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School of Education and Social Policy

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**EMPLOYMENT**

9/15 – present	<b>Associate Dean for Teacher Education</b>
9/11 – present	<b>Professor</b>
9/04 – present	<b>Associate Professor</b>
6/05 – 6/16	<b>Director of Undergraduate Education</b>
9/03– 9/04	<b>Director of Undergraduate Teacher Education</b>
9/97 – 9/04	<b>Assistant Professor</b>

Northwestern University, School of Education and Social Policy

**EDUCATION**

1996	<b>University of California, Berkeley</b> Ph.D. in Science and Mathematics Education Thesis: <i>The nature and dynamics of teachers' content knowledge</i>
1987	<b>University of California, San Diego</b> Master of Arts in Mathematics California Clear, Multiple Subjects Credential Single Subject Credential in Mathematics
1985	<b>University of Chicago</b> Bachelor of Arts in Mathematics with Honors

**TEACHING**

9/89 – 6/92	Berkeley Unified School District, Berkeley, CA
9/88 – 6/89	Lincoln Middle School, Vista, CA
9/87 – 6/88	Lincoln Junior High School, Oceanside, CA

**HONORS AND AWARDS**

National Council of Teachers of Mathematics, Linking Research and Practice Outstanding Publication Award	2016
Academic Leadership Program Fellow, Committee on Institutional Cooperation	2014-15
Northwestern University, School of Education and Social Policy, Professor of the Year	2014
AERA Division K Excellence in Research in Teaching and Teacher Education Award	2013
Public Voices Fellow, Northwestern University	2012-13
Kappa Delta Pi/AERA Division K Early Career Award	2003
National Science Foundation Career Grant	2002-07
Society for Information Technology and Teacher Education Outstanding Paper Award	2002
National Academy of Education /Spencer Postdoctoral Fellowship	2001-02
McDonnell Postdoctoral Fellowship	1995-97
Spencer Dissertation Fellowship	1994-95

**PAPERS PUBLISHED AND IN PRESS**

**Journal Articles**

Sherin, M. G. & Dyer, E. B. (2017). Mathematics teacher self-captured video and opportunities for learning. *Journal of Mathematics Teacher Education*, 20, 477-495.

van Es, E. A., & Sherin, M. G. (2017). Bringing facilitation into view. *International Journal of STEM Education*, 4(1), 32-37.

Karsenty, R. & Sherin, M. G. (2017). Video as a catalyst for mathematics teachers' professional growth. *Journal of Mathematics Teacher Education*, 20, 409-413.

- Luna, M. J. & Sherin, M. G. (2017). Using a video club design to promote teacher attention to students' ideas in science, *Teaching and Teacher Education*, 66, 282-294.
- Dyer, E. B. & Sherin, M. G. (2016). Instructional reasoning about interpretations of student thinking that supports responsive teaching in secondary mathematics, *ZDM*, 48(1-2), 69-82.
- van Es, E. A., Stockero, S., Sherin, M. G., van Zoest, L., Dyer, E., B. (2015). Making the most of teacher self-captured video. *Mathematics Teacher Educator*, 4(1), 6-19.
- Blomberg, G., Sherin, M. G., Renkl, A., Glogger, I., & Seidel, T. (2014). Understanding Video as a Tool for Teacher Education: Investigating Instructional Strategies Integrating Video to Promote Reflection, *Instructional Science*, 42(3), 443-463.
- Blomberg, G., Renkl, A., Sherin, M. G., Borko, H., & Seidel, T. (2013). Five Research-Based Heuristics for Using Video in Pre-service Teacher Education. *Journal of Educational Research* 5(1), 90-114.
- Brantlinger, A., Sherin, M. G., & Linsenmeier, K. (2011). Discussing discussion: A video club in the service of math teachers' National Board preparation. *Teachers and Teaching*, 17(1), 5 – 33.
- Sherin, M. G., Linsenmeier, K. L., (2010). Principals' views of mathematics teacher learning. *Journal of Mathematics Education Leadership*. 20-32
- van Es, E. A. & Sherin, M. G. (2010). The influence of video clubs on teachers' thinking and practice. *Journal of Mathematics Teacher Education*, 13, 155-176.
- Derry, S. J., Pea, R. D., Barron, B., Engle, R. A., Erickson, F., Goldman, R., Hall, R., Koschmann, T., Lemke, J., Sherin, M. G., Sherin, B. L. (2010). Conducting video research in the learning sciences: Guidance on selection, analysis, technology, and ethics. *Journal of the Learning Sciences*, 19, 3-53
- Sherin, M. G., & van Es., E. A. (2009). Effects of video club participation on teachers' professional vision. *Journal of Teacher Education* 60(1), 20-37.
- Sherin, M. G., Linsenmeier, K., & van Es., E. A. (2009). Selecting video clips to promote mathematics teachers' discussion of student thinking. *Journal of Teacher Education*, 60(3), 213-230.
- Sherin, M. G., & Drake, C. (2009). Curriculum strategy framework: Investigating patterns in teachers' use of a reform-based elementary mathematics curriculum. *Journal of Curriculum Studies* 41(4), 467-500.
- Colestock, A. & Sherin, M. G. (2009). Teachers' sense-making strategies while watching video of mathematics instruction. *Journal of Technology and Teacher Education* 17(1), 7-29.
- Sherin, M. G., Russ, R., Sherin, B. L., & Colestock, A. (2008). Professional vision in action: An exploratory study. *Issues in Teacher Education*.1 (2), 27-46.
- Sherin, M. G. & Sherin, B. L. (2008). Moving from shared data to shared frameworks. *Journal for Research in Mathematics Education Monograph*, 14, 185- 194.
- Gomez, L., Sherin, M. G., Griesdorn, J., & Finn, L. (2008). Creating social relationships: The role of technology in preservice teacher preparation. *Journal of Teacher Education*, 59(2), 117-131.
- van Es, E. A. & Sherin, M. G. (2008). Mathematics teachers "learning to notice" in the context of a video club. *Teaching and Teacher Education*, 24, 244-276.
- Linsenmeier, K., & Sherin, M. G. (2007). What?, Wow!, and Hmm...: Video clips that promote discussion of student math thinking. *Journal of Mathematics Education Leadership*, 10(1), 32-41.
- Mendez, E. M., Sherin, M. G., Louis, D. A., (2007). Multiple perspectives on the development of an eighth-grade mathematical discourse community. *Elementary School Journal* 108 (1), 41-61.
- Drake, C., & Sherin, M. G. (2006). Practicing change: Curriculum adaptation and teacher narrative in the context of mathematics education reform. *Curriculum Inquiry*, 36, 153-187.

