MELINDA C. KNAPP
University Vita

A. EDUCATION AND EMPLOYMENT INFORMATION

1. Education

Oregon State University, College of Education — Corvallis, OR
Ph.D., Education — 2014

Oregon State University, College of Education — Corvallis, OR
M. Ed., Education with Mathematics Minor — 2008

California State University, Fullerton — Fullerton, CA
Multiple Subject Teaching Credential (K-8) — 2000

California State University, Fresno — Fresno, CA
B.S., Surveying & Photogrammetry — 1988

2. Employment

Oregon State University-Cascades — Bend, OR
Instructor, *Secondary Cohort Lead,*
Coordinator Partners in Education — 2015-current
Teacher Education

Bend-La Pine School District — Bend, OR
Mathematics Instructional Coach — 2013 - 2015
Grades K-5

Bend La Pine School District — Bend, OR
Mathematics Educator, Sky View Middle School — 2004 - 2013
Grades 6-8

Los Alamitos School District — Los Alamitos, CA
Mathematics and Science Educator, Oak Middle School — 2000 - 2004
Grade 6

B. TEACHING, ADVISING AND OTHER ASSIGNMENTS

1. Instructional Summary

Oregon State University-Cascades

Course Title	Academic Term	Enrollment
Part-time Adjunct Instructor		
SED 574: Math Pedagogy and Technology I	Winter 2012	2
SED 576: Math Pedagogy and Technology II	Spring 2013	2
SED 518: Analysis of Classrooms III	Spring 2014	2
SED 515: Analysis of Classrooms II	Winter 2015	12

SED 518: Analysis of Classrooms III	Spring 2015	12
Full Time Instructor		
TCE 506: Portfolio (Elementary cohort)	Summer 2015	22
ED 537 Secondary Math Methods I	Summer 2015	2
ED 538 Secondary Math Methods II	Fall 2015	2
ED 566 Elementary Math Methods	Fall 2015	24
ED 539 Secondary Math Methods III	Winter 2016	2
ED 514 Learning Environments II	Winter 2016	23
ED 510 Clinical Practice (Secondary)	Winter 2016	22
ED 515 Learning Environment III	Spring 2016	14
ED 510 Clinical Practice (Secondary)	Spring 2016	22
ED 537 Secondary Math Methods I	Summer 2016	2
ED 566 Elementary Math Methods	Fall 2016	28
ED 538 Secondary Math Methods II	Fall 2016	2
ED 808 Partners in Education	Fall 2016	12
ED 539 Secondary Math Methods III	Winter 2017	2
ED 510 Clinical Practice (ELEM)	Winter 2017	28
ED 808 Partners in Education	Winter 2017	15
Course Buyout—Numbers in Nature, Math on the Mountain Project	Winter 2017	30 in-service teachers
ED 515 Learning Environments III	Spring 2017	21

Other courses and workshops

- **Partners in Education Collaborative (2016-2017).** Work with approximately 15 in-service teachers and principals to create opportunities for OSU-C Teacher Candidates who are in PIE schools opportunities to engage more widely. Course is focused on supporting Cooperating Teachers to mentor and to create a school-wide environment that sees TCs as an asset.
- **Co-teaching Workshops (2016-2017).** Work with approximately 35 Cooperating Teachers to support co-teaching in the clinical placement classrooms. This work supports OSU-C emphasis on mentoring and seeing Teacher Candidates as an asset in the classroom.

Team or Collaborative Efforts

- **Numbers in Nature, Math on the Mountain Workshops (Spring 2016-Fall 2017**). Trained and collaborated with approximately 30, K-12 math and science teachers to develop curriculum and assessments related to building data literacy for students using real world (contextualized) scientific applications. Planned and co-lead (with Mike Giamellaro and Kari O'Connell) multiple workshops and retreats throughout the 16-month grant.

