

## **Jessica J. Thompson, Ph.D.**

*Research Associate*

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### ***Education***

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- 2001-2006 *Doctor of Philosophy in Education, Curriculum and Instruction, Science Education University of Washington, Seattle, WA*  
Thesis: *Multiple narratives: How urban girls engage in co-authoring life stories and scientific stories*
- 2000-2001 *Master of Education, Curriculum and Instruction, Science Education, University of Washington, Seattle, WA*  
Thesis: *Science Learning Among At-Risk Girls: A Qualitative Examination of Motivation to Learn, Self-Efficacy, Relevance, and Engagement*
- 1998-2000 *Washington State Teaching Certification Western Washington University, Seattle, WA*
- 1990-1994 *Batchelor of Arts in Biology, Chemistry minor, Whitman College, Walla Walla, WA*  
Thesis: *Transposon (TN5) Induced Mutations in Agrobacterium Tumerfaciens Responsive to External Acidification*

### ***Current Certification***

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- 2000-2014 *Washington State Continuing Teaching Certificate, Endorsed in 4-12 Science, Biology, and Chemistry*

### ***Professional Experience***

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- 2006-present *Research & Teaching Associate in Teacher Education, University of Washington, Seattle, WA.*  
Currently co-Principal Investigator for research program that tracks secondary science teachers' learning trajectories from the Teacher Education Program through the first year of teaching. Program supports the teaching and learning of ambitious, equitable science teaching practices.
- Currently heading a special outreach support project to support science teachers in the Puget Sound region. Program supports the Southeast Seattle Initiative by working with science teachers to develop professional learning communities and with principals and district-level science support specialists to develop a shared understanding of ambitious, equitable pedagogy. Also involves a monthly video club that helps teachers investigate student work and make informed changes to practice.
- Courses taught:
- The Design of Elementary and Secondary Inquiry-Based Science Learning Environments, EDC&I 470/471
  - Teaching as Inquiry: Studying One's Own Practice in Elementary and Secondary Science Learning Environments, EDC&I 570/571
  - Elementary Science Teaching Methods, EDTEP523
  - Culturally Responsive Math and Science Teaching, EDC&I 495
- 2004-2006 *Instructor, University of Washington, Seattle, WA*  
Courses taught:
- Teaching Science in the Secondary School, EDTEP 586-587
  - Culturally Responsive Math and Science Teaching, EDC&I 505

- 2002-2004 *Teaching Assistant*, University of Washington, Seattle, WA  
 Courses taught:
- Teaching Science in the Secondary School, EDTEP 586-587
  - Portfolio: Tool for Reflection, EDTEP 595
  - First & Third Quarter Field Experience for Pre-service Educators, EDTEP 591/593
- 2000-2002 *Research Assistant for Reconnecting Youth*, University of Washington, Seattle, WA  
 Taught a high school drop-out prevention class and conducted research examining the efficacy of the Reconnecting Youth Program. Lee Eggert, Ph.D. (P.I.)
- 1997 - 2000 *Science Teacher*, Central Kitsap High School, Silverdale, WA  
 Taught Chemistry, Biology, Marine Science and Botany
- 1996 - 1997 *Science Teacher*, Redmond High School and Evergreen Junior High, Redmond, WA  
 Taught High School Biology, 7th Grade Life Science, and 8th Grade Earth Science
- 1994 - 1996 *Science Chair*, Tar River Learning Center, Rocky Mount, NC
- Taught 6<sup>th</sup>-8<sup>th</sup> Grade Integrated Science, Physical Science, Biology, Marine Biology, and Environmental Science at an alternative middle and high school.
  - Taught summer school for high school students repeating Biology.
  - Assisted in training twenty-five, 1995 North Carolina Teach For America Corps teachers and forty 1995 Nash-Rocky Mount school system new teachers.
  - Taught summer school with Teach for America; Yates Junior High, Houston, TX. 7th Grade General Science.
- 1992 - 1994 *Herbarium Assistant and Biology Teaching Assistant*, Whitman College, Walla Walla, WA
- 1993 *Research Assistant* for Fragile-X research project, Charles Laird, Ph.D. (P.I.), Fred Hutchinson Cancer Center, Molecular Medicine Department, Seattle WA
- 1992 *Research Assistant* for agrobacterium research project Eugene Nester, Trevor Charles (P.I.), University of Washington, Microbiology Department, Seattle, WA

### ***Academic Awards/ Fellowships Achievements***

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2007 Selma Greenberg Dissertation Award

*Research on Women and Education* Special Interest Group of the *American Educational Research Association* annually recognizes one dissertation nationally for contribution in gender and equity.

