

101 perspectives on teachers' new pedagogical knowledge: suggested reading list for teachers in MBE schools

Agarwal, P. K., & Bain, P. M. (2019). Powerful teaching: Unleash the science of learning. John Wiley & Sons. ISBN: 978-1-119-52184-6

Aronson, B., & Laughter, J. (2016). The theory and practice of culturally relevant education: A synthesis of research across areas. *Review of Educational Research*, 86(1), 163-206.

<https://doi.org/10.3102/0034654315582066>

Barrett, L. F. (2020). Seven and a half lessons about the brain. Houghton Mifflin. ISBN-13: 978-0358645597

Battro, A. M., Fischer, K. W., & Léna, P. J. (2008). The educated brain: Essays in neuroeducation. In *Mind, Brain, and Education*. Cambridge University Press.

<https://doi.org/10.1017/CBO9780511489907>

Blakemore, S. J., & Frith, U. (2005). The learning brain: Lessons for education. Blackwell publishing. ISBN: 1405144777, 9781405144773

Blinkoff, E., Wright, C. A., Scott, M., Fletcher, K., Masters, A. S., Ilgaz, H., Vu, L., Hirsh-Pasek, K., & Golinkoff, R. M. (2023). Shifting from a classroom of reluctant compliance to a classroom of responsive curiosity. *Young Children*, 78(3), 14-22.

<https://www.naeyc.org/resources/pubs/yc/fall2023>

Brault Foisy, L. M., Matejko, A. A., Ansari, D., & Masson, S. (2020). Teachers as orchestrators of neuronal plasticity: effects of teaching practices on the brain. *Mind, Brain, and Education*, 14(4), 415-428. <https://doi.org/10.1111/mbe.12257>

Brooks, J. G., & Brooks, M. G. (2021). Schools reimagined: unifying the science of learning with the art of teaching. Teachers College Press. ISBN-13: 978- 0807764978

Brown, P. C., Roediger III, H. L., & McDaniel, M. A. (2014). Make it stick: The science of successful learning. Harvard University Press. ISBN-13: 978-0674729018

Callaghan, B. L., & Tottenham, N. (2016). The neuro environmental loop of plasticity: A cross-species analysis of parental effects on emotion circuitry development following typical and adverse caregiving. *Neuropsychopharmacology*, 41(1), 163- 176. doi.org/10.1038/npp.2015.204

Cantor, P., & Osher,D.(Eds.). (2021). The science of learning and development: Enhancing the lives of all young people. Routledge. ISBN 9780367481070

Cantor, P., Lerner, R. M., Pittman, K. J., Chase, P. A., & Gomperts, N. (2021). Whole-child development, learning, and thriving: A dynamic systems approach. Cambridge University Press. <https://doi.org/10.1017/9781108954600>

Carroll, A., Cunnington, R., & Nugent, A. (Eds.). (2020). Learning under the lens: applying findings from the science of learning to the classroom. Routledge. ISBN 9780367136635

Casey, B. J. (2023). Executive functions in the brain, development and social context: Early contributions by neuroscientist, Adele Diamond. *Developmental Cognitive Neuroscience*, 62. doi: 10.1016/j.dcn.2023.101272

Castles, A., Rastle, K., & Nation, K. (2018). Ending the reading wars: Reading acquisition from novice to expert. *Psychological Science in the Public Interest*, 19(1), 5-51. <https://doi.org/10.1177/1529100618772271>

Costa, A.L. & Kallick, B. (2008). Learning and leading with habits of mind: 16 characteristics for success. ASCD. ISBN: 978-1-4166-0741-0

Costandi, M. (2016). Neuroplasticity. MIT Press. ISBN: 9780262529334

Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2020). Implications for educational practice of the science of learning and development. *Applied developmental science*, 24(2), 97-140. <https://doi.org/10.1080/10888691.2018.1537791>

Darling-Hammond, L., & Oakes, J. (2021). Preparing teachers for deeper learning. Harvard Education Press. ISBN-13: 978-1682532928

Darling-Hammond, L., Cantor, P., Hernández, L. E., Theokas, C., Schachner, A., Tijerina, E., & Plasencia, S. (2021). Design principles for schools: Putting the science of learning and development into action. Learning Policy Institute.

<http://creativecommons.org/licenses/by-nc/4.0/>.

