

# CURRICULUM VITAE FOR KIMBERLY MCGINLEY VINCENT

Washington State University  
Pullman, WA 99164-3113

January 2015

## GENERAL INFORMATION

**NAME:** Kimberly McGinley Vincent, PhD

**RANK:** Clinical Associate Professor

**OFFICE LOCATION:**

Department of Mathematics  
Washington State University  
PO Box 643113  
Pullman, WA 99164-3113

**OFFICE PHONE:** 509-335-3143

**E-MAIL:** [vincent@math.wsu.edu](mailto:vincent@math.wsu.edu)

**SPOUSE'S NAME:** Peter M. Vincent

**DATE OF FIRST EMPLOYMENT AT WSU:** January 1998

**DATE OF PRESENT RANK AT WSU:** August 2009

## EDUCATION BEYOND HIGHSCHOOL

Ph.D. in Mathematics Education, 1999, University of Idaho  
(Also completed the course work and qualifying exams for a PhD in Mathematics at UI, 1995)

M.S. in Mathematics, 1989, University of Idaho

B.S. in Mathematics, 1984, Idaho State University

## EXPERIENCE

### **Positions and Dates:**

Teaching Assistant, Mathematics Department, Idaho State University,  
1984-1985

Teaching Assistant, Mathematics Department, Univ. of Colorado Colo. Spgs.,  
1986-1987

Research Assistant, Micro Electronic Research Center, University of Idaho  
1987-1988

Teaching Assistant, Department of Mathematics, University of Idaho  
1988-1993

Teaching Assistant, College of Ed, Teacher Division, University of Idaho  
1993-1994

Lecturer, Department of Mathematics, University of Idaho  
1994-1997

Preceptor, Department of Mathematics, Washington State University  
1998-1999

Instructor, Department of Mathematics, Washington State University  
2000-2003

Clinical Assistant Professor, Department of Mathematics, Washington State University  
2003-2009

Clinical Associate Professor, Department of Mathematics Washington State University  
2009-present

### **MEMBERSHIPS IN PROFESSIONAL SOCIETIES**

National Council of Teachers of Mathematics (NCTM)

Mathematical Association of America (MAA)

Special Interest Group of MAA Research in Undergraduate Mathematics Education  
(RUME)

Special Interest Group of MAA Quantitative Literacy

Washington Council of Teachers of Mathematics

Washington Teachers of Teachers of Mathematics (WaToToM)

### **PROFESSIONAL RECOGNITION**

#### **Teaching Awards**

Awarded *Excellence in Teaching Award* from Department of Mathematics, University of Idaho, December **1993**.

Nominated, **April 2002**, for *College of Education's Excellence in Teacher Preparation Award*, WSU. This nomination was for collaboration with other faculty to provide excellence in teacher preparation.

Included in *Who's Who Among America's Teachers*, **2004**. Nominated by former student Nichole Huffman.

Included in *Who's Who Among America's Teachers*, **2005, 2006**. Nominated by former students (anonymous).

Barbara Chamberlin Female Mathematics Educator of the Year awarded by Washington State Math Council, **2013**

#### **Service to the State of Washington**

Conference Organizer— Math-a-Rama at the Northwest Mathematics Conference (NWMC), Bellevue WA. I recruited 38 pre-service teachers from five universities and colleges in Washington and Oregon to present short mathematics lessons at Math-a-Rama. I made all necessary scheduling arrangements with NWMC organizers. **October 2007**.

**Invited** to be a Conference Organizer—Northwest Mathematics Conference, Spokane WA. I also was chair of the Math-a-Rama committee. **October 2009-November 2010**.

Member of *Washington Teachers of Teachers of Mathematics (WaToToM)*. This organization writes position papers for promotion excellence in preparing future mathematics K-12 teachers. These papers are used to influence policy made by agencies such as: the WA State Board of Education, Office of Superintendent of Public Instruction, and Professional Education Board. **January 1999-present.**

**Invited** to serve as Executive Director of *Washington Teachers of Teachers of Mathematics, (WaToToM)*. **January 2009-present.**

Nominated to apply and subsequently selected to serve on the *Math Panel* by the State Board of Education (SBE). The initial charge given the Washington Legislature was to attend three meetings, reporting to the WA State Board of Education (SBE), to provide feedback to *Strategic Teaching*, a team preparing recommendations on how to revise Washington State's K-12 Math Standards. Since the completion of this charge the legislature has requested this panel continue to advise the State Board of Education for three years. Washington Legislature defined the charge of the Math Panel: advise on adoption of Revised Washington State K-12 Mathematics Standards, review of curricula to recommend for all grade bands; review policy and SBE recommendation on the requirement for a third year of high school mathematics for all Washington public high school students. **April 2007-August 2009.**

**Invited** by Dr. Terry Bergeson, Superintendent of Public Instruction, to be a member of the *Standards Revision Team* with the charge to revise Washington State's K-12 Math Standards, **October 2007- July 2008.**

**Invited** by Randy Dorn, Superintendent of Public Instruction, to be a member of *Common Core Standards Statewide Workgroup*, **July 2010-2012.**

## **Service Nationally**

**Chair-Elect** for Special Interest Group Mathematical Association of American-Quantitative Literacy (SIGMAA-QL), February 2007-February 2008.

**Chair** for Special Interest Group Mathematical Association of American-Quantitative Literacy (SIGMAA-QL), **February 2008-February 2009.**

**Co-organized** a Contributed Paper Session (CPS) at the Joint Mathematics Meetings (JMM), San, Diego, CA. Title: *Assessment of Student Learning in Undergraduate Mathematics*. Co-organizers were Bill Martin, Bernie Madison and Maura Mast. January 2008.

