

CURRICULUM VITAE

LYNNEA CHRISTINE WEST SALVO

Business Address:

MathTree, Inc.
1801 Sheridan Court
McLean, VA 22101
703-448-8655
mathtree@mac.com
www.mathtree.com

EDUCATION

Ph.D. 2006

Education, George Mason University, Fairfax, VA
Specialization: Mathematics Education Leadership
Minor: Instructional Technology

M. S. T. M. 1982

Master of Science in the Technology of Management, The American University,
Washington, DC
Specialization: Environmental Systems Management
Honor: Outstanding Scholarship, Center for Technology and Administration, 1981-1982

B. A. 1971

Biology, Swarthmore College, Swarthmore, PA
Minor: Art History

UNIVERSITY TEACHING EXPERIENCE

George Mason University, Fairfax, VA (2006 - 2007)
Adjunct Professor

Courses Taught

EDUC 513: Teaching Elementary Mathematics in International Schools

This course is a one-semester introduction to methods for teaching all children developmentally appropriate topics in number and operations, geometry, algebra, and data analysis. Students work with manipulatives and technologies to explore mathematics, solve problems, and learn ways to teach mathematics content to children.

EDCI 572: Methods of Teaching Mathematics in the Secondary School

This course is a one-semester introduction to methods for teaching middle and high school age students. It covers curricula, current issues, and research literature in secondary school mathematics. Emphasis is placed on developing different styles of teaching.

BUSINESS EXPERIENCE

MathTree, Inc., McLean, VA, (1992 to present), formerly Salvo Educational Enterprises
President

- Direct MathTree Math Camps, 1999 - present, handling all aspects including scheduling, finding locations, publicizing, registering students, hiring, staff training, teaching, and more.
- Conduct MathTree Math Camps on contract (Two Rivers Charter School, Washington, DC, July 2008; SEED School of Washington, DC, July 2005).
- Develop MathTree Math Camps, two-week half-day camps using MathTree, Inc., publications that develop number sense and mathematics skills.
- Conduct teacher training sessions in preparation for camp instruction.
- Create mathematics education curriculum materials, original devices, and games.
- Provide and supervise internships for prospective mathematics teachers (in 2005, 7 students)

- from George Washington University and 1 from Marymount University)
- Tutored 15 to 20 students per week who ranged in grade level from 3rd grade through college and in mathematics curricula from basic number operations to calculus until 2007.

MATHEMATICS TEACHING EXPERIENCE (other than above)

Fairfax Collegiate School, Annandale, VA (1995-2000)

Director, Summer Enrichment Mathematics Program, 1998-2000, Teacher, 1995-1997

- Hired and trained all mathematics teachers and assistants and directed the mathematics curriculum that used MathTree, Inc., materials; taught classes, 1995-1997

Madeira School, Greenway, VA, 1999-2001

Teacher

- Taught Algebra I to freshmen; conducted MathTree skill development during Wednesday Co-Curriculum for all freshmen (2000-2001)

Math Mysteries Camp/CREST at George Mason University, Fairfax, VA, Summer, 2000

Director/Teacher

Washington Waldorf School, Bethesda, MD, 1990-1993

Teacher

MATHEMATICS EDUCATION CONSULTING EXPERIENCE

Outside Item Writer, American Institute for Research, Washington, DC (2006)

- Wrote items for standardized mathematics tests

Consultant, K12, McLean, VA (2006)

- Compiled research on common misconceptions in algebra and corresponding teaching strategies

INTERNATIONAL TEACHING EXPERIENCE

American School of Naples, Naples, Italy (1973-1974)

Teacher of several subjects

PATENTS GRANTED

Salvo, L. (2004). *U. S. Patent No. 6,702,582*. Washington, DC: U. S. Patent and Trademark Office. Device and method for solving circles (a manipulative for teaching pi, circumference, and area of a circle).

