

META L. VAN SICKLE

Education

PhD	University of South Florida, Science Education, 1992.
MEd	University of South Florida, Science Education, 1989.
BS	Michigan State University, Horticulture & Science, 1978.

Current Position and Professional Experience

Professor, College of Charleston

Biographical Sketch

Meta Van Sickle, Ph.D is a Full Professor at the College of Charleston. A teacher with over 20 years experience, Meta earned her Ph.D. in Science Education at the University of South Florida. Not only does she teach in the secondary education program, she is the current program director for the M.Ed. in Science and Math for Teachers program. An active member of several professional societies, Meta is especially active in the Association of Science Teacher Educators.

Awards and Honors

	Kappa Delta Pi, Kappa Delta Pi.
2012	John Shrum Award, Southeast Association of Science Teacher Educators.
2012	ExCEL, College of Charleston.
2010	President, Association of Science Teacher Education.
2009	Distinguished Service, Center for Partnerships to Improve Education.
2005	Attendee, NSF Sponsored National Urban Science Education Conference.
2004	Attendee, US Secretary of Education.
2001	Article inclusion in special collection, Journal for Adolescent and Adult Literacy.

Contracts, Grants and Sponsored Research

2012 - 2017	Mentoring for Math Proficiency Project Period: August 2012-July 2017 (Meta L. Van Sickle, Co-Investigator; Courtney Howard, Principal)
-------------	--

- 2010 - 2015 Partnering to Improve Middle School Science and Math Achievement: Using nature to create integrated, inquiry-based and culturally-sensitive learning environments
NSF
Project Period: July 2010-July 2015
(John S. Peters, Principal; Meta L. Van Sickle, Co-Investigator; Gary W. Harrison, Co-Investigator)
- 2010 - 2015 New, GK-12 Environmental Necessity: Communicating Seacoast Science via Inquiry Teams
NSF
Project Period: June 2010-May 2015
(Meta L. Van Sickle, Co-Investigator; David W. Owens, Principal; Meta L. Van Sickle, Co-Investigator)
- 2014 - 2015 Ministry of Education, Sultanate of Oman
Project Period: February 2014-January 2015
(Meta L. Van Sickle; William Veal, Principal)
- 2010 - 2014 Improving Teacher Quality
CHE/US Dept of Ed
Project Period: July 2010-June 2014
(Meta L. Van Sickle, Principal; Pauline Egelson, Co-Investigator)
- 2009 - 2014 New GK-12 Environmental Necessity: Communicating Seacoast Science via Inquiry Teams
NSF
Project Period: June 2009-May 2014
(Meta L. Van Sickle, Co-Investigator; David W. Owens, Principal)
- 2011 - 2013 The Behavioral Observation Laboratory: A Collaborative, Interdisciplinary Model for Enhancing Math and Science Teacher Education
NSF - TUES
Project Period: June 2011-May 2013
(Carol C. M. Toris, Principal; Meta L. Van Sickle, Co-Investigator)
- 2008 - 2012 New, GK-12
Project Period: January 2008-December 2012
(David W. Owens, Principal; Meta L. Van Sickle, Co-Investigator)
- 2011 - 2012 Teacher Quality Grant
Project Period: July 2011-June 2012; \$0
(Mary Elizabeth Lloyd; William Veal, Principal; Meta L. Van Sickle; John S. Peters; Ana Oprisan, Co-Investigator; Hope M. Florence; Kate Popejoy; Janet Rizer; Gwen Bright)

