

Mtss

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- 2014 – 2017 Co-pi on IES Grant with Russel, J. Stein, M. Correnti, R. Coaching to Improve Common Core Aligned Mathematics Instruction in Tennessee, Tennessee Department of Education, Learning Research and Development Center, Institute for Learning.
- Responsible for designing mathematics professional development, tools and resources related to mathematics coaching. Shared responsibility for coding and analyzing coach data.
- 1998 – Present Chair of Mathematics Team, Institute for Learning (IFL), Learning Research and Development Center (LRDC), University of Pittsburgh, Pittsburgh, PA
- Responsible for designing mathematics tools and resources, and coordinating a team of four resident fellows and consultants working in school districts under contract with the IFL. Manage the design, development, and review of K-12 performance-based assessments aligned to the Common Core State Standards, sets of related lesson guides and units for grades K-12, and professional development modules.
- 1994 – Present Resident Fellow, Institute for Learning, Learning Research and Development Center (LRDC), University of Pittsburgh, Pittsburgh, PA
- Currently working with professional developer and leadership teams from large urban school districts in the United States, focusing on mathematics content and pedagogy. For the past five years broadened work base to include state departments of education. Working collaboratively with the Tennessee State Department of Education to train approximately 300 mathematics coaches in content and pedagogy related to the Common Core State Standards. Developing professional development modules with detailed notes meant to scaffold TN Coaches' redelivery of the material to 30,000 teachers statewide. Developing performance-based assessments for grades K-12 and collaborated with Measurement Incorporated and The Tennessee Department of Education to develop scoring guides and select anchor papers for scoring student work state-wide.
- 2009 – 2013 Adjunct Professor of Leadership for Teaching and Learning, University of Pittsburgh, Pittsburgh, PA
- Co-designed and co-led a course to support aspiring principals to function as instructional leaders. The course gives principals an opportunity to analyze and discuss instructional methods in mathematics and English Language Arts. Principals learn to give feedback and guidance to teachers in both content areas. Characteristics

of effective professional development are discussed and linked to research findings to better enable principals to work on high leverage practices in their schools.

2001 – 2013 Adjunct Professor for Mathematics Methods, University of Pittsburgh, Pittsburgh, PA
Engaged masters-level students in solving and discussing mathematics tasks, assessment methods, and instructional methods as they pertain to student performance. Collaborated bi-monthly with other adjunct professors and university professors on course design and implementation.

1989 – 1994 Research Specialist, Math3 Project, Learning Research & Development Center (LRDC), University of Pittsburgh, Pittsburgh, PA

The Math³ project had two interlocking goals: (a) to disseminate a successful program—Math³—in primary grade mathematics; and (b) to develop a collaborative-support model for the professional development of elementary mathematics teachers. The U.S. Department of Education's Dwight D. Eisenhower Mathematics and Science Program supported the dissemination and development of Math3. Math³ is a research-based method of teaching and dissemination that is informed by research in the areas of cognitive psychology, mathematics education, cognitive apprenticeship, and the reflective practitioner.

1991 – 1992 Member, Learning Environments Group (LEG), National Alliance for Restructuring Education (Alliance)

Funded by the New American Schools Development Corporation, the Alliance was composed of nine site-partners (five states and four school districts) and ten non-site partners. The partners' efforts to restructure education were keyed to meeting five design tasks. As a LEG member, focused efforts on addressing the first two design tasks: (1) identifying learning outcomes and creating quality measures of progress toward those outcomes; and (2) connecting schools to curriculum and instructional resources needed to perform to high standards.