Darling-Hammond, L., Schachner, A. C., Wojcikiewicz, S. K., & Flook, L. (2022). Educating teachers to enact the science of learning and development. *Applied Developmental Science*, 1-21. doi.org/10.1080/10888691.2022.2130506

Dehaene, S. (2020). How we learn: The new science of education and the brain. Penguin UK. ISBN: 0525559884

Diamond, A. (2000). Close interrelation of motor development and cognitive development and of the cerebellum and prefrontal cortex. *Child Development*, 71, 44–56.

<https://doi.org/10.1111/1467-8624.00117>

Diamond, A. (2011). Biological and social influences on cognitive control processes dependent on prefrontal cortex. *Progress in Brain Research*, 189, 319–339. (special issue entitled “Gene Expression to Neurobiology and Behavior: Human Brain Development and Developmental Disorders”) doi.org/10.1016/B978-0-444-53884-0.00032-4

Diamond, A. (2013). Executive functions. *Annual Review of Psychology*, 64, 135-168. <https://doi.org/10.1146/annurev-psych-113011-143750>

Diamond, A. (2012). How I came full circle from the social end of psychology to neuroscience and back again in an effort to understand the development of cognitive control. Malleable minds, Translating insights from psychology and neuroscience to gifted education. Storrs, CT: National Center for Research on Giftedness and Talent. [do.org/10.13140/RG.2.1.2972.3284](https://doi.org/10.13140/RG.2.1.2972.3284)

Diamond, A., & Ling, D. S. (2019). Aerobic-Exercise and resistance-training interventions have been among the least effective ways to improve executive functions of any method tried thus far. *Developmental Cognitive Neuroscience*, 37. doi.org/10.1016/j.dcn.2018.05.001

Dockrell, J., Llaurodo, A., Massonne, J., & Sumner, E. (2021). Oral language—the foundation for learning. *Oxford Review of Education*, 48(6), 743-766, doi.org/10.1080/03054985.2021.2013189

Doyle, T. & Zakrajsek, T. D. (2022). The new science of learning: how to learn in harmony with your brain. Routledge. ISBN 9781642675016

Dubinsky, J. M., Roehrig, G., & Varma, S. (2022). A place for neuroscience in teacher knowledge and education. *Mind, Brain, and Education*, 16(4), 267- 276. <https://doi.org/10.1111/mbe.12334>

Dweck, C. (2017). Mindset-updated edition: Changing the way you think to fulfill your potential. Hachette UK. ISBN-13: 9781472139962

Ferrari, M., & McBride, H. (2011). Mind, Brain, and Education: The birth of a new science. *Learning Landscapes*, 5(1), 85-100. <https://doi.org/10.36510/learnland.v5i1.533>

Ekman, R., Fletcher, A., Giota, J., Eriksson, A., Thomas, B., & Bååthe, F. (2022). A flourishing brain in the 21st century: A scoping review of the impact of developing good habits for mind, brain, well being, and learning. *Mind, Brain, and Education*, 16(1), 13-23.

<https://doi.org/10.1111/mbe.12305>

Feuerstein, R., Falik, L.H. & Feuerstein, R.S. (2015). Changing minds and brains: The legacy of Reuven Feuerstein, higher thinking and cognition through mediated learning. Teachers college Press. ISBN: 9780807756201

Fischer, K. W. (2009). Mind, brain, and education: building a scientific groundwork for learning and teaching1. *Mind, Brain, and Education*, 3(1), 3-16.
<https://doi.org/10.1111/j.1751-228X.2008.01048.x>

Fischer, K. W., Bernstein, J. H., & Immordino-Yang, M. H. (Eds.). (2007). Mind, brain, and education in reading disorders (Vol. 11). Cambridge University Press. ISBN-13: 978-1107603226

Fisher, D., Frey, N., & Hattie, J. (2016). Visible learning for literacy, grades K-12: Implementing the practices that work best to accelerate student learning. Corwin Press. ISBN: 9781506332352

Frey, N., Fisher, D., & Smith, D. (2022). The social emotional learning playbook: A guide to student and teacher well-being. Corwin Press. ISBN: 9781071886762

Gardner, H. E. (2000). *Intelligence reframed: Multiple intelligences for the 21st century*. Hachette UK. ISBN-13: 978-0465026111

Hammond, Z. (2014). *Culturally responsive teaching and the brain: Promoting authentic engagement and rigor among culturally and linguistically diverse students*. Corwin Press. ISBN-13: 978-1483308012

