

CURRICULUM VITAE
University of Idaho

NAME: ANNE ELIZABETH ADAMS

DATE: August 22, 2018

RANK OR TITLE: Associate Professor

DEPARTMENT: Curriculum & Instruction

OFFICE LOCATION AND CAMPUS ZIP: 407 Education
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EMAIL: aeadams2uidaho.edu

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<http://webpages.uidaho.edu/limsst/>

DATE OF FIRST EMPLOYMENT AT UI: August 2004

DATE OF TENURE: March 27, 2015

DATE OF PRESENT RANK OR TITLE: August 1, 2015

EDUCATION BEYOND HIGH SCHOOL:

Degrees:

Ph.D., University of Idaho, Moscow, ID, 2009, Mathematics Education

M.A., University of California, Davis, CA, 1982, Developmental Psychology

B.S., University of California, Davis, CA, 1976, Psychology

Certificates and Licenses:

State of Idaho Standard Secondary Education Credential with endorsements for grades 6-12 in
Standard Mathematics, Natural Science, Physical Science, and Psychology

State of California Clear Ryan Single Subject Teaching Credential in Mathematics for Kindergarten
through Adult with endorsements in Biology and Psychology.

State of Idaho Basic Educational Technology Competency Certificate

EXPERIENCE:

Teaching, Extension and Research Appointments:

Associate Professor, Department of Curriculum and Instruction, University of Idaho (August 2015 –
Present)

Assistant Professor, Department of Curriculum and Instruction, University of Idaho (August 2008 –
June 2015)

Temporary Faculty, Department of Curriculum and Instruction, University of Idaho (August 2005 –
July 2008)

Adjunct Faculty, Department of Curriculum and Instruction, University of Idaho (August 2004 –
June 2005)

Research and Teaching Assistant, University of California, Davis, Ca. (October 1980 - June 1984).

Assisted in designing a research study of elementary and junior high school students' mathematical reasoning strategies, tested students, analyzed data, coauthored research papers.

Research and Teaching Assistant, University of California, Davis, Ca. (May 1984 – August 1984).
Wrote and received grant to create self-paced instruction package to teach introductory probability theory and review basic algebra concepts. Designed and programmed instruction modules for Apple IIe computers.

Contact Teacher, Idaho Distance Education Academy (August 2004 – August 2005).
Trained parents in understanding and implementing Idaho K-12 Achievement Standards; conducted parent workshops in mathematics education and understanding the Direct Math Assessment.

Teacher, Renaissance Charter School, Moscow, Idaho (Sept 1999 – June 2004).
Taught math and science courses for grades 6-12; developed curriculum and policy for grades 6-12.

Teacher, Feilding Agricultural High School, Feilding, New Zealand (May 1989 – May 1990).
Taught mathematics for Grades 8-12; worked with students from a variety of cultural backgrounds, including many native Maori students.

Teacher, Holmes Junior High School, Davis Unified School District, Davis, California (August 1985 – June 1988). Taught mathematics for grades 7-9, general science, Grade 7, and developed junior high mathematics curriculum for the Davis district; worked with students from a variety of cultural backgrounds.

Teaching Assistant, University of California, Davis, Ca, statistics and psychology courses (Sept 1980 – June 1984). Led discussion sections, wrote and graded exams and term papers, lectured, and tutored.

Student Teacher, University of California, Davis, Ca. (March 1982 – June 1982).
Team taught introductory psychology course.

Teaching Assistant, Statistics Lab, San Francisco State University, San Francisco, Ca. Sept 1979 – June 1980). Supervised self-paced statistics course, tutored students, administered and graded exams.

Non-Academic Employment:

Claims Adjuster, Occidental Life Insurance Co., San Francisco, Ca. (June 1977 – Sept 1980).

TEACHING ACCOMPLISHMENTS: (Academic and Extension teaching)

Areas of Specialization: Mathematics Education, Content Literacy Strategies for Instruction

Courses Taught:

EDCI 413 – Data Analysis and Probability (Spring 2019)
EDCI 416 - Proportional and Algebraic Reasoning (Fall 2017)
EDCI 327 - Elementary Mathematics Education (Summer 06, Fall 06, Spr 07, Fall 07, Spr 08, Fall 08, Spr 09, Fall 09, Spring 10, Fall 10, Spr 11, Spring 2012, Fall 2013, Spring 2014, Fall 2014, Spring 2015, Fall 2016, Spring 2017, Spring 2018)
EDCI 408 – Integrated Methods Practicum (Fall 08, Spr 09, Fall 09, Spr 10, Fall 10, Spr 11, Spring 2012, Fall 2013, Spring 2014, Fall 2014, Spring 2015, Fall 2016, Spring 2017, Spring 2018)
EDCI 427 - Elementary Mathematics in the Classroom (Fall 06, Spr 07, Fall 07, Spr 08)
EDCI 434 - Secondary Mathematics Methods (Fall 06, Fall 07, Fall 08, Fall 09, Fall 10, Fall 2011, Fall 2012, Fall 2015)

EDCI 454 - Secondary Mathematics Methods Practicum (Fall 06, Fall 07, Fall 08, Fall 09, Fall 10, Fall 2011, Fall 2012, Fall 2015)
 EDCI 404 – Geometry for Middle School Teachers (spring 2013)
 EDCI 513 – History of Educational Thought (Spring 2010)
 EDTE 327 - Elementary Mathematics Education (Fall 04, Spr 05, Summer 05, Fall 05, Spr 06, Summer 06)
 EDTE 434 - Secondary Mathematics Methods (Spr 06)
 EDTE 454 - Secondary Mathematics Methods Practicum (Spr 06)
 ED 201 – Diverse Learners in Schools and Social/Cultural Contexts (Fall 07, Spr 08)
 ED 302 – Curriculum, Instruction and Assessment Strategies (Fall 05)
 EDTE 502 – Classroom Assessment of Mathematics Performance (Fall 05)
 EDTE 502 – CAMP Using Assessment for Mathematics Proficiency (Spr 06)
 EDCI 502 – Mathematical Thinking for Instruction (Spr 10, Fall 10)
 EDCI 502 – Theoretical Perspectives in Mathematics Education (Fall 10)
 EDCI 502 – Foundations of Mathematics Education Research (Spr 11)
 EDCI 502 – Models of Intervention in Mathematics (Fall 2012)
 EDCI 504 – Leadership in Mathematics Education I (Summer 2012, 2013)
 EDCI 504 – Leadership in Mathematics Education II (Summer 2013, 2014)
 EDCI 504 – Leadership in Mathematics Education III (Summer 2014, 2015)
 EDCI 404/504 – Proportional and Algebraic Reasoning (Spring 2016)