- 2010 - 2011 2008 HHMI Undergraduate Science Education Program-Year 3
Howard Hughes Medical Institute (HHMI)
Project Period: September 2010-August 2011; \$355125
(Pamela J. Riggs-Gelasco, Principal; Elizabeth L. Meyer-Bernstein, Co-Investigator;
Mark W. Hurd, Co-Investigator; Sorinel Oprisan, Co-Investigator; Meta L. Van Sickle,
Co-Investigator)
- New, GK-12 Environmental Necessity: Communicating Seacoast Science via Inquiry
Teams
NSF (GK-12)
Project Period:
(Lee Patterson, Co-Investigator; Meta L. Van Sickle, Co-Investigator; David W. Owens,
Principal)
- 2007 - 2009 GK-12 Lowcountry Sci. Partners for Inquiry Teaching & Learning-Continuing
Project Period: January 2007-December 2009
(Meta L. Van Sickle, Principal)
- 2008 - 2009 2008 HHMI Undergraduate Science Education Program-Year 1
Howard Hughes Medical Institute (HHMI)
Project Period: September 2008-August 2009; \$375000
(Elizabeth L. Meyer-Bernstein, Co-Investigator; Mark W. Hurd, Co-Investigator;
Sorinel Oprisan, Co-Investigator; Meta L. Van Sickle, Co-Investigator; Pamela J. Riggs-
Gelasco, Principal)
- 2006 The Lowcountry Partners For Inquiry Teaching and Learning: NSF GK 12 sponsored
grant.
Project Period: March 2006-May 2006; \$89262.00
(Meta L. Van Sickle)
- 2006 GK-12 Lowcountry Sci. Partners for Inquiry Teaching & Learning
Project Period: January 2006-May 2006
(Meta L. Van Sickle, Principal)
- 2004 - 2005 Lowcountry Science Partners for Inquiry and Learning yr 3
Project Period: June 2004-May 2005; \$182892
(Meta Van Sickle, Principal)
- 2003 - 2004 GK-12 Lowcountry Science/Inquiry Learning Yr 2
Project Period: June 2003-May 2004; \$148040
(Meta Van Sickle, Principal)
- 2002 - 2004 Lowcountry Science Partners for Inquiry and Learning yr 2
Project Period: June 2002-May 2004; \$24000
(Meta Van Sickle, Principal)
- 2002 - 2003 GK-12 Lowcountry Sci. Partners for Inquiry Teaching & Learning
Project Period: June 2002-May 2003; \$148310
(Meta Van Sickle, Principal)

- 1999 - 2000 Haut Gap School-to-Work program
Project Period: December 1999-June 2000
(Mary E. Jones, Co-Investigator; Meta L. Van Sickle, Principal)
- 1999 - 2000 Development of EDFS703
CFD (formerly CETL)
Project Period: November 1999-June 2000; \$500
(Meta L. Van Sickle)
- 1999 - 2000 Johns Island School-to-Work Initiative
Project Period: December 1999-May 2000; \$21536
(Meta Van Sickle, Principal)

Publications

Peer-Reviewed Articles

- Bazler, J. & Van Sickle, M. L. (2016). Reviews of biology and mathematics APPS for use by science and mathematics teachers. *Sciejournal*.
- Bazler, J. & Van Sickle, M. L. (2016). United States next generation science standards; Impact on education and useable guide. *Research in Higher Education*.
- Bazler, J. (2016). The Foldscope. *Journal of Modern Education Review*.
- Bazler, J., Van Sickle, M. L., Graybill, L., Simons, D., Sorenson, N., & Brownstein, E. (2014). Discussion of the effectiveness of the national accreditation process of secondary science education programs, a pilot study. *Journal of Case Studies in Accreditation and Assessment*.
- Bazler, J., Van Sickle, M. L., Simonis, D., Graybill, L., Sorenson, N., & Bournstein, E. (2014). Discussion of the effectiveness of the national accreditation process of secondary science education programs, a pilot study. *AABRI: Cases in Education*, 3.
- Bazler, J., Van Sickle, M. L., Graybill, L., Simonis, D., Sorenson, N., & Brownstein, E. (2014). Discussion of the effectiveness of the national accreditation process of secondary science education programs, a pilot study. *AABRI: Cases in Education*, 4, 1-7.
- Tyler, B., Van Sickle, M. L., Harrison, G. W., & Tempel, G. (2008). Lasting impact of a professional development program on constructivist science teaching methods. *Journal of Elementary Science Education*, 20, 49-60.
- Van Sickle, M. L., Dickerson, D., & Van Sickle, M. L. (2007). Groundwater in science education. *JSTE*.
- Dickerson, D., Callahan, T. J., Van Sickle, M. L., & Hay, G. H. (2005). Students' conceptions of scale regarding groundwater. *Journal of Geoscience Education*, 53(4), 374-380.
- Van Sickle, M. L., Bogan, M., Kamen, M., B. B., & Dickman, C. (2005). Us of portfolios for standards-based performance in teacher education. *College Student Journal*, 39(3), 497-509.
- Van Sickle, M. L., Cuccioi, S., Van Sickle, M. L., & Smith, S. (2005). Linking literacy to ecology and science teaching. *CITE*.