- van Es, E. A. & Sherin, M. G. (2006). How different video club designs support teachers in “learning to notice.” *Journal of Computing in Teacher Education*, 22(4), 125-135.
- Sherin, M. G., & van Es, E. A. (2005). Using video to support teachers’ ability to notice classroom interactions. *Journal of Technology and Teacher Education*, 13(3), 475-491.
- Sherin, M. G., & Han, S. (2004). Teacher learning in the context of a video club. *Teaching and Teacher Education*, 20, 163-183.
- Sherin, M. G., Mendez, E. P., & Louis, D. A. (2004). A discipline apart: The challenges of ‘fostering a community of learners’ in a mathematics classroom. *Journal of Curriculum Studies*, 36(2), 207-232.
- Hufferd-Ackles, K., Fuson, K., & Sherin, M. G. (2004). Describing levels and components of a math-talk learning community. *Journal for Research in Mathematics Education*, 35 (2), 81-116.
- Shulman, L. S., & Sherin, M. G. (2004). Fostering communities of teachers as learners: Disciplinary perspectives. *Journal of Curriculum Studies*. 35(4), 135-140.
- Sherin, M. G. (2003). Using video clubs to support conversations among teachers and researchers. *Action in Teacher Education*, 4, 33-45.
- Iszák, A., & Sherin, M. G. (2003). Exploring the use of new representations as a resource for teacher learning. *School Science and Mathematics* 103(1), 18-27.
- Sherin, M. G. (2002). When teaching becomes learning. *Cognition and Instruction* 20(2), 119-150.
- Sherin, M. G. (2002). A balancing act: Developing a discourse community in a mathematics classroom. *Journal of Mathematics Teacher Education*, 5, 205-233.
- van Es, E. A., & Sherin, M. G. (2002). Learning to notice: Scaffolding new teachers’ interpretations of classroom interactions. *Journal of Technology and Teacher Education*, 10(4), 571-596.
- Sherin, M. G., Sherin, B. L., & Madanes, R. (2000). Exploring diverse accounts of teacher knowledge. *Journal of Mathematical Behavior*, 18(3), 357-375.
- Frederiksen, J. R., Sipusic, M., Sherin, M. G., & Wolfe, E. (1998). Video portfolio assessment: Creating a framework for viewing the functions of teaching. *Educational Assessment*, 5(4), 225-297.
- Schoenfeld, A., Gamoran, M., Kessel, C., Leonard, M., Orbach, R., & Arcavi, A. (1992). Toward a comprehensive model of human tutoring in complex subject matter domains. *Journal of Mathematical Behavior*, 11, 293-319.

### **Books**

Smith, M. & Sherin, M. G. (to appear 2019). *The five practices in practice: Successfully orchestrating mathematical discourse in your middle school classroom*, Corwin Press.

Sherin, M. G., Jacobs, V. R. & Philipp, R. A (Eds). (2011). *Mathematics teacher noticing: Seeing through teachers’ eyes*. New York: Routledge. *Awarded the AERA Division K 2013 Award for Excellence in Research in Teaching and Teacher Education*

### **Invited Book Chapters**

Sherin, M. G. (2017). Exploring the boundaries of teacher noticing. In E. O. Schack, M. H. Fisher, & J. A. Wilhelm (Eds.). *Teacher Noticing: Bridging and Broadening Perspectives, Contexts, and Frameworks* (pp. 401-408). Springer.

Russ, R., Sherin, B. L. & Sherin, M. G. (2016). What constitutes teacher learning? Teacher learning and the balance of expertise. In D. Gitomer & C. Bell (Eds.). *Handbook of Research on Teaching: Fifth Edition* (pp. 391-438). Washington DC: American Educational Research Association.