**Co-organized** a Contributed Paper Session at the Joint Mathematics Meetings, Washington DC with Cinnamon Hillyard. Title: *Quantitative Literacy Across the Curriculum*. **JMM January 2009.**

## Other

1. **Invited** to be keynote speaker at Math Leadership Conference in Twin Falls, Idaho, plus conducted three workshops at the conference, August 1998. The theme of the conference was the use of alternative or authentic assessment in mathematics.
2. **Invited** to Qualitative Research Course at the University of Idaho to discuss my research, April 1996, July 1997 and October 1997.
3. **Invited** to co-present with Sandra C. Cooper, an activity on symmetry and culture for Women in Science and Culture at WS spring 2001, fall 2001.
4. **Invited** to co-present results of peer-led group learning with Greg Crouch for Science, Mathematics and Engineering College (SMEC) fall 2001, and to visiting high school teachers at Math Day, fall 2001
5. **Invited** to conduct a two hour workshop, *Gender Equity* at Evergreen State College in Olympia WA, December 2001
6. **Invited** to present research, *Three Veins of Research Intertwined into One Teaching Philosophy* at New Mexico State University, December 2001.
7. **Invited** to co-present three hour workshop *Quantitative Literacy for the Pre-service Teachers* at Washington Teachers of Teachers of Mathematics (WaToToM) annual meeting, February 2004. Co- presenters Cinnamon Hillyard (UW), Ron Ward (WWU).
8. **Invited** to present WSU's work toward *Quantitative Literacy in the Major* at the Washington Center, Olympia WA, January 2004.
9. **Invited** to be a panelist on Quantitative Literacy at the Joint Math Meetings (JMM) in Phoenix AZ, January 2004.
10. **Invited** to facilitate two half-day workshops for science faculty at WSU Vancouver on Quantitative Literacy, July 2007.
11. **Invited** to facilitate a workshop, *Visual Representations and Dynamic Software for Conceptual Understanding* at the Northwest Mathematics Conference, Bellevue WA October 2007.
12. **Invited** to facilitate two half day workshops for all faculty at Renton High School to embed quantitative projects in all disciplines, **17 May 2008, 14 June 2008.**
13. **Invited** to facilitate one week workshop for middle school teachers, *Building Bridges Between Mathematics and Science*, in the Northwest Educational Service District, June 2009.
14. **Invited** to co-facilitate three day workshop for MESA teachers from all over the state of WA. Prosthetic Arm Project, **July 2013.**

## COURSES TAUGHT

### University of Idaho, Mathematics Department

College Algebra (Math 140 Precalculus), fall 1988, fall 1991

Intermediate Algebra (Math 50/101), spring, fall 1989

Math for Elementary Teachers I (Math 235), fall 1989, fall 1995, spring 1996, spring 1997, fall 1997

Math for Elementary Teachers II (Math 236) fall 1989, spring 1990, fall 1995, fall 1996  
Survey of Calculus (Math 160) fall 1990, fall 1992, fall 1993  
Analytical Geometry and Calculus I (Math 180) spring 1991  
Finite Math (Math 111) spring 1992  
Analytical Geometry and Calculus III (Math 200) spring 1995  
Algebra and its Applications (Math 137) spring 1996, fall 1996, spring 1997, fall 1997

### **Washington State University, Department of Mathematics**

Intro to Mathematics (Math 210), spring 1998  
Math for Elementary Teachers I (Math 251), spring 1998, fall 1998, spring 1999, fall 1999, spring 1999, fall 1999, spring 2000, fall 2001, spring 2001, spring 2002, spring 2003, spring 2010  
Math for Elementary Teachers II (Math 252), fall 1998, spring 1999, spring 1999, spring 2000, fall 2000, fall 2001, spring 2002, fall 2002, spring 2003, fall 2003, fall 2005, fall 2007  
Middle school mathematics class on algebraic thinking, Math 351 Spring 2005, 2007, spring 2013  
Methods of Teaching for Secondary School Mathematics, fall 1999-2013  
Linear Algebra (Math 220) spring 2000, fall 2002, summer 2011, fall 2012, spring 2013  
Calculus for Life Science Majors (Math 140) spring 2001, fall 2001, spring 2002, spring 2003, fall 2004, spring 2008  
Abstract/Modern Algebra, Math 320, spring 2008, spring 2012  
Capstone Mathematics Class for Secondary mathematics majors, Math 432 Spring 2006, spring 2012  
Approaches to Mathematics Teaching, Math 534 spring 2007  
Introduction to Proof Writing, Math 301 spring 2010, summer 2012  
Intersections of Gender, Culture and Mathematics, Math 431, Math 531 fall 2010, fall 2013  
Calculus for Middle School Teachers, Math 151, summer 2010 and as independent study fall 2010, fall 2011  
Geometry for Middle School Teachers fall 2012, fall 2013

### **RESEARCH**

#### **PUBLICATIONS**

(\* indicates those that were peer reviewed before acceptance for publication)

1. \*Vincent, K.M. (1997) *Women's attitudes toward mathematics: A case study of one woman's attitudes*. The Journal of Critical Pedagogy, 1. Western Montana of the University of Montana Research Publications. <http://wmc131.wmc.edu/pub/jcb/issuel-1/contents.html>
2. (Invited) Vincent, K.M. (1998). *Geometry in the elementary school*. Pinnacle, Idaho Council of Teachers of Mathematics.
3. \*Vincent, K.M. (in print). *The Myth: Women, mathematics and technology do not merge*. In The Politics of Schooling: Creating Communities of Solidarity and Hope. Falmer Press.
4. \*Vincent, K.M. (2003). *Can Technology Replace Hand-on Learning in Geometry?* In Proceedings for Society for Information, Technology and Teachers Education annual conference of Association of Advancement of Computing in Education, Albuquerque, NM, spring 2003