- Van Sickle, M. L., Wallace, A. H., Dickerson, D., Tempel, C., P. C., & Powell, S. (2004). Project inquiry: An NSF-funded professional development model for promoting scientific inquiry in Middle level classrooms.
- Van Sickle, M. L. (2003). Transforming Teaching. *Journal of College Science Teaching*, XXXII(4), 258-263.
- Cozart, A. M., Cudahy, D. C., Ndunda, M., & Van Sickle, M. L. (2003). The Challenges of Co-Teaching within a Multicultural Context. *Multicultural Education*, 10(3), 43-45.
- Jones, M. E., Van Sickle, M. L., & Aina, E. O. (2002). A case study of the sociopolitical dilemmas of Gullah speaking students: Educational policies and practices. *Journal of Language, culture, and curriculum*. *Journal of Language, Culture, and Curriculum*, 15(1), 75-88.
- Jones, M. E., & Van Sickle, M. L. (2001). Helping linguistically diverse students share what they know. *Journal of Adolescent and Adult Literacy*, 44(5), 468-475.
- Blake, M., & Van Sickle, M. L. (2001). How to help them succeed: Instructional strategies for at-risk students. *Journal for Adolescent and Adult Literacy*, 44, 468-476.
- Perkins Jr., R. F., Davis, S. C., Van Sickle, M. L., & Welch, F. C. (2001). Preservice teachers' practicum experience: Using multimedia to create computer-aided instruction. *Teacher Education Journal of South Carolina*, 17-20.
- Van Sickle, M. L. (2001). A Case Study of South Carolina Sea Island Language: What happens when a Creole language doesn't mix with standard school language? *Journal of Interdisciplinary Education*, 5(1), 175-195.
- Kubinec, W., & Van Sickle, M. L. (1999). The fifty-cent optics lab. *Science Scope*, 23, 16-20.
- Jones, M. E., Bartel, V. B., Bower, K., Orth, L., & Van Sickle, M. L. (1997). Preparing teachers for culturally diverse schools: A true story. *Multicultural Education*, 4(4), 24-28.
- Bartel, V. B., Jones, M. E., Bower, K., McKay, L., & Van Sickle, M. L. (1997). Preparing teachers for culturally diverse schools. *Multicultural Education*, 4(4), 24-26.
- Perkins Jr., R. F., Davis, S. C., Van Sickle, M. L., & Welch, F. C. (1996). Encouraging creativity in preservice teachers: Designing CAI with hypermedia. *Educational Media International*, 73-75.
- Perkins, R., Davis, S. C., Van Sickle, M. L., & Welch, F. (1996). Encouraging creativity in preservice teachers: Designing CAI with hypermedia. *Educational Media International*, 33, 73-75.
- Van Sickle, M. L., & Dickman, C. (1995). Using concept mapping to learn and write about science. *Writing Across the Curriculum*.
- Bogan, M., Van Sickle, M. L., & Dickman, C. (1994). Changes in pedagogical content knowledge of preservice science teachers from three universities in the southeastern United States. *Southeastern Regional Association of Teacher Educators*, 3, 23-30.

Book Chapters

- FoulksBoyd, B., Dickman, C., & Van Sickle, M. L. Weather activity sequences for conceptual development.
- Bazler, J. (2014). Designing instruction for gifted future science teachers. IGI Global Disseminator of Knowledge.
- Bazler, J. (2014). Historical overview of adult gifted education in the United States. IGI Global Disseminator of Knowledge.
- Jones, M. E., & Van Sickle, M. L. (2004). Helping linguistically diverse students share what they know. *Preparing reading professionals: A collection from the International Reading Association* Newark: International Reading Association.

Non-Reviewed Papers

Other

Newsletter

- Van Sickle, M. L., Finnan, C. R. (2009, December). Educated opinions: What's next in education reform?. *National Science Teachers Association*, 3.

Newspaper

- Van Sickle, M. L., Spence, L. (2007, August). Turning the Tide on Trash "Pollution Solutions". pp. 16.

Conference Proceeding

- Van Sickle, M. L. (2000). A civil rights issue? Vocabulary development in science and mathematics. Bloomington, IN.

