Charles J. Eick, Ph.D. [ceick@westga.edu](mailto:ceick@westga.edu)

Associate Professor in Secondary Education 678-839-2240

Leadership and Instruction

University of West Georgia

Carrollton, Georgia 30118

**RELATED EDUCATION**

Auburn University, Auburn, Alabama. Doctor of Philosophy in Science Education, December 1999.

* 60 quarter hours of graduate life sciences courses
* Dissertation on student teacher practice in secondary science classrooms

Georgia State University, Atlanta, Georgia. Master of Education in Science, August 1993.

* Concurrent middle grades science endorsement through Cobb County Schools, GA.

Clemson University, Clemson, South Carolina. Bachelor of Science in Plant Sciences *(Summa Cum Laude)*, May 1984.

**RECENT EDUCATION**

Boston College, Boston, Massachusetts. Master of Arts in Pastoral Ministry, August 2015.

* Thesis on the theology of ‘belonging’ and Catholic community for youth ministry

**ALABAMA AND GEORGIA CERTIFICATION**

General Science, grades 7-12 (2017); Middle Grades Science, grades 4-8 (2017)

Broad Field Science, grades 7-12 (2019); Middle Grades Science, grades 4-8 (2019)

**PROFESSIONAL EXPERIENCE**

University of West Georgia, Carrollton, Georgia. Associate Professor of Science Education, 2015-present.

* Secondary Science Education (6-12): MAT and UTeach Programs.

Auburn University, Auburn, Alabama. Associate Professor of Science Education, 1999-2015.

* Elementary Science Education (K-6), 2007-present
* Sabbatical Spring 2007 to teach eighth grade science, Auburn City Schools
* Secondary Science Education (6-12), Program Coordinator, 1999-2006

Troup County Public Schools, LaGrange, Georgia. High School Science Teacher, 1996-1997.

Cobb County Public Schools, Marietta, Georgia. High School and Middle School Science Teacher, 1989-1996.

Pickens County Public Schools, Pickens, South Carolina. Junior High School Science Teacher, 1985-1986.

**PROFESSIONAL HONORS AND AWARDS**

**Academic Honors**

Phi Kappa Phi Honor Society

##### Teaching Awards

Eick, C., Womack, J., Bannon, S., & Anderson K. (2010). Zimpher Award for Outstanding Professional Development School. Holmes Partnership. [Co-application with Auburn City Schools]

Southeastern Association for Science Teacher Education (SASTE), John Shrum Award for Excellence in Science Teacher Education 2006

**Research Awards**

Auburn University, College of Education, Faculty Award for Research 2015

**Elected Professional Offices**

Elections Committee – Association of Science Teacher Educators (ASTE) 2008-2011

Regional Director – Association for the Education of Teachers of Science (AETS) 2001-2004

President – Southeastern Association for the Education of Teachers of Science (SAETS) 2000-2001

##### Professional Improvement

Sabbatical Leave, Spring 2007. Auburn University College of Education and Auburn City Schools Professional Development School. In-kind salary support from the Department of Curriculum and Teaching and Auburn City Schools Central Office for temporary full-time teaching position at Auburn Junior High School.

##### Internal Support

Auburn University College of Education and Auburn City Schools Professional Development School. $10,000 from College of Education. Auburn University [with Peggy Dagley and Shannon Brandt (Auburn City Schools)] (2008-2009)

TEAM-Science: Developing Teacher Leaders, Curriculum Guides, and Infrastructure for Supporting Inquiry-Based Science Reform in East Alabama. $80,000 from Outreach, COSAM, and COE. Auburn University [with Marllin Simon] (2005-2006)

Development of Citizen Volunteer Protocols and Educational Materials Related to

Stream Macroinvertebrate Monitoring. $15,355.00 (plus in-kind match of $15,355)

Small Competitive Grant – Environmental Institute. Auburn University [with W.

Deutsch] (2004-2006)

Beginning a Science Partnership with a Local Middle School through Use of Hands-On Science Kits. $400.00 National Advisory Council Grant – College of Education. Auburn University (2002-2003)

A Model After-School Aquatic Environmental Science Program for Alabama. $28,420.00 (plus in-kind match of $32,601.00) Small Competitive Grant Environmental Institute. Auburn University [with L. Vining] (2002-2004)

Aquatic Science Curriculum for Middle Schools in West Alabama - $25,000.00 Collaborative Outreach Grant – Office of the Vice-President for Outreach. Auburn University [with L. Vining] (2001)

High School Remediation through Interactive Teaching Strategies. $1,500.00 Partners in Community Service Grant – College of Education. Auburn University (2000)

Making a Professional Development School Work for Science Education. $2,000.00 Outreach Project Grant – Office of Human Resources and Outreach. Auburn University (2000)

**External Support**

Tatarchuk, S. & Eick, C. (2009-2010). Use of outdoor trail backpacks for learning about environmental education. $3,543.18. Turner Foundation Grant.

