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Teacher Observations on the Implementation of the Tools of the Mind Curriculum in the Classroom: Analysis of Interviews Conducted over a One-Year Period

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Author(s)

Susan Imholz, Anthony Petrosino

ABSTRACT

The following pilot study reports on teacher observations and reflections of implementing the Tools of the Mind curriculum in pre-k and kindergarten classrooms in an east coast urban school district in the US. The study followed five teachers over the course of a school year. Structured interviews were conducted with each teacher individually shortly after Tools of the Mind teacher training sessions took place. The analysis reports on themes that emerged in these conversations. Findings address: challenges the teachers faced in implementing the program, training issues, and the effectiveness of the program in supporting children's intellectual and social skills.

KEYWORDS

Curriculum; Preschool Education; Early Childhood Education; Learning; Social Development; Self-Regulation

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References

- [1] Barnett, S., Kwanghee, J., Yaroz, D., Thomas, J, Hornbeck, A., Stechuk, R., & Burns, S.(2008). Educational effects of the Tools of the Mind curriculum. A randomized trial. *Early Childhood Research Quarterly*, 23, 299-313. doi:10.1016/j.ecresq.2008.03.001
- [2] Barron, B., Schwartz, D. L., Vye, N. J., Moore, A., Petrosino, T., Zech, L., & Bransford, J. D. (1998). Doing with understanding: Lessons from research on problem and project based-learning. *The Journal of the Learning Sciences*, 7, 271-311.
- [3] Bloom, B. S., & Krathwohl, D. R. (1956). Taxonomy of educational objectives; the classification of educational goals by a committee of college and university examiners. *Handbook I: Cognitive Domain*. New York, NY; Longmans, Green.
- [4] Bodrova, E., & Leong, D. (2001). Tools of the Mind: A case study of implementing the Vygotskian approach in American early childhood and primary classrooms. International Bureau of Education, Switzerland.
- [5] Bodrova, E., & Leong, D. J. (2003). How play rich environments foster literacy high level play. *Early Childhood Today*, 22-25.
- [6] Bodrova, E., & Leong, D. J. (2005a). Uniquely pre-school: What research tells us about the ways young children learn. *Educational Leadership*, 63, 44-47.
- [7] Bodrova, E., & Leong, D. J. (2005b). Self-regulation: A foundation for early learning. *Principal*, 85, 30-36.
- [8] Bodrova, E., & Leong, D. J. (2006). The development of self-regulation in young children: Implications

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for teacher training. In M. Zaslow, & I. Martinez-Beck (Eds.), *Future Directions in Teacher Training* (pp. 203-224). New York: Brooks-Cole.

- [9] Bodrova, E., & Leong, D. J. (2007). *Tools of the Mind: The Vygotskian approach to early childhood education* (2nd Ed.). Columbus, OH: Merrill/Prentice Hall.
- [10] Broadbent, D. (1958). *Perception and communication*. Amsterdam, NL: ElsevierScience. doi:10.1037/10037-000
- [11] Brown, A. L., & Campione, J. C. (1994). Guided discovery in a community of learners. In K. McGilly (Ed.), *Classroom lessons: Integrating cognitive theory and classroom practice*. Cambridge, MA: MIT Press/Bradford Books.
- [12] Brown, A. L., & Campione, J. C. (1996). Psychological theory and the design of innovative learning environments: On procedures, principles, and systems. In L. Schauble, & R. Glaser (Eds.), *Innovations in learning: New environments for education* (pp. 289-325). Mahwah, NJ: Erlbaum.
- [13] Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18, 32-42.
- [14] Brown, J. S. (2006). *New learning environments for the 21st century: Exploring the edge*. URL (last checked 5 January 2012). johnseelybrown.com/Change%20article.pdf
- [15] Bruner, J. (1960). *The process of education*. Cambridge, MA: Harvard University Press.
- [16] Bruner, J. (1966). *Toward a theory of instruction*. Cambridge, MA: Harvard University Press.
- [17] Bruner, J. (1996). *The culture of education*. Cambridge, MA: Harvard University.
- [18] Cooper, H., Robinson, J., & Patall, E. (2006). Does homework improve academic achievement: A synthesis of research. *Review of Educational Research*, 76, 1-62. doi:10.3102/00346543076001001
- [19] Darling-Hammond, L. (2000). Teacher quality and student achievement. *Education Policy Analysis Archives*, 8, 1-44.
- [20] Diamond, A., & Lee, K. (2011). Interventions shown to aid executive function development in children 4 to 12 years old. *Science*, 333, 959-964. doi:10.1126/science.1204529
- [21] Doidge, N. (2007). *The brain that changes itself: Stories of personal triumph from the frontiers of brain science*. Toronto, CA: Penguin.
- [22] Goe, L., & Stickler, L. (2008). Teacher quality and student achievement: Making the most of recent research. *TQ Research & Policy Brief*. URL (last checked 28 December 2011). www.tqsource.org/publications/March2008rief.pdf
- [23] González, N., Andrade, R., Civil, M., & Moll, L. (2001). Bridging funds of distributed knowledge: Creating zones of practice in mathematics. *Journal of Education of Students Placed at Risk*, 6, 115-132. doi:10.1207/S15327671ESPR0601-2_7
- [24] Hanusek, E., Kain, J., O' Brien, D., & Rivkin, S. (2005). *The market for teacher quality*. Working Paper n. 11154. Cambridge, MA: National Bureau of Economic Research. URL (last checked 28 December 2011). www.nber.org/papers/w11154.pdf
- [25] Hmelo-Silver, C. E., Duncan, R. G., & Chinn, C. A. (2007). Scaffolding and achievement in problem-based and inquiry learning: A response to Kirschner, Sweller, and Clark, 2006. *Educational Psychologist*, 42, 99-107. doi:10.1080/00461520701263368
- [26] Kalantzis, M., & Cope, B. (2008). *New learning: Elements of a science of education*. Cambridge, MA: Harvard University Press.
- [27] Knowles, M. (1980). *The modern practice of adult education: From pedagogy to andragogy*. Chicago, IL: Follet.
- [28] Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.
- [29] Lowenfeld, V., & Brittain, W. L. (1975). *Creative and mental growth* (6th edition). New York, NY: MacMillan.
- [30] Marcon, R. (2002). Moving up the grades: Relationship between preschool model and later school success. *Early Childhood Research and Practice*, 4. URL (20 January 2010).

