

CURRICULUM VITAE

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EDUCATION:

2000	Ph.D. Curriculum and Instruction	University of Colorado, Boulder
1991	B.S. Science Education	North Carolina State University

PROFESSIONAL EXPERIENCE:

2007-present Associate Professor, UNCG, Department of Curriculum and Instruction

2000-2007 Assistant Professor, UNCG, Department of Curriculum and Instruction

1995-2000 Graduate Instructor, Univ. of Colorado, School of Education

1995-2000 Graduate Research Assistant, Univ. of Colorado, School of Education

1991-1995 High School Science Teacher, Athens Drive High School, Raleigh, NC

PUBLICATIONS: (*Denotes peer reviewed publications)

- *Carlone, H.B. & Johnson, A. (2007). Understanding the science experiences of women of color: Science identity as an analytic lens. *Journal of Research in Science Teaching*, 44 (8), 1187-1218.
- Carlone, H.B. (2006). Review of *Science education for everyday life: Evidence-based practice* by Glen S. Aikenhead. *Science Education*, 90(6), 1144-1146.
- *Carlone, H. B. & Webb, S. M. (2006). On (not) overcoming our history of hierarchy: Complexities of university/school collaboration. *Science Education*, 90(3), 544-568.
- *Buxton, C., Carlone, H.B., & Carlone, D. (2005). Boundary spanners as bridges of student and school discourses in an urban science and math high school. *School Science and Mathematics*, 105(6), 302-312.
- Strahan, D., Carlone, H., Horn, S., Dallas, F., & Ware, A. (2005). Developing a shared stance toward learning at Central Elementary School. In: Ponder, G. & Strahan, D. (Eds). *Deep change: Cases and commentary on reform in high stakes states*. Greenwich, CT: Information Age Publishing, 47-64.
- *Carlone, H.B. (2004). The cultural production of science in reform-based physics: Girls' access,

participation, and resistance. *Journal of Research in Science Teaching*, 41(4), 392-414.

*Carlone, H.B. (2003). Innovative science within and against a culture of "achievement." *Science Education*, 87, 307-328.

*Carlone, H.B. (2003). (Re)Producing good science students: Girls' participation in high school physics. *Journal of Women and Minorities in Science and Engineering*, 9, 17-34.

*Strahan, D., Carlone, H., Horn, S., Dallas, F., & Ware, A. (2003). Beating the odds at Archer Elementary School: Developing a shared stance toward learning. *Journal of Curriculum and Supervision*, 18, 204-221.

*Carlone, H. & Bowen, M. (2003). The fallacy of "authentic" science classrooms: Missing aspects of practicing science communities. In *Proceedings of the 2003 7th International History, Philosophy & Science Teaching Conference*, Winnipeg, Canada.

Carlone, H.B. & Horn, S. (2002). Results from Archer Elementary School. In Strahan, D. (Ed.), *Achieving success in the North Carolina Lighthouse Schools: Patterns of performance in elementary schools that have beaten the odds, Phase two report*, pp. 44-68, Chapel Hill, NC: Principals' Executive Program.

*Helms, J.V. & Carlone, H.B. (1999). Science education and the commonplaces of science. *Science Education*, 83, 233-245.

WORKS ACCEPTED FOR PUBLICATION:

*Carlone, H.B., Kimmel, S., & Tschida, C. (accepted for publication). A rural math, science, and technology elementary school tangled up in global networks of practice. *Cultural Studies of Science Education*.

WORKS IN REVIEW:

Carlone, H., Haun-Frank, J., & Kimmel, S. (in review). *Tempered radicals: Elementary teachers' narratives on doing the work of science education reform*.

WORKS IN PREPARATION:

Carlone, H., Enfield, M., Johnson, A., & Haun-Frank, J. (in preparation). What you might expect and what you may have never considered to be culturally relevant science: Lessons learned from a multi-site ethnography.

Carlone, H., Haun-Frank, J., Webb, A.W., Enfield, M., & Reavis, S. (in preparation). Cultural models of "science person" in two fourth-grade reform-based science classrooms: Assessing equity beyond knowledge- and skills-based outcomes.

Johnston, A., Settlege, J., Moss, D., & Carlone, H. (in preparation). Resisting the scholarly norm in science education: Perspectives on scholar activism, pragmatism, and orchestration.