PUBLICATIONS

- Russell, J. Stein, M., Correnti, R., Bill, V., Booker, L., Schwartz, N. (2017) Tennessee Scales Up Improved Math Instruction Through Coaching. National Association of State Boards of Education
- Russell, J. L., Correnti, R., Stein, M. K., Hannan, M., Bill, V., Schwartz, N., Booker, L. & Pratt, N. R. (2015, October). *Using data for improvement to support implementation at scale: Adaptive integration in the TN Mathematics Coaching Project*. National Center on Scaling Up Effective Schools Second National Conference, Nashville, TN.
- Huinker, DeAnn and Victoria Bill. *Taking Action: Implementing Effective Mathematics Teaching Practices in Grades K-5*. Reston, VA: National Council of Teachers of Mathematics, 2017.
- Hyed-Metzuyanin, E. and Bill, V., (2016) "It's not easy to make an old horse do new tricks" – An experienced mathematics teacher's development towards explorative instruction. AERA.
- Russell, J. L., Correnti, R., Stein, M. K., Hannan, M., Bill, V., Schwartz, N., Booker, L. & Pratt, N. R. (2015, October). *Using data for improvement to support implementation at scale: Adaptive integration in the TN Mathematics Coaching Project*. National Center on Scaling Up Effective Schools Second National Conference, Nashville, TN.
- Bill, V. and Speranzo, L., (2016) Taking It Into the Classroom: Experiencing PD as Learners. Curriculum and Pedagogy Conference, Cleveland OH
- Hyd-Metzuyanin, E., Smith, M., Bill, V. and Resnick, L. (2014) Ritual to Explorative Participation: A Lens for Examining Change in Teachers' Instructional Practices Over Time. Research Report Submitted to the Journal for Research in Mathematics Education.
- Bill, V. L. & Jamar, I. (2009). Disciplinary literacy in the mathematics classroom. In S. M. McConachie & A R. Petrosky (Eds.), *Content matters: A disciplinary literacy approach to improving student learning* (pp. 63-86). San Francisco, CA: Jossey Bass.
- Smith, M. S., Bill, V., & Hughes, E. K. (2008). Thinking through a lesson: Successfully implementing high-level tasks. *Mathematics Teaching in the Middle School*, 14(3), 132-138.
- Bill, V. & Goldman, P. (2006). *The case of Nathanael Greene middle school: Coherent and effective professional development*. The Wallace Foundation Technology Innovation Challenge Grant from the U.S. Department of Education.
- McConachie, S., Hall, M., Resnick, L., Ravi, A. K., Bill, V. L., Bintz, J., & Taylor, J. A. (2006). Task, text, and talk. *Educational Leadership*, 64(2), 8–14.

Bill, V. L., Leer, M. N., Reams, L. E., & Resnick, L. B. (1992). From cupcakes to equations: The structure of discourse in a primary mathematics classroom. *Verbum*, 15(1), 63-85.

Resnick, L. B., Bill, V., & Lesgold, S. (1992). Developing thinking abilities in arithmetic class. In A. Demetriou, M. Shayer, & A. Efklides (Eds.), *Neo-Piagetian theories of cognitive development: Implications and applications for education* (pp. 210-230). London: Routledge.

Resnick, L. B., Bill, V., Lesgold, S., & Leer, M. (1991). Thinking in arithmetic class. In B. Means, C. Chelemer, & M. S. Knapp (Eds.), *Teaching advanced skills to at-risk students: Views from research and practice* (pp. 27-53). San Francisco: Jossey-Bass.

PRESENTATIONS

Bill, V. and Huinker, D., (2017) Supporting Elementary Teacher Development in Using the Eight Effective Mathematics Teaching Practices By Using *Taking Action: Implementing Effective Mathematics Teaching Practices in Grades K – 5*

Huinker D., and Bill, V., (2017) Taking Action: Implementing Effective Mathematical Practices in K – 5, *NCTM San Antonio, Texas*

Bill, V. and Speranzo, L., (2017) Coaching with Intention. *NCTM 2017 National Conference, San Antonio, Texas.*

Bill, V., (2016) Impasses are Inevitable: Supporting Productive Struggle is the Solution. *NCTM Innov8 Conference. St. Louis, Missouri.*

Klingensmith, K. and Bill, V., (2016) Getting Mathematical Understanding to SOAR!. *NCTM San Antonio, Texas.*

Stein, M.K. and Bill, V. (2016). An Instructional Mathematics Coaching Model: A Means to Deep and Specific Conversations, *AMTE 2016 Annual Conference, Irvine, CA.*

Bill, V., Boston, M., Dillion, F., Huinker, D., Smith, M., Steele, M. (2016). Supporting Teachers' Development of NCTM's Effective Mathematics Teaching Practices: An Exploration of New Resources, *20th Annual AMTE Conference, Irvine, CA.*

Bill, V. (2015). Strategies for Differentiating Instruction and Learning. *National Council of Teachers of Mathematics, Boston, MA.*

Bill, V., Huinker, D., Hillen, A. (2015). Principals to Action: Effective Mathematics Teaching Practices, The Case of Jennifer DiBrienza, *National Council of Teachers of Mathematics, Boston, MA.*