Students Advised:

Undergraduate Students:

35 – 125 students per semester; 35 is currently a typical number of undergraduate advisees

Graduate Students:

Major Professor

Doctoral Students:

██████████ (May 2011), Dissertation: *A Hermeneutic Phenomenological Study of the Experience of Teacher-Learners*
 ██████████ (May 2016), Mathematics Education, Dissertation: *Does an Observer's Content Knowledge Influence the Feedback Offered About Mathematics Lessons?*
 ██████████ Ph.D. student, mathematics education
 ██████████ Ph.D. student, mathematics education
 ██████████ Ed.D. student, education

Education Specialist Students:

██████████ Ed. S., mathematics education (May 2017)

Master's Students:

██████████ M.Ed. Student
 ██████████ M.Ed. Student
 ██████████ M.Ed. Student
 ██████████ M.Ed. (August 2016)
Productive learning communities: Focusing on the effects of a daily morning meeting in an elementary classroom
 ██████████ M.Ed. (August 2015) *Uniting within the Language Barrier: Key Factors and Methods to benefit Students with the use of Multiple Languages in the Elementary Classroom*
 ██████████ M.Ed. (May 2015). Project: Web Portfolio
 ██████████ M.Ed. (Sept. 2014). Project: Web Portfolio
 ██████████ M.Ed. (July 2014). Project: *A Fifth Grade Mathematics Curriculum to Meet the Common Core Mathematics and Practice Standards*
 ██████████ M.Ed. Student (August 2014). Project: *Empowered by Words? Vocabulary Development Building Conceptual Knowledge in Mathematics Through Literacy in Sixth Grade*

[REDACTED] Student (August 2014). Project: *How and Why of Kindergarten Reasoning Discussions*
 [REDACTED] M.Ed. (May 2014). Project: Web Portfolio
 [REDACTED] M. Ed. (August 2013). Project: *Mathematical Reasoning Development in Fourth and Fifth Grade Students Through Fractions Number Sense Development and Discourse*
 [REDACTED] M.Ed. (July 2013). Project: *Students Don't Know What They Don't Know: Using Standards Based Grading to Address a Discrepancy in Metacognitive Knowledge Monitoring*
 [REDACTED] M.Ed. (May 2013). Project: *Alignment to the Common Core Standards: A Summary of Easy CBM's Math Measures*
 [REDACTED] M.Ed. (May 2013). Project: *Teaching and Learning of Fraction Multiplication and Division at the Middle School Level*
 [REDACTED] M.Ed. (July 2012). Project: *What is Your Story? Student Perceptions, Beliefs and Motivation in the Mathematics Classroom*
 [REDACTED] M.Ed. (July 2012). Project: *Effects of Student Engagement When Infusing Mathematics into the Agricultural Science and Technology (AST) Classroom.*
 [REDACTED] M.Ed. (July 2012). Project: *Accelerated Reader: The Effects of "Best Practices" Implementation: An Action Research Project*
 [REDACTED] M. Ed. (August 2011). Project: *Transitioning to a Standards-Based Classroom in 7-12 Mathematics*
 [REDACTED] M.Ed. (August 2011). Project: *The Components and Benefits of an Effective Class Website*
 [REDACTED] M.Ed. (August 2010). Project: *How Do Students View Themselves in the Mathematics Environment in My Classroom, and Do These Views Differ According to Gender?*
 [REDACTED] M.Ed. (August 2009). Project: *What information Can Teachers Gain when Their Students Engage in Writing in Mathematics?*
 [REDACTED] M.Ed. (August 2008). Project: *Combining Reading and Math: The Use of Reading and Manipulative Strategies and to Teach Mathematics Vocabulary to Secondary Elementary School Students*
 [REDACTED] M.Ed. student

Committee Member for:

[REDACTED] student, Mathematics Education
 [REDACTED] Ph.D. (December 2018) Education
 [REDACTED] Ph.D. (August 2016), Educational Leadership
 [REDACTED] Ph.D. (October, 2015), Mathematics Education
 [REDACTED] Ed.D. (July 2015), Educational Leadership
 [REDACTED] Ed.D.J (July 2014), Mathematics Education
 [REDACTED] Ed.D. (July 2014), Mathematics Education
 [REDACTED] Ed.D. (July 2014), Mathematics Education
 [REDACTED] Ph.D. (July, 2012), Mathematics Education
 [REDACTED] Ph.D. Candidate, Education
 [REDACTED] Ph.D. Candidate, Education
 [REDACTED] Ph. D. student, mathematics education
 [REDACTED] M.Ed. (December 2013), Special Education

Materials Developed:

EDCI 413 – Data Analysis and Probability
 EDCI 416 – Proportional and Algebraic Reasoning
 EDCI 327 - Elementary Mathematics Education
 EDCI 408 – Integrated Methods Practicum
 EDCI 434 - Secondary Mathematics Methods
 EDCI 513 – History of Educational Thought

ED 201 – Diverse Learners in Schools and Social/Cultural Contexts
 EDTE 502 – CAMP Using Assessment for Mathematics Proficiency
 EDCI 502 – Theoretical Perspectives in Mathematics Education
 EDCI 502 – Foundations of Mathematics Education Research
 EDCI 504 – Leadership in Mathematics Education I (Summer 2012)
 EDCI 504 – Leadership in Mathematics Education II (Summer 2013)
 EDCI 504 – Leadership in Mathematics Education III (Summer 2014)
 EDCI 404 – Geometry for Middle School Teachers
 EDCI 404/504 – Proportional and Algebraic Reasoning

Rubrics for assessing levels of mathematics Student Argument Reasoning and Assessment (SARA), an instrument developed for use with grade 8 mathematics students in the Longitudinal Learning of Viable Argument in Mathematics for Adolescents (LLAMA) project. (2017-2019).

