

Mark Arvidson, Ph.D.

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EDUCATION

Bachelor of Science, Mathematics - May 1986
Wheaton College, Wheaton, Illinois

Master of Arts, Education - emphasis in Student Development, May 1991
Azusa Pacific University, Azusa, California

Doctor of Philosophy, emphasis in Mathematics Education &
Curriculum and Instruction, May 1997
Claremont Graduate University, Claremont, California

PROFESSIONAL EXPERIENCE

Professor – 2005 to present

- Instruction – Teach a variety of courses in the math department from Algebra to Applied Calculus. Responsible for the training of both elementary and secondary mathematics teachers.
- Leadership - Direct the Math Fellows program. Coordinate seminars on the intersection of faith and mathematics. Evaluate the effectiveness of pre-service teachers. Direct service learning project for APU students at Center Middle school's after-school math club. Serve on the NCAA committee overseeing the athletic programs at APU. Chair of multiple search committees for the department.

Associate Professor - 2000 to 2005

Azusa Pacific University, Mathematics Department, Azusa, California

- Instruction – Teach a variety of courses in the math department. Implemented a web-based algebra course for the department.
- Leadership – Designed the math course Mathematics for Secondary Teachers (MATH 301). Designed the math course Humans and Computation (HDEV 303) for the accelerated degree program. Designed the course Mathematics for Elementary Teachers (MATH 201) for the mathematics department. Designed the course The Senior Seminar (MATH 496). Chair of search committee for the mathematics department. Authored a study and proposal to implement a math center on campus, specifically to provide support services for developmental mathematics students. Provide direction and guidance for curriculum development and the subsequent assessment of mathematical knowledge within the department.

Assistant Professor - 1997 to 2000

Azusa Pacific University, Teacher Education Department, Azusa, California

- Instruction - Work with master teachers to cooperatively plan a program of activities for the student teacher. Assist student teachers in curriculum development and lesson plan implementation in their respective disciplines.
- Supervision - Observe and evaluate student teacher's skills and performance in the classroom. Conference with student teacher and supervising teacher to address any problems and concerns.
- Leadership - Direct student teaching program in conjunction with Director of Teacher Education. Evaluate effectiveness of student teaching program.

Adjunct Professor - 1995 to 1998
The Claremont Graduate School, Claremont, California

- Instruction - To help teachers create activities for their classrooms that are both rich in mathematical content and accessible to all students. Video and graphic calculators are used to allow teachers to gain mathematical power. Activities are created that will allow all students - regardless of their age, race, sex, or language - to investigate a variety of challenging, real non-routine problems.
- Leadership - Provide direction and guidance for curriculum development and the subsequent assessment of mathematical knowledge.

Lecturer / Instructor - 1994 to present
University of California, Riverside, California

- Instruction - Lead instructor in mathematics education for the Institute for the Study of the Theory of Multiple Intelligences. To assist teachers in creating activities for their classrooms that are both rich in mathematical content and accessible to all students. Activities are created that will allow all students - regardless of their age, race, sex, or language - to investigate a variety of challenging, real non-routine problems. Technology, hands-on activities and cooperative learning are used to allow teachers to deepen their knowledge of K-12 mathematics to develop an engaging mathematics curriculum.
- Leadership - Provide direction and guidance for teacher development, curriculum and instruction. Model effective teaching strategies in mathematics education.

Mentor Teacher, Mathematics - 1995 to 1997
Baldwin Park Unified School District, Baldwin Park, California

Mathematics Instructor - 1988 to 1997
Sierra Vista High School, Baldwin Park, California

- Instruction - Plan and present math lessons to predominantly inner-city Hispanic students. Develop weekly lesson plans and instruct 35-40 students each period.
- Intervention - Direct Saturday reform school program for at-risk students. Counsel and serve as liaison in at-risk student intervention program.
- Leadership - Develop, implement and direct GATE program for highly gifted and talented students. Present workshops on the Theory of Multiple Intelligences and other learning theories.

Papers & Publications:

Arvidson, M. (2016). Examining the attitudes of pre-service elementary school teachers toward mathematics. Paper presented at ICME 2016: The Thirteenth International Congress on Mathematics Education. Hamburg, DE: ICME

Flores, P.A., & **Arvidson, M. (2011, January).** The exceptional road to understanding: How service-learning impacts undergraduate students' perceptions of special education and worldview. Paper presented at the ninth annual Hawaii International Conference on Education, Honolulu, HI: HICOE

Arvidson, M. (2007). The necessity of Multiple Intelligence theory in the classroom. In Critical issues in brain science and pedagogy. (pp. 57-82). Columbus, OH: McGraw-Hill.

Arvidson, M. (2006). Two bad ants get straightened out: Connecting linear equations and children's literature. In Algebraic Thinking Across the Grades, K-12 (2006-07) Special Edition. (pp. 41-46). El Cajon, CA: California Mathematics Council.