Presentations, Lectures, Panels and Papers

- Bazler, J., Van Sickle, M. L. (2014, January) "Development and Implementation of a Evaluation System for Mathematics and Biology Educators Using iPads." ASTE Annual International Meeting, San Antonio, TX.
- Quet, Q., Van Sickle, M. L. (2013, January) "De Earth De We." Association of Science Teacher Educators, Charleston, SC.
- Ndunda, M., Van Sickle, M. L. (2013, January) "Development of a Professional Learning Community at Burke High School." Association of Science Teacher Educators, Charleston, SC.
- Cozart, A. M., Van Sickle, M. L., Whitworth, A. S. (2012, November) "Building science vocabulary: through the eyes of a warm demander." Carolina TESOL, Spartanburg.
- Cozart, A. M., Van Sickle, M. L. (2012, October) "Science and language acquisition for English learners." Southeastern Association for Science Teacher Education, Macon, Georgia.
- Ndunda, M., Van Sickle, M. L., Osisioma, I. O. (2010, January) "Identifying Students' Competencies for Learning Mathematics and Science." Association for Science Teacher Education International Conference., Sacramento, California.
- Van Sickle, M. L., Beamer, T. (2009) "Lasting Impact of a Professional Development Program on Constructivist Science Teaching Methods."

- Van Sickle, M. L., Schirmer, C. (2007, June) "Using science to teach English to English language learners." ESOL Mini Conference, Charleston, CS.
- Van Sickle, M. L., Bartel, V. B., Cudahy, D. C., Jaruszewicz, C. L. (2007, May) "Powerful learning seminar." Teaching Fellows, Charleston, CS.
- Van Sickle, M. L., Tempel, C., Tempel, G. (2007, April) "Change in the practices of scientists as they work in public school classrooms." NARST, New Orleans, LA.
- Van Sickle, M. L., Tempel, C., Tempel, G. (2007, January) "The effects of a three year NSF GK12 program on teacher, teaching practices and beliefs." ASTE, Clearwater Beach, FL.
- Van Sickle, M. L., Carnes, N., Tempel, G., Tempel, C. (2006, April) "Change in the Practices of Science Teachers (Grades 3-10) as They Participate in a Constructivist Long-Term Professional Development." Southeast ASTE Annual Conference, Columbia, SC.
- Van Sickle, M. L. (2006, March) "Scientists in the Urban Classroom." Center for Partnerships, Charleston, CS.
- Van Sickle, M. L. (2006, March) "Scientists in the Urban Classroom." Center for Partnerships, Charleston, SC.
- Van Sickle, M. L., Dickerson, D., Thompson, D.L., Rose-Baele, J., Tempel, C., Coffee, P., Dawkins, K. (2006, January) "Teachers' perceptions of an intensive, large-scale professional development program." ASTE, Portland, OR.
- Van Sickle, M. L., Cozart, A., Holman, R. (2005, July) "Information about College of Charleston masters in ESOL and ESOL endorsement grant." ESOL Mini Conference, Charleston, CS.
- Van Sickle, M. L., Cozart, A. M. (2005, June) "Basics and Beyond." Carolina TESOL, Charleston, SC.
- Van Sickle, M. L., Tempel, G., C. T., Gaskill, N. (2005, April) "Change in the beliefs of scientists and teachers as they work together." NARST, Dallas, TX.
- Van Sickle, M. L., Dickerson, D., Ndunda, M. (2005, April) "International comparison of ground water concepts." NARST, Dallas, TX.
- Van Sickle, M. L., Tempel, G., Tempel, C. (2005, April) "Scientists and teachers working together: Nobody rides the shortbus." NSTA, Dallas, TX.
- Van Sickle, M. L., Martin, E. M., Watts, J. Fred F. (2004, November) "College of Charleston Share-A-Thon." SC Science Council, Charleston, CS.
- Van Sickle, M. L., Jablon, P. (2003) "Investigating Phenomena and Negotiating Ideas in the Middle School Science Classroom and Community: Would the Teacher Please Be Quiet?" AETS International Conference.
- Van Sickle, M. L., Cozart, A., Majors, P. (2003) "Higher education/secondary education: A win, win, win collaboration." Carolina TESOL Fall Conference, Charlotte, NC.
- Van Sickle, M. L., Tempel, G., Tolliver, B., Garcia, N. (2003) "GK12: Inquiry Teaching and Learning." SEAETS Regional Conference.