UNPUBLISHED SCHOLARLY WORK:

Carlone, H.B. (2000). *The cultural production of "science" and "scientist" in high school physics: Girls' access, participation, and resistance*. Unpublished doctoral dissertation, University of Colorado, Boulder, CO.

FUNDED RESEARCH:

Principal Investigator: National Science Foundation's early career development (CAREER) award (8/06-7/11). *CAREER: A study of pedagogical practices and the development of students' science identities*, \$597,009.

Co-project director (with Terry Tomasek). University/School/Teacher Education Partnership (USTEP), UNCG (8/1/05-5/1/06). *Improving elementary science education at UNCG's Professional Development Schools in Rockingham County*, \$5000.

PI: Thomas Undergraduate Research Scholar Grant, UNCG, (May, 2005-May, 2006). *An ethnographic study of a math, science, and technology magnet elementary school*, \$2000 (funds an undergraduate research assistant)

PI: Undergraduate Research Assistantship Grant, UNCG, (May, 2004-May, 2005), *Identifying Elementary Students' Out-of-School Science Identities*, \$2000

PI: Undergraduate Research Assistantship Grant, UNCG, (May, 2004-May, 2005), *Identifying Elementary Students' In-School Science Identities*, \$2000

Project director. University/School/Teacher Education Partnership (USTEP), UNCG (8/1/04-6/1/05). *Improving elementary science education one lesson a time*, \$5000

Co-Project director (with Terry Tomasek). University/School/Teacher Education Partnership (USTEP), UNCG (8/1/04-6/1/05). *Improving elementary science education one lesson a time: Expanding lesson study opportunities for UNCG's Professional Development Schools*, \$5000

PI: Regular Faculty Grant, UNCG, *Identifying and understanding the development of science identities in reform-based elementary science* (May, 2003- May, 2004), \$5000

Project director. University/School/Teacher Education Partnership (USTEP), UNCG (8/1/03-6/1/04), *Using collaborative professional development models to integrate standards-based science in the elementary school curriculum*, \$4522.

PI: Undergraduate Research Assistantship Grant, UNCG, (May, 2003-May, 2004), *Identifying and understanding the development of science identities in reform-based elementary science*, \$1500

PI: Summer Excellence Grant, UNCG, *Bringing literacy and science together in the context of a collaborative teacher study group* (June-August, 2003), \$4000

PI: Summer Excellence Grant, UNCG, *Moving beyond the “basics”: Integrating science and literacy in the elementary curriculum* (June-August, 2002), \$4000

PI: Summer Excellence Grant, UNCG, *Integrated science as a means to a more inclusive science* (June – August, 2001), \$4000

PI: New Faculty Research Grant, UNCG, *Integrated science as a means to a more inclusive science* (December, 2000-June, 2001), \$4954

American Dissertation Fellow, American Association of University Women, (AAUW) *The cultural production of science and scientist in high school physics: Girls’ access, participation, and resistance* (July, 1999- May, 2000), \$15,000

American Educational Research Association/Spencer Doctoral Fellow (1998-1999), \$20,000

Recipient, Brown/Ricketts/Udick Grant, AAUW Boulder Branch (September, 1999- May, 2000), \$1,000

Recipient, Pearl McPherson Spencer Award, University of Colorado Graduate School (Fall, 1999), \$750

Recipient, Beverly Sears Dean’s Small Grant, University of Colorado Graduate School (Fall, 1998), \$510

INVITED PRESENTATIONS:

Carlone, H.B. (October, 2008). Keynote presentation for *Science Education at the Crossroads*, Altah, Utah.

Carlone, H. (October, 2008). *If we build it better, will they come?: A proposal for doctoral science education*. Science Education at the Crossroads, Altah, Utah.

Carlone, H.B. (September, 2007). *Defining my post-tenure self within and against historically worn grooves of academia*. Science Education at the Crossroads, Amherst, MA.

Carlone, H.B., Kimmel, S., & Tschida, C. (April, 2007). *A rural math, science, and technology elementary school tangled up in global networks of practice*. Paper to be presented at the “Science Education in a Context of Globalization” forum sponsored by Cultural Studies of Science Education and Springer Publishers.

Carlone, H. (September, 2006). *Whither science learning as identity transformation?: Theory into practice*. Paper presented at the second annual Science Education at the Crossroads Conference, Weber State University, Ogden, Utah.

