## CURRICULUM VITAE Vivian Rose La Ferla

## Professor of Mathematical Sciences and Educational Studies Rhode Island College Providence, Rhode Island 02908 (401) 456-9861 vlaferla@ric.edu

## **EDUCATION**

Ed. D., Mathematics Education, Boston University, 1986.

Special Studies Status, History and Philosophy of Science, Harvard University,1975-76.M.A., Applied Mathematics, Boston University, 1974.

Lifetime Teachers' Certification - Secondary Mathematics –Boston University, Boston, MA, 1973.

B.A., Mathematics & Mathematics Education with a *minor in Physics*, *cum laude*, Boston University, 1973.

## **PROFESSIONAL EXPERIENCE**

July 2009-present	Professor of Mathematical Sciences & Educational Studies,	
Rhode Island College		
Fall 2019-2020	FUSE Fellow, Highlander Institute, Providence, RI	
2009-present	Program Coordinator, Secondary Mathematics,	
Rhode Island College Educational Studies		
2018-2020	Coordinator of PK-12 Secondary Educational	
Programs, Rhode Island College		
Fall 2015	Visiting Scholar, MEF, Ankara, Turkey	
	Conducting research in Geometry	
1996-2009	Associate Professor of Mathematics & Computer Science and	
Educational Studies, Rhode Island College		
Fall 2007	Visiting Scholar, Ankara University, Ankara, Turkey	
1000 1005		
1992-1995	Associate Professor of Mathematics &	
	Secondary Education, Rhode Island College	
1989-1992	Associate Professor of Mathematics,	
	Rhode Island College	
1976-1988	Assistant Professor of Mathematics,	
	Rhode Island College	
1974-1976	Instructor of Mathematics and Computer	
	Science, Rhode Island College	
1979-1987	Director of the Mathematics Learning	

	Center, Rhode Island College
1974	Instructor of Mathematics, Boston University
1973-74	Teaching Assistant, Boston University

### HONORS

*Invited* Mathematics Educator *Keynote* at 3rd International Congress of Eurasian Social Sciences, April 2020.

*Advisory Board member*, Journal of Faculty of Education, Ankara University, September 2007 - present.

Most Valuable Professor selected by student-athlete (3), 2018 & 2019,

Nominated for National Council of Teachers of Mathematics

Board of Directors, April 2015.

Golden Key Award, Delta Kappa Gamma Society International,

May 2014.

*Invitation* to participate in a *lesson study* at Shizuoka High School of Science and Technology by Hideyuki Umeda and Kiroyuki Kumakura (Shizuoka University, Japan.). 7 July 2012.

*Certificate* of Recognition *as board member*, Recycling for Rhode Island Education, July 1995.

Paul Maixner *Distinguished Teaching Award*, Rhode Island College, 1993.

Richard H. Balomenos Award in recognition of strong thoughtful leadership in mathematics

education by the Association of Teachers of Mathematics in New England,

Newport, Rhode Island, November 2, 1990.

Awarded the Rhode Island College Grant Person of the Year, 1988.

Certificate of Appreciation, National Council of Teachers of Mathematics, 1986.

## **PROFESSIONAL AFFILIATIONS**

National Council of Teachers of Mathematics Rhode Island Mathematics Teachers Association Association of Teachers of Mathematics in New England Pi Mu Epsilon, Mathematics Honorary Society Pi Lambda Theta, Women's Honor Society Delta Kappa Gamma, Key Women's Educators International

## PATENT

La Ferla, Vivian R., Moreau, Janine E. and Rodrigues, Mariano. *Three-dimensional board game*. 4,082,283. 4-4-78.

Ci.273-241.000. Developed out of a general studies course on Games.

## GRANTS

V. La Ferla, M. Lawrence & C. McLaughlin. (6/22). *The Elementary STEM Workshop*. \$84,162. Funded. RIDE & Rhode Island Foundation.

*Infusing Infinite Mathematical Problem Solving into Math ED courses.* (MOMATH) Faculty Research Grant, \$1,195 (2022).

*Geometry & Manipulatives for Pre-service Elementary Teachers.* Mini-Grant from Delta Kappa Gamma Society International, \$500 (2014). *Geometry and 3D Learning Experiences,* Faculty Development Fund, \$1,000 (2010).

*Spatial Abilities of Pre-service Elementary Teachers.* Faculty Research Grant, \$1,350 (2010).

*Internationally Recognized Technologies for use in the Mathematics Classroom.* Faculty Development Fund, \$1,400 (2009).