Using Mathematics Language, an assessment tool of grade 8 student mathematics language understanding and use – created and piloted Fall 2018.

Protocols for Professional Development Leadership:

Protocol 0: Introducing Mathematical Reasoning

Protocol 1: Deepening Math Reasoning

Protocol 2: Analyzing Student Reasoning

Protocol 3: Planning and Debriefing a Generalization and Justification Lesson

Courses Developed:

EDCI 413 – Data Analysis and Probability (Spring 2019)
 EDCI 404 (now EDCI 416) – Proportional and Algebraic Reasoning (Spring 15)
 EDCI 404 (now EDCI 411) – Geometry for Middle School Teachers (Spring 13)
 EDCI 302 – part of a team of faculty who worked to develop this course for the revised Education Core (Spring 09)
 EDCI 427 – Elementary Mathematics in the Classroom
 EDCI 408 – Integrated Methods Practicum – developed with Melissa Saul and Jerine Pegg (Fall 08)
 EDTE 502 – Classroom Assessment of Mathematics Performance
 EDTE 502 – CAMP Using Assessment for Mathematics Proficiency
 EDCI 502 – Mathematical Thinking for Instruction
 EDCI 502 – Theoretical Perspectives in Mathematics Education
 EDCI 502 – Foundations of Mathematics Education Research
 EDCI 504 – Leadership in Mathematics Education I (Summer 2012, 2013)
 EDCI 504 – Leadership in Mathematics Education II (Summer 2013, 2014)
 EDCI 504 – Leadership in Mathematics Education III (Summer 2014)
 EDCI 404/504 (now EDCI 416) – Proportional and Algebraic Reasoning (Spring 2016)

Non-credit Classes, Workshops, Seminars, Invited Lectures, etc.:

EDCI 505 – PD: Teaching Math Argument (co-taught Fall 2016, Summer 2017, Fall 2017, Spring 2018, Fall 2018, Spring 2019, Summer 2019)
 Adams, A. Qualitative Data analysis – Getting Started. Presentation to EDCI 504 Advanced Writing and Research, UI. Spring 2014
 EDCI 505 – Proportional Reasoning (co-taught Summer 2015)
 EDCI 505 – Algebra and Common Core Math (Summer 2015)
 EDCI 505 – How to Learn Math (Fall 2013)
 EDCI 505 – Leadership in Mathematics Education III (Summer 2014, 2015)
 EDCI 505 – Leadership in Mathematics Education II (Summer 2013, 2014)
 EDCI 505 – Leadership in Mathematics Education I (Summer 2012, 2013)
 EDCI 505 – Supporting Leadership in Math Education 1 (Summer 2012, 2013, 2014, 2015)
 Workshops in Making Mathematics Reasoning Explicit (Fall 2011-present)
 EDCI 405/505 – Literacy Strategies in Math and Science for Secondary Teachers (Spr 08, Fall 09, Spr 10, Fall 10, Spr 11)
 EDCI 505 – Mathematical Thinking for Instruction (Spr 09, Summer 09, Fall 09)
 EDTE 505 – Classroom Assessment of Mathematics Performance (Fall 05)

EDTE 505 – CAMP/ Math Assessment (Spr 06)
 Adams, A. (2006). *Math as a Vehicle for Understanding the World Around Us*.
 Presentation to teachers at Moscow Charter School, Moscow, ID, February, 2006.

Honors and Awards:

SCHOLARSHIP ACCOMPLISHMENTS: (Including scholarship of teaching and learning, artistic creativity, discovery, and application/integration)

Publications, Exhibitions, Performances, Recitals:

Refereed/Adjudicated (blind peer reviewed):

- Adams, A. E., Ely, R., & Yopp, D. (2017). Using generic examples to make arguments viable. *Teaching Children Mathematics*, 23(5), 293-300.
- Adams, A.E., Pegg, J. & Case, M. (2015) Anticipation guides: Reading for mathematics understanding. *Mathematics Teacher*, 108(7), 498-505.
- Pegg, Jerine M., Anne E. Adams, Hilary Smith Risser, SueAnn I. Bottoms, Anne L. Kern, and Ke Wu. (2014) Finding FRIENDS: Creating a Community of Support for Early Career Academics. *Brock Education* 24(1) 47–54.
- Bristol, L., Adams, A.E., & Johannessen, G. (2014) Academic life--support: The self study of a transnational peer mentoring group. *Mentoring and Tutoring*, 22(5), 396-414. DOI:10.1080/13611267.2014.983325
- Adams, A.E., Miller, B.G, Saul, M. & Pegg, J. (2014). Supporting elementary pre-service teachers to teach STEM through place-based teaching and learning experiences. *Electronic Journal of Science Education*, 18(5), 1-22.
- Bottoms, S., Pegg, J., Adams, A.E., Smith Risser, H., Wu, K., & Kern, A.L. (2013). Mentoring from the outside: The role of a peer mentoring community in the development of early career education faculty. *Mentoring and Tutoring*, 21(2), 195-218.
- Adams, A.E. & Pegg, J. (2012). Teachers' enactment of content literacy practices in secondary science and mathematics classes. *Journal of Adolescent and Adult Literacy*, 56(2), 151-161.
- Pegg, J. & Adams, A.E. (2012). Reading for claims and evidence: Using anticipation guides in science. *Science Scope*, October, 80-84.
- Ely, R. & Adams, A.E. (2012). Unknown, placeholder, or variable: What is x? *Mathematics Education Research Journal*, 24(1), 19-38. DOI 10.1007/s13394-011-0029-9
- Adams, A. (2010). Rehearsal or reorganization: Two patterns of literacy strategy use in secondary mathematics classes. *The Montana Mathematics Enthusiast*, 7, 371-390.
- Acredolo, C, Adams, A. & Schmid, J. (1984). On the understanding of the relationships between speed, duration and distance. *Child Development*, 55, 2151-2159.
- Acredolo, L. P., Adams, A., & Goodwyn, S.W. (1984). The role of self-produced movement and visual tracking in infant spatial orientation. *Journal of Experimental Child Psychology*, 38, 312-327.

