive scientists must work collegially with educators for this to happen and the scientists must understand that educators may be beginning with a different end in mind. They are looking at changing lives, or at least changing thinking in the hopes that developing critical thinking skills can lead to better understanding, better choices, and ultimately better lives. They generally do not mind much what label is given to the strategy, the principle or where exactly in the brain a particular activity happens to activate, only that it does activate the brain to wonder. And educators understand the need for as precise a label as can be conferred. After all, failing to find labels and adhere to individualized education plans (IEPs) is actually illegal, even when this process is ultimately intended to improve learning environments.

The medical community's premise is that they are to "first, do no harm." Teachers may not know much at this time of the scientific lingo needed to fully describe precisely how motivation occurs in the brain, how retention is cemented into long-term memory, or other explanations that the science of learning can explain about making changes in their classrooms. But is this harmful? Graduating a cadre of educators to work in schools who approach a classroom of students with the frame of mind that "there is no such thing as a learning style" has the potential to do great harm. Making a statement that learning styles do not exist can insinuate to future teachers that any type of differentiation is not needed to promote learning. But as all teachers know, students are different. People are different. And whether we call them left brained or label them an auditory learner, (or even let them label themselves as different) does this harm the education process? It is within this complex diversity that we must recognize learning takes place in as many ways as there are potential paths of neural networks in the brain to produce it for an entire classroom of students to learn. Consequently, recognizing differences is far more critical a concept that proving scientifically whether or not learning styles exist.

Differences definitely exist and what we call them is secondary to an educator. However, our effort in producing this work was to help bridge the important gap between those trained to teach and those trained about learning and we welcome any interested thinkers to wonder with us and build a broader base from which we can all learn.

Special thanks to all of those interested students who participated in this Response to the Deans for Impact Report project at the University of North Carolina at Charlotte, to Dr. Chuang Wang for allowing us to commandeer an entire issue of his *Journal of Application of Educational Policy & Research*, to Priscila Baddouh for her exemplary eyes and technical expertise, to Dr. Richard Lambert for sharing so many of his superb synapses to help move this project from idea to reality, and finally to Dr. Paula Goolkasian for her continued inspiration.