- Van Sickle, M. L. (2002) "Expanding our notion of the caring science teacher." AETS International Conference, Charlotte, NC.
- Van Sickle, M. L. (2002) "Scholarly writing session." Pre-conference workshop, Charlotte, NC.
- Van Sickle, M. L. (2002) "The ethic of care in science teaching - Keynote Address." SEAETS Regional Conference, Kennesaw, GA.
- Van Sickle, M. L., Cozart, A. (2002) "Continuing Education Program." Tourism Commission, Charleston, SC.
- Van Sickle, M. L. (2002, November) "Higher Education/Secondary Education: A win, win, win collaboration." Carolina TESOL, Charlotte, NC.
- Van Sickle, M. L., Cozart, A. (2002, November) "Writing new autobiographies: Learning to "read" the world vis experiences with migrant children." NAME conference, Washington, D.C.
- Van Sickle, M. L., Kubinec, W. (2001) "From science professor to science teacher." Association for the Education of Teachers in Science, Costa Mesa, CA.
- Van Sickle, M. L., Blake, M. (2001) "Helping linguistically different students share what they know." South Carolina International Reading Association, Hilton Head, SC.
- Jones, M. E., Van Sickle, M. L. (2001, November) "Sharing What They Know: Communication Strategies for Linguistically Diverse Students." 21st Southeast International Reading Conference, Hilton Head, SC.
- Jones, M. E., Van Sickle, M. L. (2001, March) ""Cultural Borders: An Obstacle to Academic Achievement in Science and Mathematics: How to Get Out of Special Education and into Gifted Classes." Annual National Association for Research in Science Teaching Meeting, St Louis, Missouri.
- Jones, M. E., Van Sickle, M. L. (2001, February) "Helping Linguistically Diverse Learners Share What They Know." South Carolina State Council of the International Reading Association, Hilton Head, SC.
- Jones, M. E., Ndunda, M., Van Sickle, M. L., Glascoe, M., Aina, O., Ficklin, M. (2000, July) "Symposium: Minimizing the Barriers to Learning: The Issues of Dialect Diversity and Social Justice." 18th World Congress on Reading, Auckland, New Zealand.
- Jones, M. E., Ndunda, M., Van Sickle, M. L. (2000, May) ""Dialect Diversity and Social Justice"." International Reading Association's 45th Annual Convention, Indianapolis, Indiana.
- Jones, M. E., Van Sickle, M. L. (2000, April) "A Year Study of Sea Island Students in South Carolina: Effects of Dialect on Science and Mathematics Learning." 2000 National Association for Research in Science Teaching, New Orleans, LA.
- Jones, M. E., Van Sickle, M. L., Ndunda, M. (2000, January) ""Teaching Highly At-Risk Students Math and Science: A Sea Island Perspective"." AETS, Akron, Ohio.
- Van Sickle, M. L. (2000, January) "How do women faculty in science education define and celebrate professional excellence?" AETS, Akron, OH.
- Van Sickle, M. L. (2000, January) "Teaching highly at-risk students math and science: A Sea Island perspective." AETS, Akron, OH.

Jones, M. E., Van Sickle, M. L., Ndunda, M. (1999, November) "Dialect Diversity & Social Justice." 1999 Southeast Regional TESOL Conference, Birmingham, AL.

Jones, M. E., Van Sickle, M. L., Ndunda, M. (1998, December) "Dialect Diversity and the At-Risk Student: Social Justice." 20th Annual Citadel Reading Conference, Charleston, SC.

Jones, M. E., Ndunda, M., Van Sickle, M. L. (1998, October) "Social Justice: Language Diversity, Culture, and Literacy." 8th Annual International Conference of the National Association for Multicultural Education, St. Louis, MO.

Jones, M. E., Van Sickle, M. L., Aina, O., Glascoe, M. (1998, July) "Language Diversity, Culture and Literacy: Making Connections." 17th World Congress on Reading of the International Reading Association, Ocho Rios, Jamaica.

Conference Participation

Association of Science Teacher Educators, Conference Chairperson, 2012 - 2013.
Center for Faculty Development, Conference Panel, 2006.

Editorial and Review Activities

2017 – current	Coeditor, Journal of Instructional Pedagogies Invited Manuscript Reviewer or Referee, McGraw Hill, "Human Growth and Development." Grant Reviewer—Ad Hoc, CHE--Eisenhower Grants, "several."
2006 - 2010	Editorial Board Member, Contemporary Issues in Technology and Teacher Education, "CITE."
2006 - 2009	Editorial Board Member, ASTE, "Journal of Elementary Science Education."
1998 - 2008	Invited Manuscript Reviewer or Referee, Journal of Research in Science Teaching, "several each year."
1999 - 2007	Invited Manuscript Reviewer or Referee, Journal of Women and Minorities in Science and Engineering, "several."
2007	Grant Reviewer—Panel, NSF, "NSF DK12 grants."
2005 - 2006	Grant Reviewer—Ad Hoc, NC Quest.
2003	Grant Reviewer—Ad Hoc, Editorial, "Journal of Women and Minorities in Science and Engineering."