**CURRENT ASSIGNMENT**

Teaching – 60% *(3 X 3 semester reduced load)*

Outreach/Service – 20%

**GRADUATE STUDENTS**

M.A.T. Science Education – *(comprehensive exam scorer)*

**TEACHING AND COURSE EXPERIENCE**

**Graduate Education Courses**

SEED 6263/6260 Instructional Strategies for Science Education (2/1 semester hours)

* Fall 2015

SEED 6285 Integrated Approach to the Sciences (3 semester hours)

* Spring 2016

SEED 7288 Teaching Internship (3 semester hours)

* Spring 2016 *(voluntary additional load)*

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CTEE & CTSE 7510/6 Research Studies in Area of Specialization (3 semester hours)

These courses emphasize the reading and implementation of research in the elementary (CTEE) (K-6) and secondary science (CTSE) (6-12) classrooms. The reading and presentation of research directly relate to classroom teachers’ action research projects. Projects were designed to meet the requirements of the Advanced Professional Work Sample for NCATE assessment. The course is also offered online through distance education using Canvas.

CTSE 7530/6 Organization of Program in Area of Specialization (3 semester hours)

This course targeted the study of science programing, textbook analysis, and inquiry-oriented materials available to the secondary science teacher. An emphasis was placed on standards-based materials and how they are incorporated into semester planning in meeting state and national standards. Materials from GEMS, BSCS, SEPUP, It’s-About-Time, and Alabama’s *Science in Motion* and *AMSTI* (STC-MS, GLOBE) are featured. This course is also offered online through distance education using Canvas.

CTEE 7430/6 Curriculum & Teaching: Science (3 semester hours)

This course incorporates a Project-Based Learning approach to science curriculum and teaching in the elementary classroom through application of social constructivism and national standards emphasizing inquiry. Collaborations on clean water projects include Alabama Water Watch and the Save Our Saugahatchee (SOS) environmental groups. The course is also offered online through distance education using Canvas.

CTSE 7540/6 Evaluation of Program in Area of Specialization (3 semester hours)

This course focused on the tools of evaluation used in a standards-based secondary science classroom for authentic assessment, including traditional testing, performance assessment, portfolio assessment, and the use of rubrics. The topic of standardized testing and its meaning and uses is also studied. Students create various assessments for use with their classroom curriculum. This course is also offered online through distance education using Canvas.

CTEE & CTSE 8990/6 Research and Dissertation (1-10 semester hours)

One-on-one guidance is given to doctoral candidates who are proposing, carrying out, and completing their dissertation studies, including assistance in obtaining IRB Human Subjects approval for their proposed research. These hours are now offered online for students who cannot meet in person with their chair.

**Undergraduate Education Courses**

UTCH 3002 Classroom Interactions (3 semester hours)

* Fall 2015, Spring 2016

UTCH 3003 Problem-Based Instruction (3 semester hours)

* Fall 2015, Spring 2016

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CTEE 4090 & 4100 Curriculum & Teaching I & II: Science (3 semester hours)

The two secondary education science methods courses lay the foundation for standards-based teaching practice in the science classroom in grades 6-12. Students learn to develop daily and unit lesson plans following a Learning Cycle Model where they incorporate inquiry-oriented practices during laboratory time with an emphasis on safety. Students spend 1-2 days per week in their concurrent school practicum, including experience in middle school and high school. The end-product of the methods series is the creation of a portfolio of practice.

CTEE 4030 Curriculum: Natural Science (3 semester hours)

The elementary education science methods course looks at the nature of teaching science as inquiry and process in grades K-6. Students learn to utilize the Learning Cycle Model for structuring lessons with the incorporation of inquiry-based activities and note-booking for children. Students spend 2-3 days per week in their concurrent school practicum placements in our local Professional Development Schools. The summer section of the course also emphasizes teaching environmental and outdoor science while in summer camp practice settings including the Auburn University Forest Ecology Preserve.

CTSE 4000 Technology in Science Education (2 semester hours)

The secondary science technology course introduces for practice the various technologies for instruction and communication that are currently utilized in the classroom. Web-based technologies, the use of interactive white boards, and computers/tablets are introduced. Technologies for the science laboratory and data-gathering (through *Science in Motion*) are also practiced. Students generate evidence of their use of the technologies introduced.

CTSE 4200 Managing Middle and High School Classrooms (2 semester hours)

Science education majors while concurrently enrolled in their internship semester, learn how to manage classrooms and address discipline in this course. During the first few weeks, the course meets more intensively to review best practices for classroom management and preparing the first week of school. Afterwards, students meet in person and online in a hybrid course format, where the emphasis moves to addressing first year teacher issues including laboratory safety and difficult disciplinary cases.

CTEE 4190 Effective Classroom Management (3 semester hours)

This course emphasizes a practitioner’s approach to classroom management for beginning elementary teachers. Students develop a comprehensive classroom management plan and learn techniques to manage their classroom and student behaviors while in their methods course practicum. Case studies of children in their classroom placements are utilized in assignments in the course.

CTEE 4950/6 Professional Development Seminar (2 semester hours)

This course supports practicing elementary interns in their initial formation and development. Interns’ needs are addressed through a co-generated syllabus on topics of interest and need. Periodic guest teachers and special workshops based on stated needs support this development. Online discussion boards facilitate a community of practice where immediate curriculum and student discipline needs are addressed. This course is offered through distance learning to interns placed outside of the sixty-mile radius of Auburn University.