*The Effect of Using Computer Manipulatives on Pre-service Students' Understanding of Three-dimensions.* Faculty Research Grant, (2009).

*Interpreting Geometric Ideas using a Problem Solving Schema and the Group Embedded Figures Test.* Faculty Development Fund, \$500 (2008).

*Turkish Geometry Problems: Translating, Assessing and Implementing.* Faculty Research Grant, \$1,350 (2008).

*Proof: Assessing Geometric Reasoning of Undergraduate Students.* Faculty Research Grant, \$2950 (2007).

*Webshare Materials for Mathematics Practicum*<sup>\*</sup> (with Susan Patterson & Trintuition). Rhode Island Teacher Education Renewal Technology Fund. (2006). <u>http://www.trintuition.com/tr/index.php?m=55&uid=6</u>)

*Teaching the Proof in Geometry: Geometric Reasoning Through Visualization, Communication, and Polya's Process.* Faculty Development Fund, \$1,000 (2006).

*Teaching the Proof in Geometry: Geometric Reasoning Through Visualization, Communication, and Polya's Process.* Faculty Research Grant, RIC, \$1,381 (2006).

*Reading and Writing in Math and Science*. (with M. Roemer & C. Panofsy) Title II Mini-Grant Rhode Island Office of Higher Education. \$4,500. (2002).

*Introduction to Computing for Elementary and Middle School Education Majors*. (with Kate Sanders). Title II mini-grant Rhode Island Office of Higher Education. \$7,153. (2001).

Infusing Equity by Gender Into All Curricula and Classrooms. (with Nancy Sullivan and

Rose Marie Cipriano) Rhode Island Department of Elementary & Secondary Education. Funds to sponsor handbook for teachers. \$20,000. (1998).

*Infusing Gender Equity into all Curricula and Classrooms*. Rhode Island Department of Elementary & Secondary Education and the RI Commission on Women, workshop held June 25-29, 1997. \$5,000. (1997)

*The Rhode Island Calculus Consortium Module Project.* (with Lew Pakula, Mike Latina and Mary McNulty). National Science Foundation, \$150,000. (\$41,000 RIC) (1992-1995).

*Probability and Games of Chance: Probability Consortium.* Dwight D. Eisenhower fund for Mathematics and Science administered by the Office of Higher Education, \$10,000. (1993-1994).

*Inner-City School/ Museum Collaborative*. Dwight D. Eisenhower fund for Mathematics and Science for \$54,000. (1991-1992).

*Excellence in Teaching Mathematics Project.* Dwight D. Eisenhower fund for Mathematics and Science for \$42,000,(1991)

*Excellence in Teaching Mathematics Project.* Dwight D. Eisenhower fund for Mathematics and Science for \$40,000 (1990).

*Excellence in Teaching Mathematics Project.* Dwight D. Eisenhower fund for Mathematics and Science for \$30,000 (1989).

*Excellence in Teaching Mathematics Project.* Dwight D. Eisenhower fund for Mathematics and Science for \$20,500 (1988).

## PRESENTATIONS

"Trends in Mathematics Education Research," Invited Keynote Mathematics Education Speaker, 3rd International Congress of Eurasian Social Sciences. Bodrum, Turkey. April 2020.

Analysis of Three-Dimensional Geometric Explorations of Pre-Service Teachers (with Elif Karsli and Sinem Sozen Ozdogan), 13th International Congress of Mathematical Education (ICME-13), Hamburg, Germany, 24-31 July 2016.

## Mathematics Carnival: A Vehicle for ALL to Learn CCSSM-Geometric Concepts!

Presented paper at the National Council of Teachers of Mathematics (NCTM) 2016 Annual Conference and Exposition, San Francisco, CA. 12- 16 April 2016.

*The Common Core State Standards in Mathematics.* TED Universitesi, Istanbul, Turkey. 20 October 2015.

*Mathematics Education in the USA*. T.C. Mili Egitim Bakanligi Melek Ipek Ilk ve Orta Okulu. 12 November 2015.

## Transformational Geometry: Travel through the Common Core! Paper presented at the

National Council of Teachers of Mathematics (NCTM) 2014 Annual Meeting and Exposition. New Orleans, Louisiana. 7-13 April 2014.

*Transformational Geometry: Linking Geometry and Algebra with the Common Core.* Paper presented at the National Council of Teachers of Mathematics 2013 Annual Meeting and Exposition. Denver, Colorado. 17-20 April 2013.