Peer Reviewed/Evaluated (non-blind):

- Bottoms, S., Pegg, J, Adams, A. E., Smith Risser, H., Wu, K. (in press). Mentoring within communities of Practice. In B.J. Irby, J. Boswell, L. Searby, F. Kochan, & R. Garza (Eds.). *The Wiley International Handbook of Mentoring*. New York: Wiley.
- Arbaugh, F., Wieman, R., Adams, A. E., Teuscher, D., Van Zoest, L. (2017). Situating learning for secondary mathematics preservice teachers within the context of rehearsals: Challenges and resulting adaptations. In *Building Support for Scholarly Practices in Mathematics Methods*. Charlotte, NC: Information Age Publishing, Inc.
- Adams, A. E., Pegg, J. M., Bottoms, A. I. Smith Risser, H., Wu, K., & Kern, A. L. (2016). Storying our academic career transitions within a peer-mentoring community. In B. G. G. Johannessen (Ed.). *Global Co-Mentoring Networks in Higher Education: Politics, Policies, and Practices*, pp. 73–94. Basel: Switzerland: Springer.

Submitted

- Ely, R., Yopp, D., & Adams, A. E. (under review). Abductive and other reasoning types in argumentation. Submitted to *Educational Studies in Mathematics*.
- Karunakaran, M. S., Adams, B. Wnek, A. E., Knott, L., & Ely, R. Elicit Quantitative Reasoning Using Talk Moves. Submitted to *Teaching Children Mathematics*
- Yopp, D., Ely, R., Adams, A.E., Neilson, A. (under review). Eliminating counterexamples. *Journal of Mathematical Behavior*.

Under Revision

- Yopp, D. Ely, R., Adams, A. E., Nielsen, A. W., Thomas, T., & Barfuss, L. (under revision). A sidecar fosters daily viable arguments. Submitted to *Mathematics Teaching in the Middle School*.
- Ely, R., Adams, A. E., Blackham, V., Yopp, D., & Knott, L. (Under revision). Sleuthing and anticipatory tasks. *Educational Studies in Mathematics*.

In Preparation

- Yopp, D., Sutton, J., Wang, X., Ely, R., Adams, A.E., Neilson, A. Efficacy Findings of a Grade 8 Mathematics Proof and Proving Intervention
- Adams, A. E., Ely, R. Developing Student Skepticism for Empirical Arguments (in preparation).
- Adams, A. E. (in preparation). Learning from a Mathematics Lesson Taught in Bengla: Impacting Preservice Elementary Teachers' Support for ELLs.
- Adams, A.E., Ely, R., Johnson Leung, J., Knott, L. (in preparation). Learning to make viable arguments: Justifying divisibility rules.
- Pegg, J. & Adams, A.E. (in preparation). Secondary teachers' beliefs about the use of literacy strategies in mathematics and science classes.
- Prummer, K. & Adams, A. E. (in preparation). Using patterns to find the 'big idea': Generalizing the multiplicative inverse.

Peer-reviewed Conference Proceedings (blind peer reviewed)

- Adams, A. E., Karunakaran, M. S., Klosterman, P., Knott, L., & Ely, R. (2016). Using precise mathematics language to engage students in mathematics practices. In (Eds.) *Proceedings of the 38th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*, pp. 1158-1165. Tucson, AZ: PME-NA.
- Karunakaran, M. S., Wnek, B., Knott, L., Adams, A. E., Ely, R. (2016). Creating opportunities for justifying: An examination of one teacher's evolving questioning strategies. In (Eds.) *Proceedings of the 38th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*, pp. 427. Tucson, AZ: PME-NA
- Wnek, B., Karunakaran, M. S., Adams, A. E. & Knott, L. (2016). Improving student analytical justification through professional development. In Csíkos, C., Rausch, A., & Sztányi, J. (Eds.). *Proceedings of the 40th Conference of the International Group for the Psychology of Mathematics Education*, Vol. 1, pp. 340. Szeged, Hungary: PME
- Ely, R., Adams, A.E., Yopp, D., Blackham, V., Druffel, C., Knott, L., & Clay Olson, J. (2014). Shortcutting abduction to enable justification. In P. Liljedahl, C. Nicol. S. Oesterle, & D. Allan, (Eds.) *Proceedings of the 38th Annual Meeting of the International Group for the Psychology of Mathematics Education (Vol. 6)*, pp. 62. Vancouver, BC.
- Knott, L., Clay Olson, J, Rapone, B., Adams, A. E., & Ely, R. (2014). In P. Liljedahl, C. Nicol. S. Oesterle, & D. Allan, (Eds.) A model for systemic change in rural schools. *Proceedings of the 38th Annual Meeting of the International Group for the Psychology of Mathematics Education (Vol. 4)*, pp. 1-8. Vancouver, BC.
- Adams, A. E., & Pegg, J. (2013). Secondary mathematics teachers' beliefs regarding content area reading. In M. Martinez & A. Castro Superfine, (Eds.) *Proceedings of the 35th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Chicago, IL: University of Illinois, Chicago, pp. 1097.
- Knott, L. Olson, J., Adams, A., & Ely, R. (2013). Task design: Supporting teachers to independently create rich tasks. In Claire Margolinas (Ed.) *Task Design in Mathematics Education: Proceedings of ICMI Study 22*.