Hardiman, M. M. (2012). *The brain-targeted teaching model for 21st-century schools*. Corwin Press. ISBN 978-1-4129-9198-8

Hattie, J. (2023). *Visible learning: The sequel: A synthesis of over 2,100 meta-analyses relating to achievement*. Taylor & Francis. ISBN 9781032462035

Hattie, J., Fisher, D., Frey, N., Gojak, L. M., Moore, S. D., & Mellman, W. (2016). *Visible learning for mathematics, grades K-12: What works best to optimize student learning*. Corwin Press. ISBN: 9781506362946

Hirsh-Pasek, K., Golinkoff, R. M., Nesbitt, K., Lautenbach, C., Blinkoff, E., & Fifer, G. (2022). *Making schools work: Bringing the science of learning to joyful classroom practice*. Teachers College Press. ISBN: 978-0-8077-6739-9

Howard-Jones, P. (2009). *Introducing neuroeducational research: Neuroscience, education and the brain from contexts to practice*. Routledge. ISBN 9780415472012

Howard-Jones, P. A. (2014). Evolutionary perspectives on mind, brain, and education. *Mind, Brain, and Education*, 8(1), 21-33. <https://doi.org/10.1111/mbe.12041>

Immordino-Yang, M. H. (2015). *Emotions, learning, and the brain: Exploring the educational implications of affective neuroscience*. WW Norton & Company. ISBN: 978-0-393-70981-0

Immordino-Yang, M. H., & Gotlieb, R. J. (2020). Understanding emotional thought can transform educators' understanding of how students learn. In *Educational Neuroscience: Development Across the Life Span*. ISBN: 978-0-393-70981-0

Kelleher, I., & Whitman, G. (2018). A bridge no longer too far: A case study of one school's exploration of the promise and possibilities of mind, brain, and education science for the future of education. *Mind, Brain, and Education*, 12(4), 224-230. <https://doi.org/10.1111/mbe.12163>

Kim, M., & Sankey, D. (2022). *The science of learning and development in education*. Cambridge University Press. ISBN-13: 978-1108999786

Knox, R. (2016). *Mind, brain, and education: A transdisciplinary field*. *Mind, Brain, and Education*, 10(1), 4-9. <https://doi.org/10.1111/mbe.12102>

Lang, J. M. (2021). *Small teaching: Everyday lessons from the science of learning*. John Wiley & Sons. ISBN-13: 978-1118944493

Larrison, A. L. (2013). Mind, brain and education as a framework for curricular reform. University of California, San Diego. Dissertation: 3556891

Lieberman, M. D., & Eisenberger, N. I. (2009). Pains and pleasures of social life. *Science*, 323(5916), 890-891. doi.org/10.1126/science.117000

Lieberman, M. D., Eisenberger, N. I., Crockett, M. J., Tom, S. M., Pfeifer, J. H., & Way, B. M. (2007). Putting feelings into words. *Psychological Science*, 18(5), 421-428. <https://doi.org/10.1111/j.1467-9280.2007.0191>

Martin, K. L. (2018). Learner centered innovation: Spark curiosity, ignite passion and unleash genius. IMPress. ISBN-13: 978-1948334006

Martin, K. L. (2021). Evolving education: Shifting to a learner-centered paradigm. IMPress, a division of Dave Burgess Consulting, Incorporated. ISBN-13: 978-1948334341

Massonnié, J., Frassetto, P., Mareschal, D., & Kirkham, N. Z. (2020). Scientific collaboration with educators: Practical insights from an in-class noise-reduction intervention. *Mind, Brain, and Education*, 14(3), 303-316. <https://doi.org/10.1111/mbe.12240>

McTighe, J., & Silver, H. F. (2020). Teaching for deeper learning: Tools to engage students in meaning making. ASCD. ISBN: 978-1-4166-2862-0

Nasir, N. S., Lee, C. D., Pea, R., & McKinney de Royston, M. (2021). Rethinking learning: What the interdisciplinary science tells us. *Educational Researcher*, 50(8), 557-565. <https://doi.org/10.3102/0013189X211047251>

National Academies of Sciences, Engineering, and Medicine. (2018). How people learn II: Learners, contexts, and cultures. National Academies Press. ISBN: 978-0-309-45964-8

National Research Council. (2000). How people learn: Brain, mind, experience, and school: Expanded edition (Vol. 1). National Academies Press. ISBN: 978-0-309-07036-2