## Geometric Transformation: Art and Proof.

Presented workshop at the Association of Teachers of Mathematics in New England (ATMNE), Warwick, RI, November 9, 2011.

## Probabilistic Reasoning in Quantitative Geometry.

Presented workshop at Association of Teachers of Mathematics Fall Meeting, Nashua, NH, October 2010.

An International Comparison of the Effect of Using Computer Manipulatives on Pre-service and Middle Grades Students' Understanding of Three-dimensional Buildings. Accepted to present workshop with Geometry Research Team from Istanbul, Rome and the USA at the International Conference on Technology in Mathematics Teaching, Metz, France. July 6 - 9, 2009.

*Geometry: Assessing and Improving Reasoning and Spatial Visualization for ALL students!* Accepted to present workshop at the National Council of Teachers of Mathematics, Regional Meeting, Boston, MA. October 2009.

*Sherlock Holmes Solves Math Mysteries*, (with Francesca Florio – prior student teacher in 2006), Workshop given at the Association of Teachers of Mathematics in New England, Portland, Maine. November 2008.

*A Multicultural Look at Mathematics* (with S. Olkun, F. Gonsulates, and M. Ceylan) 11<sup>th</sup> International Congress on Mathematics Education. Monterrey, Mexico. July 2008. Virtual participant in research presentation (via skype).

Assessing Geometric Reasoning of Undergraduate Students, Rhode Island College Scholar's Conference, April 28, 2008. Seminar.

Problem Solving Strategies: Integration with the Middle and High School Mathematics Curriculum. Workshop at the Teacher Training Academy in Istanbul, Turkey. http://ttatr.pd4educators.com/eng/index.html. December 28, 2007. (8 hours)

Geometric Reasoning Ability of Undergraduate Students. Middle East Technical University.

Ankara, Turkey. December 27, 2007. Seminar.

- *Mathematical Problem Analysis and its Use in Geometry.* (4 hour workshop to 25 teachers) TED Koleji Foundation High School. December 26, 2007.
- *Problem Solving and Mathematics* (presentation to 300 high school students) TED Koleji Foundation School. Ankara, Turkey. December 26, 2007.
- *Mathematics and Geometry in the US.* Mamak Anatolian High School. Ankara, Turkey. December 25, 2007. Presentation.
- *Analysis of Geometric Reasoning of College Students.* Ankara University. Ankara, Turkey. December 25, 2007. Presentation.
- *Improving Problem Solving Abilities of College Students.* Ankara University & Middle East Technical University, December 24, 2007. Presentation.
- *Math, Mystery, Motivation.* Presentation with first year teachers-Francesca Florio and NinaVizzacarro, Association of Teachers in New England, Springfield, Massachusetts, November 8, 2007. Workshop.
- Advanced Euclidean Geometry. Association of Teachers in New England, Springfield, Massachusetts, November 2007. Presentation.

*Teaching the Proof in Geometry: Geometric Reasoning through Visualization, Communication, and Polya's Process.* Presentation and poster at the 3<sup>rd</sup> International Conference on the Teaching of Mathematics, Istanbul, Turkey. July 2006.

*Math, Magic & Mystery.* Association of Teachers of Mathematics in New England, Providence, Rhode Island, October 22, 2004. Workshop.

*Introduction to Computing for Future Elementary and Middle-School Teachers*, Conference on Small College Computing (Northeast Region). Worcester, Massachusetts, 2002. Presentation.

Tangrams. Harmony Library, Harmony, Rhode Island, Workshop. February 19, 2004.

*Reading and Writing in Mathematics,* Institute for Teachers, Rhode Island College, August 12 -15, 2002. Week-long seminar for high school teachers.

*Using Manipulatives to Teach Algebra and Problem Solving*, Diocese of Providence, Educator's Colloquium, Providence, Rhode Island. March 13, 2001. Workshop.

Problem Solving Workshop, St. Pius V School, Providence, Rhode Island, February, 2001.

*Writing in the Mathematics Classroom.* Sponsored by The RIC Writing Project. Rhode Island College, January 2000. Workshop.

*Gender Equity and the Classroom*. Equity Conference, Title IX Coordinators, RIDE sponsored, New England Institute of Technology on April 7, 1998. Presentation.

*Infusing Gender Equity into all Curricula.* Rhode Island Commission on Women: Educator's Colloquium. Providence, Rhode Island. March 1998. Presentation.