Oxford, UK: International Commission on Mathematical Instruction, pp. 599-608. ISBN: 978-2-7466-6554-5

- Knott, L. Olson, J., **Adams, A.**, & Ely, R. (2013) Task design: Supporting teachers to create rich tasks independently. In *Proceedings of the 6th East Asia Regional Conference on Mathematics Education (EARCOME 6)*. 17-22 March 2013, Phuket, Thailand.
- Adams, A. E.**, & Pegg, J. (2012). Secondary mathematics teachers' enactment of content literacy strategies. In Van Zoest, L. R., Lo, J.-J., & Kratky, J. L. (Eds.). In *Proceedings of the 34th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Kalamazoo, MI: Western Michigan University, pp. 841-844.
- Ely, R., Olson, J.C, **Adams, A. E.**, Knott, L., & Weaver, D. (2012). A classroom observation rubric for mathematical justification. In Van Zoest, L. R., Lo, J.-J., & Kratky, J. L. (Eds.). *Proceedings of the 34th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Kalamazoo, MI: Western Michigan University, pp. 1196.
- Pegg, J., **Adams, A.**, & McConnell, R. (2008). An initial survey of secondary science and mathematics teachers' content area literacy practices. *Proceedings of the Annual Meeting of the Association For Science Teacher Education*, St. Louis, MO, January 2008.

Evaluation/Annual Reports

- Knott, L., **Adams, A.E.**, Ely, R., & Karunakaran, M. S., MMRE Final (Report Year 7) Provided to NSF, August 2018.
- Knott, L., **Adams, A.E.**, Ely, R., & Karunakaran, M. S., MMRE Annual Report Year 6. Provided to NSF, April 2017.
- Knott, L., **Adams, A.E.**, Ely, R., & Karunakaran, M. S., MMRE Annual Report Year 5. Provided to NSF, April 2016.
- Knott, L., Ely, R., **Adams, A.E.**, & Olson, J., MMRE Annual Report Year 4. Provided to NSF, April 2015.
- Knott, L., Ely, R., **Adams, A.E.**, & Olson, J., MMRE Annual Report Year 3. Provided to NSF, April 2014.
- Knott, L., Ely, R., **Adams, A.E.**, & Olson, J., MMRE Annual Report Year 2. Provided to NSF, April 2013.
- Knott, L., **Adams, A.E.**, Olson, J., & Ely, R. MMRE Annual Report Year 1. Provided to NSF, March 2012.
- Adams, A.E.**, Pegg, J., Duclos, T., & Scarano, J. (2011). Literacy Instruction in Math and Science for Secondary Teachers (LIMSST) Evaluation Report for 2010-11
- Adams, A.**, Pegg, J., & McConnell, R. (2009). Literacy Instruction in Mathematics and Science for Secondary Teachers (LIMSST) Evaluation Report for 2008-09.
- Pegg, J., **Adams, A.**, & McConnell, R. (2008). Literacy Instruction in Mathematics and Science for Secondary Teachers (LIMSST) Evaluation Report for 2007-08.
- Adams, A.**, Ewers, T., Piez, C., & Wallin, A. (2006). Assessment for Mathematical Proficiency: Year 2 Annual Report.

Professional Meeting Papers, Workshops, Showings, Recitals:

- Adams, A. E.**, Ely, R. & Knott, L. (2019). Creating and Supporting Mathematics Teacher Leaders: Inviting Administrators into the Conversation. To be Presented at the *Annual Conference for the Association of Mathematics Teacher Education*, Orlando, FL, February 7-9.
- Nielson, A., Yopp, D. & **Adams, A. E.** (2018) Line of "Good" Fit in Grade 8 Classrooms. Paper presented at the *National Council of Teachers of Mathematics Research Conference*, in Washington, D.C., April 23-25.
- Adams, A. E.** (2018). Learning from a Mathematics Lesson Taught in Bengla: Impacting Preservice Elementary Teachers' Support for ELLs. Presented at the *Annual Conference for the Association of Mathematics Teacher Education*, Houston, TX, February 8-10.
- Adams, A. E.** & Shawon, F. (2017). Learning from a Mathematics Lesson Taught in Bengla. Paper presented at the *Palouse Language and Culture Symposium*, Moscow, ID, April 8.
- Adams, A. E.** & Shawon, F. (2017). The Impact of a Non-English Math Lesson on Preservice Elementary Teachers' Support for ELLs. Paper presented at the *International Globalization, Diversity, and Education*

Conference. Spokane, WA, Feb. 15-17.