Committees and Service

Department Service

NCATE, accreditation report writing, January 2011 - January 2013.

College-wide Service

M.Ed/Ed.S organizational committee, Committee Member, May 2007 - Present.
Lowcountry Hall of Science and Math, Advisory Board, August 1995 - Present.
President's Advisory Committee, Advisory Board, January 2013 - August 2013.
MAT in Middle Grades Planning Committee, Committee Member, August 2005 - June 2011.
Lowcountry Hall of Science and Math, Committee Member, June 2007.
SMFT, Program Director, August 2002 - August 2006.
Graduate Council, Committee Member, August 1997 - August 2006.
Brown v. Board celebration, July 2004 - October 2004.

Professional and Community Service

Center for Partnerships, Pro Bono Professional Service, August 2006 - Present.
Journal of Geoscience Education, Reviewer, March 2012 - March 2014.
CITE, Editorial Board, January 2005 - January 2014.
ASTE, Editorial Review Board, January 2009 - January 2013.
Association of Science Teacher Educators, Editorial Board, January 2006 - January 2013.
COSEE, Committee Member, March 2006 - March 2007.

Other

Advisory Board, June 2008 - June 2014.
NARST, Committee Member, March 2003 - March 2012.
NARST, Committee Chair, March 2006 - March 2009.
Association for Science Teacher Educators, Board of Directors, January 2003 - January 2006.

Faculty Development Activities

SMILE, Lowcountry hall of science and, Charleston, SC, November 2006.

Grant writing, ORGA, Charleston, SC, June 2006.

Critical issues for PK-12 education, CPIE, Charleston, SC, March 2006.

Writing for publication, SOEHHP, Charleston, SC, January 2006.

The future of teacher education at the College of Charleston: A state and national context, SOEHHP, Charleston, SC, October 2005.

Summit for SC coalition for mathematics and science, SCCMS, Columbia, SC, April 2005.

Coastal Legacy Professional Development Program, COSEE, Ravenel, SC, July 2004.

Secretary's Science Summit, US Department of Education, Washington, DC, March 2004.

Effective Schools, SCACTE, Charleston, SC, October 2001.