5. \*Vincent, K.M. (2004). *Developing Experience Using Technology in a Constructivist Setting for Pre-service Secondary Mathematics Teachers*. In Proceedings for Society for Information, Technology and Teacher Education annual conference of Association of Advancement of Computing in Education, Atlanta, GA, spring 2004.
6. Saldana, M.A. & Vincent, K.M. (2005). *Factors that Influence the Underrepresentation of Latino/a Students Majoring in Mathematics in the State of Washington*. The McNair Journal, WSU, Vol. 3. pp114-129.
7. Pham, H & Vincent, K.M. (2007). The McNair Journal, WSU, Vol

#### RESEARCH PUBLICATIONS IN PROGRESS

1. Vincent, K. M. & Buyserie, B. (work in progress, submitted March 2007). *An Interdisciplinary Collaboration Between English and Mathematics Pre-service Teachers*.
2. Vincent, K.M. & Gilbert, M. (work in progress). *Raising Cognitive Demand for Middle School Mathematics In-service Teachers*. This research is based on three years of data from MCSP.
3. Vincent, K. M. (work in progress). *In-service Teachers Use of Formative Assessment to Inform Teaching*. This research is based on three years of data from MCSP.
4. Vincent, K. M & Gilbert, M. (work in Progress). *Improving Teachers Understanding of Proportional Reasoning*.
5. Vincent, K.M. (work in Progress). *Teaching for Transfer and High Cognitive Demand Through the Use of Discourse*.

#### CURRICULUM PUBLICATIONS IN PROGRESS

6. \*Vincent, K.M., DeTemple, D., Cooper, S.C. and Adams, V. (under contract with Addison Wesley—in progress). Activity Manual for Elementary Teachers. This will be used for the two content courses, Math 251, Math 252 and the math methods course, Teaching and Learning 353.
7. \*Vincent, K.M. (submitted and accepted 2006 to be published 2007). *Reading Rates: Interpreting Data and Making Inferences*. <http://serc.carleton.edu/sp/ssac/index.html>
8. \*Vincent, K.M. (submitted and accepted 2006, targeted publishing date 2007). Discovering Parabolas by Plotting Quadratic Data. Rhea Irving (Ed). *Sketchpad Across the Curriculum*. Key Curriculum Press.
9. Vincent, K.M. (WSU), Gilbert, M (UH), King, J. (UW), Mabbott, A (Seattle School District), & Adolphson, K (EWU). (in progress--a publisher has been approached). *Math Case Study Project*. This publication is curriculum is intended for professional development with middle school mathematics teachers. The first two years we have developed activities for middle school mathematics dealing with proportional reasoning and geometry. The materials also include curriculum to address pedagogy.

#### PROFESSIONAL PAPERS PRESENTED

##### Refereed

1. Vincent, K.M. & Adele, G. (1993). *Tessellations*. 80-minute workshop, Idaho Council of Teachers of Mathematics, Post Falls ID

2. Vincent, K.M. (1995). *Discover the Magic of Kaleidoscopes*, 80-minute workshop, Annual Idaho Council of Teachers of Mathematics, Pocatello ID.
3. Vincent, K.M. (1995). *Women's Attitudes Toward Mathematics: A Case Study of One Woman's Perspective*, Northern Rocky Mountain Educational Research Association, 13<sup>th</sup> Conference, Jackson WY.
4. Vincent, K.M. (1996). *Discover the Magic of Kaleidoscopes*, 180-minute workshop, Annual Idaho Council of Teachers of Mathematics, Twin Falls ID.
5. Vincent, K.M. (1997). *Woman's Gains and Struggles in College Mathematics Classes Utilizing a Feminist Pedagogy*, Research Conference in Collegiate Mathematics Education, Mt. Pleasant, MI (sponsored by the Research in Undergraduate Mathematics Education Community (RUMEC), Central Michigan University, and Exxon Foundation). **General Sessions Presentation.**
6. Vincent, K.M. (1997). *Odyssey of a Mathematician Utilizing a Divergent Pedagogy*, Northern Rocky Mountain Educational Research Association, 15<sup>th</sup> Anniversary Conference, Jackson WY.
7. Vincent, K.M. (1998). *Attitudes of Women Students in Math,  $E=Mc^2$* , Washington Community College Conference, Lake Chelan WA.
8. Vincent, K.M., Cooper, S.C. & Meuth, J. (1998). *Inclusive Teaching Strategies*, Annual meeting Pacific Northwest Section of MAA, Pullman WA.
9. Vincent, K.M. (1998). *Reactions of a Fearful Liberal Arts Audience in a Mathematics College Classroom: Explored by a Teacher Researcher*, Research Conference in Collegiate Mathematics Education, South Bend Indiana, sponsored by RUMEC.
10. Vincent, K.M. (1999). *An Example of Alternative Assessment in College Algebra,  $E=Mc^2$* , Washington Community College Conference, Ocean Shores WA.
11. Vincent, K.M. (1999). *Technology—Not Just a Man's Tool: Graphing Calculators as a Liberatory Tool for Women*, Research Conference in Collegiate Mathematics Education, Chicago IL (sponsored by RUMEC).
12. Vincent, K.M. (1999). *Myth: Women, Mathematics and Technology Do Not Merge*, Northern Rocky Mountain Educational Research Association, Jackson WY.
13. Vincent, K.M. (1999). *Mirrors: The Connection Between Kaleidoscopes and Tessellations*, Northwestern Regional National Council of Teachers of Mathematics, Boise ID.
14. Vincent, K.M. & Martin, J. (2000). *Tessellating Space with Polyhedra*. Washington Community College Conference, Wenatchee WA.
15. Vincent, K. M. & Adams, V. (2001). *Developing a Continuum from Mathematics Content to Classroom Experience*, Fourth Annual Mathematics Education Institute, New Mexico State University, Las Cruces NM.
16. Vincent, K. M. (2001). *Creating a Gender Equitable Learning Experience in the Mathematics Classroom*, National Council of Teachers of Mathematics, Orlando FL.
17. Vincent, K.M. (2001). *Peer-led Group Work for Prospective Elementary Teachers*, Northern Rocky Mountain Educational Research Association, Jackson WY
18. Vincent, K.M. (2002). *Women Can Do Math* (1.5 hour workshop), National Council of Teachers of Mathematics, Las Vegas NV, April 2002.
19. Vincent, K. M. (2004). *Equity Issues in Mathematical Pedagogy: Intertwining Nature of Theory, Praxis, and Qualitative Research*, February 13, 2004, Grace Symposium at WSU
20. Vincent, K.M. (March, 2004). *Developing Experience Using Technology in a Constructivist Setting for Pre-service Secondary Mathematics Teachers*. SITE annual conference of Association of Advancement of Computing in Education, Atlanta GA.