*American Association of University Women Dissertation Fellowship*, 2005-2006 (\$20,000)

AAUW Supports women doctoral candidates completing dissertations. Granted on the basis of scholarly excellence, teaching experience, and active commitment to helping women and girls through research. 51 fellowships were awarded in the United States, 2 in the field of Education.

Teacher of the Year, Tar River Learning Center, 1995-1996

First Year Teacher of the Year, Tar River Learning Center, 1994-1995

Academic Distinction, Whitman College, Fall 1991, Spring 1993, Fall 1993, Spring 1994

### ***Publications***

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Windschitl, M., Thompson, J. & Braaten, M. (accepted). Fostering Ambitious Pedagogy in Novice Teachers: The New Role of Tool-Supported Analyses of Student Work. *Teachers College Record*.

Thompson, J., Braaten, M., Windschitl, M., Sjoberg, B., Jones, M., & Martinez, K. (in press). Collaborative Inquiry into Students' Evidence-based Explanations: How Groups of Science Teachers Can Improve Teaching and Learning. *The Science Teacher*.

- Windschitl, M., Thompson, J. & Braaten, M. (2008). How novice science teachers appropriate epistemic discourses around model-based inquiry for use in classrooms. *Cognition and Instruction*, 26(3), 310-378.
- Windschitl, M., Thompson, J., & Braaten, M. (2008). Beyond the Scientific Method: Model-Based Inquiry as a New Paradigm of Preference for School Science Investigations. *Science Education*, 92(3).
- Windschitl, M. & Thompson, J. (2006). Transcending simple school science investigations: Can pre-service instruction foster teachers' understandings of model-based inquiry? *American Educational Research Journal*, 43(4), 783-835.
- Thompson, J.J. & Windschitl, M. (2005). "Failing girls": Understanding connections among identity negotiation, personal relevance & engagement in science learning from underachieving girls. *Journal of Women and Minorities in Science and Engineering*, 11(1), 1-26.
- Thompson, J.J. (2002). Situating Gender Identities in Science Engagement. In M. Weinburgh & S. L. Jones (Eds). *Proceedings of Gender and Science Education International Conference. Situating Gender and Science Education in Local Contexts*. Fort Worth, TX: Institute of Mathematics, Science, and Technology Education.

### ***Conference Presentations***

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- Thompson, J., Braaten, M. & Windschitl, M. (2009, June) *Learning Progressions as Vision Tools for Advancing Novice Teachers' Pedagogical Performance*. Learning Progressions in Science, Iowa City, IA.
- Thompson, J., Windschitl, M., & Braaten, M. (2009, April) *Toward a Theory of Developing Pedagogical Expertise: A 3-year Study of Individuals Becoming Teachers*. Paper presented at National Association for Research in Science Teaching, Anaheim, CA.
- Thompson, J., Braaten, M. & Windschitl, M. (2009, April) *Learning Progressions as Tools for Advancing a Science of Pedagogical Performance*. Paper presented at American Education Research Association, San Diego, CA.
- Thompson, J. (2008, November). *Pathways to Engaging Urban Girls Identities in Science*. Selma Greenberg Dissertation Award Talk, Research on Women and Education Special Interest Group of the American Educational Research Association, Washington D.C.
- Thompson, J. & Windschitl, M. (2008, April). *How Pedagogical Reasoning and Practice Develops Across "Learning-To-Teach" Contexts*. Paper presented at American Education Research Association, New York, NY.
- Thompson, J. & Windschitl, M. (2007, April). *Multiple narratives: How underserved urban girls engage in co-authoring life stories and scientific stories*. Paper presented at American Education Research Association, Chicago, IL.
- Windschitl, M. & Thompson, J. (2007, April). *How novice science teachers appropriate epistemic disciplinary discourses for use in classrooms*. Paper presented at American Education Research Association, Chicago, IL.
- Thompson, J.J. & Windschitl, M.A. (2004, April). *Seeing beyond science: How underachieving girls engage in personal and relational spaces*. Paper presented at National Association for Research in Science Teaching, Vancouver BC.
- Thompson, J.J. & Windschitl, M.A. (2004, April). *Identity and discourse: How underachieving girls engage in science*. Paper presented at American Education Research Association, San Diego, CA.
- Windschitl, M.A. & Thompson, J.J. (2004, April). *Using scientific models to frame inquiry: Beginning teachers' understandings of canonical science practices*. Paper presented at American Education Research Association, San Diego, CA.
- Thompson, J.J. & Shope, B.A. (2004, February). *Success in school science*. Presentation at Northwest Girls Collaborative Project Culminating Conference, Redmond, WA.