Teaching Experience

College of Charleston

EDEE 367, Teaching Science: Pre K - Grade 3, FALL 2014
EDEE 370, Teaching Health Education, MAYMESTER 2015
EDEE 450, Student Teaching in the Elementary School, FALL 1999
EDEE 455, Early Childhood Clinical Practice, SPRING 2014
EDEE 457, Elementary Grades Clinical Practice, SPRING 2014
EDEE 459, Middle Grades Clinical Practice, SPRING 2015
EDEE 465, Reflective Practice, SPRING 2015
EDEE 638, Mathematics and Science in Early Childhood Education, SPRING 2000 - SPRING 2002
EDEE 664, Health and Physical Education for the Elementary Teacher, MAYMESTER 2015
EDEE 670, Elementary Science Instruction, FALL 1999 - FALL 2003
EDEE 685, IS:Culturaly Responsive Behav, SUM II DAY 2010
EDEE 685, Is: Early Childhood Math & Scien, SUM II DAY 2004
EDEE 900, Continuous Research Enrollment, FALL 2005
EDFS 303, Human Growth and Educational Process, FALL 2000
EDFS 456, Teaching Strategies in Content Area, FALL 2009
EDFS 456, Teaching Strategies in the Content Areas, FALL 2010
EDFS 456, Teaching Strategies in the Content Areas: 1, 2, 3, 4, 5, 6, FALL 2007
EDFS 456, Teaching Strategies in the Content Areas: 1,2,3,4,5,6, FALL 1999 - FALL 2006
EDFS 460, Clinical Prac In Content Area, SPRING 2006
EDFS 460, Clinical Prac in Content Area, SPRING 2007 - SPRING 2009
EDFS 460, Clinical Practice in Content Area, SPRING 2010
EDFS 460, Stud Tchng In Content Area, FALL 1999 - FALL 2005
EDFS 470, Altern Curr, Algebra I @ Burke, SPRING 2007 - FALL 2007
EDFS 470, Developmental Study of Affective factors in the classroom, SPRING 2015
EDFS 654, Human Growth and Development, SUM II DAY 2001 - SUM II DAY 2005
EDFS 660, Nature of Sci, Math & Sci/Mat Ed, MAY EVENING 2008 - MAY EVENING 2010
EDFS 660, Nature of Science, Mathematics and Science/Mathematics Education, SUM II DAY 2000 - SPRING 2007
EDFS 660, Nature of Science, Mathematics, and Science/Mathematics Education, SPRING 2011 - SPRING 2015
EDFS 680, Teaching English through the content areas, MAY EVENING 2004 - MAY EVENING 2007
EDFS 685, IS: Clinical in Secondary Ed, SPRING 2010
EDFS 685, Inquiry Math For Teachers, SPRING 2001
EDFS 685, Is: Research For Scientists, FALL 2005
EDFS 691, Use of Technology in Math and Science, SUM II DAY 2001
EDFS 702, Research and Development Project, FALL 2011 - FALL 2013
EDFS 703, Curriculum, Policy, and Systems in Science and Mathematics Education, SPRING 2000 - SPRING 2014
EDFS 705, Reflective Practice and Pro De, SPRING 2011
EDFS 795, Policy of Separation of Church and State: Impact on Public Education, FULL SUMMER 2015
EDFS 796, St: Multicultural Education, SUM I DAY 2001
EDFS 900, Continuous Research Enrollment, FALL 2005
EVSS 693, Is:Lsn Plns-Dixie Plant.K-12/Col, FALL 2004
HONS 499, A Study On Group Learning, SPRING 2005 - FALL 2005
SMFT 555, Applications of Physics for Teachers: How Things Work, FALL 1999 - FALL 2001
SMFT 697, Education Research Writing Sem, MAY EVENING 2004 - SPRING 2005
SMFT 697, Science Teaching For Scientists, SPRING 2003
SMFT 697, St: Constr. Tchng For Scientists, FALL 2003
SMFT 697, St: I-Movies & Science Teaching, MAY EVENING 2003 - MAY EVENING 2005
SMFT 697, St: In Science Or Math For Teach, SUM II DAY 2003

SMFT 697, St: Inquiry Learn In Prim Math, SUMMER EVENING 2000
SMFT 697, St: Sci Tchng Sem For Scientists, FALL 2003 - FALL 2004
SMFT 697, St:Capstone On Enviromntl Teach, FALL 2002
SMFT 697, St:Constrvst Tchg Prac-Sciences, FALL 2002
SMFT 697, St:Dev A Science Night For Famil, SPRING 2002
SMFT 698, IS: Capstone Research Analysis, SUM II DAY 2013 - FALL 2013
SMFT 698, IS: Clinical Practice in Sec Ed, SPRING 2010
SMFT 698, IS: Connecting Students to Scie, FALL 2008
SMFT 698, IS: Effect Strat for Teach Math, FALL 2009
SMFT 698, IS: Effect of Writing on Math, FALL 2010
SMFT 698, IS: Exercise & Learning, SUM II DAY 2009
SMFT 698, IS: Grant Writing, FALL 2012
SMFT 698, IS: Nature of Science & Math, SUM II DAY 2009
SMFT 698, IS: Nature of Science and Math, FALL 2013
SMFT 698, IS: Workshop for Physics & P.S., SUM I DAY 2007
SMFT 698, Independent Study, FALL 2006 - SPRING 2007
SMFT 698, Parents' Self Efficacy Towards math Common Core Standards, FALL 2015

General Teaching Interests

Another area of interest is the quality of post-secondary science education. Meta has worked closely with professors in the sciences to encourage learner-centered practices and inquiry based teaching for undergraduate science courses. One of the articles from her work in this area is "Transforming teaching" written with a Physics professor and published in the Journal of College Science Teaching.

General Research Interests

She has several research interests, most prominently studying the ethics of care in science education and science for all including the linguistically diverse. Two of her most recent articles are "The challenges of co-teaching within a multicultural context" with Drs. Cozart, Cudahy, and ndunda in Multicultural Education and "A case study of South Carolina Sea Island language: What happens when a Creole language doesn't mix with standard school language" with Drs. Aina and Blake in Journal of Interdisciplinary Education.

Professional Memberships

American Educational Research Association.
Association for Science Teacher Educators.
National Association for Research in Science Teaching.
National Science Teachers Association.