21. Vincent, K.M., Keen, A. & Gauger, L. (April 2004). *Practice Teaching in a Rural Area*. Talk and workshop at the annual Washington community College Mathematics Conference, Tacoma WA.
22. Vincent, K.M. (January, 2004). *Developing Experiences Using Technology in a Constructivist Setting: For Pre-service Secondary Mathematics Teachers*. Joint Mathematics Meetings (JMM), Phoenix AZ.
23. Vincent, K.M. (November, 2005). *Inland Northwest Math Experience It's IN ME ...is it in YOU?: Provide Teaching Practicum Experience infusing technology and constructivist activities*. JMM, Atlanta GA.
24. Vincent, K.M. & Buyserie, B. (January 2006). *Learning to Make Inferences: Connecting Quantitative Literacy and Language Arts for Math and English Pre-service Teachers*. JMM, San Antonio TX.
25. Vincent, K.M. (March 2006). *Quantitative Literacy in the Major: Pilot Program*. Poster for WSU Faculty Showcase, Pullman WA, March 2006.
26. Vincent, K.M. (March 2006). *Quantitative Literacy in the Major Pilot Study*, Poster Session at WSU Academic Showcase.
27. Vincent, K.M. (April 2006). *Introduction of Quadratic Functions and Graphs: Using Sequences and Geometer's Sketchpad*, Annual Mathematics conference WAMATYC, Stevenson WA.
28. Vincent, K.M. Buyserie, B. (2007) *An Interdisciplinary collaboration Between English and Mathematics Pre-service Teachers*. Poster for WSU Faculty Showcase, Pullman WA March 2007
29. Vincent, K. M., Buyserie, B. (2008). *Accurately Representing Realities in Student Research: Teachers Change by Integrating Quantitative Literacy into the Writing Classroom*. Conference on College Composition and Communication, New Orleans April 2008).
30. Vincent, K.M., Ely, R. (2009). *Context vs Notation: Lessons Learned from History and the Classroom*. Math Fest,
31. Vincent, K.M. & Buyserie (2009) *Incorporating Quantitative Literacy in Research Writing*. Joint Mathematics Meetings
32. Vincent K. M. (2009) *Mathematics Case Study Project 2005-2008*. Poster presentation at WSU Faculty Showcase March 2009.
33. Vincent, K.M. & PreToM (2009) *Math-a-Rama*, Northwest Mathematics Conference, Whistler BC October 2009.
34. Vincent, K.M. (2010). *Teaching for Transfer and High Cognitive Demand Through Discourse in Algebra*. Joint Mathematics Meetings, January 13-16, 2010; San Francisco CA.
35. Vincent, K.M. (2010). *Geometer's Sketchpad and Transfer of Learning*. Northwest Mathematics Conference, October 7-9, 2010 Spokane WA
36. Vincent, K.M. (2010). *Efficiency: Learning One Technique for Multiple Uses*. Northwest Mathematics Conference October 7-9, 2010, Spokane WA.
37. Vincent, K.M (2013). *Teaching It always works*. Northwest Math Conference **October 11-12, 2013**, Bellevue WA
38. Vincent, K.M (2013). *Multiple Representations How and Why*. Northwest Math Conference **October 11-12, 2013**, Bellevue WA
39. Vincent, K.M. & PreToM (2013) *Math-a-Rama*, Northwest Mathematics Conference, **October 11-12, 2013**, Bellevue WA .
40. Vincent, K.M. (2014). *Unpacking the Mathematical Practices K-8*. Northwest Mathematics Conference, **October 2014**, Portland Or.



41. Vincent, K.M. (2014) *Unpacking the Mathematical Practices Grades 8-12*. Northwest Mathematics Conference, **October 2014**, Portland OR.

### **Invited**

1. Vincent, K. M. (1996). *Women's Attitudes Toward Mathematics: A Case Study of One Woman's Perspectives*, Introduction to Qualitative Research, graduate course at University of Idaho.
2. Vincent, K. M. (1997). *Qualitative Research in the Field of Mathematics Education*, Introduction to Qualitative Research, graduate course at the University of Idaho.
3. Vincent, K. M. (1997). *Woman's Gains and Struggles in College Mathematics Utilizing a Feminist Pedagogy*, Introduction to Qualitative Research, graduate course at the University of Idaho.
4. Vincent, K. M. (1998). *Authentic Assessment in the Mathematics Classroom*. Keynote speaker address at the Math Leadership Conference in Twin Falls, ID.
5. Vincent, K. M. (1998). *Conjecturing & Investigation With Pentominoes for Elementary School Students*, 3 hour workshop, Math Leadership Conference, Twin Falls, ID.
6. Vincent, K. M. (1998). *Integer Activities for Middle School Students*, 3-hour workshop, Math Leadership Conference, Twin Falls ID.
7. Vincent, K. M. (1998). *Graphing Calculators as a Tool to Help Young Women*, Northwest Regional National Council of Teachers of Mathematics, Boise, ID.
8. Vincent, K.M. and Buyserie, B. (April 2007). *Reading Rates*, Pacific Northwest Mathematics Association of American, McMinnville OR.