- Colestock, A. & Sherin, M. G. (2015). What teachers notice when they notice student thinking: Teacher-identified purposes for attending to student thinking. In A. Roberston, R. Scherr, & D. Hammer (Eds.) *Responsive Science Teaching* (pp. 126-144). New York: Routledge.
- Hufferd-Ackles, K., Fuson, K. & Sherin, M. G. (2015). The Math-Talk Learning Community: Looking back and looking ahead.. In E. A. Silver & P. A. Kenney, *Lessons Learned from Research: Volume 1, Useful and Useable Research Related to Core Mathematical Practices* (pp. 125-134). Reston, VA, National Council of Teachers of Mathematics.
- Sherin, M. G. & Russ, R. (2014). Teacher noticing via video: The role of interpretive frames. In B. Calandra & P. Rich (Eds.) *Digital video for teacher education: Research and practice* (3-20). New York: Routledge.
- Derry, S., Sherin, M. G., & Sherin, B. L., (2014). Multimedia learning with video. In R. Mayer (Ed.) *The Cambridge Handbook of Multimedia Learning: Second Edition* (pp. 785-812). Cambridge, Cambridge University Press.
- Sherin, M. G., Russ, R., & Sherin, B. L. (2013). Integrating noticing into the modeling equation. In Y. Li & J. Moschkovich (Eds.) *Proficiency and beliefs in learning and teaching mathematics* (pp. 111-124). Rotterdam, The Netherlands: Sense Publisher.
- Sherin, M. G. (2013). Foreword. In L. T. Goldsmith & N. M. Seago, *Examining mathematics practice through classroom artifacts* (pp.xiii – xv). Boston: Pearson.
- Philipp R., Jacobs, V. R., & Sherin, M. G (2012). Noticing of mathematics teachers. In: Lerman S. (Ed.) *Encyclopedia of Mathematics Education: SpringerReference* ([www.springerreference.com](http://www.springerreference.com)). Springer-Verlag Berlin Heidelberg, 0. DOI: 10.1007/SpringerReference\_313299 2012-08-02 21:49:54 UTC
- Sherin, M. G., Jacobs, V. R. & Philipp, R. A. (2011). Situating the study of teacher noticing. In M. G. Sherin, V. R. Jacobs, & R. A. Philipp (Eds.) *Mathematics teacher noticing: Seeing through teachers' eyes* (pp. 3 – 13). New York: Routledge.
- Sherin, M. G., Russ, R. S., Colestock, A. A. (2011). Accessing mathematics teachers' in-the-moment noticing. In M. G. Sherin, V. R. Jacobs, & R. A. Philipp (Eds.) *Mathematics teacher noticing: Seeing through teachers' eyes* (pp. 79 – 94). New York: Routledge.
- Russ, R., Sherin, B. L.. & Sherin, M. G. (2011). Images of expertise in mathematics teaching. In Y. Li & G. Kaiser (Eds.) *Expertise in mathematics instruction* (pp. 41- 58). New York: Springer.
- Drake, C. & Sherin, M. G. (2008). Developing curriculum vision and trust: Changes in teachers' curriculum strategies. In J. Remillard, G. Lloyd, & B. Herbel-Eisenmann (Eds.), *Mathematics Teachers at Work: Connecting curriculum materials and classroom instruction* (pp.321-337). New York: Routledge.
- Sherin, M. G. (2007). The development of teachers' professional vision in video clubs. In R. Goldman, R. Pea, B. Barron, & S. Derry (Eds.), *Video research in the learning sciences* (pp. 383-395). Hillsdale, NJ: Erlbaum.
- Sherin, M. G. & Sherin, B. L. (2007). Research on how people learn with and from video. In S. Derry, Ed. *Guidelines for video research in education: Recommendations from an expert panel* (pp. 47-58). White paper commissioned by the National Science Foundation. <http://drdc.uchicago.edu/what/video-research.html>
- Darling-Hammond, L., Banks, J., Zumwalt, K., Gomez, L., Sherin, M. G., Griesdorn J., & Finn, L. (2005). Educational Goals and Purposes: Developing a Curricular Vision for Teaching In L. Darling-Hammond & J. Bransford (Eds.), *Preparing Teachers for a Changing World* (pp. 169-200). Indianapolis, IN: Jossey-Bass.
- Sherin, M. G. (2004). Perspective on M. Lampert's "When the problem is not the question and the solution is not the answer: Mathematical knowing and teaching." In T. P. Carpenter, J. Dossey & J. Koehler (Eds.) *Classics in mathematics education research (Vol. 1)* (p. 152). Reston, VA: National Council of Teachers of Mathematics.

Sherin, M. G. (2004). New perspectives on the role of video in teacher education. In J. Brophy (Ed.) *Using video in teacher education* (pp.1-27). NY: Elsevier Science.

Sherin, M. G. (2001). Developing a professional vision of classroom events. In T. Wood, B. S. Nelson, & J. Warfield (Eds.) *Beyond classical pedagogy: Teaching elementary school mathematics* (pp. 75-93). Hillsdale, NJ: Erlbaum.

### **Research-Based Articles for Practitioners**

Sherin, M. G. & Dyer, E. B. (2017). Teacher self-captured video: Learning to see. *Kappan*, 98(7), 49-54.

Linsenmeier, K., Sherin, M. G., Walkoe, J. & Mulligan, M. (2014). Lenses for examining students' mathematical thinking. *Mathematics Teacher*, 108(2), 142-146.

Russ, R.S., & Sherin, M.G. (2013). Using interviews to uncover student ideas in science. *Science Scope* 36(5), 18-23.

Sherin, M. G. & Linsenmeier, K. (2011). Pause, rewind, reflect: Video clubs throw open the classroom doors. *Journal of Staff Development*, 32(5), 38-41.

Linsenmeier, K., & Sherin, M. G. (2009). What makes a video clip interesting? *Teaching Children Mathematics*, 15(7), 418-422.

Sherin, M. G. (2004). Video volunteers. *ENC Focus Review*, 11(3), 4-6.

Sherin, M. G. & van Es, E. A. (2003). A new lens on teaching: learning to notice. *Mathematics Teaching in the Middle School*, 9(2), 92-95.

Sherin, M. G., & van Es, E. A. (2002). Learning to notice as a focus for professional development. *Classroom Leadership* 5(9),1,6.

Sherin, M. G., Drake, C., & Fuson, K. (2002). Curricula as a context for professional development. *Classroom Leadership Online*, 5(6). Retrieved from <http://www.ascd.org/readingroom/classlead/0203/index.html>

Sherin, M. G. (2000). Facilitating meaningful discussions about mathematics. *Mathematics Teaching in the Middle School*, 6(2), 186-190.

Sherin, M. G. (2000). Viewing teaching on videotape. *Educational Leadership*, 57(8), 36-38.

Sherin, M. G., Louis, D. A., & Mendez, E. P. (2000). Students' building on each other's mathematical ideas. *Mathematics Teaching in the Middle School*, 6(3), 122-125.

Sherin, M. G., Mendez, E. P., & Louis, D. A. (2000). Talking about math talk. In M. Burke (Ed.), *Learning mathematics for a new century: 2000 Yearbook of the NCTM* (pp.188-196). Reston, VA.