- Adams, A. E.**, Karunakaran, M. S., Klosterman, P., Knott, L., & Ely, R. (2016). Using precise mathematics language to engage students in mathematics practices. Presented at the *38th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Tucson, AZ, November 3-6.
- Karunakaran, M. S., Wnek, B., Knott, L., **Adams, A. E.**, Ely, R. (2016). Creating opportunities for justifying: An examination of one teacher's evolving questioning strategies. Presented at the *38th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Tucson, AZ, November 3-6.
- Adams, A. E.**, Yopp, D., & Ely, R. (2016). Reasoning paths from exploration to argument. Presented at the *National Council of Teachers of Mathematics Research Conference*, in San Francisco, CA, April 11-13.
- Karunakaran, M., **Adams, A.E.**, Wnek, B., Blackham, V., Klosterman, P., Knott, L., & Ely, R. (2016). Making mathematical reasoning explicit: Responsive professional development. Presented at the *International Group for Mathematics Education (ICME)* in Hamburg, Germany, July 24-31.
- Wnek, B., Karunakaran, M. S., **Adams, A. E.** & Knott, L. (2016). Improving student analytical justification through professional development. Presented at the *40th Conference of the International Group for the Psychology of Mathematics Education*,. Szeged, Hungary, August 3-7.
- Adams, A. E.**, Ely, R., Blackham, V. (2015) Using a string to tie ratio reasoning to linear functions. Presented at the *National Council of Teachers of Mathematics Conference*, in Minneapolis, NM, November 11-13.
- Adams, A.E.**, Miller, B.G, Eitel, K.B., & Schon, J. (2015). Learning from each other: Science and education students co-learning to teach environmental education. Presented at the *International Globalization, Diversity & Education Conference*. Spokane, WA. Feb. 26-27.
- Ely, R., **Adams, A.E.**, Yopp, D., Blackham, V., Druffel, C., Knott, L., & Clay Olson, J. (2014). Shortcutting abduction to enable justification. Presented at the *38th Annual Meeting of the International Group for the Psychology of Mathematics Education*. Vancouver, BC, July 15-20.
- Knott, L., Clay Olson, J, Rapone, B., **Adams, A. E.**, & Ely, R. (2014). A model for systemic change in rural schools. Presented at the *38th Annual Meeting of the International Group for the Psychology of Mathematics Education*. Vancouver, BC, July 15-20.
- Clay Olson, J., Knott, L., Rapone, B., **Adams, A.E.**, & Ely, R. (2014). Supporting systemic change. Paper presented at the *Northwest Association of Teacher Educators (NWATE) Conference*, Pullman, WA, June 5-6.
- Klosterman, P., Rapone, B., Moore, R., Clay Olson, J., Knott, L., **Adams, A.E.**, & Ely, R. (2014). Professional development model to help teachers to use common core math practices in their instruction. Paper presented at the *Northwest Association of Teacher Educators (NWATE) Conference*, Pullman, WA, June 5-6.
- Ely, R., **Adams, A. E.**, & Blackham, V. (2014). Ways to elicit reasoning: Hunt-then-fish vs. anticipatory tasks. Presented at the *National Council of Teachers of Mathematics Research Conference*, in New Orleans, LA, April 7-9.
- Adams, A. E.**, & Pegg, J. (2013). Secondary mathematics teachers' beliefs regarding content area reading. Presented at the *35th Annual Conference of the North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA 2013)* in Chicago, IL, Nov. 14-17
- Saul, M., **Adams, A.E.**, & Miller, B. G. (2013). Reimagining teacher education: Place-based pedagogy, culturally responsive teaching, and curriculum integration. Presented at the *Northwest Association of Teacher Educators Annual Conference* in Pullman, WA, May 30-31.
- Bristol, L., Johannessen, G. & **Adams, A. E.** (2013). Academic life--support: The self study of a transnational peer mentoring group. Presented at the *American Education Research Association Annual Meeting*, San Francisco, CA, April 27 – May 1.
- Adams, A. E.**, Ely, R., Knott, L., Olson, J., Weaver, D., Blackham, V., Druffel, C., Harahap, H., & Lundholm, I. (2013) Making math reasoning explicit. Presented at the *MSPNet Learning Networks Conference*. Washington DC, February 11-12.
- Adams, A. E.**, & Pegg, J. (2012). Secondary mathematics teachers' enactment of content literacy strategies. Presented at the *34th Annual Conference of the North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA 2012)* in Kalamazoo, MI, Nov. 1-4.
- Ely, R., Olson, J.C, **Adams, A. E.**, Knott, L., & Weaver, D. (2012). A classroom observation rubric for mathematical justification. Presented at the *34th Annual Conference of the North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA 2012)* in Kalamazoo, MI, Nov. 1-4.

- Pegg, J., Bottoms, S., Risser, H. **Adams, A.E.**, Kern, A. L., & Norman, K. W. (2012). Storying our academic career transitions within a peer-mentoring community. Presented at the *American Education Research Association Annual Meeting*, Vancouver, BC, April 13-17.
- Pegg, J. & **Adams, A.** (2011) Reading for claims and evidence: Using anticipation guides in science. Presented at the *Alberta Teachers Association Science Council Conference*, Lake Louise, AB, Oct. 21-22.
- Pegg, J., & **Adams, A.** (2011). Variations in teacher's use of content literacy strategies in secondary science and mathematics classes. Presented at the *Canadian Society for the Study of Education XXXIVth Annual Conference*, Fredericton, New Brunswick, May, 2011.
- Bottoms, S., Pegg, J. **Adams, A.E.**, Kern, A. L., Norman, K. W., & Risser, H. (2011). Creating a community of practice of emerging academics across institutions. Presented at the *American Education Research Association Annual Meeting*, New Orleans, April 8-12.
- Pegg, J., & **Adams, A.** (2010). Secondary science and mathematics teachers' beliefs regarding content area literacy. Presentation at the *Canadian Society for the Study of Education XXXVIIIth Annual Conference*, Montreal, QB, Canada, May 2010.
- Adams, A.**, Kern, A., & Saul, M. (2010). *Culturally responsive teaching: An integrated field experience at the Coeur d'Alene Tribal School*. Presented at a Supporting Teaching, Advising, Assessment and Technology Integration Colloquium at the University of Idaho, Feb. 18, 2010.
- Saul, M., Kern, A., & **Adams, A.** (2010). Preparing teachers for diverse classrooms: A case study of preservice teachers at a tribal school. *Sixth International Globalization and Diversity Conference*, Spokane, WA, February, 2010.
- Adams, A.** & Pegg, J. (2009). Rehearsal or reorganization: Influences of teachers' beliefs about teaching and learning on content literacy strategy use. *School Science and Mathematics Association Conference*, Reno, NV, October 2009.
- Adams, A.** (2009). Rehearsal or reorganization: Two patterns of literacy strategy use in secondary mathematics classes. Paper presented at *Northwestern Women Researchers in Math/Science Education* meeting, Missoula, MT, August 15, 2009.
- McConnell, R., McConnell, M., **Adams, A.**, Pegg, J., & Wood, N. (2008, November). *Reading and writing in math and science*. Presentation at the National Council for Teachers of English, San Antonio, TX.
- Pegg, J., **Adams, A.**, & McConnell, R. (2008). *An initial survey of secondary science and mathematics teachers' content area literacy practice*. Association for Science Teacher Education, St. Louis, MO., January 2008.
- Adams, A.** (2006). *Classroom assessment for mathematical proficiency: The role of classroom discourse*. Northwest Rocky Mountain Educational Research Association, Sun Valley, ID, October 2006.
- Adams, A.** (2006). *Classroom assessment for mathematical proficiency*. Idaho Math Science Partnership Meeting, Boise, ID, October 2006.
- Acredolo, C. & **Adams, A.** (1983). *On the understanding of the relationships between speed, duration and distance*. Society for Research in Child Development, Detroit, MI., April, 1983.