### **GRANT PROPOSALS**

Title	Role	Submitted to	Period \$ Budget Requested	Outcome
Creative Geometry Workshop, principle investigator Gail Adele	Participating Faculty	Math & Science Improvement Competitive Grant Program Under the Dwight D. Eisenhower Mathematics & Science Education Act	1990, \$6,500	Funded
CO-TEACH	Participating faculty	Education Department of US	2000-2004	Funded
Boeing Educational Grant, principle investigator, Duane DeTemple	Participating Faculty	Boeing	2000-2004	
Project Effect II, Planning Grant,	Participating Faculty	NSF		Funded

principle investigators, Sandra C. Cooper, Judy Meuth				
Washington State Gender Equity Project, principle investigator Jo Sanders, WRI	Participating faculty, Steering Committee Member	NSF	2000-2002, \$300,000 per year for 3 years	Funded
Prism, principle investigators Sandra C. Cooper, Judy Meuth	Participating Faculty	NSF	2001-2003, \$300,000 per year for 3 years	Funded
TEAMS: <u>T</u> eachers for <u>E</u> ducation, <u>A</u> pplication, <u>M</u> astery, and <u>S</u> ynergy in Leadership, Research, Reading, and Mathematics Principle Investigator, Dawn Shnew	Co-authored and Participating Faculty	HECB	2003-2004,	Not funded
Revision of Practice Teaching In Math 330, Principle Investigator, Kimberly Vincent	Authored grant, PI, and faculty	Subgrant from CO-TEACH	Fall 2003, \$2,400	Funded
Professional Development in Grays Harbor, Principle Investigators, Kimberly Vincent, Cynthia Thomas	PI, participating faculty	HECB	2003-2004	Not funded
Social Change, Gender Dynamics, and Inequities in global Context: An Interdisciplinary Research Program. Proposed by GRACe, via Amy Mazur	Participating faculty	WSU	Fall 04 and Spring 05— salary buy out for ¼ time for three faculty members	Funded

Quantitative Literacy Across the Curriculum: Integrating Mathematics in the Major	Principle Investigator	WSU, Provost's Office, Undergraduate Teaching and Learning Improvement Grants	\$40,000	Not Funded
Assessing the Impacts of Feminists in Academia	Principle Investigator	NSF-HSD	2005, \$650,000	Not Funded
Mathematics Case Study Project	Co-Principle Investigator	Title II- Math Science Partnership	2005-2008, \$825,000 (\$275,000 per year for 3 years—housed at EWU—subgrant awarded to WSU for salary and travel)	Funded
COMPUteach (principle investigator V.S. Manoranjan)	Participating faculty	Boeing		Funded
(principle investigator Peter Ritson, WSU-Vancouver)	Participating faculty	Office of Undergraduate Education WSU- <i>Teaching and Learning Improvement Grant</i>	2006-2007	funded
Quantitative Literacy in the Major	Principle Investigator	Office of Undergraduate Education WSU- <i>Undergraduate Teaching and Learning Improvement Grant</i>	2005, \$40,000	Funded
<i>Mathematics Case Study Project</i>	Co-Principle Investigator, Internal Researcher, Participating Faculty	Title II No Child Left Behind— Math Science Partnerships	\$275,000 for July 2005-June 2006 \$275,000 for July 2006-June 2007, \$275,000 for July 2006-June 2007	Funded

<i>Mathematics Case Study Project</i>	Principle Investigator	EWU-subgrant from Math Science Partnership	\$18000 for July 2005-June 2006 \$20,000 for July 2006-June 2007 \$30,000 for June 2007-July July 2007	Funded
<i>IN ME</i>	Principle Investigator	<i>Tensor Summa Grants— Mathematical Association of America</i>	\$6000 for August-December 2008	Not funded
<i>Improving Mathematics Education for All Learners: Students, teachers, leaders, &amp; higher education collaborate (IME for ALL)</i>	Principle Investigator	NSF-Math Science Partnership Planning Grant	\$367,806 February 2009-February 2011	Submitted Proposal March 25, 2008 Unknown status until June 2008)
<i>Mathematics Case Study Project (Continuation Grant)</i>		Title II No Child Left Behind— Math Science Partnerships	Requested \$99,979 May 15 2008-August 31, 2008	Funded \$78,598
<i>Mathematics Video Case Study Project (MVCSP)</i>	Principle Investigator	NSF-Math Science Partnership	\$5,638,082 May 2009-August 2012	Not Funded 2009
<i>Mathematics Video Case Study Project (MVCSP)</i>	Principle Investigator	NSF Discovery Research K-12	Requested \$3,497,879 June 2009-August 2013	Not Funded 2009
<i>Teachers Exploring and Analyzing Mathematics: Developing Video Cases TEAM DVC</i>	Principle Investigator	NSF Discovery Research K-12	Requested \$3,500,000 for July 2010 August 2015	Not Funded 2010
<i>Mathematics Video Case Study Project</i>	Principle Investigator	Title II No Child Left Behind— Mathematics Science Partnerships	Requested \$683,649 for January 2013 through September 2015	Not Funded 2012

In addition to the grants, in 2005, I asked for donations from Schweitzer Engineering Laboratories (SEL), Cypress Semiconductor, and Advanced Hardware Architecture to support the use of

technology in the *Inland Northwest Math Experience (IN ME)*. For two years (2004 and 2005) SEL has donated \$1500 each of these years for technology for *IN ME*.