*Infusing Gender Equity in the Mathematics Classroom.* Presentation at the Conference: Images of Gender Equity: Together Without Boundaries. Providence, RI. November 21, 1997.

*Mathematics Equity Classroom Practices.* Presentation & Coordinator of Conference on Infusing Equity by Gender Into All Curricula and Classrooms. Foreman Center, June 23-27, 1997.

*RI Calculus Consortium Module Project: Derivatives*, Mathematical Association of America. Salem State College, November 17, 1995. Presentation.

*RI Calculus Consortium Module Project,* National Educational Computing Conference, Baltimore, Maryland, June 18, 1995. Presentation.

*Trends and Future Outlook for Women,* Rhode Island Commission on Women: Panel on Gender Wage Gap: An Unfinished Agenda, Rhode Island Convention Center, May 24, 1995. Panel.

*NSF Initiatives*, Math Department Colloquium, Rhode Island College, May 8,1995. Presentation.

*Collaborative/Cooperative Learning (J. Bierden & D. Christy),* Faculty Colloquium, Rhode Island College, March 30, 1995. Workshop.

*Incremental Calculus Reform,* East Bay Collaborative Day, Roger Williams University, March, 1995. Workshop.

*Calculus Reform: Examples in Economics,* American Social Science Association Annual Meeting. Poster presented. Washington, D.C. January 6-9, 1995.

*Calculus Reform.* (*with Clem DeMayo of Providence College*) Association of Teachers of Mathematics in New England, Fall Conference, Burlington, VT, November, 1994. Presentation.

*Rhode Island Calculus Consortium Module Project*. Poster presentation at the National Science Foundation's Project Impact Conference, May 31-June 3, 1994.

Portfolio Assessment (Poster), Sigma Xi, Rhode Island Chapter, Spring 1994.

A Call for Change in Teaching, Maixner Award Lecture, Rhode Island College, April 7, 1994.

*Teaching Probability Concepts Using Cooperative Learning Techniques*. Association of Teachers of Mathematics in New England, Fall Conference, November, 1993. Workshop.

*Calculus Reform.* Association of Teachers of Mathematics in New England, Fall Conference, November, 1993. Workshop.

*The NCTM Standard: Data Analysis.* The Whole Kit and Kaboodle Teacher Institute (G. Kneisley, Director) Rhode Island College, July 15, 1993. Workshop.

*Collaborative Learning: A Way to Teach the Concept of Derivatives,* Harvard University. 2<sup>nd</sup> Annual Conference on the Teaching of Calculus, Cambridge, MA, June 25, 1993. Presentation.

*Cooperative Learning in the Calculus Classroom,* presented to the Calculus Consortium, Office of Higher Education, June 25, 1992. Presentation.

*Math Anxiety*, Project Equity Algebra Teachers, Providence, Rhode Island, 1992. Workshop.

*Sneaking Statistics, into the Mathematics Curriculum.* (with Mary Mc Nulty) Rhode Island Mathematics Teachers Association, May 16, 1991. Workshop.

*On Creating Change in the Teaching of Mathematics in the 21<sup>st</sup> Century*, Balomenos Memorial Lecture, Association of Teachers of New England, Newport, Rhode Island, November 2, 1990.

*Estimation.* National Council of Teachers of Mathematics, National Conference, Orlando, FL., April, 1989. Workshop.

*Motivating Mathematics Lessons: A Two-Pronged Approach,* National Council of Teachers of Mathematics National Conference, Boston, MA, December 2, 1988. Workshop.

*Motivation.* Fall Conference, Association of Teachers of Mathematics in New England, October 24, 1987. Workshop.

*Teaching Estimation Using Microcomputers*. National Council of Teachers of Mathematics, National Conference, Anaheim, California, April 10, 1987.Workshop. *Mathematics Anxiety*, research presented at Sigma Xi, Rhode Island College chapter, April, 1987. Poster.

Estimation, Conference for Excellence in Teaching Mathematics, Rhode Island College,

May 16, 1987. Workshop.

*Problem Solving in Mathematics*. Four workshops, Governor's Program for Gifted High School Students, July, 1987.

## Workshops conducted in various Rhode Island Middle and High Schools.

Sample topics include: consumerism, problem solving, bubble math, math fair topics, tangrams, transformational geometry, 1974 - present.

## PUBLICATIONS

# Analysis of Three-Dimensional Geometric Explorations of Pre-Service Teachers. with Elif in

Proceedings of the 13th International Congress on Mathematical Education (ICME-13). Hamburg (Germany) 14th - 20th July 2016.