CTEE & CTSE 4920 Internship (10 semester hours)

This course is student teaching for one full semester in a local or distance placement for elementary and secondary students. Interns are supervised by a university professor or graduate student who hold periodic conferences with students and their cooperating teachers over performance. Students must meet the basic proficiency requirements of their programs and the College of Education to pass their internship experience.

**Other Courses**

SCMH 1010 Concepts of Science (4 semester hours)

This course is an interdisciplinary lecture and lab course that presents major scientific concepts and stresses the interactions between the sciences and the humanities. Each major disciplinary area of science is addressed with the goal of basic science literacy. Approximately 200-300 students are in one lecture section.

SUST 5000 Senior Capstone (3 hours)

This course is the capstone research seminar for students completing the minor in Sustainability Studies. The instructor(s) provide instruction and mentoring to help students complete their chosen research projects related to their various majors and interests.

**Statement of Teaching Philosophy**

I am a student-centered and social constructivist educator. I believe in listening to my students and creating “learning experiences” that meet their developing needs as soon-to-be teachers of science. These types of experiences cannot be completely *a priori* or pre-determined as in most university courses, but must be flexible and subject to change to meet students’ learning needs. My programming and teaching is based on developing candidate practical knowledge as beginning teachers of science through a reflective and supportive environment. Dialogue, supportive feedback, and self-evaluation allows students to track their progress and “better” their work or performance. I attempt to develop my students’ expertise in teaching through pertinent experiences on campus and in their field placements that form the practical knowledge base for effective science teaching practice. Only when my students have this experiential learning base can we have constructive dialogue, meaningful learning, and improvement in teaching practice.

My students want and need to learn relevant knowledge and skills for beginning science teaching. Field-based practice facilitates this learning and relevance. I help my students become “ready” to begin their teaching career as effective beginning teachers of science. I try to achieve this “readiness” through constructing courses with the knowledge, experiences, and work that students find useful for their developing teaching practice, such as use of the Alabama Math Science and Technology Initiative materials. With these resources my students are placed in schools and in teaching roles immediately. They begin teaching through observing and modeling the practice of an experienced and effective classroom teacher. They also consider teaching practice with what they are learning on campus, integrating formal and practical learning in their practice. Through teaching, they test their abilities and develop their skills in learning to teach. Reflection and dialogue on practice is an important part of growth and change in this type of situated learning. My students are encouraged to technically and critically dialogue on practice with their cooperating teachers, each other, and me through campus and on-line discussion groups. I help facilitate my students’ reflection on their developing teaching practice in light of the NextGen Standards for science teaching. These Standards have the integration of process and content through scientific practices of inquiry as the goal for science teaching practice.

Many of the practices that my students are learning support the teaching of science through “structured inquiry,” or guided discovery. These approaches support students in exploring scientific phenomena and engaging in the work of scientists while concurrently learning scientific principles and concepts. Learning to teach through inquiry involves a complex set of skills and practices that are not easy to master for beginning teachers. Therefore, I rely heavily on student feedback, as well as current research in my field to create experiences in my courses that will help my students grow professionally from where they are in order to become more effective at use of structured inquiry. Toward this goal the use of standards-based science curricula can provide a framework for effective practice.

My ongoing reflection on what and how I teach, and how my students perceive it, guides my thought processes and motivation for continuous program improvement. I rely heavily on student evaluation both formal and informal to continually assess my teaching and the curricula of my courses. I use these comments in making changes in my approach and course content for future semesters. This change does not mean pandering to some students’ wishes for an “easier” program, but listening for critical feedback to strengthen the program. Through student feedback, we now require more field experience and related performance measures in our program, which has made it more challenging.

**RESEARCH**

**Books**

Dias, M., Eick, C., & Brantley-Dias, L. (2013). *Practicing what we teach: Science teacher*

*educators as K-12 teachers*. New York: Springer. (Dias 50%, Eick 40%, Dias L. 10%)

**Book Chapters**

Eick, C. (2013). A sabbatical as a middle grades science teacher: Building new practical knowledge for practice. In M. Dias, C. Eick, L. Brantley-Dias (Eds.), *Practicing what we teach: Science teacher educators as K-12 teachers*. (pp. 89-101). New York: Springer.

Eick, C., Brantley-Dias, L., & Dias, M. (2013). Teaching youth again: Reflecting on renewal. In

M. Dias, C. Eick, L. Brantley-Dias (Eds.), *Practicing what we teach: Science teacher educators as K-12 teachers*. (pp. 269-286). New York: Springer. (Eick 60%, Brantley-Dias 20%, Dias 20%)

Eick, C., Carrier, S., Perez, K., & Keasal, D. (2010). Summer methods in summer camps:

Teaching Projects Wild, Wet, and Learning Tree at an outdoor environmental education center. In A. Bodzin, B. Shiner-Klein, & S. Weaver (Eds.) *The inclusion of environmental education in science teacher education.* (pp. 173-189). NY: Springer. (Eick 40%; Carrier 20%; Perez 20%; Keasal 20%)

Eick, C. & Ware, F. (2005). Coteaching in a science methods course: An apprenticeship

model for early induction to the secondary classroom. In W-M Roth & K. Tobin (Eds.), *Teaching together, learning together*. New York, NY: Peter Lang. (Eick 80%; Ware 20%)

Eick, C. (2002). Personal histories supporting retention of beginning science teachers. In J. Rhoton & P. Bowers (Eds.), *Issues in science education: Science teacher retention* (pp. 85-92). Arlington, VA: National Science Teachers Association.