2. Student Evaluations of Teaching:

Academic term	Course number	Q1 Median	Q2 Median	Responses/ Enrolled (i.e: 25/40, 63%)	OSU-C Q1 Median	OSU-C Q2 Median
Question 1: The course as a whole was? ***Question 2: The instructor's contribution to the course was?***						
Spring 2017	ED515 Learning Environments III	5.9	6.0	11/21 52%	5.1	5.3
Winter 2017	ED539 Secondary Math Methods III	na	na	0/2 0%	na	na
Fall 2016	ED566 Elementary Math Methods	5.5	5.7	18/28 64%	5.0	5.3
Fall 2016	ED538 Secondary Math Methods II	na	na	0/2 0%	na	na
Summer 2016	ED537 Secondary Math Methods I	na	na	0/2 0%	na	na
Spring 2016	ED515 Learning Environments III	5.9	6.0	9/14 64%	5.0	5.2
Winter 2016	ED514 Learning Environments II	5.0	5.5	18/23 78%	5.0	5.2
Winter 2016	ED 539 Secondary Math Methods III	na	na	0/2 0%	na	na
Fall 2015	ED 566 Elementary Math Methods	5.6	6.0	11/24 46%	5.0	5.2
Fall 2015	ED 538 Secondary Math Methods II	na	na	0/2 0%	na	na

Summer 2015	ED 537 Secondary Math Methods I	na	na	0/2 0%	na	na
Summer 2015	TCE 506: Portfolio (Elementary cohort)	5.9	5.9	5/22 23%	5.2	5.4
Spring 2015	SED 518: Analysis of Classrooms III	6.0	6.0	6/12 50%	5.0	5.2
Winter 2015	SED 515: Analysis of Classrooms II	5.0	5.0	10/12 83%	4.9	5.2

3. **Advising**
   - Advise approximately 14-28 Elementary pre-service teachers for issues related to their clinical experience. (Fall = 14, Winter =28). Fall 2016-Winter 2017.
   - Advise approximately 15 Secondary students in role as Cohort Lead
   - Advise and serve as University Supervisor to two Secondary Mathematics students for specific around mathematics teaching and clinical experiences.
   - Advise and supervise four University Supervisors (Secondary)

C. SCHOLARSHIP AND CREATIVE ACTIVITY

1. **Refereed Publications**
   a) **Journal Articles**

Baker, C, **Knapp, M.**, & Galanti, T. (accepted). Principles to Actions: Coaches Engage. *Teaching Children Mathematics,* NCTM, Reston, VA.

Gibbons, L. K. & **Knapp, M.** (accepted). Promoting Professional Growth: How Instructional Leaders Create Opportunities for Talking about Teaching and Learning. *Teaching Children Mathematics*, NCTM, Reston, VA.

Knapp, M. (2017). An Autoethnography of a (Reluctant) Teacher Leader. *Journal of Mathematical Behavior*, 41(1), 251-266.

Hintz, A., Gibbons, L.K., & **Knapp, M.** (2015). Beyond the right answer. *Educational Leadership,* 73(1).

Gibbons, L. K. & **Knapp, M.** (2015). Promoting Professional Growth: How Instructional Leaders Create Opportunities for Talking about Teaching and Learning. *Journal for School Development, 36*(3), 14-19.

   b) **Book Chapters**

Giamellaro, M., & **Knapp, M**. (accepted). *STEM Camp as Symbiotic Learning for Rural Middle School Students and Pre-service Teachers.* In Meidl, T. (Ed.). Service-Learning Initiatives in Teacher Education Programs.

Virmani, R., Taylor, M. W., Rumsey, C., Box, T., Hedges, M., Kazemi, E., **Knapp, M**., Lynch, S., Schwartz, K., Swartz, B., & Woods, D. (2017). *Bringing Mathematics Methods into Classrooms.* In Kastberg, S., Lischka, A., Tyminski, A., & Sanchez, W. (Eds.). Building Support for Scholarly Practices in Mathematics Methods. Charlotte, NC: Information Age Publishing.