Nesbitt, K. T., Blinkoff, E., Golinkoff, R. M., & Hirsh-Pasek, K. (2023). Making schools work: An equation for active playful learning. *Theory Into Practice*, 62(2), 141-154. <https://doi.org/10.1080/00405841.2023.2202136>

Nouri, A., Tokuhama-Espinosa, T. & Borja, C. Crossing boundaries in Mind, Brain, and Education. Cambridge Scholars Publishing. ISBN 13: 978-1-5275-9075-5

Oakley, B., & Sejnowski, T. J. (2021). Uncommon sense teaching: Practical insights in brain science to help students learn. Penguin. ISBN-13: 978-0593329733

Perkins, D. (2010). Making learning whole: How seven principles of teaching can transform education. John Wiley & Sons. ISBN: 978-0-471-15360-3

Pollock, J. E., & Tolone, L. J. (2020). Improving student learning one teacher at a time. ASCD. ISBN: 978-1-4166-2969-6

Posner, M. I., & Rothbart, M. K. (2007). Educating the human brain. American Psychological Association. <https://doi.org/10.1037/11519-000>

Privitera, A. J., Ng, S. H. S., & Chen, S. H. A. (2023). Defining the Science of Learning: A Scoping

Review. Trends in Neuroscience and Education, 100206.

<https://doi.org/10.1016/j.tine.2023.100206>

Ritchhart, R., Church, M., & Morrison, K. (2011). Making thinking visible: How to promote engagement, understanding, and independence for all learners. John Wiley & Sons. ISBN-13: 978-0470915516

Romeo, R. R., Leonard, J. A., Robinson, S. T., West, M. R., Mackey, A. P., Rowe, M. L., & Gabrieli, J. D. (2018). Beyond the 30-million-word gap: Children's conversational exposure is associated with language related brain function. Psychological Science, 29(5), 700-710.

<https://doi.org/10.1177/09567976177427>

Rose, T. (2016). The end of average: How to succeed in a world that values sameness. Penguin UK. ISBN-13: 978-0062358363

Sah, P., Fanselow, M., Hattie, J., Maggamen, S., Mattingley, J., Quirk, G., & Williams, S. (2016). Integrating neuroscience and learning: now's the time. NPJ Science of Learning, 1(1), 1-2.

<https://doi.org/10.1038/npjscilearn.2016.7>

Saleh, I.M. & Khine, M.S. (2023). New science of learning: Exploration in Mind, Brain, and Education. Brill. ISBN 13: 978-9004540750

Santoianni, F., & Ciasullo, A. (2023). Milestones of bioeducational approach in Mind, Brain, and Education research. In Integrated education and learning (pp. 297-318). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-031-15963-3_17

Sarma, S. (2020). Grasp: The scientific transformation of how we learn. MIT Press. ISBN-13: 978-0385541824

Schwartz, D. L., Tsang, J. M., & Blair, K. P. (2016). The ABCs of how we learn: 26 scientifically proven approaches, how they work, and when to use them. WW Norton & Company. ISBN: 978-0-393-70926-1

Schwartz, M. S., & Paré-Blairev, E. J. (Eds.). (2017). Research in mind, brain, and education. Routledge. ISBN 9781138946729

Solari, E. J., Terry, N. P., Gaab, N., Hogan, T. P., Nelson, N. J., Pentimonti, J. M., ... & Sayko, S. (2020). Translational science: A road map for the science of reading. Reading Research Quarterly, 55, S347-S360. <https://doi.org/10.1002/rrq.357>

Taylor, S. E., Eisenberger, N. I., Saxbe, D., Lehman, B. J., & Lieberman, M. D. (2006). Neural responses to emotional stimuli are associated with childhood family stress. Biological Psychiatry, 60(3), 296-301. <https://doi.org/10.1016/j.biopsych.2005.09.027>

Thomas, M. S., Ansari, D., & Knowland, V. C. (2019). Annual research review: Educational neuroscience: Progress and prospects. *Journal of Child Psychology and Psychiatry*, 60(4), 477-492. <https://doi.org/10.1111/jcpp.12973>

Tokuhama-Espinosa, T. (2014). Making classrooms better: 50 practical applications of mind, brain, and education science. WW Norton & Company. ISBN: 978-0-393-70813-4