Salvo, L. (2003). *U. S. Patent No. 6,575,754*. Washington, DC: U. S. Patent and Trademark Office. Device and method for teaching mathematical properties associated with even and odd numbers.

PUBLICATIONS

Books

Salvo, L. (2004). *Multiplication Matters*. McLean, VA: MathTree, Inc.

- Facts grouped in ten subsets, based largely in number theory
- Abridged version used in dissertation research

Salvo, L. (1998). *Much Math in a Minimum of Morsels*. McLean, VA: MathTree, Inc.

- A ten-lesson program that develops basic number theory
- Approved in 1999 for use in Fairfax County Public Schools
- Leased to Fairfax Collegiate School for Summer Enrichment Program, 1998 - 2003.

Salvo, L. (1997). *MathTree*. McLean, VA: MathTree, Inc.

- A diagnostic program covering 200 mathematics skills
- Approved in 1999 for use in Fairfax County Public Schools
- Leased to Fairfax Collegiate School for Summer Enrichment Program, 1998 - 2003.

CV – Lynnea C. Salvo, Ph. D. 2
President, MathTree, Inc.

Salvo, L. (1998). *Taming the Times Tables*. McLean, VA: MathTree, Inc.

Book Chapter (Invited)

Salvo, L. (2007). Effects of an experimental curriculum on third graders' performance on multiplication facts. In D. F. Berlin & A. L. White (Eds.), *Global issues, challenges, and opportunities to advance science and mathematics education* (pp. 241-260). Columbus, OH: International Consortium for Research in Science and Mathematics Education.

Games

Salvo, Lynn. (In press). *Product Parfait*. Didax Educational Resources. Rowley, MA.
Product Rocket (2004), a game for practicing multiplication facts involving the factors 6, 7, and 8 exclusively
Product Hopscotch (2004), a set of games for practicing multiplication facts involving selected groups of factors
Product Parfait (2003), a game for practicing basic multiplication number combinations
Remainder Race (2002), a game for practicing divisibility rules

Articles

Salvo, Lynnea C. (2003). Letter to the Editor: A representation of a solution to the traffic jam problem. On-Math. http://my.nctm.org/eresources/view_article.asp?article_id=6208 Reston, VA: National Council of Teachers of Mathematics.

Refereed Proceedings

Salvo, L., Smith, L., Inge, V., Staley, J., Bolyard, J., and Moyer, P. (2002). Rabbit Ears to Slope to Derivatives: Longitudinal Development of an Algebraic Concept. In A. Rogerson (Ed.) *Proceedings of the International Conference: Humanistic Renaissance in Mathematics Education* (pp. 334-338). The Mathematics Education into the 21st Century Project.

Unpublished Manuscripts

Salvo, Lynnea C. (2003). Trigonometry's ambiguous case: A manipulative.
Salvo, Lynnea C. (2003). Where is Brockton? What is dyscalculia? And how do children learn to number?
Salvo, Lynnea C. (2002). Bridging the concept of parity between cognitive science research and mathematics teaching.
Salvo, Lynnea C. (2002). Proportions, Proteus, and the number one.
Salvo, Lynnea C. (2002). Pi in your eye: Seeing the end of an 'endless' number.
Salvo, Lynnea C. (2001). Three uncommon algorithms that blend efficiency with understanding.
Salvo, Lynnea C. (2001). Taxonomy of mathematics skills.

Manuscripts in Preparation

Salvo, Lynnea C. Math's invisibles.
Salvo, Lynnea C. Teaching absolute value inequalities in natural language.
Salvo, Lynnea C. Metacognition: Getting to know my own thinking on a Dr. Alan Schoenfeld mathematics problem.

PROFESSIONAL PRESENTATIONS

International Presentations

Multiplication Matters: A New Curriculum for Teaching Multiplication Facts. (2007, September). Teaching Presentation, 9th Annual International Conference, The Mathematics Education into the 21st Century Project, Charlotte, NC.