2. Professional meetings, symposia, conferences

a) Invited presentations

Baker, C., & **Knapp, M**., (accepted). The Decision-Making Protocol for Mathematics Coaching. **Invited workshop** at the National Council of Supervisors of Mathematics, Washington, D.C.

Baker, C., & **Knapp, M**., (2017, June). The Decision-Making Protocol for Mathematics Coaching. **Invited presentation** at the National Mathematics Coaching Conference, Farmington, ME.

Knapp, M. (2016, June). *How the Development of a Leadership Identity can support Mathematics Coaching*. **Invited presentation** at the Virginia Mathematics Specialist Initiative Conference: Preparing and Implementing Successful Mathematics Coaching Programs, Richmond, VA.

Knapp, M. (2015, May). A Teaching/Leading/Coaching Story. **Invited presentation** at the AMTE/Brookhill Institute Mathematics Specialists/Coaches Research Conference, Waukesha, WI.

b) Other presentations (peer reviewed)

Knapp, M. & Baker, C. (accepted). The Decision-Making Protocol for Mathematics Coaching. Presentation at the 50th Annual meeting of the National Council of Supervisors of Mathematics, Washington, D.C.

Knapp, M., Lynch, S., Rumsey, C., Schwartz, K., Swartz, B., Virmani, R., & Woods, D. (accepted). *Embedding Math Teacher Preparation in PK-12 Settings*. Presentation at the 22nd Annual meeting of the Association of Mathematics Teacher Educators, Houston, TX.

Knapp, M., Lynch, S., Rumsey, C., Schwartz, K., Swartz, B., Virmani, R., & Woods, D. (February, 2017). *Embedding Math Teacher Preparation in PK-12 Settings*. Presentation at the 21st Annual meeting of the Association of Mathematics Teacher Educators, Orlando, FL.

Gibbons, L. K., **Knapp, M**., Louie, N., & Whitenack, J., (February, 2017). *Coaches' Relational Work*. Presentation at the 21st Annual meeting of the Association of Mathematics Teacher Educators, Orlando, FL.

Knapp, M. (2016, October). *Supporting Productive Struggle in the Classroom*. Presentation at the 55th Northwest Mathematics Conference. Yakima, Washington.

Knapp, M., & Larsell, O. (2016, October). *T.E.A.M.S. Teacher Educators, Administrators, Mathematics Coaches, and Students.* Presentation at the 55th Northwest Mathematics Conference. Yakima, Washington.

Knapp, M, Gibbons, L. (2016, April). *How Coaches and Principals Work Together To Create Opportunities to Talk about Teaching and Learning*. Presentation at the 48th Annual meeting of the National Council of Supervisors of Mathematics, San Francisco, CA.

Knapp, M. (2015, February). *Teacher Leadership: (Re)shaping of an Identity*. Presentation at the 19th Annual meeting of the Association of Mathematics Teacher Educators, Orlando, FL.

Knapp, M., & Doty, T. (2014, June). *Learning Walks: One School's Story of Learning Together.* Presentation at the Confederation of Oregon School Administrators Conference. Seaside, Oregon.

Dick, T., & **Knapp, M.** (2011, March). *Studio Math Classroom: A Model for Developing Leadership, Mentoring, and Fostering Professional Learning.* Presentation at the Western Regional Noyce Program Conference. Newport Beach, California.

Knapp, M., Edmondson, S. & Nordquist, L. (2010, October) *Studio Classroom Project: A Successful Mathematics Professional Development Model*. Presentation at the 2010 OASSA/OESPA Annual Principals Conference. Bend, Oregon.

Foreman, L., & **Knapp, M**. (2010, July). *What are we Learning from the Studio Classroom Project?* Presentation at the fifth Annual Robert Noyce Teacher Scholarship Program Conference. Washington, D.C..

