

Jessica Jensen



EDUCATION

The University of Iowa, Iowa City, Iowa

Doctorate of Mathematics Education, Expected May 2017

Minor: Gifted and Talented Education, Statistics

Dissertation: Meaningful Questioning in Procedurally and Conceptually Based Lessons

Viterbo University, La Crosse, Wisconsin

Master of Arts in Education, July, 2010

Area of Emphasis: Reading, Middle School Education

Thesis: *The Effects of Learning and Practicing Problem Solving Strategies on Students' Success in Solving Application Problems*

The University of Iowa, Iowa City, Iowa

Bachelor of Arts, May, 2008

Major: Elementary Education

Area of Emphasis: Mathematics

PROFESSIONAL EXPERIENCE

Professional Development Leader for Iowa Mathematics Proficiency Project (IMaP²),

The University of Iowa, Iowa City, IA 2014-current

- Design professional development for 30 elementary mathematics teachers
- Lead professional development on practices aligned with CCSS-M
- Observe and model teaching for maximum student engagement

Instructor, University of Iowa, Iowa City, IA, 2012-current

- Methods: Middle School Mathematics as primary instructor
 - Implement pre-service teacher tutoring partnership with ICCSD
 - Engage students in activities that model mathematical best practices
 - Develop students' abilities to write problem-based lesson plans
- Methods: Elementary Mathematics as primary instructor
 - Develop students' number sense
 - Engage students in activities that model student meaning making
- Number and Operations as teaching assistant
 - Develop deep conceptual understanding of CCSS's Number and Operations domain
 - Make connections across mathematical topics
- Seminar: Curriculum and Student Teaching as primary instructor
 - Develop teaching abilities for advanced topics such as differentiation, parent communication, grading, problem-based learning, ethical dilemmas
 - Counsel student teachers

Student Teacher Supervisor, The University of Iowa, Iowa City, IA, 2013-2015

- Observe student teachers and analyse their teaching
- Enhance student teachers' teaching through conferencing and questioning

Research Assistant, University of Iowa, Iowa City, IA, 2014-current

- Design frameworks for grant proposals
- Lead research projects independently and for IMaP²
- Mentor undergraduate and graduate students in research methods

Home-school Mathematics Instructor, Iowa City, IA, 2013-current

- Improve problem solving and critical thinking skills in grades 6-9 students
- Gifted and Talented Educator**, Belin-Blank Center, University of Iowa, Iowa City, IA, 2013-current
- Design problem-based enrichment activities for grade 2-6 students
 - Incorporated university students in the lesson development and teaching of gifted and talented students
 - Focused on the conceptual development of mathematics content
- Classroom Teacher**, 7th grade, Parkview Middle School, Ankeny, IA, 2008-2012
- Taught mathematics and reading classes for 7th grade students
 - Implement a variety of teaching strategies including cooperative learning, productive group work, and hands-on approaches to learning
 - Manage formative and summative test data to inform instruction and to create more personalized education plans for struggling students
 - Implement and integrate new curriculum to include spiral review and assessments
 - Represent Parkview Middle School on Building Leadership Team
 - Engage in learning around and facilitate PLC implementation of literacy strategies on Content Literacy District Team
 - Direct student body play productions up to 40 students twice a year
 - Help process and interview applicants on interview committee
 - Mentor and model research based teaching strategies for first year teachers
 - Organize social events as Social Committee Chair
 - Co-teach inclusionary classroom comprised of over 60% high needs students
 - Lead professional learning community curriculum work including reading professional literature weekly
 - Coordinate and lead school cycling club
- Volunteer Mentor**, Des Moines Science Center, Des Moines, IA 2011
- Observe and provide feedback on science teaching as part of a system improvement plan
- Substitute Teacher**, West Branch CSD, West Branch, IA, 2008
- Math Tutor**, Vicki Burketta, Iowa City, IA, 2007-2008, Self-employed, 2010-current
- Teacher**, Shimek Elementary BASP, Iowa City, IA, 2005-2007
- Camp Counsellor/Art Director**, Lincoln Elementary, Iowa City, IA, 2006-2007, Heartland Child Development, Council Bluffs, IA, 2005

PRESENTATIONS

International

Jensen, J. & Choi, K. M. (2014, July). *Temporal patterns in cognitive demand of teacher questioning*. Short oral research report at Psychology of Mathematics Education International Conference, Vancouver, Canada.

