

Eric L. Mann, Ph.D.
Assistant Professor
Purdue University
Department of Educational Studies
100 N. University Street
Beering Hall of Liberal Arts and Education, Rm 5131
West Lafayette, IN 47906
Office Phone: 765-494-0087
Email: elmann@purdue.edu
Web: <http://www.edst.purdue.edu/elmann/>

Academic Background

Ph.D. in Educational Psychology (Gifted and Talented and Mathematics Education), The University of Connecticut, Storrs, CT, 2005.
M.A.T. (Elementary Teaching) The Colorado College, Colorado Springs, CO, 1997.
M.S. in Systems Management (Logistics Systems), University of Southern California, Los Angeles, CA, 1980.
B.A. (Mathematics), Albion College, Albion, MI, 1974.

University Positions

2007 - present Assistant Professor, Department of Educational Studies, Purdue University
2006 - 2007 Visiting Assistant Professor, Math Education, Department of Curriculum and Instruction with a joint appointment in the College of Science, Department of Mathematics, Purdue University
2006 - 2007 Educational Specialist, Indiana Space Grant Consortium
2005 - 2006 Visiting Assistant Professor, Department of Curriculum and Instruction, Purdue University
2005 - 2007 Associated Colleague, Gifted Education Resource Institute, Purdue University
2002 - 2007 Adjunct Faculty, University of Connecticut, Gifted Education

Professional Experience

University Teaching Experience

Purdue University

EDPS 540: Gifted, Creative and Talented Children, Summer 2005
EDPS 542: Curriculum and Program Development in Gifted Education, Summer 2006, Summer 2007
EDPS 430: Creating and Managing Learning Environments, Fall 2007
EDCI 365: Teaching Science in the Elementary School, Fall 2005, Spring 2006
EDCI 425: Teaching Mathematics in Secondary Schools, Fall 2005
EDCI 426: Teaching Mathematics in the Middle School, Spring 2006, Fall 2007, Spring 2007
EDCI 498M: Supervised Teaching In Secondary Mathematics Education, Spring 2006, Fall 2007, Spring 2007

University of Connecticut

EPSY 459: Curricular Options for High Ability Students (Online, Web-based), Spring 2003, Spring 2004, Fall 2004, Spring 2005, Fall 2005, Spring 2006, Fall 2006, Spring 2007
 EPSY 373: Strategies for Differentiating the Grade Level Curriculum (Online, Web-based), Fall 2003

Public Schools***Seventh Grade Mathematics Teacher***

Hall Memorial School, Willington, CT 2002-2003

Gifted and Talented Coordinator

Bow Memorial Middle School, Bow, NH 2001-2002

Eighth Grade Science, Mathematics and American History Teacher

Bow Memorial Middle School, Bow, NH 1998-2002

Fifth Grade Teacher

Atkinson Academy, Atkinson, NH 1997-1998

Related Teaching Experience

Fifth Grade Intern Teacher, Rockrimmon Elementary, Colorado Spring Co 1996-1997

Publications***Peer Reviewed***

Mann, E. L. (submitted for publication). The search for mathematical creativity: Can we identify creative potential in middle school students?

Mann, E. L. (submitted for publication). Parental perceptions of mathematical talent.

Mann, E. L. (2006). Creativity: the essence of mathematics, *Journal for the Education of the Gifted*. 30 (2) p. 236-260.

Educational Publications.

Mann, E. L. (2007). iMATHination, *Teaching for High Potential*, Spring 2007, p. 11.

Mann, E. L. (2007). Creativity: An essential element in your mathematics classroom, *Teaching for High Potential*, Winter 2007, p. 7.

Mann, E. L., Casa, T. M., and Spinnelli, A. M., (2004). *Unraveling the mystery of the MoLi stone: Place value and numeration. Teacher Support Manual*, Storrs, CT: Neag Center of Gifted Education and Talent Development, University of Connecticut.

Mann, E. L., Spinnelli, A. M., and Casa, T. M. (2004) *At the mall: Working with variables and equations. Teacher Support Manual*, Storrs, CT: Neag Center of Gifted Education and Talent Development, University of Connecticut.

Casa, T. M., Mann, E. L., and Spinnelli, A.M., (2004) *Awesome algebra: Looking for patterns and generalizations. Teacher Support Manual*, Storrs, CT: Neag Center of Gifted Education and Talent Development, University of Connecticut.

Casa, T. M., Mann, E. L., and Spinnelli, A.M., (2004). *Digging for Data: The Search Within Research. Teacher Support Manual*, Storrs, CT: Neag Center of Gifted Education and Talent Development, University of Connecticut.

Spinnelli, A. M., Casa, T. M., and Mann, E. L. (2005), *Analyze This! Representing and Interpreting Data, Teacher Support Manual*, Storrs, CT: Neag Center of Gifted Education and Talent Development, University of Connecticut.