### **CONFERENCE PROCEEDINGS**

Dobie, T.E., White, S., & Sherin, M. G. (2017) Towards a shared language of instruction: Exploring teachers' lexicon for mathematics teaching and learning. In E. Galindo & J. Newton, (Eds.), *Proceedings of the 39th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Indianapolis, IN.

Mesiti, C., Clarke, D., Dobie, T.E., White, S, & Sherin, M. G (2017). "What do you see that you can name?" Documenting the language teachers use to describe phenomena in middle school mathematics classrooms in Australia and the USA. In Kaur, B., Ho, W.K., Toh, T.L., & Choy, B.H. (Eds.), *Proceedings of the 41st Conference of the International Group for the Psychology of Mathematics Education* (Vol. 3, pp. 241-248). Singapore: PME.

Elby, A., Richards, J., Walkoe, J., Gupta, A, Russ, R. S., Luna, M. J., Robertson, A., Coffey, J. E., Edwards, A. R., Sherin, M. G., van Es, E. A. (2014). Differing notions of responsive reaching across Mathematics and science: Does the discipline matter? In Polman, J. L., Kyza, E. A., O'Neill, D. K., Tabak, I., Penuel, W. R., Jurow, A. S., O'Connor, K., Lee, T., and D'Amico, L. (Eds.). (2014). *Learning and becoming in practice: The International Conference of the Learning Sciences* (ICLS) 2014, Volume 1 (pp. 1406-1415). Boulder, CO: International Society of the Learning Sciences.

- Sherin, B.L., Sherin, M.G., Colestock, A.A., Russ, R.S., Luna, M.J., Mulligan, M., & Walkoe, J. (2010). Using digital video to investigate teachers' in-the-moment noticing. In K. Gomez, L. Lyons, & J. Radinsky (Eds.), *Learning in the Disciplines: Proceedings of the 9th International Conference of the Learning Sciences (ICLS 2010) - Volume 2, Short Papers, Symposia, and Selected Abstracts*. International Society of the Learning Sciences: Chicago IL.
- Sherin, M. G. (2009). Video excerpts to support collaborative teacher inquiry. In D. Slavit, T. Holmlund, & A. Kennedy (Eds.), *Proceedings of the Conference on Collaborative Teacher Inquiry* (pp.69-74). Vancouver, Washington: Washington State University Vancouver.
- Sherin, M. G. (2008). Issues in the use of video to support teacher learning in the United States. In J. Remillard and R. Maynard (Eds.), *Proceedings of the Conference on Building on Cross-National Comparisons to Improve the Preparation and Support of Teachers of Mathematics* (pp.69-74). Philadelphia, PA: University of Pennsylvania.
- Sherin, M. G. (2007). Using video to study mathematics teachers' professional vision. In K. Reiss, A. Schoenfeld, & G. Törner (Eds.), *Oberwolfach Report 52/2007 Professional development of mathematics teachers: Research and practice from an international perspective* (pp.22-24). Oberwolfach, Germany: Mathematisches Forschungsinstitut Oberwolfach.
- Torner, G., Sriraman, B., & Sherin, M. G. (2005). Video-based research on mathematics teaching and learning. In M. Wilson (Ed.), *Proceedings of the Twenty-Seventh Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Columbus, OH: ERIC Clearinghouse for Science, Mathematics, and Environmental Education.
- Matese, G., Sherin, M. G., & Edelson, D. (2002). Design principles for scaffolding inquiry-based science assessment. *Proceedings of the Fifth International Conference of the Learning Sciences* (pp. 276-283). Mahwah, NJ: Erlbaum
- van Es, E. A., & Sherin, M. G. (2002). Challenges to supporting teacher learning in a video club. *Proceedings of the Fifth International Conference of the Learning Sciences* (pp. 651-655). Mahwah, NJ: Erlbaum
- Wallace, A., & Sherin, M. G. (2002). Viewing a reform mathematics curriculum through the eyes of two veteran teachers. In D. Mewborn (Ed.), *Proceedings of the Twenty-Fourth Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 1915-1926). Columbus, OH: ERIC Clearinghouse for Science, Mathematics, and Environmental Education.
- Sherin, M. G., & van Es, E. A. (2002). Using video to support teachers' ability to interpret classroom interactions. *Proceedings of the Thirteenth Annual Meeting of the Society for Information Technology and Teacher Education* (pp. 2532-2536). Norfolk, VA: Association for the Advancement of Computing in Education.
- Sherin, M. G., & Iszák, A. (2001). Representations as a resource for teacher learning. In R. Speiser, C. Maher, & C. N. Walter (Eds.), *Proceedings of the Twenty-Third Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (961-962). Columbus, OH: ERIC Clearinghouse for Science, Mathematics, and Environmental Education.
- Sherin, M. G., & Drake, C. (2000). Models of curriculum use in the context of mathematics education reform. 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* (pp. 667-672). Columbus, OH: ERIC Clearinghouse for Science, Mathematics, and Environmental Education.
- Kalathil, R. R., & Sherin, M. G. (2000). Role of students' representations in the mathematics classroom. In B. Fishman & S. O'Connor-Divelbiss (Eds.), *Proceedings of the Fourth International Conference of the Learning Sciences* (pp. 27-28). Mahwah, NJ: Erlbaum.
- Sherin, M. G., & Hufferd-Ackles, K. (1999). Supporting teacher learning via curriculum materials. In F. Hitt, & M. Santos (Eds.), *Proceedings of the Twenty First Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp.723-729). Columbus, OH: ERIC Clearinghouse for Science, Mathematics, and Environmental Education.

Sherin, M. G. (1998). Developing teachers' ability to identify student conceptions during instruction. In S. B. Berenson, K. R. Dawkins, M. Blanton, W. N. 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* (pp.761-767). Columbus, OH: ERIC Clearinghouse for Science, Mathematics, and Environmental Education.