Bill, V. and Miller, S. (2015). What evidence "counts" as student understanding of a concept? *National Council of Teachers of Mathematics Regional Conference, Nashville, TN.*

Metzuyanin, E., Bill, V., Franz, N. Smith, M., Resnick, L. (2015). Designing for Change in Teachers' Practices: Towards Implementing Explorative Mathematics Instruction, *Discussion Session at NCTM Research Conference, Boston MA.*

Bill, V. and Klingensmith, K. (2014). Talking and Writing: A Means of Making Sense of Mathematics. *New Orleans, LA.*

Goldman, P., Sherer, J. Bill, V, Bickel, D., McConachie, S., (2013, September). *Accountable Talk: Conversations that Work. Coursera Course.*

- Bill, V. (2006). Analyzing Student Thinking: Assessing and Advancing Questions. Presentation at the 55th Annual Meeting of the Pennsylvania Council of Teachers of Mathematics, Somerset County, Pennsylvania.
- Bill, V. (2006, April). *Accountable Talk* about Equivalence. Presentation at Annual Meeting of the National Council of Teachers of Mathematics, St. Louis Missouri.
- Bill, V. & Metz, M.L. (2005, April). A Template for Reflecting on Coaching. Presentation at the National Council of Teachers of Mathematics, Anaheim, CA.
- Smith, M.S. & Bill, V. (2004, January). Thinking Through a lesson: Collaborative Lesson Planning as a Means for Improving the Quality of Teaching. Presentation at the Annual Meeting of the Association of Mathematics Teacher Educators, San Diego, CA.
- Smith, M.S. & Bill, V. (2003, April). Thinking Through a lesson: Collaborative Lesson Planning as a Means for Improving the Quality of Teaching. Presentation at the Annual Meeting of the National Council of Supervisors of Mathematics, San Antonio, TX.
- Bill, V., Miller, A., (2001, March), Teaching the Big Ideas. National Council of Teachers of Mathematics. Orlando, Florida.
- Bill, V., Shayer, M., (2000, February). A Global Instructional Process: A Means to Developing Conceptual Understanding, WA.
- Johnston., J., Bill, V., (2000, January). An Effort-Based System. *Association for Supervision and Curriculum (ASCD)*.
- Bill, V, McConachie, S., (1998, April). Making the Expectations Clear in the 21st Century. *American Educational Research Association*.
- Bill V. Miller A., (1998, March). Developing Conceptual Understanding. *Pennsylvania Council of Teachers of Mathematics (PCTM) Regional Conference*, Harrisburg, PA.
- Bill, V., Leer, M. (1998, April). Distributed Curriculum. *American Educational Research Association*, San Diego, CA.
- Bill, V. Miller, A. (1998, April). Linking Instruction and Assessment to Standards. *Western Pennsylvania Association for Supervision and Curriculum Development (WPASCD)*, Pittsburgh, PA.
- Bill, V., & Smith, M. S. (1997, February). A Thinking Curriculum as a Guide to Base Instruction. Presentation at a meeting of the *National Alliance for Restructuring Education*, Washington, DC.
- Bill, V. Miller, A. (1997, March). Using Investigations to Develop a Community of Learners. *Pennsylvania Council of Teachers of Mathematics (PCTM) Regional Conference*, King of Prussia, PA.
- Bill, V. Miller, A. (1995, April). Kindergarten and First Grade Performance Assessments. *Pennsylvania Council of Teachers of Mathematics (PCTM) Regional Conference*, Pittsburgh, PA.
- Bill, V. Miller, A. (1995, April). Second and Third Grade Performance Assessments. *Pennsylvania Council of Teachers of Mathematics (PCTM) Regional Conference*, Pittsburgh, PA.
- Leer, M. N., Resnick, L. B., and Bill, V. L., (1994, April). "The Math³ Cognitive Apprenticeship Model of Professional Development: Building a Community of Reflective Practitioners Symposium: From Research to School-Based Practice: The Development and Dissemination of an Innovative Elementary Mathematics Program, Math³, American Educational Research Association, Annual Meeting.