Eick, C. (1995). Person-Centered Learning. In J. Hassard (Ed*.), Increasing your students’*

*science achievement* (pp. 54-59). Atlanta: Georgia State University

**Peer Refereed Manuscripts** (\* Denotes Student Contribution)

Eick, C. & Dias, M. (in press). Enacting a reform-based science curriculum: Design

changes to extend inquiry. *International Journal of Designs for Learning*.

\*Nunes-Bufford, K., Burton, M., & Eick, C. (2013). Developing elementary preservice

teachers’ initial conceptions of common practices in science and mathematics teaching. *Alabama Journal of Mathematics, 37*. Retrieved from <http://ajmonline.org/2013/> (Nunes-Bufford 50%, Burton 30%, Eick 20%)

\*Duenas, G. & Eick, C. (2013). Building a trusting relationship – Appreciating the linguistic

and cultural influence of three Hispanic families on school learning. *Journal of Scholastic Inquiry: Education, 1*(1), 9-41. (Duenas 80%, Eick 20%)

McCormick, T., Eick, C., & Womack, J. (2013). Project REACH: Building awareness of

culturally responsive pedagogy through a professional development school (PDS) book study initiative. *School-University Partnerships, 6*(1), 6-14*.* (McCormick 60%; Eick 30%; Womack 10%)

\*Hendrix, R., Eick, C., & Shannon, D. (2012). The integration of creative drama in

an inquiry-based elementary program: The effect on student attitude and conceptual learning. *Journal of Science Teacher Education*, *23*(7), 823-846. (Hendrix 60%, Eick 30%, Shannon 20%)

Eick, C. (2012). Use of the outdoor classroom and nature-study to support science and

literacy: A descriptive case study of a third-grade classroom. *Journal of Science Teacher Education*, *23*(7), 789-803.

Eick, C. & King, D. (2012). Non-science majors’ perceptions of the use of you-tube video to

support learning in an integrated science lecture. *Journal of College Science Teaching, 42*(1), 26-30. (Eick 80%, King 20%)

Dias, M., Eick, C., & Dias, L. (2011). Practicing what we teach: A self-study in

implementing an inquiry-based curriculum in a middle grades classroom. *Journal of Science Teacher Education, 22,* 53-78*.* (Dias 60%; Eick 30%; Dias 10%)

\*Stewart, B. & Eick, C. (2010). Are administrators disconnected? A comparison

case study of important teacher dispositions in elementary science. *Academic Leadership Online Journal, 8* (4)*.* Retrieved at: <http://www.academicleadership.org/article/--are-administrators-disconnected-a-comparison-case-study-of--important-teacher-dispositions-in-elementary-science> (Stewart 80%; Eick 20%) [National Journal with an Acceptance Rate of 45%]

Eick, C. & \*Stewart, B. (2010). Dispositions supporting elementary interns in the teaching of

reform-based science materials. *Journal of Science Teacher Education, 21*, 783-800. (Eick 80%; Stewart 20%) [International Journal with an Acceptance Rate of 22.3%]

Eick, C. & McCormick, T. (2009). Critically thinking about culturally responsive pedagogy in

practice: An elementary education book study in student teaching. *Southeastern Regional Association of Teacher Educators Journal, 19* (1), 52-60. Available: <http://www.apsu.edu/srate/index.html> (Eick 80%; McCormick 20%) [Regional Journal with an Acceptance Rate of 19%]

\*Pickens, M. & Eick, C. (2009). Motivational strategies used by two teachers in different

tracked science courses. *Journal of Educational Research, 102* (5), 349-362*.* (Pickens 80%; Eick 20%) [International Journal with an Acceptance Rate of 17%]

Eick, C. (2009). Tailoring the nationals standards to support early science teacher

identities: How can we build on personal histories for successful beginning practice? *Journal of Science Teacher Education, 20*, 135-136. [International Journal with an Acceptance Rate of 5-10%]

Eick, C., Dias, M., & Cook Smith, N. (2009). Middle School Students’ Conceptual Learning

from the implementation of a new NSF supported curriculum: *Interactions in Physical Science*™. *School Science and Mathematics, 109* (1), 45-57. (Eick 60%, Dias 10%; Cook-Smith 30%) [International Journal with an Acceptance Rate of 25%]

Tripp, L. O. & Eick, C. J. (2008). Match-making to enhance the mentoring relationship in

student teaching: Learning from a simple personality instrument. *Electronic Journal of Science Education, 12* (2), 1-26. Available: <http://ejse.southwestern.edu> . (Tripp 50%; Eick 50%) [International Journal with an Acceptance Rate of 30%]