#### CONFERENCE PRESENTATIONS

Dobie, T., Sherin, M. G., & White, S. (2018, April). *A U.S. lexicon: Teachers' language for describing mathematics classrooms*. Presentation at the Annual Meeting of the American Educational Research Association, New York.

Dyer, E. B., Sherin, M. G. (2018, March), *Supporting science teacher learning through capturing and selecting video of one's own classroom*. Presentation at the Annual Meeting of the National Association for Research in Science Teaching, Atlanta, GA.

Richards, J., Fox, A., Shim, S., Anderson, E., Dobie, T.E., Sherin, B., Lee, J., Thompson, J., Kazemi, E., Lomax, K., & Sherin, M. G. (2017, April) *Designing for K-2 teacher learning about modeling in practice-based online courses*. Annual Meeting of the American Educational Research Association, San Antonio, TX.

Sherin, M. G. & van Es, E. A. (2016, March) *Designing video clubs for teacher learning*. Presentation at the Critical Issues in Mathematics Education Workshop, Berkeley, CA.

Dyer, E. B. & Sherin, M. G. (February, 2016). *Using point-of-view observations to study and develop teachers' in-the-moment thinking*. Presentation at the Annual Meeting of the Association of Mathematics Teacher Educators, Irvine, CA.

Dyer, E. B. & Sherin, M. G. (April, 2015). *Using self-captured video to develop pre-service teacher noticing of substantive student thinking in mathematics and science*. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago.

Sherin, M. G., Dyer, E., van Es, E., A., Sun, J., Stockero, S., & van Zoest, L. (2014, January). *Teacher-captured video: Tools, opportunities and challenges..* Presentation at the Annual Meeting of the Association of Mathematics Teacher Educators, Irvine, CA.

Weiman, R., Philipp, R., Chazan, D., Ellis, M., Sherin, M. G., Silver, E., Stockero, S., & Dolk, M. (2014, January). *Using secondary mathematics video: Strategies and visions*. Presentation at the Annual Meeting of the Association of Mathematics Teacher Educators, Irvine, CA.

Jacobs, V. R., Sherin, M. G., & Philipp, R. A., (2013, November). *Mathematics teacher noticing: A hidden skill of teaching*. Work Group presented at the Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (pp.723-729). Chicago, IL.

Sherin, M. G. & Sherin, B. L. (2013, April). *Teacher learning and the balance of expertise*. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco.

Sherin, M. G., Dyer, E., Walkoe, J., Russ, R. S. (2013, April). *Using video clubs to examine student thinking about algebra*. Presentation for the Annual Meeting of the National Council of Teachers of Mathematics. Denver.

Russ, R. S. & Sherin, M. G. (2013, April). *A model of change: Connecting teacher noticing to improved student learning outcomes*. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco.

Luna, M. & Sherin, M. G. (2013, April). *Supporting teachers' ability to attend to student thinking in science*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Puerto Rico.

Sherin, M. G., Russ, R. S., & Colestock A. (2011, April). *Assessing mathematics teachers' in-the-moment noticing*. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans.

- Luna, M. & Sherin, M. G. (2011, April). *Developing expertise in attending to student science thinking*. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans.
- Sherin, M. G. & Philipp, R. (2011, April). *Mathematics teacher noticing: Seeing through teachers' eyes*. Presentation at the Research Pre-session of the Annual Meeting of the National Council of Teachers of Mathematics, Chicago.
- Linsenmeier, K. & Sherin, M. G. (2011, February). *Examining student thinking through video*. Presentation at the Annual Meeting of the Metropolitan Math Club, Lincolnshire, IL.
- Philipp, R., Sherin, M. G., Jacobs, V., Goldsmith, L., Santagata, R., Seago, N., van Es, E. A. (2011, January). *Learning about and from mathematics teacher noticing*. Presentation at the Annual Meeting of the Association of Mathematics Teacher Educators, Irvine, CA.
- Taylor, M., Mitchell, R., Drake, C., & Sherin, M. G. (2011, January). *Professional development for "more effective" curriculum use*. Presentation at the Annual Meeting of the Association of Mathematics Teacher Educators, Irvine, CA.
- Sherin, M. G., Russ, R., Sherin, B. L., & Colestock, A. (2009, April). *Professional vision in action*. Paper presented at the Annual Meeting of the American Educational Research Association, San Diego, CA.
- Linsenmeier, K., & Sherin, M. G. (2009, April). *Using video to promote teacher discussion of student mathematical thinking*. Paper presented at the Research Pre-session of the Annual Meeting of the National Council of Teachers of Mathematics, Washington DC.
- Colestock, A. & Sherin, M. G. (2009, August). *Selective archiving as a tool for representing teaching*. Poster presented at the of TheMaT Conference on creating and using representations of mathematics teaching in research and teacher education, Ann Arbor, MI.
- Sherin, M. G. & van Es, E. A. (2007, April). *Using video to document change in teachers' professional vision*. Paper presented at the Annual Meeting of the American Educational Research Association. Chicago.
- Sherin, M. G., van Es, E. A., Colestock, A. (2007, January). *Video clubs as a context for teacher noticing*. Presentation at the Annual Meeting of the Association of Mathematics Teacher Educators, Irvine, CA.
- Sherin, M. G. (2006, April). *Using video to develop mathematics teachers' professional vision*. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco.
- Sherin, M. G. & van Es, E. A. (2006, April). *What we (think we know) about teacher learning in video clubs*. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco.
- Sherin, M. G., Linsenmeier, K., & van Es, E. A. (2006, April). *Selecting video clips for teacher learning about student thinking*. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco.
- Brantlinger, A. & Sherin, M. G. (2006, April). *Discussing discussion: A video club in the service of National Board preparation*. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco.
- van Es, E. A. & Sherin, M. G. (2005, April). *The influence of video clubs on teacher thinking and practice*. Paper presented at the Annual Meeting of the American Educational Research Association, Montreal.
- Sherin, M. G. & Han, S. (2002, April). *Teacher learning in the context of a video club*. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans.
- Drake, C. & Sherin, M. G. (2002, April). *Changing Models of Curriculum Use*. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans.
- Sherin, M. G., & van Es, E. A. (2002, March). *Using video to support teachers' ability to interpret classroom interactions*. Paper presented at the Thirteenth Annual Meeting of the Society for Information Technology and Teacher Education, Nashville.