Carlone, H. (September, 2006). *Visions of science education*. Invited panelist at the second annual Science Education at the Crossroads Conference, Weber State University, Ogden, Utah.

Carlone, H.B. (October, 2005). *Science identity as an analytic lens for science education: Possibilities and complexities*. Paper presented at the Science Education at the Crossroads Conference, University of Connecticut.

Carlone, H.B. (October, 2003). Student voice in the STEM classroom. Invited plenary session speaker at a national meeting of Project Kaleidoscope, Richmond, VA.

Carlone, H.B. (January 2001). Evaluating the Biological Sciences Curriculum Study Integrated Science Curriculum, Part II. Presentation at the BSCS Integrated Science Teacher Orientation Conference, Colorado Springs, CO.

Carlone, H.B. & Coulson, D. (November, 2000). Evaluating the Biological Sciences Curriculum Study Integrated Science Curriculum, Part I. Presentation at the BSCS Integrated Science District Leadership Conference, Colorado Springs, CO.

CONFERENCE PRESENTATIONS AND PAPERS (*Peer-reviewed)

*Carlone, H. (April, 2008). *Possibility, surprise, and imagination: The promise of scholar activism, pragmatism, and orchestration in science education*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Baltimore, MD.

*Haun-Frank, J., Kimmel, S., Carlone, H., & Vaughn, M. (April, 2008). *Doing the work of science education reform: Teachers' narratives of hard-won accomplishments*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Baltimore, MD.

*Carlone, H.B., Kimmel, S., & Tschida, C. (April, 2007). *The relevant context of science education: An ethnography of a rural math, science, and technology elementary school*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Chicago, IL.

*Carlone, H.B. (March, 2008). Exploring connections between pedagogy and students' science identity development. Paper presented at the annual meeting of the *American Educational Research Association*, New York, NY.

*Kimmel, S., Haun-Frank, J., Carlone, H., & Vaughn, M. (March, 2008). Tempered radicals: Elementary teachers' narratives of teaching science within and against prevailing meanings of schooling. Poster session (with paper) presented at the annual meeting of the *American Educational Research Association*, New York, NY.

*Carlone, H.B., Kimmel, S., & Tschida, C. (April, 2006). The relevant context of science education: An ethnography of a rural math, science, and technology elementary school. Paper presented at the annual meeting of the *National Association for Research in Science Teaching*, New Orleans, LA.

- *Buxton, C.A., Carlone, H.B., & Carlone, D. (April, 2005). *Boundary spanners as bridges of student and school discourses in an urban science and math high school*. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada.
- *Carlone, H.B. (April, 2005). *Science identity as an analytic lens for science education*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Dallas, TX.
- *Tomasek, T., & Carlone, H. (April, 2005). *Improving elementary science teaching through Japanese lesson study*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Dallas, TX.
- *Buxton, C.A. & Carlone, H.B. (April, 2004). *The role of boundary objects in creating discourses of science in an urban science and math high school*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Vancouver, British Columbia, Canada.
- *Webb, S., & Carlone, H.B. (April, 2004). *Promoting science inquiry in a fifth grade teacher study group using a lesson study framework*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- *Carlone, H.B. & Bowen, M. (July, 2003). *The fallacy of “authentic” science classrooms: Missing aspects of practicing science communities*. Paper presented at the 7th International History, Philosophy & Science Teaching Conference, Winnipeg, Canada.
- *Carlone, H.B., & Webb, S. (April, 2003). *Negotiating meaning amidst the shifting locus of power in a collaborative planning group*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- *Webb, S., & Carlone, H.B. (April, 2003). *Problematizing authentic literacy practices: University and school based educators negotiate meanings of literacy within a collaborative project*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- *Carlone, H.B., & Webb, S. (March, 2003). *Complicating “collaboration” in a professional development project: Competing cultural models and the dynamic nature of power*. Paper presented at the annual meeting of the National Association for Research in Science Teaching.
- *Webb, S., Carlone, H.B., & Duffy, A. (November, 2002). *“This is how we do literacy here”: A collaborative planning team negotiates meanings of literacy within a framework of science inquiry*. Paper presented at the annual meeting of the National Reading Conference, Miami, FL.