## **COMMITTEE SERVICE AT WSU**

### **University**

Co-Team Leaders of the Gender Equity Team, summer 2000-2002  
CO-TEACH Member, spring 2000-2004  
All University Math Committee 2001-2005  
Job Search committee, College of Education fall 2004, fall 2005  
Development Committee of STEM PhD, fall 2006-present  
Planning Committee for Provost Guest Speaker Series October 2007-April 2008  
Development Committee for Middle School Mathematics Endorsement **January 2008-present**  
Professional Educational Advisory Board for College of Education **November 2008-present**  
SIS Portal Focus Group WSU IT, **September 2010-2013**  
GUC Academic Vision Subcommittee, WSU IT, **September 2010-2013**

### **Department**

Preceptor Search Committee, fall 1999  
Math Placement Committee, Chair 1998-2000  
Math Placement Committee Member 2001  
Technology Committee Member, fall 2001  
Masters in Mathematics with Community College Teaching Committee, Member, fall 2001-2005  
Instructor Search Committee, fall 2001  
Mathematics Education Curriculum, spring 2003 present  
Recruiting Committee (formerly High School and Community Relations) fall 2004-present  
Assessment fall 2004-present  
Undergraduate Education Committee spring 2005-present

## **PROFESSIONAL OUTREACH SERVICE**

Instructor of Geometry for a two-week workshop, for junior high school students, in the Idaho Quest Program at the University of Idaho, funded by the College of Education, summer 1991.

Presented various workshops in geometry for second and fourth grader students at Lena Whitmore Elementary School, Moscow, ID, fall 1989, spring 1990, spring 1992.

Taught a four-day Creative Geometry Workshop for elementary school children, ages 6-12, through the Community Enrichment Program at the University of Idaho, July 1992, 1993 and 1994. These were partially funded by a grant procured by the Office of Community Enrichment, from the Steele Reece Foundation.

Member of the Advisory Board for Community Enrichment Program at the University of Idaho, 1993-1998.

Co-coached an Odyssey of the Mind Team of fifth and sixth grade students, whose long-term project was a mini-terrain vehicles, winter/spring 1994.

Creative Geometry Workshop for K-8 School Teachers: Moscow, ID, June 1990, June 1991; Grangeville, ID June 1991; Coeur d'Alene, June 1992, 1993, 1994, 1995; Boise, ID; June 1992, 1993, 1994, 1995, 1997; Nampa, ID, June 1996; Twin falls, ID, July 1995, June 1996, June 1997. Each workshop consisted of a five-day workshop using various manipulatives. The workshop modeled hands-on, exploratory activities designed for the use in elementary and middle school grades. All of the years, except 1996, were funded by Eisenhower funding. During 1996, I solicited funding from Meridian and Nampa school districts to completely cover the expenses for one workshop. Judy Snider and Judy Young (ICTM representatives) secured two small grants to help subsidize the workshop for Twin Falls the summer of 1996.

Member of Academic Placement Testing Program (APT), statewide committee--dealing with the Math Placement exam administered across the Washington State, 1998-present.

Taught *2Gs*  $\cong$  *Geometry for Girls*, a one-week workshop, dealing with tessellations and transformational geometry, community Enrichment at the University of Idaho, summer 1999, 2000.

Author of test questions for ACT, fall 1998, summer 1999.

Collaborated in the Planning Meetings, November 18-19, 1999 & January 2000 for NSF Planning Grant for Project Effect II with PIs Sandra C. Cooper and Judy Meuth.

Attended *The State of K-12 Mathematics Education in Washington* meeting in Spokane, WA, November 1999, sponsored by the State Superintendent's Office. The purpose of the meeting was to disseminate Washington Assessment for Student Learning (WASLs) materials to educators dealing with pre-service teachers.

Member of subcommittee of APTP, our duty was to re-write the Intermediate and Advanced Math Placement Tests, 1999-2000.

Taught a review/prep course for GRE through Community Enrichment at the University of Idaho, fall 1999, fall 2000, fall 2001.

Member of the Steering Committee for the Washington State Gender Equity Project, July 2000-2002

Invited to co-present with Sandra C. Cooper, an activity on symmetry and culture for Women in Science and Culture at WSU spring 2001, fall 2001.

Organized, facilitated a math retreat for Mathematics content and Methods faculty from the CO-TEACH partner community colleges and WSU. Camp Larson, Coeur d'Alene, ID June 2001.

Invited as guest lecturer at Kendrick High School, Kendrick Idaho. Transformational geometry and it applications. October 2002.

Invited to co-lead the meetings of math representatives of the CO-TEACH grant. Kelso WA, Nov. 2001, Pullman, WA March 2002, June 2002.

Organized a professional development trip for Math Methods Students from WSU. I took them to the Northwest Math Conference in Portland OR, October 2002. (11 out of 17 students were able to attend, funded by the Dept. of Mathematics, WSU).

Co-authored a position statement for WaToToM to support institutions and to entreat OSPI to require nine months of mathematics content for pre-service teacher training, February 2003.

Organized, facilitated a math retreat for Mathematics content and Methods faculty from the CO-TEACH partner community colleges and WSU and public school teachers, Puffer Butte Lodge, Field Springs State Park WA, June 2003.