*Things to Make and Do in the Fourth Dimension.* Book Review. Mathematics Teacher, vol. 109, Issue 2, September 2015, p.159.

Kirigami: Where's the Math? Arizona Association of Teachers of Mathematics, fall 2015.

*Mathematical Reasoning Vol. 2* (ed. By V. La Ferla, et al). Pearson Learning Solutions, 2012.

## A Cross-Cultural Curriculum Study: Examining, Assessing and Designing

*Transformational Geometry Tasks for Pre-Service Teachers.* with (S. Asli Ozgun-Koca, et. al) In Proceedings of the 12<sup>th</sup> International Congress on Mathematical Education (ICME-12). p.2242 - 2251. Seoul (S. Korea) 7<sup>th</sup> -15th July 2012.

*Technology In Mathematics Education: Different Kinds And Levels of Experimentation.* with S.Asli Özgün-Koca and Sinan Olkun in the Psychology of Mathematics Educators Annual Conference (PME-36) Proceedings. ISBN:Ankara (Turkey) July 2011. *A Cross-Cultural Study: Assessing and Improving Spatial Thinking of Pre-Service Teachers.* with (S. Olkun, et.al) in the International Conference on Education and

NewTechnologies Proceedings of (EDULEARN10). ISBN:978-84-613-9386-2, pp.6671-6676., Barcelona (Spain)-5th-7th July 2010.

An International Comparison of the Effect of Using Computer Manipulatives on Pre-service and Middle Grades Students' Understanding of Three-dimensional Buildings. Presentation with (S. Olkun, et. al.) in Proceeding of the 9<sup>th</sup> International Conference on Technology in Mathematics Teaching (ICTMT-9), Metz (France), 2009.

*Mathematical Activities for Elementary Teachers, Volume 2.* edited by La Ferla, et al. New York: Pearson Education, Inc., 2008.

*A Multicultural Look at Mathematics* with (S. Olkun, F. Gonsulates, and M. Ceylan) in Proceedings of the 11<sup>th</sup> International Congress of Mathematics Education (ICME-11), Monterrey, Mexico, 2008. (Publication of Conference Proceedings, in progress).

*Teaching the Proof in Geometry: Geometric Reasoning Through Visualization Communication, and Polya's Process,* in Proceedings of the 3rd International Conference on the Teaching of Mathematics at the Undergraduate Level (CD-ROM), ed. Douglas Quinney, Turkish Mathematical Society, Istanbul, Turkey, 2006.

*Introduction to Computing for Future Elementary and Middle-School Teachers*. (with K. Sanders). <u>The Journal of Computing in Small Colleges</u> 17:6, 91-101, May 2002.

*Statistical Analysis Of Data By Gender* in Infusing Equity by Gender into the Classroom: A Handbook of Classroom Practices. ed. N.Sullivan, online at <a href="http://www.ricw.ri.gov/publications/GEH/lessons/388.htm">www.ricw.ri.gov/publications/GEH/lessons/388.htm</a>, 2000.

*The Rhode Island Calculus Consortium Module Project: Derivative.*(*Distributed statewide*) A National Science Foundation sponsored publication, 1993.

*Collaboration in Mathematics Education: A View Point.* Journal for Excellence in <u>Teaching Mathematics</u>, Rhode Island Mathematics Teachers' Association, Fall 1992.

*Mathematics Induction*. In Faculty Advancement in Mathematics/Units 1-7/With DisK (2 Books and 1 Disk) ed. J. Burling, et al. COMAP, 1989.

- *Teaching Estimation through Simulation on the Microcomputer*. Chapter 23, <u>Estimation</u> <u>and Mental Computation</u>, 1986 Yearbook of the National Council of Teachers of Mathematics, pp. 201-211. Reston, VA., 1986.
- A Comparison of an Instructional Strategy Oriented Toward Mathematical Computer Simulations to the Traditional Teacher-Directed Instruction on Measurement Estimation. University Microfilms International, 86-09285, 1986.

Rhode Island Mathematics Fair. The Mathematics Teacher, September, 1978.

Consumerism: A Vehicle for Teaching Mathematics. The ATMNE Journal, Fall, 1975.

## **OTHER PROFESSIONAL ACTIVITIES**

**National Mathematics Education Work** 

*Teaching with Technology Fellow*, WebCT. University of Rhode Island, 2000. *Invited* to the National Science Foundations Second Invitational Conference on Reform

in Mathematics and Science Education, February 24-26, 1994

Participant, Math Connection, Math/Science Education Board, October, 1993.