Arvidson, M. (2004). The necessity of MI theory in the classroom. In A. Nava (Ed.), The fundamentals of education in American multi-ethnic schools. (pp. 119-144). New York, NY: McGraw-Hill.

Arvidson, M. (2004). Training elementary teachers of mathematics: What are the essential components? Proceedings of ICME 2004: The Tenth International Congress on Mathematics Education. Copenhagen, Denmark: ICME.

Arvidson, M. (2004). The dilemma of under-prepared teachers of elementary mathematics. Proceedings of ICME 2004: The Tenth International Congress on Mathematics Education. Copenhagen, Denmark: ICME.

Arvidson, M. (Dec., 1999). Reflections on Math Reform: Where do we go from here?, accepted by the California Mathematics Council (CMC) Editorial Board for publication in the mathematics education journal, the ComMuniCator.

Arvidson, M. (June 1999). Developing the Real Number System (UCR MAT x 405 – 3 units) authored the course for the Mathematics for Educators Certificate program, which applies toward a supplementary authorization in mathematics. Riverside, CA: UC Riverside.

Arvidson, M. (Jan. 1998). Multiple Intelligences: A Key to Effective Mathematics Education (UCR EDU x 324 – 1unit) authored the course for the Institute on the Study of Multiple Intelligences Riverside, CA: UC Riverside

Arvidson, M. (Sept. 97- Jan. 98). Humans and Computation (APU HDEV 303 – 5 units): authored a mathematics course for elementary school teachers. Course development for the Accelerated Degree program. Azusa, CA: Azusa Pacific University.

Arvidson, M. (Feb. 98-May 98). Accelerated Analytic Inquiry (APU HDEV 115 – 3 units): authored an accelerated college algebra course for non-science majors. Course development for the Accelerated Degree program. Azusa, CA: Azusa Pacific University.

Arvidson, M. (1997). Reform based instruction in mathematics: An inquiry into the relationship among student achievement, teacher attitudes and reform practices. Dissertation, Claremont Graduate University, Claremont, California.

Professional Conferences, Presentations & Honors:

Final Judge - COMAP's Mathematical Contest in Modeling (MCM). San Antonio, Texas – **April 2017**

Presenter - The Thirteenth International Congress on Mathematics Education (ICME). Examining the attitudes of pre-service elementary school teachers toward mathematics. Hamburg, Germany - **July 2016**

Presenter - Pan American Workshop on Teaching Effectiveness. Pan American International School - Sao Paulo, Brazil - **March 2014**

Presenter - The exceptional road to understanding: How service-learning impacts undergraduate students' perceptions of special education and worldview. Paper presented at the ninth annual Hawaii International Conference on Education, Honolulu, HI – **January 2011**

Presenter – California Mathematics Council (CMC) Annual Conference, Two bad ants get straightened out: Connecting linear equations and children's literature. – Palm Springs, CA – **Nov. 7-8, 2008**

Presenter – National Council of Teachers of Mathematics (NCTM) Annual Conference, Two bad ants get straightened out: Connecting linear equations and children's literature. – Anaheim, CA – **April 6-9, 2005**

Presenter – California Mathematics Council (CMC) Annual Conference, Two bad ants get straightened out: Connecting linear equations and children’s literature. – Palm Springs, CA – **Nov. 5-7, 2004**

Presenter, The dilemma of under-prepared teachers of elementary mathematics. Paper presented at ICME 2004: The Tenth International Congress on Mathematics Education. Copenhagen, Denmark: ICME. **July 4-11, 2004.**

Presenter, Training elementary teachers of mathematics: What are the essential components? Panel presentation at ICME 2004: The Tenth International Congress on Mathematics Education. Copenhagen, Denmark: ICME. **July 4-11, 2004.**

Presenter, The key to optimizing learning: A workshop exploring effective teaching methods and brain-compatible lesson design. Caltech Project for Effective Teaching. Pasadena, CA: California Institute of Technology. **February 24, 2004**

Outstanding Faculty of the Year – awarded by Azusa Pacific University student body Azusa, CA. **May 2003.**

Instructor, Multiple Intelligences: The Key to Effective Mathematics Education. A certificate course in the Institute for the Study of Multiple Intelligences. U.C. Riverside, CA. **Oct. 2002**

Presenter – National Council of Teachers of Mathematics, “Teaching Mathematics and the Multiple Intelligences: a “hands-on” investigation – Las Vegas, NV – **April 22-24, 2002**

Instructor, Multiple Intelligences: The Key to Effective Mathematics Education. A certificate course in the Institute for the Study of Multiple Intelligences. U.C. Riverside, CA. **Oct. 2001**

Instructor, Multiple Intelligences: The Key to Effective Mathematics Education. A certificate course in the Institute for the Study of Multiple Intelligences. U.C. Riverside, CA. **Jan. 2001**

Instructor, Multiple Intelligences: The Key to Effective Mathematics Education. A certificate course in the Institute for the Study of Multiple Intelligences. U.C. Riverside, CA. **Aug. 2000**