- Thompson, J.J. (2003, April). *Constructing Anita: How underachieving girls engage in conversations about science*. Paper presented at American Education Research Association, Chicago, IL.
- Thompson, J.J. & Windschitl, M.A. (2002, April). *Failing girls*. Paper presented at National Association for Research in Science Teaching, New Orleans, LA.
- Thompson, J.J. (2002, April). *Situating gender and science education in local contexts*. Paper presented at Gender and Science Education, Invitational Colloquium, New Orleans, LA.
- Thompson, J.J. & Windschitl, M.A. (2002, April). *Engagement in science learning among academically at-risk girls: Sense of self and motivation to learn across learning contexts*. Paper presented at American Education Research Association, New Orleans, LA.

### **Grants**

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2008-2013	Discovery K-12 Grant, National Science Foundation No. DRL-0822016 Co-PI. Tool Systems to Support Progress Toward Expert-Like Teaching by Early Career Science Educators. Funds research program to develop and investigate on-line tools that support novice secondary science teachers in developing ambitious science teaching practices. <a href="http://depts.washington.edu/mwdisc/">http://depts.washington.edu/mwdisc/</a>	\$1,886,684
2008-2009	National Education Association Foundation PI. Puget Sound Science Teacher Network. Funds work with professional learning communities with the aim of enhancing regional capacity for the ongoing improvement of secondary science teaching and learning in high needs schools and districts.	\$5,000
2006-2008	Teachers for a New Era Grant, Carnegie Foundation Co-PI. Teachers Learning Trajectories Project. Funds research program tracking 17 secondary science teachers' learning in the Teacher Education Program into their first year of teaching. Also tracks evidence of pupil learning.	\$161,000
2003-2004	Northwest Girls Collaborative Project, National Science Foundation (NSF) Microsoft PI. Funded dissertation research supplies.	\$1,600 \$500
2000	Doi Dissertation Grant, UW College of Education Fund Funded research supplies.	\$350
1996	Learn and Serve Grant, State of North Carolina Funded a garden project in which 50 students built a vegetable garden.	\$250
1995-1996	GLOBE Grant, National Aeronautics and Space Administration and NSF Funded weather station equipment, a computer and internet access for 50 at-risk science students to collect and analyze data.	\$2,000
1995-1996	Twin Counties Educational Grant, Rocky Mount Local Businesses Funded equipment for a Laser Light Show. Underserved students learned about lasers and designed a Laser Show that was delivered to 10 elementary and middle schools.	\$500
1995	Science Mini Grant, Nash-Rocky Mount School District Funded science equipment for conducting laboratories in a school where lab-based science was not previously taught at the school.	\$250

### ***Educational Community Participation/Service***

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- 2008-present *Science Education* Journal. Review manuscripts for gender, urban contexts, and teacher education strands.
- 2007-present Currently mentoring 3 research assistants in the science education doctoral program and have served on 5 graduate students' master's committees.
- 2002-present *American Educational Research Association* and *Special Interest Group: Research on Women and Education* member. Review proposals for annual conferences.
- 2002-present *National Association for Research in Science Teaching* member. Review proposals for annual conferences.
- 2004-2006 Mentored two University of Washington undergraduate Zesba scholars in conducting educational research and developing presentations for educational conferences.

### ***References***

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