Tokuhama-Espinosa, T. (2018). Neuromyths: Debunking false ideas about the brain. W.W. Norton. ISBN: 978-0-393-71323-7

Tokuhama-Espinosa, T. (2019). The five pillars of the mind: Redesigning education to suit the brain. W.W. Norton. ISBN: 978-0-393-71321-3

Tokuhama-Espinosa, T., Borja, C. & Tirira, M. (2019). The role of technology in advancing and understanding the learning brain. UNESCO. <https://tinyurl.com/5yb2wwdy>

Tokuhama-Espinosa, T. (2019, December). The learning sciences framework in educational leadership. In *Frontiers in Education* (Vol. 4, p. 136). <https://doi.org/10.3389/feduc.2019.00136>

Tokuhama-Espinosa, T. (2021). Bringing the neuroscience of learning to online teaching: An educator's handbook. Columbia University Teachers College Press. ISBN: 9780807765524

Tokuhama-Espinosa, T. N., & Borja, C. Radical Neuroconstructivism: A framework to combine the how and what of teaching and learning? *Frontiers in Education* 8, 1215510. <https://doi.org/10.3389/feduc.2023.1215510>

Tokuhama-Espinosa, T., Simmers, K., Batchelor, D., Nelson, A. D., & Borja, C. (2023). A theory of mental frameworks. *Frontiers in Psychology*, 14, 1220664. <https://doi.org/10.3389/fpsyg.2023.1220664>

Tokuhama-Espinosa, T., & Nouri, A. (2023). Teachers' Mind, Brain, and Education literacy: A survey of scientists' views. *Mind, Brain, and Education*, 17(3), 170-174. <https://doi.org/10.1111/mbe.12377>

Tokuhama-Espinosa, T. (2024). What do kids want to know about their own brains: Why the answers help students learn and teachers teach better. Columbia University Teachers College Press. ISBN: 9780807769645

van Atteveldt, N., Tijssma, G., Janssen, T., & Kupper, F. (2019). Responsible research and innovation as a novel approach to guide educational impact of mind, brain, and education research. *Mind, Brain, and Education*, 13(4), 279-287. <https://doi.org/10.1111/mbe.12213>

Van Geert, P., & Steenbeek, H. (2008). Understanding mind, brain, and education as a complex, dynamic developing system: Measurement, modeling, and research. In A. Battro, K.W. Fischer & P.J. Léna's *The educated brain: Essays in neuroeducation*, (pp.71-94). Cambridge Unievrsty Press. <https://doi.org/10.1017/CBO9780511489907>

Weisberg, D. S., Hirsh-Pasek, K., Golinkoff, R. M., Kittredge, A. K., & Klahr, D. (2016). Guided play: Principles and practices. *Current Directions in Psychological Science*, 25(3), 177-182.
<https://doi.org/10.1177/0963721416645512>

Whitman, G., & Kelleher, I. (2016). Neuroteach: Brain science and the future of education. Rowman & Littlefield Publishers. ISBN: 9781475825350

Willingham, D. T. (2023). Outsmart your brain: why learning is hard and how you can make it easy. Simon and Schuster. ISBN 13: 9781982167172

Wilson, D., & Conyers, M. (2020). Five big ideas for effective teaching: Connecting mind, brain, and education research to classroom practice. Columbia University's Teachers College Press. ISBN-13: 978-0807754252

van Aalst, J., Mu, J., Damşa, C., & Msonde, S. E. (2022). Learning sciences research for teaching. Routledge. ISBN 9781138902909

Watson, E., & Busch, B. (2021). The science of learning: 99 studies that every teacher needs to know. Taylor & Francis. ISBN 9780367620790

Zareyan, S., Zhang, H., Wang, J., Song, W., Hampson, E., Abbott, D., & Diamond, A. (2021). First demonstration of double dissociation between COMT-Met158 and COMT-Val158 cognitive performance when stressed and when calmer. *Cerebral Cortex*, 31(3), 1411-1426.
<https://doi.org/10.1093/cercor/bhaa276>

Zosh, J. M., Gaudreau, C., Golinkoff, R. M., & Hirsh-Pasek, K. (2022). The power of playful learning in the early childhood setting. In S. Friedman, S. Bredekamp, M. Masterson, B. Willer, & B. L. Wright (Eds.), Developmentally appropriate practice in early childhood programs serving children from birth through age 8 (4th ed., pp. 81-107). NAEYC. <https://tinyurl.com/4etunfhu>