\*Jones, M. T. & Eick, C. J. (2007). Providing bottom-up support to middle school science

teachers’ reform efforts in using inquiry-based kits. Journal of Science Teacher Education, 18 (6), 913-934. (Jones 80%; Eick 20%) [International Journal with an Acceptance Rate of 10%]

\*Jones, M. T. & Eick, C. J. (2007). Implementing inquiry-based kits: Obstacles, pedagogy, and

practical knowledge development in two middle school science teachers. *Science Education, 91* (3), 492-513. (Jones 80%; Eick 20%) [International Journal with an Acceptance Rate of 21%]

Eick, C. & Dias, M. (2005). Building the authority of experience through coteaching:

Studying methods students’ thinking on practice in inquiry classrooms. *Science Education, 89* (3), 470-491. (Eick 80%; Dias 20%) [International Journal with an Acceptance Rate of 23%]

\*Ott, J., \*Belcher, A., \*Aldridge, R., & Eick, C. (2004). Teaching interactive science lessons to

remedial classes: Learning to help at risk students pass a high stakes graduation examination. ARExpeditions [on-line]. Available: [www.arexpeditions.montana.edu](http://www.arexpeditions.montana.edu) (Ott 40%; Aldridge 40%; Eick 20%) [National Journal]

Eick, C., Ware, F., Jones, M. (2004). Coteaching in a secondary science methods course:

Learning through a coteaching model that supports early teacher practice. *Journal of Science Teacher Education, 15*, 197-209. (Eick: 70%; Ware: 20%; Jones: 10%). [International Journal with an Acceptance Rate of 30%]

Eick, C. (2003). Changing an alternative teacher education program: Making every course

count. *Planning and Changing, 34*, 84-100. [National Journal with an Acceptance Rate of 32%]

Eick, C., \*Ware, F., & Williams, P. (2003). Coteaching in a science methods course: A situated learning model of becoming a teacher. *Journal of Teacher Education, 54*, 74-85. (Eick: 70%; Ware: 20%; Williams: 10%) [International Journal with an Acceptance Rate of 5-10%]

Eick, C. (2002). Job sharing their first year: A narrative of two partnered teachers induction into middle school science teaching. *Teaching and Teacher Education,18*, 887-904. [International Journal with an Acceptance Rate of 15-20%]

Eick, C. & Reed, C. (2002). What makes an inquiry-oriented science teacher? The influence

of learning histories on student teacher role identity and practice. *Science Education, 86*, 401-416. (Eick: 80%; Reed: 20%) [International Journal with an Acceptance Rate of 11-20%]

Eick, C. (2002). Studying career science teachers’ personal histories: A methodology for

understanding intrinsic reasons for career choice and retention. *Research in Science Education, 32*, 353-372. [International Journal with an Acceptance Rate of 30%]

Eick, C. (2002). Science curriculum in practice: Student teachers’ use of hands-on activities

in high-stakes testing schools. *National Association of Secondary School Principals Bulletin, 86* (30), 72-85. [National Journal with an Acceptance Rate of 25%]

Eick, C. (2000). Inquiry, nature of science, and evolution: The need for a more complex pedagogical content knowledge in science teaching. *The Electronic Journal of Science Education [on-line], 4*, (3). Available: <http://unr.edu/homepage/crowther/ejse/eick.html>. [International Journal with an Acceptance Rate of 60%]

**Editor Reviewed Articles**

Eick, C. & Vining, L. (2003). Advocating aquaculture education for scientific literacy. Agriculture Education Magazine, 76 (3), 24-25. (Eick: 80%; Vining 20%) [National Magazine with an Acceptance rate of 85%]

**Invited Articles**

Eick, C. & Jones, M. (2008, September). Trading places in science education. *National*

*Association for Professional Development Schools: PDS Partners, 4* (2), 5. (Eick 80%; Jones 20%) [National Newsletter]

**Peer-Refereed National Practitioner Articles** (\* Denotes Student Contribution)

Eick, C. & (select UTeach students). (in writing). Project-Based Instruction in a High School

Science Classroom: A Learning Cycle Unit Approach that Makes It Possible. *The Science Teacher*.

\*Hendrix, R. & Eick, C. (2014). Creative sound dramatics: Dramatic models of sound travel

extend inquiry learning for fourth graders. *Science & Children, 51*(6), 37-43. (Hendrix 60%, Eick 40%)

Eick, C., Tatarchuk, S., & Anderson, A. (2013). Vision + community = outdoor learning stations. *Science & Children, 50*(7), 61-67. (Eick 50%, Tatarchuk 25%, Anderson 25%)

Tatarchuk, S. & Eick, C. (2011). Using the outdoor classroom to integrate language arts and science process skills. *Science & Children, 48*, 35-39. (Tatarchuk 50%; Eick 50%)

Eick, C., Deutsch, W., \*Fuller, J., & Scott F. (2008). Protecting our local waterways:

Alabama Water Watch trains and supports teachers and students as citizen monitors. *The Science Teacher, 75* (4), 26-29. (Eick 30%; Deutsch 30%; Fuller 20%; Scott 20%) [National Journal with an Acceptance Rate of 25%]