Wrote materials and conducted workshop for faculty and graduate students at WSU on new uses of software Geometer's Sketchpad, Dept. of Mathematics, WSU, Pullman WA, June 2003.

Invited to present ratio activity in Women in Science and Culture (WST220), fall 2002, fall 2003.

Invited to present ratio activity at Science Camp for young teens at WSU, July 2002, July 2003.

Taught *Link between Mathematics and Art*, a one-week workshop for middle school girls, Community Enrichment at the University of Idaho, July 2003.

Prepared to co-facilitate at Curriculum Development Institute for the Prism Project funded by NSF. Due to grass fire we had to evacuate so we made plans to improve and expand participation for the following year, July 2003.

Organized a professional development trip for Math Methods Students from WSU. I took them to the Northwest Math Conference in Whistler BC, October 2003. (7 out of 18 students were able to attend, funded by the Dept. of Mathematics, WSU).

Co-facilitated a 3 hour workshop with Hillyard, C. (UW) and Ward, R. (WWU) *Quantitative Literacy for the Pre-service Teacher*, at the annual retreat for Washington Teacher of Teachers of Mathematics, February 2004.

Taught two workshops, *Creative Visuals—Using Technology in Active Ways*, for Cougar Quest July 2004. One workshop was for high school students the other for middle school students. Each was one week.

Organized a professional development trip for Math Methods Students from WSU. I took them to the Northwest Math Conference in Spokane, WA, October 2004. (7 out of 10 students were able to attend, funded by the Dept. of Mathematics, WSU).

Organized the annual Inland Northwest Math Experience. It's IN ME...is it in YOU?" This was a one-day event for regional middle school and high school students at WSU to participate in activities written by and facilitated by Math methods students from WSU. 100 students registered November 2003, and 200 students registered November 2004.

Hosted Guest speaker Bill Briggs, University of Colorado, QL...March 28, 2005. Hosted guest speakers Caren Diefenderfer, Jorgen Fleck, Hollins University, April 11, 2005.

Co-created a website for Math Awareness Month with Aaron Adams April 2005.  
<http://www.math.wsu.edu/math/faculty/vincent/mam/welcome.html>

Co-facilitated math activities for math awareness month at Kendrick High school, April 25, 2005; Colton Middle School April 27, 2005, Garfield/Palouse High School April 28, 2005.

Hosted Guest speaker Judith Moran, Trinity College, May 22-24, 2005 for QL faculty workshop. Organized and facilitated faculty workshop for QL in the Major, May 22-27, 2005.

Invited to teach Ratio Activity at Cougar Science Camp, June 21, 2005

Attended professional development workshop for Developing Mathematical Ideas-Patterns Function and Change, funded by NSF at Mt. Holyoke College, June 28-July 7, 2005.

Co-developed materials for proportional reasoning and use of effective pedagogy to teach middle school students for Math Case Study Project (MCSP), summer 2005. Co-facilitated workshop using DMI materials and MCSP materials for professional development workshop for middle school mathematics teachers, August 1-5, 2005 in Seattle WA. Co-facilitated follow-up workshops using DMI and MCSP materials September, October, December 2005.

Co-developed and co-facilitated two day workshop for middle or high school teams of teachers and students, COMPUteach, October 22 and 29, 2005

Organized a professional development trip for Math Methods Students from WSU. I took them to the Northwest Math Conference Portland OR October 13-15, 2005 (11 out of 19 were able to attend).

Organized the fourth Annual *IN ME*, 3-4 November 2005; 200 middle school and high school students attended with over 50 students on the waiting list. I also have a website associated with *IN ME* with past activities posted on the website. [www.math.wsu.edu/faculty/vincent](http://www.math.wsu.edu/faculty/vincent)

Attended the annual Washington Teachers of Teachers of Mathematics (WaToToM) Annual Retreat, February 10-12, 2006. Participation in this group is very important for the state. This group makes recommendations to the Superintendent's Office, Professional Certification Board, HEC Board, etc. Last year our focus was to provide feedback for the Office of Superintendent and their work on updating the requirements for mathematics endorsements for teachers at the elementary, middle and high school levels.

Co-developed and co-facilitated with Mike Kallaher, a two one-day workshops for middle or high school teams of teachers and students, COMPUteach, April 15, 2006, **April 2007**



**Invited** to facilitate a workshop, *Dynamic Nature of Math*, at Discovering Science Workshop hosted by College of Science, WSU Pullman WA , 22 May 2006.

Co-developed materials for proportional reasoning, geometry and use of effective pedagogy to teach middle school students for Math Case Study Project (MCSP), summer 2006. Co-facilitated workshop MCSP materials for professional development workshop for middle school mathematics teachers, June 26-30 in Cheney WA, 1-5 August 2005 in Seattle WA. Co-facilitated follow-up workshops using MCSP materials in Seattle, Cheney and Spokane: January, March, April, May, September, October, December 2006.

**Invited** to Co-facilitate workshop using *MCSP* professional development materials for the project, *Eastern Washington Connections and Inquiry*, funded by a grant for Spokane ESD 101. This was a four day workshop for middle and high school mathematics teachers in Cheney, 19-23 June 2006.

**Invited** to attend and critique Professional Learning Community at Shaw Middle School, Spokane, WA. The Professional Learning Communities provide an opportunity for public school teachers to work together to improve teaching. One teacher teaches a lesson, while the others consider the interaction of pedagogy, content, and student learning. My role was to contribute feedback on the process and provide insight into making this a meaningful process for the teachers involved, as well as give feedback to the teacher being observed, September 27, 2006.