Grants and Contracts Awarded:

- PI: David Yopp; Co-PI's: **Anne E. Adams**, Robert Ely, Chandra K. Lewis, Xin Wang, *Longitudinal Learning of Viable Argument in Mathematics for Adolescents (LLAMA)*. National Science Foundation: DRK-12. Sept.1, 2016 - August 30, 2020, \$2,999,640.
- PI: **Anne E. Adams**; Co-PI's: Robert Ely, & Jennifer Johnson Leung, *Making Mathematics Reasoning Explicit*. A Subcontract to Washington State University on the National Science Foundation, Math-Science Partnership (MSP) Teacher Institutes Program. June 1, 2011- May 31, 2018; subcontract amount: \$1,210,131. This subcontract is part of the larger grant: *Making Mathematics Reasoning Explicit* (see entry below).
- PI: Libby Knott (WSU); Co-PI's: **Anne E. Adams**, Jo Olson, Robert Ely, Tom Asaki, & Jennifer Johnson Leung, *Making Mathematics Reasoning Explicit*. National Science Foundation, Math-Science Partnership (MSP) Teacher Institutes Program. June 1, 2011- May 31, 2018, \$4,932,099
- PI: **Anne E. Adams**; Co PI's: Jerine Pegg, Robert Ely, & Rodney McConnell *Literacy Instruction in Mathematics and Science for Secondary Teachers*, Idaho State Board of Education, State Agency Higher Education Eligible Partnership Grant, (P1 107-110 ESEA as amended by No Child Left Behind) July 1, 2010 – Sept 30, 2011, \$114,999.
- PI: **Anne E. Adams**; Co PI's: Jerine Pegg & Rodney McConnell, *Literacy Instruction in Mathematics and Science for Secondary Teachers*, Idaho State Board of Education, State Agency Higher Education Eligible

Partnership Grant, (P1 107-110 ESEA as amended by No Child Left Behind) July 1, 2009 – Sept 30, 2010, \$114,988.

PI: **Anne E. Adams**; Co-PI's: Jerine Pegg & Melissa Saul. *Culturally Responsive Teaching: An Integrated Field Experience at the Coeur d'Alene Tribal School* project, a Supporting Teaching, Advising, Assessment and Technology Integration grant at the University of Idaho, Jan – Dec 2009, \$5,150.

PI: Jerine Pegg; Co PI's: **Anne Adams** & Rodney McConnell, *Literacy Instruction in Mathematics and Science for Secondary Teachers*, Idaho State Board of Education, State Agency Higher Education Eligible Partnership Grant, (P1 107-110 ESEA as amended by No Child Left Behind), July 1, 2008 – Sept 30, 2009, \$128,500.

PI: Rodney McConnell; Co PI's: Jerine Pegg, & **Anne Adams**, *Literacy Instruction in Mathematics and Science for Secondary Teachers*, Idaho State Board of Education, State Agency Higher Education Eligible Partnership Grant, (P1 107-110 ESEA as amended by No Child Left Behind) April 1, 2007 – Sept 30, 2008, \$200,000.

Grants and Contract Proposals Submitted:

Co-PI: Aleksandra Hollingshead, Royce Kimmons, Anne L. Kern, & **Anne E. Adams**. *An engaging induction model for secondary level early career in-service teachers*. Proposal submitted to The Arthur Vining Davis Foundations, April 2014, \$187,644. Not funded.

Honors and Awards:

SERVICE:

Major Committee Assignments:

State

Idaho State Department of Education Elementary Standards Revision Committee, January 2016.

Idaho State Department of Education/Higher Mathematics Education Faculty Committee on Middle School Mathematics Endorsement, May 2009 - present.

Idaho State Department of Education Secondary Mathematics Standards Revision Committee, February 2010.

Idaho Mathematics Initiative, May 2008 - 2014

University

VandalStar Pilot, Spring 2018

Facilities Scheduling Committee, 2017 – 2020

Graduate Student Fellowship Support Program – 2017-present

Chair, Financial Aid Committee, 2014 - 2015

Financial Aid Committee, August 2009 – 2015

Teacher Education Curriculum Committee, 2010 – 2011, 2014-present

Graduate Faculty Orientation committee, Spring, 2006

College

College Coordinating Committee, Fall 2007 – Spring 2008, August 2010 - present

College of Education Building Redesign Committee, Fall 2013 - 2016

College of Education Tenure and Promotion Committee, Fall 2010, 2017-2020

TPAC Training Team, December 2010 – 2012

Wright Fellows Admissions Committee, 2009-2010, 2013

Search Committee, Director of Field Experiences/Idaho TPA Coordinator, 2015

Search Committee, Financial Records Specialist, Grants and Contracts, Fall 2013

Search Committee, Financial Records Specialist, Dean's Office Spring 2011

Departmental

C & I Tenure and Promotion Committee, Fall 2016, Fall 2017

Teacher Education Core Redesign Committee, Fall 2015 – present

Mathematics Endorsement Redesign Committee, 2013 – present
 Mentor to untenured faculty member Dr. Aleksandra Hollingshead, 2015 - present
 Third Year Review Committee, Alex Hollingshead, Fall 2015
 Chair, Search Committee, Mathematics Education Position, August 2010 – March 2011
 Search Committee, Chair of Dept of Curriculum and Instruction, August 2017 – January 2018
 Search Committee, Social and Cultural Studies position, Spring 2014
 Search Committee, Geometry Instructor for EDCI 404 – Fall 2013
 Search Committee, Social Studies Methods Instructor, Summer 2013
 Search Committee, Mathematics Education Position, August 2011- Spring 2012
 Search Committee, Mathematics Education Position, January 2011- May 2011
 Search Committee, Elementary Science & Technology Position, December 2009 – July 2010
 Search Committee, Curriculum and Instruction Instructor Roster, August 2010
 Elementary Education Program Committee, Fall 2007 - present
 Secondary Education Program Committee, Fall 2007- present
 Advanced Programs Committee, Fall 2008 - present
 EDCI 302 Course Design Committee, Spring 2009
 Search Committee, Mathematics position, Coeur d'Alene, Spring 2007
 Search Committee, Literacy position, Coeur d'Alene, Spring 2007
 Search Committee, Elementary Science Education position, Spring 2006