Effects of an Experimental Curriculum on Third Graders' Knowledge of Multiplication Facts. (2006, March). International Consortium for Research in Science and Mathematics Education (ICRSME) 2006 Consultation, Nassau, Bahamas.

Rabbit Ears to Slope to Derivatives: Longitudinal Development of an Algebraic Concept. (2002,

September). Teaching Presentation, 4th Annual International Conference, The Mathematics Education into the 21st Century Project, Terrasini, Palermo, Italy.

National Presentations

The Problem Solving Journal: Rich Problems for Conceptual Understanding. (2007, March). 85th Annual Meeting of the National Council of Teachers of Mathematics, Atlanta, GA.

MathTree: Growing Number Sense and Math Skills. (2001, April). 79th Annual Meeting of the National Council of Teachers of Mathematics, Orlando, FL.

State and Regional Presentations

Multiplication Matters: A New Curriculum for Teaching Multiplication Facts. (2007, March). 29th Annual Conference of the Virginia Council of Teachers of Mathematics, Virginia Beach, VA.

The Ambiguous Case: A Manipulative. (2003, March). 26th Annual Conference of the Virginia Council of Teachers of Mathematics, Richmond, VA.

MathTree: Growing Math Skills. (2000, March). 23rd Annual Conference of the Virginia Council of Teachers of Mathematics, Norfolk, VA.

Workshops

Differentiation in the Classroom. (2006, December). Invited Faculty Workshop, Connelly School of the Holy Child, Potomac, MD.

Magic Coin Trick: Triggering Intrigue with Odd and Even Numbers. (2004, October). Regional Conference, National Council of Teachers of Mathematics, Baltimore, MD.

Math and Money. (2004, July). Girl Scout Troop 5704, Falls Church, VA.

Odd and Even Numbers: Developing the Concept Deeply. (2003, April). 81st Annual Meeting of the National Council of Teachers of Mathematics, San Antonio, TX.

Much Math in a Minimum of Morsels: Developing Number Sense. (2002, March). 25th Annual Conference of the Virginia Council of Teachers of Mathematics, Manassas, VA.

Elementary Number Theory: Number Sense. (2002, August). Invited workshop for Stafford County Public School teachers, Stafford, VA.

Elementary Number Theory: Number Sense. (2001, July). Invited workshop for Stafford County Public School teachers, Stafford, VA.

The Odd Rod: A New Manipulative for Helping Students Find Structure in the Multiplication Tables. (2001, March). 24th Annual Conference of the Virginia Council of Teachers of Mathematics, Harrisonburg, VA.

The Art of Simplifying: Taking Math from a Grind to Simple Beauty. (2000, October). Fairfax County Public Schools SOL Fair for Parents, Fairfax, VA.

Staff Development Workshops

MathTree Orientation. (2005, June). SEED School of Washington, DC.

MathTree Orientation. (2005, June). MathTree, Inc., Washington, DC.

MathTree Orientation. (2005, June). George Washington University, Arlington, VA.

GRANTS FUNDED

Project Director (\$3500). *Hands-On Solar Energy – II*. (1997). Environmental Protection Agency Environmental Education Grants. VA. Project goal: Train staff of the Reston Environmental Education Foundation in the use of solar energy equipment purchased through a previous grant.

Project Director (\$2000). *Hands-On Solar Energy*. (1995). Environmental Protection Agency Environmental Education Grants. VA. Project goal: Conceptualize and prepare the program, purchase necessary equipment, and demonstrate solar energy in action at summer camps of the Reston Association.

Project Director (\$2000). *Myths and Other Realities*. (1993). Council for Basic Education, Sci-Mat Fellow, VA. Project goal: Explore the use of mythology as an avenue for the study of ecology.

PROFESSIONAL RECOGNITION

Sigma Xi (1986)

Pi Alpha Alpha (1983)

Phi Kappa (1983)

PROFESSIONAL ASSOCIATION MEMBERSHIPS

National Council of Teachers of Mathematics (NCTM)

Virginia Council of Teachers of Mathematics (VCTM)