Presenter, God and the Academy: An International Conference for Christian Professors. Do Christian colleges graduate students with a Biblical worldview? Georgia Institute of Technology. Atlanta, GA. **June 21-25, 2000**

Instructor, Multiple Intelligences: The Key to Effective Mathematics Education. A certificate course in the Institute for the Study of Multiple Intelligences. U.C. Riverside, CA. **Aug. 21, 1999**

Consultant, Full faculty in-service on the Multiple Intelligences, La Salle high school. Pasadena, CA. **Aug. 19, 1999**

Presenter, 5th Annual West Coast Conference on the Study of Multiple Intelligences. Big Bear, CA. **July 16-17, 1999**

"Who's Who Among America's Teachers" 1997-99, 2001-03

Instructor, ‘The Real Number System’ a certificate course for the supplementary mathematics credential. U.C. Riverside, CA. **July 7-11, 1999**

Presenter- National Council of Teachers of Mathematics, "Teaching Symmetry through the Multiple Intelligences: a "hands-on" investigation." San Francisco, CA. **April 22-24, 1999**

Instructor, 'Multiple Intelligences: The Key to Effective Mathematics Education' a certificate course in the Institute for the Study of Multiple Intelligences. U.C. Riverside, CA. **Jan. 30, 1999**

Participant, “Christianity and the Liberal Arts” Coalition for Christian Colleges & Universities (CCCU), New Faculty Workshop. Westmont College, CA. **June 25-30, 1999**

Presenter, California Mathematics Council (CMC) Annual Conference. The Geometry of the Tetrahedron: Let Bernoulli Build Excitement in your Classroom. Palm Springs, CA. **Nov. 6-9, 1999**

Presenter, 1998 APU Faculty Research Forum, "Reform Based Instruction in Mathematics: An Inquiry into the Relationship Among Student Achievement and Reform Practices." **March 27, 1998**

Presenter, Greater San Diego Mathematics Council Annual Conference. Multiple Intelligences in the mathematics classroom. San Diego, CA. **Feb. 6-7, 1998**

Curriculum designer, Humans and Computation: a mathematics course for elementary school teachers. Course development. Azusa Pacific University. Azusa, CA. **Sept. 97- Jan. 98**

"LA's Most Inspirational Teacher" - Commendation by Mayor of Los Angeles. **June 1997**

Presenter- California Mathematics Council, southern section, "Teaching Symmetry through the Multiple Intelligences: a "hands-on" investigation" - Palm Springs, CA. **Nov. 8-10, 1996**

Instructor- 'Multiple Intelligences as the Key to Effective Mathematics Education' a certificate course at U.C. Riverside, CA. **Fall 1996**

WASC steering committee, Sierra Vista high school, Baldwin Park, CA. **1996-97**

Presenter- Los Angeles City Teachers of Mathematics conference. "Integrating the multiple intelligences and skydiving to teach symmetry" - CSU Dominguez Hills, **March 9, 1996**

"Teacher of the Year" - Golden Apple Award, Baldwin Park School District, **1995-96**.

Presenter- California Mathematics Council, southern section, "Multiple Intelligences in the high school mathematics classroom" - Palm Springs, CA. **Nov. 3-5, 1995**

Consultant, California Mathematics Projects High School Task Force: Secondary Mathematics Planning Committee. San Francisco, CA. **June 1995**

Consultant, Supporting Secondary Mathematics Symposium. Development of the new integrated Golden State Examination. San Francisco, CA. **Mar. 24-25, 1995**

Presenter- Kaleidoscope of Learning: A multi-disciplinary conference. "Chaos: the Strange Attraction" - U.C. Riverside, CA. **March 11, 1995**

Presenter- California Mathematics Council, southern section "The Mathematics of the Tetrahedron" - Palm Springs, CA. **Nov. 3-5, 1994**

Presenter- Kaleidoscope of Learning for the Year 2000: A Conference. "Skydiving and the Axis of Symmetry" - U.C. Riverside, CA. **March 12, 1994**

Presenter- Multiple Intelligences, Perspectives for Teaching in Classrooms K-12: A Conference, U.C. Riverside, CA. **August 6, 1994**

Teacher / Consultant- Minority Schools Mathematics Project: Summer Institute Cal State University Los Angeles, CA. **July 1993**

Presenter -- 20th Regional Conference for OCC--G.A.T.E., Santa Ana, CA. **Jan. 30, 1993**

Past and Present Professional Academic Association Memberships

California Mathematics Council (CMC)

National Council of Teachers of Mathematics (NCTM)

Los Angeles City Teachers of Mathematics (LACTMA)

Inland Area Math Project, U.C. Riverside: teacher/consultant (IAMP)

California Mathematics Project (CMP): Advisory Board

International Commission on Mathematical Instruction (ICMI)

International Congress on Mathematics Education (ICME)