- Sherin, M. G. (2000, March). *A teacher's changing perspective on classroom interactions*. Paper presented at the Research Pre-session of the Annual Meeting of the National Council of Teachers of Mathematics, Chicago.
- Sherin, M. G., & Louis, D. (2000, March). *The teacher's role in developing and sustaining mathematical discourse*. Paper presented at the Research Pre-session of the Annual Meeting of the National Council of Teachers of Mathematics, Chicago.
- Sherin, M. G. (1999, April). *A balancing act: Developing a discourse community in a mathematics classroom*. Paper presented at the annual meeting of the American Educational Research Association, Montreal.
- Sherin, M. G. (1997, March). *When teaching becomes learning*. Paper presented at the annual meeting of the American Educational Research Association, Chicago.
- Sherin, M. G., Mendez, E. P., & Louis, D. A. (1997, March). *A discipline apart: Mathematics as a challenge for FCL teachers*. Paper presented at the annual meeting of the American Educational Research Association, Chicago.
- Sherin, M. G. (1996, April). *Novel student behavior as a trigger for change in teachers' content knowledge*. Paper presented at the annual meeting of the American Educational Research Association, New York.
- Sherin, M. G., Sherin, B. L., & Madanes, R. (1996, April). *When terms collide: Clarifying diverse accounts of teacher knowledge*. Paper presented at the annual meeting of the American Educational Research Association, New York.
- Sherin, M. G. (1995, April). *Teachers' content knowledge viewed across contexts*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.
- Gamoran, M. (1994, April). *Content knowledge and teaching innovative curricula*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Gamoran, M. (1994, April). *Informing researchers and teachers through video clubs*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Gamoran, M. (1992, April). *Strategies and representations: How math students serve dinner for a thousand*. Poster presented at the annual meeting of the American Educational Research Association, San Francisco.
- Gamoran, M. (1991, April). *The tutor behind the curtain: Face-to-face and remote tutoring*. Paper presented at the annual meeting of the American Educational Research Association, Chicago.
- Gamoran, M., Moschkovich, J., Arcavi, A., & Yang, C. (1991, April). *Grapher and Oz: Exploring functions with a remote tutor*. Poster presented at the annual meeting of the American Educational Research Association, Chicago.

#### INVITED TALKS & PROFESSIONAL PRESENTATIONS

- Tools for mentoring: Collegial conversations, video and learning to notice*. Invited Presentation at Pleasantdale School District, January, 2018.
- Using video and collegial conversations to improve instruction*. Invited Workshop at Highland Park High School, July, 2017.
- The role of transcripts in a video club*. Invited Presentation at the Learning How to Look and Listen conference, Arizona State University, November, 2016.
- Teacher noticing: Theoretical frameworks, measurement, and results*. Invited Presentation at the University of Hamburg, Germany, September, 2016.
- The role of video in the coaching process*. Invited Presentation at Northwestern University 2<sup>nd</sup> Annual Instructional Coaching Conference, April 2016.

*Video clubs for mathematics teacher learning.* Plenary presentation at Teachers Development Group, March 2016.

*Designing video clubs for teacher learning.* Invited presentation at the Mathematical Sciences Research Institute, Berkeley, CA, February, 2016.

*Examining the role of video in mathematics teacher learning.* Invited presentation at the University of Illinois at Urbana, College of Education, STEM Education Colloquium, November, 2015.

*Video resources for mathematics teacher learning.* Invited presentation at the University of Illinois at Chicago, Learning Sciences Research Institute, January, 2015.

*Using video to examine mathematics teachers' professional vision.* Plenary presentation at the Second Conference on Uses of Video in the Professional Development of Mathematics Teachers, Weizmann Institute, Rehovot, Israel, January, 2014.

*Noticing our noticing: Using video clubs to study teaching and learning.* Invited presentation at Walter Payton College Preparatory School, Chicago, IL, November, 2013.

*Examining the development of mathematics teachers' professional vision.* Invited presentation at Loyola University, Department of Chemistry, October, 2013.

*Designing for Teacher Learning.* Presentation at the Big Ideas Conversation Series. Kellogg School of Management. Northwestern University, October, 2013.

*Exploring responsive teaching through the lens of noticing.* Plenary presentation at the Science Teaching Responsiveness Conference, Seattle Pacific University, July 2013.

*Examining the use of video to develop mathematics teachers' professional vision.* Invited presentation at the Tufts University, Department of Education, March, 2012.

*Video as a representation of teaching for teachers.* Invited presentation at the University of Michigan, Representations of Mathematics Teaching Conference, June, 2011.

*Examining the development of mathematics teachers' professional vision.* Invited presentation at the University of California, San Diego, CA, May, 2011

*Video as a resource for studying and development teacher noticing.* Invited presentation at the University of Nebraska, Lincoln, NE, February, 2011

*Using video to support the development of teachers' professional vision.* Invited presentation at the University of Arizona Symposium: *Using Video and Observational Research as Tools for Enhancing Youth Learning Environments: Exploring Trends and Future Directions*, Tucson, AZ, November, 2010.

*Using video to study mathematics teaching and learning.* Invited presentation at the Annual Meeting of the Institute for Learning, Chicago, IL, May, 2010.