Eick, C., Ewald, M. L., Richardson, V., & Anderson, K. S. (2007). Building a leadership

network supporting science education reform in rural east Alabama. *Science Educator, 16* (1), 8-12. (Eick 30%; Ewald 30%; Richardson 20%; Anderson 20%) [National Journal with an Acceptance Rate of 40%]

Eick, C., Meadows, L., \*Balkcom, R. (2005). Breaking into inquiry: Scaffolding supports

beginning efforts to implement inquiry in the classroom. The Science Teacher, 72 (7), 49-53. (Eick 60%; Meadows 30%; Balkcom 10%) [National Journal with an Acceptance Rate of 25%]

Hayes, L., Smith, M., & Eick, C. (2005). Habits of mind for the science laboratory. *The Science*

*Teacher, 72* (6), 24-29. (Hayes 40%; Smith 30%; Eick 30%) [National Journal with an Acceptance Rate of 25%]

Eick, C., \*Ewald-Howard, M., Kling, E., Shaw, L. (2005). Reaching out to outreach. *Science*

*Scope, 28* (7), 36-37. (Eick 40%; Ewald 20%; Kling 20%; Shaw 20%) [Acceptance rate of 30%]

Trautmann, N. M., Carlsen, W. S., Eick, C. J., Gardner, F. E., Kenyon, L., Moscovici, H.,

Moore, J. C. Thomson, M. West, S. S. (2003). Online peer review: Learning science as science is practiced. Journal of College Science Teaching, 32 (7), 443-447. (Trautmann: 55%; Carlsen: 30%; Eick: 10%; Gardner et al.: 5%) [Acceptance rate of 50%]

Eick, C. (2001). The democratic science classroom: Science teaching that can improve

student behavior and enhance inquiry. *Science Scope, 25* (3), 27-31. [Acceptance rate of 30%]

Eick, C. & \*Samford, K. (1999). Techniques for new teachers. *The Science Teacher, 66* (8),

34-37. (Eick: 70%; Samford 30%) [Acceptance rate of 50%]

Eick, C. (1998). Growing With the Standards. *Science Scope, 21* (7), pp. 10-14. [Acceptance

rate of 30%]

**Peer-Refereed Presentations at National/International Conferences**

Dias, M., Eick, C., Dias, L. (2014, January). *Teaching youth again: Reflecting on renewal.*

Paper presented at the annual meeting of the Association of Science Teacher Educators, San Antonio, TX.

Dias, M., Eick, C., Weinburgh, M., Akerson, V., Jablon, P., Guy, M. Brown, S., Meadows, L., &

Lott, K. (2013, January). *Science teacher educators teaching K-12 students as professional development: An interactive panel discussion on various approaches, goals, and benefits*. Panel discussion presented at the annual meeting of the Association of Science Teacher Educators, Charleston, SC.

Wallace, C. & Eick, C. (2012, March). *Preservice elementary teachers in service learning*

*settings: Developing ideas about teaching, learning and teacher identity.* Paper presented at the annual meeting of the National Association of Research in Science Teaching, Indianapolis, Indiana.

Morrell, P.D., Eick, C., Bell, R., Popejoy, K., Ziedler, D., & Feldman, A. (2011, January). *How to*

*get more involved with ASTE*. Presentation at the annual meeting of the Association for Science Teacher Educators, Minneapolis, Minnesota.

McCormick, T. & Eick, C. (2010, April). *Teacher candidates’ emerging understandings of*

*culturally responsive pedagogy in today’s changing classrooms*. Paper presented at the annual meeting of the American Educational Research Association (AERA), Denver, CO.

Kochan, F., Morowski, D., Dagley, P., Bannon, S., Eick, C., Greenwood, J., Womack, J.,

Anderson, K., Brandt, S., & Jenkins, T. (2010, January). *Auburn University and Auburn City Schools: Professional development system partnership*. Zimpher award presentation at the annual meeting of the Holmes Group, Charleston, SC.

Eick, C., Anderson, K., Morgan, J. (2010, January). *Increasing science achievement for all*

*students.* Paper presented at the annual meeting of the Holmes Group, Charleston, SC.

Eick, C. & Stewart, B. (2010, January). *Dispositions supporting elementary interns in the*

*teaching of reform-based science materials.* Paper presented at the annual meeting of the Association of Science Teacher Educators (ASTE), Sacramento, CA.

McCormick, T., Womack, J., Eick, C., & Scaife, S. (2009, March). *Teachers and candidates*

*learning together about practices that support diverse students.* Paper presented at the Professional Development Schools National Conference, Daytona Beach, FL.

Eick, C., Tippins, D., Brown, S., Smolleck, L., Koehler, C., & Mueller, M. (2009, January).

*Science education scholarship for new professors: Defining and doing it for successful promotion and tenure.* Panel presentation at the Association of Science Teacher Educators, Hartford, CT.

Eick, C., Jones, M., & Anderson, K. (2008, April). *Trading places for science education:*

*Switching roles between a middle school teacher and a university education professor.* Session presented at the Professional Development Schools National Conference, Orlando, FL.