- *Carlone, H.B. (April, 2002). *Problematizing “best practice” discourse in science education via an analysis of girls’ participation in reform-based science*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- *Carlone, H.B. (April, 2002). *Embracing the prescriptive and resisting the “authentic”*: An examination of tool-based practices in high school physics. Paper presented at the annual meeting of the National Association for Research in Science Teaching, New Orleans, LA.
- *Carlone, H.B. (April, 2001). *Invoking micro and macro contexts to understand girls’ participation and learning in high school physics*. Paper presented at the annual meeting of the American Educational Research Association, Seattle, WA.
- *Carlone, H.B. (March, 2001). *Innovative science within and against a culture of “achievement.”* Paper presented at the annual meeting of the National Association for Research in Science Teaching, St. Louis, MO.
- *Carlone, H.B. (April, 2000). *The cultural production of scientist identities in high school physics: Girls’ access, participation, and resistance*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, New Orleans, LA.
- *Carlone, H.B. (June, 1999). *Constructing gender and science in school science: Contesting sociohistorical legacies*. Paper presented at the annual meeting of the National Women’s Studies Association, Albuquerque, NM.
- *Carlone, H.B. (April, 1999). *Identifying and expanding the meanings of ‘scientist’ in school science: Implications for the participation of girls*. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada.
- *Carlone, H.B. (March, 1999). *Producing, contesting, and being produced by scientific practice: An illustration of practice theory*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Boston, MA.
- *Brand, C., Carlone, H. B., Rader, C., & Lewis, C. (April, 1998). *Prospects and challenges for children creating science models*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, San Diego, CA.
- *Carlone, H. B. (April, 1998). *Learning to become a scientist: The enculturation of the newcomer into the practice of science*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, San Diego, CA.
- *Carlone, H. B., Garcia, C., & Lewis, C. (April, 1998). *The science theater/teatro de ciencias project as a design experiment*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.

- *Carlone, H. B. (March, 1997). *Examining the knowledge and reasoning employed in children's scientific models and explanations*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Chicago, IL.
- *Lewis, C., Rader, C., Brand, C., & Carlone, H. B. (March, 1997). *Models children build: Content, logic and educational impact*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Chicago, IL.
- *Robinson, C. D., Carlone, H. B., Rader, C., and Garcia, C. E. (July, 1996). *See it! Draw it! Make it move! Learning through modeling: The sTc project*. Poster presented at the annual conference of the Cognitive Science Society, San Diego, CA.

PRESENTATIONS AT LOCAL/REGIONAL MEETINGS: (*Peer-reviewed)

- Carlone, H.B. (November, 2002). *Teaching science for all: What is multicultural science education, anyway?* Workshop presented (in collaboration with members of PDS team of pre-service teachers) at the annual meeting of the North Carolina Science Teachers Association, Greensboro, NC.
- Carlone, H.B. (October, 2001). *Integrating standards-based elementary science with literacy: Inspiring ideas from UNCG*. Workshop presented (in collaboration with PDS team of pre-service teachers) at the annual meeting of the North Carolina Science Teachers Association, Greensboro, NC.
- *Carlone, H.B. (March, 2001). *Girls' participation, interest, and resistance in reform-based and traditional high school physics*. Paper presented at the annual meeting of the North Carolina Association for Research in Education, Charlotte, NC.
- *Carlone, H.B. (January, 1999). *Moving beyond difference-based explanations for the gender problem in science education*. Paper presented at the Third Annual University of Colorado Feminist Symposium, Boulder, CO.
- Lewis, C., Brand, C., Carlone, H. B., Garcia, C. E., Pulver, P., Rader, C., & Robinson, C. D. (September, 1996). *Science Theater/Teatro de Ciencias*. Presented at the Child's Play Workshop, Boulder, CO.

PROFESSIONAL ACTIVITIES (1996-Present):

Service related to the field of science education:

Program Committee, Division C (learning), Section 4 (science) Co-coordinator, *American Educational Research Association (AERA)*, 2007-2008.

Program Committee, Strand Co-coordinator: Cultural, Social, and Gender Issues, *National Association for Research in Science Teaching (NARST)*, (2005-2007).

Equity and Ethics Committee, *NARST* (2006-present).

Early Career Research Award Selection Committee, *NARST* (2006-present).