*Using video to support the development of teacher noticing.* Invited presentation at the Center for Early Reading First, University of Illinois at Chicago, College of Education, Chicago, IL, January, 2010.

*Investigating mathematics teacher noticing.* Invited presentation at the Learning Sciences Colloquium, Northwestern University, Evanston, IL, May 2009.

*An overview of teacher preparation in the United States.* Invited presentation at the Center for Educational Leadership, University of Pennsylvania, Philadelphia, PA, November, 2008.

*Using video to study mathematics teachers' noticing.* Invited presentation for the Mathematics Education Colloquium, University of Wisconsin, Madison, WI, November, 2008.

*Using video to examine mathematics teachers' professional vision.* Invited presentation for the Mathematics Education Colloquium Series, Michigan State University, East Lansing, MI, September, 2008.

*Video as a resource for investigating mathematics teachers' professional vision.* Invited presentation for the University of Granada, Department of Mathematics Education, Spain, March, 2008.

*Using video to study mathematics teachers' professional vision.* Invited presentation for the Mathematisches Forschungsinstitut Oberwolfach, Germany, November, 2007.

*Video clubs as a context for examining teachers' professional vision.* Invited presentation for the Center for Proficiency in Teaching Mathematics, University of Michigan, Ann Arbor, MI, January, 2007.

*Using video as a context for teachers' noticing.* Presentation at the Annual Meeting of the Association for Mathematics Teacher Education, Irvine, CA, January, 2007.

*Using video to study mathematics teachers' professional vision.* Invited presentation for 2005 Video Research in Education Meeting, sponsored by IERI/NSF, Washington D. C., December, 2005.

*Video clubs and the development of mathematics teachers' professional vision.* Invited presentation at the Lesson Lab Research Institute, Los Angeles, CA, October, 2005.

*Teacher learning and the use of video clubs.* Invited presentation for the Center for Innovative Learning Technologies, Stanford, CA, November, 2002.

*Developing teachers' professional vision through the use of video clubs.* Paper presented at the annual meeting of the National Academy of Education, Toronto, CA, October, 2002.

Facilitator, *International Conference of the Learning Sciences Doctoral Consortium*, Seattle, WA, October, 2002.

Panelist, *Developing a professional identity.* Spencer Dissertation Fellows Retreat, November, 2001. Evanston, IL.

*Developing a discourse community in the mathematics classroom.* Invited presentation at the University of Wisconsin, Madison, Mathematics education seminar, September, 2001.

*Teaching students to build on other students' mathematical ideas.* Workshop presented with D. Louis. National Council of Teachers of Mathematics Annual Conference, Chicago, IL, April, 2000.

*Mathematics teaching and learning: Using discourse to promote student learning.* Presented at the Leadership Academy and Urban Network for Chicago, July, 2000, 2001, & 2003.

Panelist, *Spencer Foundation Conference on Collaborative Research for Practice*, New Orleans, LA, March, 1999.

*The development of a professional vision around classroom practice.* Paper presented at the Invited Conference on Elementary Mathematics Pedagogy, Purdue University, October, 1998.

*Building teacher learning communities: The role of video clubs.* Presented at the Leadership Academy and Urban Network for Chicago, July, 1998, 1999, & 2000.

*Forging new relationships in the world of K - 12 Education: New roles for teachers, superintendents, university faculty, and researchers.* Presented with P. Peterson at the Annual Meeting of the Suburban School Superintendents, November, 1997.

*The Cartesian connection: Teaching functions and graphs in grades 7-9.* National Council of Teachers of Mathematics Annual Conference, March, 1993.

#### PROFESSIONAL DEVELOPMENT CONSULTANT

- 1/16 – 10/16 Mathematics program evaluation. Winnetka Public Schools.
- 2/12 – 5/13 Online platform for teacher reflection and learning, Teaching Channel, San Francisco.
- 10/03– 5/11 Multimedia materials to support mathematics teacher learning, Teachscape, New York.
- 3/02 – 6/02 Examining teacher learning in the context of video clubs, Winnetka School District, IL.
- 9/00 – 6/02 Lighthouse Partnership: Professional development workshops for mathematics teachers, Evanston School District, IL.
- 9/98 – 6/99 Supporting the development of teachers as researchers, Winnetka School District, IL.
- 3/93 – 6/97 Video Club Facilitator. Jordan Middle School, Palo Alto, CA; El Cerrito High School, Richmond, CA.
- 5/92 – 6/92 Scoring Coordinator, Video Portfolio Project. Educational Testing Service, Emeryville, CA.
- 7/90 – 8/90 Supervisor, Mathematics Teacher Institute. University of California, San Diego.

#### ADVISORY BOARD MEMBER

- 9/16 – 8/20 *Supporting Instructional Growth in Mathematics*, Vanderbilt University
- 8/16 – 7/20 *Goal-Oriented Discussions in Science and Math*, Educational Testing Service
- 9/14 – 8/18 *Empowering Teachers through VideoReview*, TERC
- 9/13 – 8/17 *Theorizing and Advancing Responsive Teaching Based on Children's Thinking about Rational Numbers and Operations*, University of Texas, Austin
- 5/13 – 4/18 *Noticing and Using Students' Prior Knowledge in Problem-Based Instruction*, University of Illinois, Urbana-Champaign
- 9/12 – 8/14 *Constructing Multimedia Artifacts Using a Video Repository*, Rutgers University
- 8/10 – 8/15 *Learning to Learn from Mathematics Teaching*, University of California, Irvine
- 7/10 – 6/13 *Virtual Learning Communities: An Online Professional Development Resource for STEM Teachers*, University of Chicago
- 3/10 – 2/11 *High School Video Task Force Member*, National Council of Teachers of Mathematics, Reston, VA
- 9/07 – 9/12 *Toward a Scalable Model of Mathematics Professional Development: A Field Study of Preparing Facilitators to Implement the Problem-Solving Cycle*, University of Colorado, Boulder, CO.
- 5/06 – 5/11 *Researching Mathematics Leader Learning*, WestEd, San Francisco, CA
- 2/06 – 2/09 *Math Science Partnership-Knowledge Management and Dissemination*, Horizon Research, NC.
- 6/05 – 5/07 *What Influences Teachers' Modifications of Curricula?* University of Maryland, College Park.
- 6/05 – 5/10 *Investigating the Needs of Elementary School Teachers of Mathematics at Different Points During Sustained Professional Development*, San Diego State University.
- 3/04 – 3/06 *Understanding and improving professional development for college mathematics instructors*, Michigan State University.
- 8/00 – 8/04 *Mosaic II: The relationship between teacher instructional practice and student achievement in mathematics and science*, The Rand Corporation.