Spinnelli, A. M., Mann, E. L. and Casa, T. M, (2004). *What's the ME in measurement all about? Teacher Support Manual*, Storrs, CT: Neag Center of Gifted Education and Talent Development, University of Connecticut.

Spinnelli, A. M., Casa, T. M., and Mann, E. L. (2004). *Factors, multiples and leftovers: Linking multiplication and division. Teacher Support Manual*, Storrs, CT: Neag Center of Gifted Education and Talent Development, University of Connecticut.

Significant Government Publications

Mann, E. L., (1988). *Statement of work: New Boston Air Station support services*, Falcon Air Force Base, CO: 50th Space Wing.

Mann, E. L., (1986). *Mission essential needs statement: Satellite attack warning system*, Peterson Air Force Base, CO: United States Air Force Space Command,

Mann, E. L., (Ed.). (1984) *Air Force Space Command sponsored research topics for the Air Force Institute of Technology*. Peterson Air Force Base, CO.

Mann, E. L., (1983). *Air Force Space Shuttle mission planning specialist training program*, Houston, TX: United States Air Force Systems Command.

Mann, E. L., (Ed.), (1982). *STS-6 Operational Flight Profile*, JSC-18621, Houston, TX: Mission Planning and Analysis Division, Lyndon B. Johnson Space Center, NASA.

Presentations

Invited

Jan 2007 *Finding and Developing Mathematical Creativity* (Millennium Speaker Series)
Region 10 Educational Service Center, Dallas TX

National

Apr 2007 *Identifying Creative Potential in Mathematics*, Paper presented at American Educational Research Association's Annual Conference, Chicago, IL.

Nov 2006 National Association for Gifted Children National Conference, Charlotte, NC

The Essence of Mathematics

Identification of Mathematical Creativity in Middle School Students

Challenging High-Ability Elementary School Science Students

May 2006 *Identifying Creative Potential in Mathematics*, The Eighth Biennial Henry B. & Jocelyn Wallace National Research Symposium on Talent Development, University of Iowa, Iowa City, IA.

Apr 2006 *Finding and Developing the Creative Student of Mathematics*, NCTM National Convention, St. Louis, MO

Jul 2005 *Developing Mathematical Creativity in Upper Elementary and Middle School Students*, CONFRATUTE, University of Connecticut, Storrs, CT

Nov 2004 National Association for Gifted Children National Conference, Salt Lake City, UT.

Finding and developing mathematical talent

Project M³: Realizing diverse students' mathematical potential

Jul 2004 *Creating Creative Mathematicians*, CONFRATUTE, University of Connecticut, Storrs, CT

Regional

- Apr 2007 *Powerful Learning for High Ability K-8 Students – Science*, Region 8 Educational Services Center, Columbia City, IN.
- Mar 2007 *Inquiry: Engaging Students in Scientific Discovery*, Argos Elementary School, Argos, IN
- Oct 2006 *Creativity Belongs in Your Classroom*, Indiana Council of Teachers of Mathematics Annual Conference, Indianapolis, IN.
- Sep 2006 *Finding and Developing the Creative Student of Mathematics*, NCTM Regional Conference, Chicago
- Jul 2006 DISCOVER! Institute, Purdue University
The Essence of Mathematics
Challenging High Ability Science Students
Institute Workshop on Math with Rachel McAnallen
- Mar 2006 *Powerful Learning for High Ability K-8 Students – Science*, East Central Indiana Educational Services Center
- Dec 2005 *Powerful Learning for High Ability K-8 Students – Science*, Northern Indiana Educational Services Center
- Jul 2005 *Developing Mathematical Creativity in Upper Elementary and Middle School Students*, DISCOVER! Institute, Purdue University
- Apr 2005 *Finding and developing mathematical talent*. District 4 Region Schools Parent Advocacy Group, Deep River, CT.
- Mar 2005 *Developing Mathematical Talent: On-Line Resources to Develop Creativity*. Associated Teachers of Mathematics in Connecticut, Spring Conference
- Oct 2004 *Finding and developing mathematical talent*. New England Conference on the Gifted and Talented, Mystic, CT.

Professional Development

- Oct 2006 *Meeting the Needs of the Gifted High School Student: An Overview of Curriculum Differentiation Strategies*, Northeast Dubois High School, IN.
- Feb 2005 *Differentiation in the Middle School Mathematics Classroom*. Bloomfield School District, CT.
- Dec 2004 *Applications of differentiated instruction: High school math and science*. Nashoba Regional School District, MA.
- Nov 2004 *Applications of differentiated instruction: Middle school math and science*. Nashoba Regional School District, MA.
- Aug 2004 *Math differentiation and creativity in the elementary classroom*. East Haven School District, CT.
Math differentiation and creativity at the secondary level. East Haven School District, East Haven, CT.
Five dimensions of differentiation for high-end learning the mathematics classroom. Ridgefield Public Schools, CT.
- Jun 2004 *Developing creative mathematicians*, Region 10 Teachers of the Gifted, New York City Public School, NY.
- Mar 2004 *Differentiating middle school mathematics*, Newtown Public Schools, CT.
- Oct 2003 *Differentiating middle school mathematics*, Newtown Public Schools, CT.
- Sep 2003 *Curriculum compacting*, North Haven School District, CT.