Organized the fourth Annual *IN ME* Nov 2, 3, 2006; 220 middle school and high school students registered. I also have a website associated with *IN ME* with past activities posted on the website. [www.math.wsu.edu/faculty/vincent](http://www.math.wsu.edu/faculty/vincent)

**Invited** to Co-facilitated *Ball Bounce* at Gar-Pal High School, with Scott Koppa (WSU graduate), 16 November 2006. In this activity we had students bounce balls and collect data with Calculator Based Rangers. They discovered the constant ratio of heights of successive bounces. Some groups also were able to fit a parabola to one bounce to reinforce their understanding of transformations and the vertex form of parabola.

Co-developed materials for algebraic thinking and use of effective pedagogy to teach middle school students for *Math Case Study Project (MCSP)*, summer 2007. Co-facilitated workshop for professional development workshop for middle school mathematics teachers, June 26-30 in Cheney WA, 1-5 August 2005 in Seattle WA. Co-facilitated follow-up workshops using MCSP materials in Seattle, Cheney and Spokane: January, March, April, May, September, October, December 2007.

**Invited** as a member of the Math Panel (serving the State Board of Education) to attend a focus group with the charge to reply to *Strategic Teaching's* recommendation to OSPI on how to revise Washington K-12 Mathematics Standards. Pasco WA, July 2007.

**Invited** to organize and facilitate workshops for science faculty at WSU Vancouver. I organized and facilitated two half day workshops on integrating quantitative literacy into college level science classes, summer 2007.

**Invited** to Co-facilitate workshop using *MCSP* professional development materials for the project, *Eastern Washington Connections and Inquiry*, funded by a grant for Spokane ESD 101. This was a four day workshop for middle and high school mathematics teachers in Cheney 18-31 June 2007.

Organized the fourth Annual *IN ME* November 2, 9 2007; 100 middle school and high school students registered. I also have a website associated with *IN ME* with past activities posted on the website. [www.math.wsu.edu/faculty/vincent](http://www.math.wsu.edu/faculty/vincent)

**Invited** by Terry Bergeson, as a member of the Standards Revision Team to facilitate focus groups with 800 teachers at the OSPI Winter Conference, Spokane WA, **January 2008**.

Developed and facilitated workshops for WSU composition faculty to improve students use of quantitative information in their research writing. Beth Buyserie helped with all the planning and choice of projects for the workshops. I facilitated had four workshops, then faculty developed projects to improve students understanding and use of quantitative information. **January-April 2008**.

**Invited** to advise John McNamara on Quantitative Literacy speaker and workshops for the Provost's guest Speaker Series, October 2007-April 2008. I also served on the planning committee and assisted Caren Diefenderfer and Ruth Sloan, during the three workshops they facilitated, **10-11 April 2008**.

**Invited** to beta test the next version of the software Geometer's Sketchpad v5 by Key Curriculum Press, **summer 2008 to spring 2010**.

**Invited** facilitated two half day workshops for all high school faculty at Renton High School, **17 May 2008 and 14 June 2008**.

Facilitated and developed curriculum for middle school mathematics teacher professional development, *Mathematics Case Study Project*. **August 2008**.

Organized the sixth Annual *IN ME* **November 6, 7 2008**; 100 middle school and 40 high school students registered. I also have a website associated with *IN ME* with past activities posted on the website. [www.math.wsu.edu/faculty/vincent](http://www.math.wsu.edu/faculty/vincent)

**Invited** to facilitate proportional reasoning workshop for Building Bridges Between Mathematics and science for the Northwest Education Service District June 2009.

Organized the seventh Annual *IN ME* November 6th 2009 120 middle school and high school students registered. I also have a website associated with *IN ME* with past activities posted on the website. [www.math.wsu.edu/faculty/vincent](http://www.math.wsu.edu/faculty/vincent)

I travel to Nespelem to work with the Native American middle school students once a month with USDA scientists. I Created proportional reasoning curriculum for middle school students at Nespelem. Pre-service secondary math teachers in Math 330 delivered the lessons fall 2009. I delivered the lessons spring 2009. Created linear relationship curriculum for middle school students at Nespelem. Pre-service secondary math teachers in Math 330 delivered the lessons fall 2010, fall 2011, 2012 and **2014**.

Invited to be a conference organizer for the Northwest Mathematics Conference in Spokane WA October 2010.

Invited to be a member of *Common Core Standards Statewide Workgroup*. During July and August 2010 this group meet three times to compare the Common Core State Standards to WA state's mathematics standards and recommend inclusions in a report for legislators. July 2010 to 2012.

Organized the eighth, through twelfth Annual IN ME November 2010, 2011 **2012, 2013, 2014**; 110 middle school and 110 high school students registered. I also have a website associated with IN ME with past activities posted on the website. [www.math.wsu.edu/faculty/vincent](http://www.math.wsu.edu/faculty/vincent)

Advised Preservice Teachers of Mathematics (PreToM) a WSU registered student organization, **2009- present**

Organized and hosted three events for PreToM: *Texas Instrument Workshop* April 2013, *Books and Bagels*, November 2013 and *Manipulatives and Munchies*, October 2013

Organized and hosted four events **for PreToM**: Texas Instrument Workshop using the navigator (wireless communication between students calc and teachers computer) **April 2014**, Manipulatives and Munchies **Dec 2014**, Story Time at Neill Public Library **Dec 2014**.

PreToM **Invited** by Washington Mathematics Council to become a student affiliate to NCTM In **October 2014** application due June 2015.

Organized Math-a-Rama, a conference within the Northwest Mathematics Conference. Three schools, Portland State, Evergreen State College and WSU and preservice teachers present lessons at Math-a-Rama to inservice teachers, **October 2014**.

Co-facilitated workshops using Texas Instruments Navigator system with Art Mabbott at WSU for PreToM and for Math 351 and 432, **April 2013, April 2014**.