Attended, National Science Foundation Calculus Principle Investigator meeting

Sponsored by the National Science Foundation, Washington, DC, October 23-25, 1992.

*Sponsor & Co-coordinator*, Evaluation and Assessment in Mathematics. Summer Institute, Rhode Island College, August 1991.

*Member of Scholarship Committee*, National Science Foundation High School Scholars in Mathematics and Science, 1991.

Advisory Board Member, Mathematics & Science Resource Network, 1991.

*Editor*, The Journal for Excellence in Teaching Mathematics, 1991.

*Member of In-service Committee*, Association of Teachers of Mathematics in New England, 1990.

*Member*, Rhode Island, Leading Mathematics Education into the 21<sup>st</sup> Century, 1990. *Reviewer*, Mathematics Teacher, 1987 to 1990.

Sponsor & Coordinator, Teacher Enhancement in Mathematics Lecture Series, Winter, 1989. Selected to attend, Mathematics and Education Reform Network Workshop, University of California at Berkley May, 1989.

*Presider*, National Council of Teachers of Mathematics, National Conference, Portland, ME, November, 1989.

*Sponsor & Coordinator*, Excellence in Teaching Mathematics Conference, September, 1989. *Editor*, The Journal for Excellence in Teaching Mathematics, 1989.

*Presider*, National Council of Teachers of Mathematics, National Conference, Boston, MA, December 1 through 3, 1988.

*Presider*, National Council of Teachers of Mathematics, National Conference, Chicago, IL, April, 1988.

*Rhode Island Delegate*, National Council of Teachers of Mathematics General Assembly, Chicago, IL, April, 1988.

*Organizer and panel moderator*, Young Women in Mathematics, CCRI, Winter, 1988 *Editor*, Rhode Island Mathematics Teachers Association Journal, Rhode Island

Mathematics Teachers Association, 1988.

*Selected to attend,* Faculty Advancement in Mathematics. A two-week workshop sponsored by the National Science Foundation, 1988.

*Editor*, Rhode Island Mathematics Teachers Association Newsletter, Rhode Island Mathematics Teachers Association, 1987.

Sponsor & Coordinator, Excellence in Teaching Mathematics, September, 1987.

*Articulation* meetings between High School and Colleges in Rhode Island, March, 1987, Fall Conference, October 7 and 8, 1987.

Sponsor & Coordinator, Excellence in Teaching Mathematics, May 16, 1987

*Certificate of Completion*, Institute on Computing in Schools. Harvard University,

Graduate School of Education, 1982.

Originator & Coordinator, Rhode Island Bicentennial Math Fair, 1976.

America Diploma Project Algebra II Judgment Study Workshop. Towson, Maryland March 2, 2009. (Attended with a team from RIC Math Department).
Advancing College Readiness: Higher Education's Role in Improving America's High Schools. Sponsored by Achieve, Inc., American Council on Education & The Charles A. Dana Center. Rhode Island State Team. Washington, D.C. December 8 & 9, 2008.
America Diploma Project Algebra I Exam Item Review. Philadelphia, Pennsylvania. May 12 – 15, 2008.
America Diploma Project Algebra II End-of-Course Exam Data Review.
Washington, D.C. January 9-11, 2008.
Aligning Expectations: Using the American Diploma Project Algebra II Exam in Higher Education." Rhode Island State Team. Washington, D.C. October 4 & 5, 2007.
American Diploma Project Algebra II End-of-Course Exam Item Review.
Philadelphia, Pennsylvania. August 7-9, 2008.

Reviewer, Mathematics Teacher, January 2008- present
Exploring, Analyzing, Convincing: Learning Deductive Reasoning with
Games of Logic---reviewed July 2008 & 2<sup>nd</sup> revision on September 2008 (accepted for publication)
The Factoring Cube—reviewed February 2008 (rejected for publication)
Reviewer, Teacher Advisory Panel (Spring 2003-Fall 2004)
Joining Forces: Spreading Successful Strategies, National Science Foundation, invitational conference. Washington, D.C. February 23-25, 1995.

Proposal Reviewer, National Science Foundation, Washington, DC, April 4-7, 1991.

## **Regional & Local Mathematics Education Work**

*Attendance*, Mathematics Summits I & II. May 2008 & November 2008. Involved RIC Secondary Mathematics Education students in the following professional meetings:

Rhode Island Mathematics Teacher's Association Spring Meeting (May 2007):

Fall ATMNE Conference, Killington, VT (with Practicum class) Oct. 18-20, 2006.