#### CONFERENCE ORGANIZER

- Conference Chair, Observing for Access, Power, and Participation in Mathematics Classrooms, Mathematical Science Research Institute, Berkeley CA, March 2017
- Conference Committee, Observing, evaluating, and improving mathematics teaching from the early grades through the university, Mathematical Science Research Institute, Berkeley CA, February 2016
- Conference Organizer, Digital resources for teacher professional development, 11/13, Evanston IL.
- Conference Chair , Mathematics Teacher Noticing, 1/08, Evanston, IL
- Steering Committee Member, SIG - Research in Mathematics Education, 4/06-4/-08
- Program Co-Chair, AERA Division K, Section 1 (Mathematics & Science Teaching), April 2005, Montreal.
- Program Co-Chair, AERA Division K, Section 1 (Mathematics & Science Teaching), April 2004, San Diego, CA.
- Program Committee, International Conference of the Learning Sciences, June 2004, Los Angeles, CA.
- Program Committee, International Conference of the Learning Sciences, October 2002, Seattle, WA.

#### GRANTS

- 2016 *Deeper Learning Labs: Digital resources for collaborative teacher learning.* (M. Sherin, PI; B. Sherin, Co-PI). The Spencer Foundation. \$499,831 over three years
- 2015 *Learning Labs: Using Videos, Exemplary STEM Instruction and Online Teacher Collaboration to Enhance K-2 Mathematics and Science Practice and Classroom Discourse.* (E. Kazemi, PI; B. Sherin, M. Sherin, J. Thompson. P. Wasley, CoPIs). National Science Foundation, \$2,999,680 over three years.
- 2011 *Developing a Video Club Curriculum: Supporting Teacher Reflection on Mathematics Learning* (M. Sherin, R. Russ, -PIs), Arthur Vining Davis Foundations, \$200,000 over two years
- 2008 *Understanding the Role of Video in Teacher Learning*, National Science Foundation Career Grant Supplement, \$51,155 over one year.
- 2008 *Freezing time: Using digital video to help teachers reason about classroom events* (M. Sherin, B. Sherin, PIs) Edison Foundation, \$499, 928 over three years.
- 2007 *Characterizing the Nature and Development of Mathematics Teachers' Noticing.* The Spencer Foundation, \$28,475 over two years.
- 2005 *Developing Teacher-Leaders in High School Mathematics* (P. Peterson, J. Spillane, M. Sherin, PIs) Arthur Vining Davis Foundations, \$148,370 over two years.
- 2004 *Distributed leadership for middle school mathematics education: Content area leadership expertise in practice,* (J. Spillane, P. Peterson, M. G. Sherin & S. Konstantopoulos, PIs) National Science Foundation RETA Grant, \$2,297,008 over five years.
- 2002 *Understanding the Role of Video in Teacher Learning*, National Science Foundation Career Grant, \$590,835 over five years.
- 2001 *Developing Teachers' Professional Vision through the Use of Video Clubs,* The National Academy of Education/Spencer Foundation, \$50,000 over one year.
- 2000 *Supporting Teacher Learning through the Use of Multimedia Cases of Mathematics Instruction,* The Braitmayer Foundation, \$34,662 over one year.
- 1999 *The Development of Multimedia Cases of Mathematics Teaching,* (M. G. Sherin & E. P. Mendez, PIs), University Research Grants Committee, Northwestern University, \$22,993.

1997      *Developing a Learn-While-Teaching Mathematics Curriculum: Stimulating Teacher Reflection on Student Learning* (K. Fuson, M. G. Sherin, & J. Spillane, PIs) McDonnell Foundation CSEP grant, \$670,097 over four years.

#### EDITORIAL BOARD

2016 – 2018      Journal of Education  
2008 – 2011      Canadian Journal of Science, Mathematics and Technology Education  
2008 – 2013      Cognition and Instruction  
2008 – 2011      Journal of the Learning Sciences

#### REVIEWER

American Educational Research Association – Divisions C, K, & L, SIG RME  
Educational Evaluation and Policy Analysis  
Educational Researcher  
Canadian Journal of Science, Mathematics and Technology Education  
Cognition and Instruction  
International Journal of Computers for Mathematics Instruction  
Journal of the Learning Sciences  
Journal of Mathematics Teacher Education  
Journal for Research in Mathematics Education  
Journal of Teacher Education  
Knowles Science Teaching Foundation  
Lawrence Erlbaum Associates  
Mathematical Thinking and Learning  
Psychology of Mathematics Education Annual Meeting  
The Rand Foundation  
Review of Educational Research  
The Spencer Foundation  
Teacher Education Quarterly  
Teaching and Teacher Education  
Teaching Children Mathematics

#### MEMBERSHIPS

American Educational Research Association  
Association of Mathematics Teacher Educators  
Illinois Council of Teachers of Mathematics  
International Society for the Learning Sciences  
National Council of Teachers of Mathematics  
Society for Information Technology and Teacher Education