Dagley, P., Eick, C., Bailey, L., Anderson, K., & Brandt, S. (2008, April). *Strengthening a*

*charter PDS through strategic planning following NCATE PDS standards.* Session presented at the Professional Development Schools National Conference, Orlando, FL.

Eick, C. & Dias, M. (2008, January). *Evaluation of the interactions in physical science guided*

*inquiry curriculum.* Poster presented at the annual meeting of the Association of Science Teacher Educators, St. Louis, MO.

Meadows, L., Eick, C., Guy, M., Czerniak, C., Jabon, P., Townsend, S., & Melear, C. (2008,

January). *Back to the trenches: Teacher educators and the impact of returning to classroom practice.* Panel presented at the annual meeting of the Association of Science Teacher Educators, St. Louis, MO.

Dias, M. & Eick, C. (2008, January). *Practicing what we teach: Interpreting a science teacher*

*educator’s experience with eighth grade physical science students.* Paper presented at the annual meeting of the Association of Science Teacher Educators, St. Louis, MO.

Eick, C. (2006, January). *Working with, not against teacher candidates in practice.* Paper

presented at the annual meeting of the Association of Science Teacher Educators (ASTE, formerly AETS), Portland, OR.

Kamen, M., Marble, S., Eick, C., Weinburgh, M., Fraser-Abder, P., Mitchell, M. (2006,

January). *New professors session.* Interactive panel discussion presented at the annual meeting of the Association of Science Teacher Educators (ASTE), Portland, OR.

Eick, C. & Tripp, L. (2005, January). *Partnering on personalities: Making better matches*

*between cooperating teachers and interns*. Poster session at the annual meeting of the Association of Educators of Teachers of Science (AETS), Colorado Springs, CO.

Kamen, M., Marble, S., Eick, C., Weinburgh, M., Fraser-Abder, P., Mitchell, M. (2005,

January). *New professors session.* Interactive panel discussion presented at the annual meeting of the Association of Educators of Teachers of Science (AETS), Colorado Springs, CO.

Baird, W., Eick, C. et al. (2005, January). *Electronic syllabus sharing: Secondary methods*

*courses.* Interactive web-based presentation at the annual meeting of the Association of Educators of Teachers of Science (AETS), Colorado Springs, CO.

Eick, C. et al. (2004, January). *What kind of preservice program graduates new teachers who*

*really do inquiry in their first few years?* Poster session at the annual meeting of the Association of Educators of Teachers of Science (AETS), Nashville, TN.

Kamen, M., Mitchell, M., Eick, C., Weinburgh, M., & Fraser-Abder, P. (2004, January). *First*

*time professor? Cutting your professional teeth*. Interactive panel discussion presented at the annual meeting of the Association of Educators of Teachers of Science (AETS), Nashville, TN.

Eick, C., Ware, F., & Jones, M. (2004, January). *Learning to make coteaching work effectively in*

*a secondary science methods course.* Paper presented at the annual meeting of the Association of Educators of Teachers of Science (AETS), Nashville, TN.

Tobin, K., Wolff-Micheal, R., Levan, S., Wassell, B., Martin, S., Milne, C., Scantlebury, K., &

Eick, C. (2004, January). *Learning to teach science using coteaching and cogenerative dialogue.* Interactive dialogue presented at the annual meeting of the Association of Educators of Teachers of Science (AETS), Nashville, TN.

Eick, C. (2004, January). *Building the authority of experience: Reflective thinking on co-teaching*

*practice in a methods course.* Paper presented at the annual meeting of the Association of Educators of Teachers of Science (AETS), Nashville, TN.

Eick, C. & Vining, L. (2003, March). *Collaborative outreach in aquatic science education for*

*scientific literacy and economic empowerment.* Paper presented at the annual meeting of the National Association for Research in Science Teaching (NARST), Philadelphia, PA.

Duggan-Haas, D., Moscovici, H., Gilmer, P., Wilson, J., & Eick, C. (2003, March). *Symbiosis on*

*campus: Collaborations of scientists and science educators.* Symposium presented at the annual meeting of the National Association for Research in Science Teaching (NARST), Philadelphia, PA.

Eick, C. & Vining, L. (2003, January). *Aquatic science education for preservice teachers in a*

*water-rich state.* Program presented at the annual meeting of the Association of Educators of Teachers of Science (AETS), St. Louis, MO.

Eick, C. et al. (2003, January). *Science teacher education in the 21st century: Perspectives on the*

*potential of the science-technology-society (STS) approaches.* Panel discussion presented at the annual meeting of the Association of Educators of Teachers of Science (AETS), St. Louis, MO.

Eick, C. (2002, January). “*Why I want to be a science teacher” autobiographical paper:*

*Longitudinal case studies of the personal histories supporting career science teachers*. Paper presented at the annual meeting of the Association of Educators of Teachers of Science (AETS), Charlotte, NC.