RIMTA, RI, November 2,2006.

RI Department of Education, Leadership Institute, November 3, 2006.

Thesis committee member, Title: How Do Students Develop as Mathematical

Communicators? An Action Research Project. Master's student in Elementary

Education, Kendra Haggerty, (Lisa Owen-advisor), 2005.

*Chair*, Free Materials Committee, Association of Teachers of Mathematics in New England, Fall Conference, 2004.

*Attended workshop*, Mathematics Institute, Updating and Motivating the Math Curriculum with Discrete Math Activities, March 6, 2004.

Judge, RI State Science Technology & Engineering Fair, March 2003-2005.

Chair, Materials Committee, Association of Teachers of Mathematics in New England,

Fall Meeting, Manchester, NH, November 6-8, 2003. (with practicum students).

Member of Education Committee, Rhode Island Commission on Women, 2003.

Curriculum Strategic Team Member, St. Pius V School, Fall 2003

*Attended*, RIDE Teaching Mathematics for Understanding Series, (12 hours) Spring 2002, (24 hours) 2001.

*Reviewer*, "Functions and Change with Trigonometry: A Modeling Alternative to College Algebra." Krauder, Evans, Noell, 2000.

Reviewer, New England Mathematics Journal, Spring 1998-2002.

*Executive Board Member*, Rhode Island Recycling for Education, 1991-1995.

*Coordinator*, Rhode Island Commission on Women Seminar, RI Convention Center, September 29, 1995.

*Educator's Colloquium member,* Rhode Island Commission on Women, 1993-1998. *Task force* Rhode Island Commission on Women, *The Effects of the Glass Ceiling in Higher Education.* 1996-1997.

*Executive board member*, Rhode Island Mathematics Teachers Association, 1987-1996. *Co-Chair*, Supplemental Program Committee, Fall Conference, Association of Teachers of Mathematics in New England, August, 27-29, 1990.

National Council of Teachers of Mathematics Standards, two-day seminar on implementing the NCTM Standards in Rhode Island, August, 27-29, 1990.

## **International Mathematics Education Work**

*Presentations at International Conferences: ICME11 & ICTM 3.* (see presentation list). *Coordinator,* Research Mathematics Education Team with Turkish Scholars. Dr. Sinan Olkun, Ankara University, Funda Gonsulates (Doctoral student at Michigan State University), and Meltem Ceylan at Darüşşafaka Schools, Istanbul, Turkey.

Geometry Curriculum Review. Private MEF Schools. Istanbul, Turkey. December 31, 2007.

Geometry Curriculum Review, Observation of Geometry classes, & meetings with faculty and students, interviews with students. Istanbul Anatolian High School, Istanbul, Turkey. December 31, 2007.

 Mathematics Curriculum Review. Daröşşafaka Schools. Istanbul, Turkey. December 30, 2007.
 Geometry Curriculum Review. Mamak Anatolian High School. Ankara, Turkey.

December 25, 2007.

## COURSES TAUGHT

## MATHEMATICS

- Math 010: <u>Basic Mathematics Competency</u>
- Math 020: Introductory Algebra
- Math 139: <u>Contemporary Topics in Mathematics</u>
- Math 141: Introduction to Mathematical Thought
- Math 143: <u>Mathematics for Elementary School Teachers I</u>
- Math 144: <u>Mathematics for Elementary School Teachers II</u>
- Math 177: Quantitative Business Analysis I
- Math 181: Applied Basic Mathematics I
- Math 182: Applied Basic Mathematics II
- Math 209: <u>Precalculus Mathematics</u>
- Math 212: <u>Calculus I</u>
- Math 212T: <u>Calculus I: Special Technology Section</u> (using the TI85 Graphing Calculator)
- Math 213: <u>Calculus II</u>
- Math 240: <u>Statistical Methods I</u> \*
- Math 247: <u>Calculus: A Short Course</u>
- Math 238: Quantitative Business Analysis II
- Math 248: <u>Business Statistics I</u>
- Math 314: <u>Calculus III</u>
- Math 324: College Geometry
- Math 445: <u>Statistical Methods II</u> \*\*
- Math 409: <u>Mathematical Problem Analysis</u>
- Math 550: <u>Mathematical Problem Analysis (Graduate course)</u>
- Math 580: <u>Geometry for High School Teachers (Graduate Course)</u>
- MTET 513: <u>Delving Deeper: Geometry and Measurement (Graduate course)</u>
- SED 315/510: Mathematics Teaching in a Diverse Classroom
- SED 410/510 Practicum in Secondary Education-Mathematics
- SED 411/511: Supervision of Field Experiences in RI Middle and High School
- SED 415/515 Rethinking Mathematics Teaching and Learning
- SED 421/521: Student Teaching in the Secondary Education-Mathematics
- SED 422/522: Student Teaching Seminar in Secondary Education-Mathematics
- SED 429: <u>Mathematics in the Secondary School (Graduate course)</u>
- SED 480: <u>Curriculum and Evaluation in Secondary Education (Graduate course)</u> (in collaboration with James Bierden and Donna Christy)
- SED 510: <u>Mathematics Teaching in a Diverse Classroom</u>
- SED 515: <u>Rethinking Mathematics Teaching and Learning</u>
- SED 580: <u>Teach for America: Mathematics Practicum</u>
- **COMPUTER SCIENCE**
- CS 101: Introduction to Computers