Choi, K. M., Hwang, J., & **Jensen, J.** (2014, July). *How teachers use cognitive diagnosis model data for instructional decision making*. Short oral research report at Psychology of Mathematics Education International Conference, Vancouver, Canada.

Choi, K. M., Choi, T., **Jensen, J.**, & Eko, S. (2014, July). *Mastery-level trends of number-and-operations and algebra for the US and Korean 8th graders*. Poster presentation at Psychology of Mathematics Education International Conference, Vancouver, Canada.

National

Jensen, J., Sherry, M., Kye, A., & Choi, K. M. (2016, April). *Maintaining high levels of cognitive demand through student silence*. Brief research report at National Council of Teachers of Mathematics Research Conference, San Francisco, CA.

Jensen, J. (2014, April). *Cognitive demand of teacher prompting: Engaging students in mathematical discourse*. Poster presentation at National Council of Teachers of Mathematics Research Conference, New Orleans, LA.

Choi, K. M., **Jensen, J.**, & Hand, B. (2014, April). *A linkage among cognitive skills in school mathematics and science*. Poster presentation at National Council of Teachers of Mathematics Research Conference, New Orleans, LA.

Local

Guest Lecturer (2016, August). *Qualitative Research Methods*. Seminar: Mathematics Education Research at University of Iowa College of Education, Iowa City, IA.

Guest Lecturer (2016, June). *Exploring conceptual understanding to build mathematical tools*. STEM Leadership and Excellence Conference, Iowa City, IA.

Jensen, J. (2014, March). *Changes in cognitive demand of teacher questioning during the phases of mathematical development*. Oral presentation at the 2014 University of Iowa Jakobsen Graduate Conference, Iowa City, IA.

Jensen, J. & Choi, K. M. (2014, March). *The effects of increased symbolic notation on cognitive demand in teacher prompting*. Poster presentation at University of Iowa, Department of Teaching and Learning Graduate Student Research Session, Iowa City, IA.

Choi, K. M., **Jensen, J.**, & Hwang, J. (2013, December). *Teachers' use of cognitive diagnosis modeling data as a formative instructional guide*. Poster presentation at Iowa Educational Research and Evaluation Association Conference, Iowa City, IA.

Jensen, J., Rash, E. (2011, February). *Knowing what your students know*. Oral Presentation at Iowa Council of Teachers of Mathematics, West Des Moines, IA.

Presentations Submitted

Jensen, J. & Choi, K. M. (2017, April). *Meaningful questioning in procedurally and conceptually based tasks*. Research report at the 2017 National Council of Teachers of Mathematics Research Conference, San Antonio, TX.

Hwang, J., **Jensen, J.**, Choi, K. M. (2017, April). *Effects of professional development on reasoning and modelling on mathematics achievement of fifth graders*. Research report at the 2017 National Council of Teachers of Mathematics Research Conference, San Antonio, TX.

PUBLICATIONS

Manuscripts Submitted

Jensen, J., Sherry, M., Kye, A., & Choi, K. M. (Submitted January 12th, 2016). *Maintaining cognitively challenging discourse through student silence*. Journal of Mathematics Teacher Education.

Jensen, J. *Ratios, rates, unit rates, and debates!* Submitting to Mathematics Teaching in the Middle School.