Research Committee, *NARST*, (2001-2004)

Review Experience

Editorial Board, *Science Education*, 2005-present

I also serve as an occasional reviewer for: *Journal of Research in Science Teaching*,
School Science and Mathematics, *American Educational Research Journal*

Program reviewer, *National Association for Research in Science Teaching* (1999-present)

Strand 2 (Classroom contexts and learner characteristics) (2003-2004)

Strand 3 (Research on Teaching) (1999-2000)

Strand 6 (Cultural, Social, and Gender Issues) (2001-2005)

Strand 11 (Cultural, Social, and Gender Issues) (2006-present)

Pre-conference workshop proposals (2001-2004)

Program Reviewer, *American Educational Research Association*

Division C (Learning and Instruction), Section 4 (Science) Co-chair (2007-2008)

Program Reviewer, American Educational Research Association (1999-present)

Division C (Learning and Instruction), Section 4 (Science) (2001-present)

Science Teaching and Learning SIG (2001-present)

Division G (Social Context), Section 1 (Local Contexts of Teaching and Learning)
(2001-2004)

External Assessor for Social Sciences and Humanities Research Council of Canada, 2008

Program reviewer, *National Science Teachers Association* (2002-2004)

Proposals for the NARST-sponsored sessions

Editorial Review Board Member, *PEERs Matter* (a NARST and NSTA joint-sponsored
publication to bridge research and practice), 2001-2004

Service to the University of North Carolina at Greensboro (UNCG)

Planning committee for the Institute for the Advancement of Mathematics and Science
Learning (2007-2008)

Public Policy Working Group, Institute for the Advancement of Mathematics and Science
Learning (2008)

Search committee member for the Houston Distinguished Professor of Science Education
(2007-2008)

Institutional Review Board, 2002-2006

O. Max Gardner Award Committee, 2001-2003

Service to the School of Education at UNCG

Faculty Phone-a-thon, 2006-2008

Search committee member for School of Education's Director of Research, 2005-2007

School of Education representative for the Institutional Review Board, 2002-2006

Scholarship committee member, 2004-2007

Search committee member for Counseling Education faculty positions, 2004-2005

North Carolina Teaching Fellows faculty mentor, 2000-2005; 2007

Executive Council (School of Education) faculty representative, Fall 2001-Spring 2002

Service to the Department of Curriculum and Instruction (CUI) at UNCG

Elementary Education Program Committee, Fall 2000-present

Doctoral Task Force, 2005-2006

Advisory Board Member, Center for School Accountability, Staff Development, and Teacher Quality (Spring 2001-2003)

Secondary Education Program Committee, Fall, 2000-Spring 2001

Search Committee for faculty position in secondary education, Department of Curriculum and Instruction, Fall 2000-2001

Lighthouse Project Evaluation Team, 2000-2001

Teacher Education Research Interest Group, Spring, 2001

Professional Development Schools Program Evaluation, Fall, 2000

Service to External Communities

Professional Development workshops and Japanese lesson study provided to multiple Professional Development Schools in Guilford County, Rockingham County, and Winston-Salem City/Forsythe County schools related to elementary science education (2001-2006)

Advisory Board Member and Assistant External Evaluator, *Biological Sciences Curriculum Study: An Integrated Approach* (Curriculum development sponsored by the National Science Foundation), (Summer, 2000-Summer, 2001)

Helped organize student presentations at *F.I.R.S.T. (Females Involved in Real Science and Technology) Conference* sponsored by Junior League of Greensboro and Tarheel Triad Girl Scout Council, (March, 2001)

Invited guest, *Biological Sciences Curriculum Study Integrated Science Design Conference*, (Summer, 2000)

Invited guest, *AERA/Spencer Foundation Summer Institute*, Boulder, CO. (Summer, 2000)

SELECTED HONORS & AWARDS:

School of Education Faculty Teaching Excellence Award, UNCG, 2008

Early Career Research Award, National Association for Research in Science Teaching, 2006

Early Career Faculty Development Award (CAREER), National Science Foundation, 2006-2011

American Association of University Women American Dissertation Fellow, 1999-2000

American Educational Research Association/Spencer Fellow, 1998-1999

Elizabeth A. Wilson Memorial Scholarship for Outstanding Elementary Educator, University of Colorado (1996-1997)

Jaycee's Young Educator of the Year Award Nominee for Athens Drive High School (1993 & 1994)

Sallie Mae First-Year Outstanding Teacher Award for Wake County, NC (1991-1992)

North Carolina Teaching Fellowship (Fall, 1987-May, 1991)