Knapp, M., & McLain, J. (2008, October). *Discourse in Action: Analyzing the Teacher's Role in Promoting Productive Mathematical Discourse*. Presentation at the Northwest Mathematics Conference. Portland, Oregon.

c) Current Research

i. **Case study research with Mathematics Coaches** utilizing the Decision-making Protocol for Mathematics Coaches (DMPMC) developed by Knapp, Baker, and Galanti. Analysis of data is currently ongoing and our goal is to publish in a mathematics education journal this year. Collaboration with math educators at George Mason University, Virginia.

ii. **Numbers in Nature, Math on the Mountain project**. The Numbers in Nature, Math on the Mountain Project is a Teacher-Scientist Partnership in which teachers and scientists are working together to bring real world data into the classroom for Central Oregon students. This project is in the data collection phase for research about teachers use of the CCSS Math Practices and the NGSS Science Practices in students

understanding of data literacy. Collaboration with OSU Corvallis and Cascades campus.

iii. **Embedding Math Methods in Classrooms**. Building on the project I have been involved with multiple elementary methods teachers I will use reflection data from my work that has involved teaching ED566 (Elementary Math Methods) course in a local elementary school. This work will inform my collaboration with six mathematics teacher educators from across the country and the way that I structure ED566 (Elementary Math Methods) course. My goal is for Teacher Candidates to be able to work with elementary students as part of this course.

4. Grants

a) Co-PI for Numbers in Nature, Math on the Mountain: A Teacher-Scientist Partnership to Contextualize STEM Instruction (~$220,000) (Funded)

We propose to develop a network of Central Oregon teachers and university faculty who are working together to improve student achievement in science, math and STEM. We will train teachers to use authentic contexts and data supported by *high-leverage classroom discourse moves* to help students make sense of natural phenomena through quantitative data and to help students see the relevance and stories embedded in the contextualized mathematics that surround them.

b) NSF EAGER Project Proposal—Teacher Leader Development within the context of Mathematics Studio (~$238,000) (Did not receive funding).

The project seeks to further develop and gain a greater understanding of the complicated and delicate negotiation of roles, responsibilities, and changing beliefs of the designated *Teacher Leaders* in their efforts to support and influence the teaching practices of their colleagues. We see the project as an opportunity to use and build on the research done on the professional development of Mathematics Studio Coaches. We envision two summer coaching institutes (using local K-12 summer schools) where teacher leaders can be apprenticed as Studio Coaches in the context of the Mathematics Studio, and opportunities for the Studio Coaches to engage in collaborative self-study about their development as a *leader of leaders*. The project will allow the Studio Coaches to meet face to face as well as collaborate remotely during the two-year project.

D. Service

1. University Service

Centers of Excellence Committee (2016-2017)
First Year Experience Committee (2015-2016)

Quality Teaching and Learning Transformational Institute (2014)
The institute engaged teams in rethinking educator preparation pedagogy approaches to better support models of teacher preparation. The institute brought together a network of educators in Oregon State to develop a culture of leadership, professionalism, continuous improvement and excellence for teachers and leaders across the Oregon P-20 system.

2. Service to the Profession

National Science Foundation DRK-12 Grant Reviewer (February 2017)

National Selection Committee for Presidential Award for Excellence in Science and Mathematics Teaching (August 2014)

Oregon Selection Committee for Presidential Award for Excellence in Science and Mathematics Teaching (June 2012)

E. Awards and Fellowships

a) National and International Awards

Teaching Award 2010
Presidential Award for Excellence in Mathematics and Science Teaching

Fellowship 2009 - 2013
NSF/Robert Noyce – Master Teacher Fellowship Award ($40,000)

b) State and Regional Awards

Teaching Award 2010 - 2011
Teacher of the Year, Bend La Pine School District

c) University and Community Awards

OSU Vice Provost Award of Excellence, **Outreach and Engagement**
Numbers in Nature, Math on the Mountain Project (May 2017)
Co-PI for project