

Karen C. Fuson

Research Shorter Publications for Teachers

- Fuson, K. C. (1991). Children's early counting: Saying the number-word sequence, counting objects, and understanding cardinality. In K. Durkin & B. Shire (Eds.), *Language and mathematical education* (pp. 27-39). Milton Keynes, GB: Open University Press.
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- Fuson, K. C. (1992). Relationships between counting and cardinality from age 2 to age 8. In J. Bideaud, J. P. Fischer, & C. Meljac (Eds.), *Pathways to number* (pp. 127-149). Hillsdale, NJ: Lawrence Erlbaum Associates. [This is a book of invited chapters celebrating the fiftieth anniversary of the publication of Piaget's book on number. Published in French in *Les chemins du nombre* (pp. 159-179). Villeneuve d'Ascq, France: Presses Universitaires de Lille.]
- Fuson, K. C. & Kwon, Y. (1992). Learning addition and subtraction: Effects of number words and other cultural tools. In J. Bideaud & C. Meljac (Eds.), *Pathways to number* (283-306). Hillsdale, NJ: Lawrence Erlbaum Associates. [This is a book of invited chapters celebrating the fiftieth anniversary of the publication of Piaget's book on number. Published in French in *Les chemins du nombre* (pp. 351-374). Villeneuve d'Ascq, France: Presses Universitaires de Lille.]
- Fuson, K. C., & Burghardt, B. H. (1993). Group case studies of second graders inventing multidigit addition procedures for base-ten blocks and written marks. In J. R. Becker & B. J. Pence (Eds., 1993), *Proceedings of the Fifteenth Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 240-246). The Center for Mathematics and Computer Science Education, San Jose State University, San Jose, CA.
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- Hiebert, J., Carpenter, T. P., Fennema, E., Fuson, K., Human, P., Murray, H., Olivier, A., & Wearne, D. (1996). Problem solving as a basis for reform in curriculum and instructions: The case of mathematics. *Educational Researcher*, Vol. 25, No. 4., pp. 12-21.
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- Fuson, K. C., Lo Cicero, A., Hudson, K., & Smith, S. T. (1997). Snapshots across two years in the life of an urban Latino classroom. In Hiebert, J., Carpenter, T., Fennema, E., Fuson, K. C., Wearne, D., Murray, H., Olivier, A., Human, P., *Making sense: Teaching and learning mathematics with understanding* (pp. 129-159). Portsmouth, NH: Heinemann.
- Fuson, K. C., Sherin, B., & Smith, S. T. (1998). A Vygotskian action-research model for developing and assessing conceptual models and instructional materials inter-actively. In S. Berenson, K. Dawkins, M. Blanton, W. Coulombe, J. Kolb, K. Norwood, & L. Stiff (Eds.), *Proceedings of the Twentieth Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Vol. 2* (pp. 541-548). Raleigh, NC: North Carolina State University.
- Ron, M. P. (1998). My parent taught me this way: The European/Latino multidigit subtraction algorithm and confusions with a U.S. algorithm. In L. J. Morrow & M. J. Kenney (Eds.), *The teaching and learning of*

algorithms in school mathematics (pp. 115-119). Reston, VA: The National Council of Teachers of Mathematics.

- De La Cruz, Y. (1999). Reversing the trend: Latino families in real partnerships with schools. *Teaching Children Mathematics*, 5 (5), pp. 296-300.
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- Ron, Pilar (1999). Spanish-English language issues in the mathematics classroom. In L. Ortiz-Franco, N. G. Hernandez, & Y. De La Cruz (Eds.) *Changing the Faces of Mathematics: Perspectives on Latinos* (pp. 23-33). Reston, Va.: National Council of Teachers of Mathematics.
- Fuson, K. C. & Lo Cicero, A. M. (2000). El Mercado in Latino primary math classrooms. In M. L. Fernandez (Ed.), *Proceedings of the Twenty-Second Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Vol. 2* (p. 453). Columbus, OH: ERIC Clearinghouse for Science, Mathematics, and Environmental Education.
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- Izsák, A. & Fuson, K. C. (2000). Students' understanding and use of multiple representations while learning two-digit multiplication. In M. L. Fernandez (Ed.), *Proceedings of the Twenty-Second Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Vol. 2* (pp. 714-721). Columbus, OH: ERIC Clearinghouse for Science, Mathematics, and Environmental Education.
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- Murata, A. & Fuson, K. (2001). Learning paths to 5- and 10-structured understanding of quantity: Addition and subtraction solution strategies of Japanese children. In R. Speiser, C. S. Maher, & C. Walter (Eds.), *Proceedings of the Twenty-Third Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Vol. 2* (pp. 639-646). Columbus, OH: ERIC Clearinghouse for Science, Mathematics, and Environmental Education.

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- Hufferd-Ackles, K., Fuson, K. C., & Sherin, M. G. (2015). Describing levels and components of a Math-Talk Learning Community. In E. A. Silver & P. A. Kenney (Eds.), *More lessons learned from research: Volume 1: Useful and usable research related to core mathematical practices* (pp. 125-134). Reston, VA: NCTM.
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- Clements, D. H., Fuson, K. C., & Sarama, J. (2017). What is developmentally appropriate teaching? *Teaching Children Mathematics, 24, No.3 (Nov/Dec)*, 178-188.
- Fuson, K. C. (2019). Relating math words, visual images, and math symbols for understanding and competence. *International Journal of Disability, Development and Education, 66* (Special Issue 2 on Mathematics education research in the field of Down syndrome: Latest developments and emerging trends.), 119-132. <https://doi.org/10.1080/1034912X.2018.1535109> Published online October 27, 2018.

Longer Research Publications

- Fuson, K. C., Richards, J., & Briars, D. J. (1982). The acquisition and elaboration of the number word sequence. In C. Brainerd (Ed.), *Progress in cognitive development: children's logical and mathematical cognition*, Vol. 1 (pp. 33-92). New York: Springer-Verlag.
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- Fuson, K. C. (1986). Teaching children to subtract by counting up. *Journal for Research in Mathematics Education, 17*, 172-189. This paper was chosen as the best research article of 1986 by the Research Advisory Council of the National Council of Teachers of Mathematics.
- Stigler, J., Fuson, K. C., Ham, M., & Kim, M. S. (1986). An analysis of addition and subtraction word problems in Soviet and American elementary textbooks. *Cognition and Instruction, 3*, 153-171.
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- Fuson, K. C. (1990). Conceptual structures for multiunit numbers: Implications for learning and teaching multidigit addition, subtraction, and place value. *Cognition and Instruction, 7*, 343-403.
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