Professional and Scholarly Organizations

National Council of Teachers of Mathematics (NCTM)
 Association of Mathematics Teacher Educators (AMTE)
 Psychology of Mathematics – North American Chapter (PME-NA)
 American Educational Research Association (AERA)
 School Science and Mathematics
 Mathematics Association of America
 National Council of Supervisors of Mathematics

Manuscript Review

Mathematical Thinking and Learning, 2018
International Congress of Mathematics Educators (ICME) – proposal reviews Nov. 2015 for 2016
American Educational Research Association (AERA), SIG: Research in Mathematics Education. 2014
Proposal reviews.
Mathematics Teacher, 2013
Mathematics Teaching in the Middle School, 2012, 2014, 2016, 2018
Teaching Children Mathematics, 2013, 2014, 2015, 2016, 2017, 2018
The Montana Mathematics Enthusiast, 2009
 Association of Mathematics Teacher Educators (AMTE), 2011
 Psychology of Mathematics Education – North America, 2010, 2013, 2015, 2016
 A.C. Burris, *Understanding the math you teach* for Pearson Education, Inc., Spring, 2006

Outreach Service:

National Observation Teaching Exam (NOTE): Assessment Standard Setting Study. Served as State of Idaho representative on the National Advisory Committee for the multistate standard study for Education Testing Service (ETS) development of an alternative teaching performance exam for elementary teacher certification, February-March, 2018.
 Professional Development Workshops and classroom based support for grade 8 mathematics teachers in the LLAMA project, Nov. 2016 - present
 Development of professional development BBLearn modules on viable argumentation for grade 8 mathematics teachers in the LLAMA project. Nov. 2016 – present.
 Professional Development Workshops and classroom based support in Making Mathematics Reasoning Explicit for mathematics teachers of grades 4-12, September 2011 to May 2018.
 Professional Development for mathematics Teachers on Special Assignment/Coaches of grades K-8 for the Making Mathematics Reasoning Explicit Project, August 2016 to May 2018.
 Professional Development Workshops and classroom based for support for secondary mathematics and science teachers on Using Literacy Strategies in Secondary Mathematics and Science Classes,

August 2007 – May 2011.

Teacher Performance Assessment (TPA). Benchmarking of Elementary Mathematics TPA, San Antonio, TX, November 2011.

Coeur d'Alene Tribal School/Lapwai School, take elementary methods students to the school for 4 days each semester to provide integrated, hands-on learning activities in mathematics, science and social studies for grades K-6 students, Spring 2009 – present.

Teacher Performance Assessment (TPA). Scoring of Pilot Elementary Mathematics TPA for candidates from Lewis Clark State College, May 2011.

Consultation on mathematics curriculum and instruction, Moscow Junior High School, 2010-2013

Consultation on mathematics curriculum, instruction, and assessment, Palouse Prairie School, 2010-2014

Consultation on mathematics curriculum and instruction, Moscow Charter School, Spring 2009

Consultation on mathematics curriculum alignment and professional development for the Plummer/Worley School District, 2008 - 2009

Coordinated annual Math Day at Lena Whitmore Elementary School, 2007- 2010.

Coordinated Family Math Night at McDonald Elementary School, April 2008.

MathBuilders grant through the Palouse Science Discovery Center, Project Consulting on Design of MathBuilders activities, a set of rich self-guided tasks for Grades 2-6 students, Spring 2008

Idaho Student Achievement Test, mathematics examination development. Developed performance descriptors and determined new cut scores, July 2006

Chaired the Math Education session at Idaho's Indian Education Summit in Lewiston, October 2006.

Community Service:

Honors and Awards:

Faculty/Staff International Development Award (FIDA) summer language and culture program, Reggio Emilia, Italy, Summer 2016

PROFESSIONAL DEVELOPMENT:

Teaching:

Learning in and from Practice Teaching Workshop, University of Michigan College of Education's Summer Learning Institute Teacher Education Workshop, July 17-21, 2011. The workshop developed instructional activity frameworks in a cycle of investigation and enactment to prepare novices for teaching practice.

Teachers Performance Assessment Consortium (TPAC), Training the Scorers Training, Seattle, February 3 – 4, 2011

Leadership Institute on Mathematics Professional Development, Teachers Development Group, Portland, OR, March 18-21, 2015

Leadership Institute on Mathematics Professional Development, Teachers Development Group, Portland, OR, February 14-17, 2013

Leadership Institute on Mathematics Professional Development, Teachers Development Group, Portland, OR, February 15-18, 2012

Leadership Institute on Mathematics Professional Development, Teachers Development Group, Portland, OR, February 16-19, 2011

Taskstream on-line assessment system training, November, 2010

Idaho Science Math Technology Coalition meeting on STEM Education, Boise, Oct 30, 2010

Scholarship:

Mathematics Education Seminar, joint weekly meetings of University of Idaho and Washington State University mathematics education faculty and graduate students, Fall 2009 – present

Psychology of Mathematics Education – North America conference Fall 2012, 2013, 2016

Psychology of Mathematics Education – International conference 2014, 2016

American Research Education Association conference, Spring 2011, 2012, 2013

UI Office of Sponsored Programs, grant administration training, Spring 2007

National Council of Teachers of Mathematics Research Presessions, Spring 2007, 2008, 2014, 2016

International Globalization, Diversity & Education Conference. 2015, 2017
International Congress for Mathematics Education, 2016
Scholarship in Practice (SIP) conference, 2015
GAMMA meeting on Generalization and Justification, August 2016
Association of Mathematics Teacher Educators, February 2018, 2019
Palouse Language and Culture Symposium, April 2017

Outreach:

Administration/Management: