

Empowering Teachers with Neuroscience?

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Although a growing amount of interest and research in *brain-based learning* suggests that, with a basic understanding of neuroscience, there is huge potential for empowering educators, we are a long way from fulfilling that potential. The most recent Mind, Brain, Education (MBE) findings described by MBE researchers (Coch & Ansari, 2009; Zamarian, Ischebeck, & Delazer, 2009) indicate that this a science that is still in its early embryonic stages of development. Coch & Ansari caution us that educators should be careful to not perceive it as a “panacea for educational problems” (2009, p. 546) and Zamarian et al. fall short of claiming that current MBE research provides conclusive evidence of teacher-empowerment capabilities either now or in the near future, stating only that “close collaboration of neuroscience and education may lead in the future to improved teaching and intervention” (2009, p. 918).

Significantly, the Zamarian review also discusses some studies that indicate how such factors as age, language, culture, and education systems also appear to activate certain brain areas, thus complicating—and probably compromising—the accuracy of data interpretation in this field. Their use of the phrase “may lead in the future” is *not* a bold declaration and it does nothing to inspire one’s confidence in the current viability of the MBE field. Furthermore, it clearly implies that most teachers should not currently be attempting to use today’s very limited base of neuroscientific knowledge in a lofty endeavor to empower themselves. There first needs to be much more collaborative and conclusive research done between “neuroscientists and educationalists” (Coch & Ansari, 2009, p. 547)—and this will take time.

During this lengthy process, the ideal situation would be to involve only those “educationalists” who are school neuropsychologists and fully capable of both communicating with neuroscientists and consulting with the curriculum specialists that actually design the instructional approaches (Koch, Timmerman, Peiffer, & Laurienti, 2013, pp. 585–586). Until teacher training includes sufficient and *proven* MBE pedagogy, any other teacher involvement in this emerging field would be premature and not in the best interest of all students.

## References

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