- Leer, M. N., Bill, V. B., and Resnick, L. B., (1993, April). "Mathematical Power and Responsibility for Reasoning," *Symposium: Classroom Discourse That Advances Thinking and Reasoning*, American Educational Research Association, Annual Meeting.
- Bill, V. B., Leer, M. N., and Resnick, L. B., (1993, April). Reflection--A Team Effort, *Symposium: Fostering Student Reflection During Mathematics and Science Learning: A Forum With Teachers and Collaborating Researchers*, American Educational Research Association, Annual Meeting.
- Bill, V. B. and Leer, M. N., (1993, March). Eisenhower National Competitive Grant Program: Briefing to the Field, *National Council of Teachers of Mathematics*, Annual Meeting.
- Leer, M. N. and Bill, V. B., (1993, March). Fitting the Pieces Together: The Dwight D. Eisenhower National Mathematics and Science Education Program; Math³, A Discretionary Program, *National Council of Supervisors of Mathematics*, Annual Meeting.
- Bill, V. B. and Leer, M. N. (1992, April). Kids, Curriculum and Collegiality: A Hands-on Approach, *Western Pennsylvania Association for Supervision and Curriculum Development*, Annual Meeting.
- Leer, M. N., Bill, V. B., and Resnick, L. B. (1992, April). Weaving Children's Thinking into Representations, *American Educational Research Association*, Poster Session, Annual Meeting.
- Resnick, L. B., Bill, V., Leer, M. N., and Clark, L. M. (1992, April). Developing Thinking Abilities in Elementary Mathematics Class, *National Council of Teachers of Mathematics*, 70th Annual Meeting.

GRANTS

- 2014 – 2017 Co-pi on IES Grant with Russel, J. Stein, M. Correnti, R. Coaching to Improve Common Core Aligned Mathematics Instruction in Tennessee, Tennessee Department of Education, Learning Research and Development Center, Institute for Learning.
- 1995 – 1998 Pennsylvania Space Grant Consortium, Grant focused on the dissemination of effective mathematics and science programs.
- 1992 – 1994 Annenberg Council for Public Broadcasting, (1992-1994) Grant to produce two videotapes on the Math³ teaching methods.
- 1986 – 1992 U.S. Department of Education's Dwight D. Eisenhower Mathematics and Science Program.

COLLABORATIONS

- 1999 – 2002 New York City Teachers' College, Catherine Fosnot: field tested materials developed with funding by the National Science foundation, and consulted and provided feedback on materials yearly.
- 1998 – 1999 National Alliance for Restructuring Education, the New Standards Partnership: served as a liaison between the Institute for Learning and the National Alliance for Restructuring Education.

- 1992 – 1994 Gateway to the future: exploring mathematics through technology (1993). Video conference at Annenberg/Council for Public Broadcasting, collaboration with the Extra Mile Foundation (Diocese of Pittsburgh), WQED, and the University of Pittsburgh. Collaborated with Annenberg/Council for Public Broadcasting, the Extra Mile Education Foundation (The Diocese of Pittsburgh), and a local television station, WQED, to produce videotapes describing Math³ Teaching methods. Responsibilities include co-coordinating the planning and production of two Videotapes.
- 1991 North central Regional Educational Laboratory. Children as problem solvers, schools that work: The research advantages. Videoconference.
- 1990 North Central Regional Education Laboratory. The Thinking Curriculum. Videoconference and review teachers' lessons and provided research-based commentary on lessons.

PROFESSIONAL ORGANIZATIONS

- Association of Mathematics Teacher Educators (AMTE), Membership Committee (2004–2005)
- Association for Supervision and Curriculum (ASCD)
- National Council of Supervisors of Mathematics (NCSM)
- National Council of Teachers of Mathematics (NCTM)
- Pennsylvania Council of Teachers of Mathematics (PCTM)

EDUCATION

- University Of Pittsburgh, Pittsburgh, PA, (2005), Masters in Administration and Policy Studies
- University Of Pittsburgh, Pittsburgh, PA (2001), Administration and Policy Studies, Principal's Certification
- Carlow College, Pittsburgh, PA (1997), M.S. in Mathematics
- Carlow College, Pittsburgh, PA, (1976), B.S. Psychology and Elementary Education

CERTIFICATIONS

- Elementary School Principal Certification
- Elementary Teaching Certification
- Special Education Certification (Duquesne University)

HONORS

- 1991 Thanks to Teacher Nominee
- 1990 Thanks to Teacher Finalist
- 1990 Carlow College Alumni Association Service Award