COLLEGE COURSES TAUGHT

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|----------------|--|--------|--------------------|
| • Fall, 2012 | Methods: Middle School Mathematics | 3 s.h. | Primary Instructor |
| • Spring, 2013 | Methods: Middle School Mathematics | 3 s.h. | Primary Instructor |
| • Summer, 2013 | Methods: Elementary School Mathematics | 3 s.h. | Primary Instructor |
| • Fall, 2013 | Methods: Middle School Mathematics | 3 s.h. | Primary Instructor |

- Spring, 2014 Seminar Curriculum and Student Teaching 3 s.h. Primary Instructor
- Spring, 2014 Observation and Lab Practicum in Secondary School Supervisor
- Fall, 2014 Seminar Curriculum and Student Teaching 3 s.h. Primary Instructor
- Spring, 2015 Observation and Lab Practicum in Secondary School Supervisor
- Fall, 2015 Observation and Lab Practicum in Secondary School Supervisor
- Spring, 2016 Methods: Middle School Mathematics 3 s.h. Primary Instructor
- Spring, 2016 Numbers and Operations 3 s.h. Teaching Assistant
- Fall, 2016 Methods: Middle School Mathematics 3 s.h. Primary Instructor

GRANTS

Choi, Kyong Mi (Principal Investigator), & **Jensen, Jessica** (Post-doc), "*Empowering Teachers as Proactive Research Partners: An Extension of I-MaP²*" Submitted to Spencer Foundation, \$399,611. (July 2017 - June 2020). Not funded.

Hua, Youjia (Principal Investigator), Choi, Kyong Mi (Co-PI), Woods-Groves, Suzanne (Co-PI), Hendrickson, Jo (Co-PI), & **Jensen, Jessica** (Post-doc). "**STEM PRomISE** (*Promoting Reasoning and Modeling Improving Self-Efficacy*)" Submitted to National Science Foundation, \$1,660,779. (July 2017 - June 2020). Pending.

AWARDS

- Audrey Qualls Travel Award, 2016 (\$300)
- Graduate Student Research Award, 2016 (\$300)
- Teaching and Learning Accomplishment Award, 2015-2016 Academic Year (\$381)
- Teaching and Learning Accomplishment Award, 2014-2015 Academic Year (\$458)
- Graduate Student Research Award, 2014 (\$500)
- Audrey Qualls Travel Award, 2014 (\$300)
- Graduate Student Research Award, 2013 (\$500)
- Audrey Qualls Travel Award, 2013 (\$300)
- TeachingWorks Mathematics Methods Fellowship—S. D. Bechtel, Jr. Foundation, 2017 (\$7800)

AREAS OF RESEARCH INTEREST

- Cognitive demand of teacher questioning
- Engaging students in meaning making
- Mathematical Knowledge for Teaching and teachers' beliefs on learning
- Case studies
- Qualitative and mixed methods
- Effects of teacher questioning on student understanding
- Effects of professional development on teacher questioning

CERTIFICATIONS

- Elementary Education
- K-8 Mathematics
- K-8 Reading
- Middle School Generalist
- K-12 Gifted and Talented Education
- Trained in use of Mathematical Quality of Instruction coding instrument

CONFERENCES AND WORKSHOPS ATTENDED

- National Council of Teachers of Mathematics Research Session, 2016, San Francisco, CA
- STEM Excellence and Leadership Conference, 2016, Iowa City, IA
- Psychology of Mathematics Education Conference, 2014, Vancouver, Canada
- University of Iowa Jakobsen Graduate Conference, 2014, Iowa City, IA
- National Council of Teachers of Mathematics Research Session, 2013, New Orleans, LA
- Psychology of Mathematics Education North American Chapter Annual Conference, 2013, Chicago, IL
- National Council of Teachers of Mathematics Research Session, 2013, Denver, CO
- Iowa Educational Research and Evaluation Association Conference, 2013, Iowa City, IA
- CTLT Course: Flipping Your Classroom, 2017, San Luis Obispo, CA

PROFESSIONAL MEMBERSHIPS

National Council of Teachers of Mathematics, including reviewer for NCTM 2016 and 2017 research pre-sessions

Psychology of Mathematics Education—North American Chapter

REFERENCES

[REDACTED]

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