Honors Earned

Pi Lambda Theta, International Honor Society for Education (University of Connecticut)
Kappa Delta Pi, International Honor Society for Education (The Colorado College)
Who's Who Among America's Teachers, 9th Edition
Who's Who in America, 75th and 76th Editions

Professional Organizations

American Educational Research Association
National Association for Gifted Children
Indiana Association for the Gifted
National Council of Teachers of Mathematics
Indiana Council of Teachers of Mathematics
National Science Teachers Association
School Science and Mathematics Association
The American Society for Engineering Education
International Technology Education Association

Service

Manuscript Reviewer for School Science and Mathematics

Grants

2007 National Science Foundation Discovery Research – K12 proposal for Realizing Opportunities for Technology, Engineering and Science (ROUTES), Unfunded (\$2,999,999).
2005 U.S. Department of Education Jacob K. Javits proposal for National Research Center on Talent Development and Gifted Education at Purdue University, Unfunded (\$9,502,363).
2003 Blue Chip School Technology Grant, State of Connecticut
\$125,000 initial award, \$73,000 follow-on, Hall Memorial School, Willington, CT

Teacher Certifications

Indiana (Valid through October 4, 2016)
Elementary/Primary Generalist
Elementary/Intermediate Generalist
Gifted and Talented Education – Elementary/Middle School
Earth/Space Science – Middle School
Physical Science – Middle School
Mathematics – Middle School
Connecticut (Valid through March 10, 2010)
Elementary (K-6) Endorsement 005
Mathematics, Middle School Endorsement 229
Earth Science, Middle School Endorsement 223
New Hampshire (Expired June 30, 2006)
Elementary (K-8) Endorsement 1811

Other Life Experiences

1975-1996 United States Air Force - Enlisted as an Airman Basic; Retired a Lieutenant Colonel

Career Highlights

- 1991-96 2nd Space Wing Falcon Air Force Base, CO – Deputy Chief, Wing Plans: supervised a staff of 42; responsible for programming, planning and budgeting for 39 worldwide units with an annual budget of \$161 million.
- 1988-91 Detachment 2, 2nd Satellite Tracking Group, New Boston Air Station, NH – Deputy Commander: second in command for a 3,000-acre air station with 200 employees and \$12 million annual budget. Wrote and managed a 5-year security services contract and a 20-year station support services contract.
- 1984-88 Headquarters, Air Force Space Command, Peterson Air Force Base, CO – Plans officer: authored a variety of requirements, plans and agreements.
- 1983-84 13th Missile Warning Squadron, Clear Air Station, AK – Chief, Space Object Identification Section. Certified as a trainer and evaluator for space object identification specialists. Revised training curriculum.
- 1980-83 Manned Space Flight Support Group, NASA Johnson Space Center, TX – Space Shuttle Flight Design Manager, Space Shuttle Flight Design Engineer: supported the Space Shuttle Flight Test program and was the Flight Design Manager for the maiden launch of the Shuttle Columbia. Participated in the planning for 17 Shuttle missions. Served as a member of a four person team of NASA subject matter experts validating training materials for certification of para-professional mission planning specialists.
- 1977-81 Aerospace Defense Command Combat Operations Center, Cheyenne Mountain Complex, CO – Assistant Chief Analyst Operations Branch. Certified as a trainer and evaluator for mission orbital analysts for both low orbit and deep space objects.
- 1975-77 33rd Communications Group, March Air Force Base, CA – Navigational Aids and Communications System Management Office Analysis Non-commissioned Officer.

Military Awards

For Outstanding Achievement

NASA Group Achievement Award
 Three - Air Force Commendation Medals
 Two - Air Force Achievement Medals
 Twelve Outstanding Airmen of the Air Force Award
 Honor Graduate Basic Military Training
 Honor Graduate, Ground Radio Principles course
 Honor Graduate, Telecommunications System Control Specialist course
 Distinguished Graduate and 2nd Honor Graduate, Officer Basic Military Training
 Distinguished Graduate, Squadron Officer School
 1st Space Wing Junior Officer of the Quarter
 Headquarters North American Defense Command Junior Officer of the Quarter
 Headquarters Air Force Space Command Junior Officer of the Quarter
 Strategic Air Command Communication Area Airman of the Quarter
 Air Force Association Award for Outstanding Technical Abilities

For Meritorious Service

Five - United States of America Meritorious Service Medals

Department of Defense Joint Service Commendation Medal

Air Force Commendation Medal

Five - Air Force Organizational Excellence awards

Three - Air Force Outstanding Unit awards

Master, Space Operations Badge