- [31] McEwen, B., Aki, H., Barchas, J., & Kreek, M. (Eds.) (2011). *Social neuroscience: Gene, environment, brain, body*. *Annals of the New York Academy of Science*, 1231, August 2011.
- [32] Newell, A., & Simon, H. (1972). *Human problem solving*. Englewood Cliffs, NJ: Prentice Hall.
- [33] Papert, S. (1980). *Mind storms*. New York: Basic Books.
- [34] Papert, S., & Harel, I. (1991). *Constructionism*. Norwood, NJ: Ablex Publishing.
- [35] Pascual-Leone, A., Amedi, A., Fregni, F., & Merabet, L. B. (2005) The plastic human brain cortex. *Annual Review of Neuroscience*, 28, 377-401. doi:10.1146/annurev.neuro.27.070203.144216
- [36] Pea, R. (2004). The social and technological dimensions of scaffolding and related theoretical concepts for learning, education, and human activity. *Journal of the Learning Sciences*, 13, 423-451. doi:10.1207/s15327809jls1303_6
- [37] Piaget, J. (1975). *Equilibrium of cognitive structures*. Chicago, IL: University of Chicago Press.
- [38] Piaget, J. and Kegan, P. (1957). *Construction of reality in the child*. London: Routledge.
- [39] Scardamalia, M., & Bereiter, C. (1991) Higher levels of agency for children in knowledge building: A challenge for the design of new knowledge media. *Journal of the Learning Sciences*, 1, 37-68. doi:10.1207/s15327809jls0101_3
- [40] Schauble, L. & R. Glaser (Eds.) (1996). *Innovations in learning: New environments for education*. Mahwah, NJ: Erlbaum.
- [41] Sherin, B., Reiser, B., & Edelson, D. (2004). Scaffolding analysis: Extending the scaffolding metaphor to learning artifacts. *Journal of the Learning Sciences*, 13, 387-421. doi:10.1207/s15327809jls1303_5
- [42] Scott-Jones, D. (1995). Parent-child interactions and school achievement. In B. A. Ryan, G. R. Adams, T. P. Gullota, R. P. Weissberg, & R. L. Hampton (Eds.), *The family-school connection: Theory, research, and practice* (pp. 75-107). Thousand Oaks, CA: Sage.
- [43] Van Voorhis, F. (2003). Interactive homework in middle school: Effects on family involvement and science achievement. *Journal of Educational Research*, 96, 323-338. doi:10.1080/00220670309596616
- [44] Verenikina, I. (2010). Vygotsky in twenty-first-century research. *World Conference on Educational Multimedia, Hypermedia and Telecommunications 2010*. URL (last checked 21 September 2010). <http://research.kinasevych.ca/2010/07/verenikina-2010-vygotsky-in-twenty-first-century-research/>
- [45] Vygotsky, L., & Kozulin, A. (Ed.) (1986). *Thought and language*. Cambridge, MA: MIT Press.
- [46] Wertsch, J. (1985). *Vygotsky and the social formation of mind*. Cambridge, MA: Harvard University Press.
- [47] Wishy, B. (1972). *The child and the republic*. Philadelphia, PA: University of Pennsylvania.