#### **GENERAL STUDIES**

GS 365: <u>Games</u>

<u>NOTES</u>

\*Math 240 is a specialized requirement of all students in secondary education mathematics. The computer statistical package MINITAB, TI-84 GC, Excel is introduced in the course. \*\*Math 345(445) is an elective course in which the computer statistical language SPSS is essential and is integrated into the course. In the past, the majority of students have been secondary education mathematical majors, with the rest being from the physical and social sciences.

## **OTHER PROFESSIONAL ACTIVITY**

Teaching with Technology Fellow, WebCT. University of Rhode Island, 2000. Invited to the National Science Foundations Second Invitational Conference on Reform in Mathematics and Science Education, February 24-26, 1994 Participant, Math Connection, Math/Science Education Board, October, 1993. Attended, National Science Foundation Calculus Principle Investigator meeting Sponsored by the National Science Foundation, Washington, DC, October 23-25, 1992. Sponsor & Co-coordinator, Evaluation and Assessment in Mathematics. Summer Institute, Rhode Island College, August 1991. Member of Scholarship Committee, National Science Foundation High School Scholars in Mathematics and Science, 1991. Advisory Board Member, Mathematics & Science Resource Network, 1991. Editor, The Journal for Excellence in Teaching Mathematics, 1991. Member of In-service Committee, Association of Teachers of Mathematics in New England, 1990. *Member*, Rhode Island, Leading Mathematics Education into the 21<sup>st</sup> Century, 1990. Reviewer, Mathematics Teacher, 1987 to 1990. Sponsor & Coordinator, Teacher Enhancement in Mathematics Lecture Series, Winter, 1989. Selected to attend, Mathematics and Education Reform Network Workshop, University of California at Berkley May, 1989. Presider, National Council of Teachers of Mathematics, National Conference, Portland, ME, November, 1989. Sponsor & Coordinator, Excellence in Teaching Mathematics Conference, September, 1989. Editor, The Journal for Excellence in Teaching Mathematics, 1989. *Presider*, National Council of Teachers of Mathematics, National Conference, Boston, MA, December 1 through 3, 1988. Presider, National Council of Teachers of Mathematics, National Conference, Chicago, IL, April, 1988. Rhode Island Delegate, National Council of Teachers of Mathematics General Assembly, Chicago, IL, April, 1988. Organizer and panel moderator, Young Women in Mathematics, CCRI, Winter, 1988 Editor, Rhode Island Mathematics Teachers Association Journal, Rhode Island Mathematics Teachers Association, 1988. Selected to attend, Faculty Advancement in Mathematics. A two-week workshop sponsored by the National Science Foundation, 1988.

*Editor*, Rhode Island Mathematics Teachers Association Newsletter, Rhode Island Mathematics Teachers Association, 1987.

Sponsor & Coordinator, Excellence in Teaching Mathematics, September, 1987.

*Articulation* meetings between High School and Colleges in Rhode Island, March, 1987, Fall Conference, October 7 and 8, 1987.

*Sponsor & Coordinator,* Excellence in Teaching Mathematics, May 16, 1987 *Certificate of Completion*, Institute on Computing in Schools. Harvard University,

Graduate School of Education, 1982.

Originator & Coordinator, Rhode Island Bicentennial Math Fair, 1976.

## COURSES TAUGHT 1992-1995 Chair, Council of Rhode Island College

2016 Chair elect, Curriculum Committee

2017-20 Member, Assessment Committee, FSEHD