Eubanks, J., Belcher, A., Aldridge, R., & Eick, C., (2002, January). *Teaching interactive science*

*lessons in a high school’s remediation program: What can we learn in helping students pass a high stakes examination?* Paper presented at the annual meeting of the Association of Educators of Teachers of Science (AETS), Charlotte, NC.\*

Eick, C. (2001, January). *First-year science teachers as partners: Learning to teach together in a*

*job-sharing arrangement.* Paper presented at the annual meeting of the Association of Educators of Teachers of Science (AETS), Costa Mesa, CA.

Eick, C. (2001, January). *Making co-teaching work: A field experience in a science methods*

*course.* Paper presented at the annual meeting of the Association of Educators of Teachers of Science (AETS), Costa Mesa, CA.

Eick, C. (2000, April). *Putting the standards in practice in student teaching: The interplay of classroom influences with personal histories*. Paper presented at the annual meeting of the National Association for Research in Science Teaching (NARST), New Orleans, La.

Pennell, J., Eick, C. & Akey, T. (2000, April). *Teachers’ perspectives on assessment and grading practices*. Paper presented at the annual meeting of the American Education Research Association (AERA), New Orleans, La.

Eick, C. & Baird, W. (1999, January). *How can we improve our support for the internship experience?* Paper presented at the meeting of the Association of Educators of Teachers of Science (AETS), Austin, TX.

**Peer Refereed Presentations at Regional Conferences**

Eick, C. (2015, October). *Project-based instruction in a high school classroom: A learning cycle*

*unit approach that makes it possible*. Paper presented at the annual meeting of the Southeastern Association of Science Teacher Educators (SASTE), Columbus, GA.

Eick, C. (2016, February). Project-based instruction in a high school classroom. An

interactive presentation at the annual meeting of the Georgia Science Teachers’ Association (GSTA), Stone Mountain, GA.

**Statement of Scholarly Program**

My research is integrally linked with the mission of my department, the training and development of K-12 teachers. My research both flows from science teacher education programming and is used to transform it, particularly for preservice and new teachers. The framework from which I operate in conducting research is a qualitative and contextual one, making naturalistic observations in authentic teaching situations. One goal of this research is to learn how to develop or transform preservice teacher education so that students are prepared to succeed as beginning teachers of science to a diverse student body. This success focuses on supportive contexts and the ability to teach science through the use of scientific practices of inquiry as outlined in the National Science Standards. Toward this effort I took a semester sabbatical in the spring of 2007 in order to implement one of the many new standards-based curricula available in middle grades. In teaching eighth grade full-time, I learned more about the pros and cons of a new inquiry-oriented curriculum in both motivating diverse students and increasing their achievement. After this sabbatical I decided to focus more closely at science in the upper elementary grades where a new state-sponsored program, the Alabama Math Science & Technology Initiative (AMSTI), was beginning in grades K-8. I wanted to learn more about the teaching, implementation, and study of this new curriculum and training model for elementary and middle grades teachers.

Standards-based science teaching is not just accomplished in the classroom, but also in the outdoors and other informal settings (e.g. environmental centers, after-school programming, zoos, aquaria, to name a few). I attempt to bring my interest and expertise in the natural sciences and environmental education to our students through such programs as the *Alabama Water Watch* (and associated aquatic science curricula) and the Project Wild, Project Learning Tree, and Project Wet curriculum series. I work closely with university partners in Extension, Fisheries, and Forestry-Wildlife in order to do this work.

In addressing the contexts of my work, my research focuses on three particular areas:

(1) Preparing preservice teachers to be “ready” to enter their teaching careers as competent beginning teachers of science through community and school-based partnerships.

(2) Identifying and developing preservice teachers’ personal histories, dispositions, and experiences in education that support teaching science and science teacher identities.

(3) Developing an informal science education component in our program that

provides development and resources for teaching science in outdoor settings, particularly environmental science education.

I have conducted extensive studies of a situated learning model that I have developed for coteaching in school classrooms during my students’ pre-internship experience in their secondary and middle grades methods courses. This research shows promise in helping students develop their practical knowledge and abilities to teach as they teach alongside an experienced classroom teacher. Supportive school sites, ongoing study and reflection, and professional dialogue are integral components in learning to teach through inquiry in this process.

I have studied the lives and biographies of my students as they enter the teacher education program and as they progress through it. Students bring past experiences in education and in science that strongly inform their beginning thought and practice as teachers of science. Better understanding the beliefs, dispositions, and experiences that students bring to science teaching may enable teacher educators to better tailor preservice programming for greater impact on student development as beginning teachers of science.

**SERVICE**

**University**

* Provost Committee on Promotion of Women at Auburn University (2014-present)
* Provost Search Committee, College of Education representative (2011)
* Quality Enhancement Plan Exploratory Committee (2010-2011)
* Core Curriculum Oversight and General Education Committee (2009-2011)
* Sustainability Initiative Council (2008-present)
* AAUP Executive Committee (2008-2010)
* Member, Phi Kappa Phi Scholarship Awards Committee (2001-present)
* Board Member, Environmental Institute (2002-2004)
* Budget Advisory Committee (2004-2006)

**College**

* Member, Shared Governance Committee (2010- 2011)
* Professional Development School System – College of Education Liaison with Auburn City Schools: [www.auburnschools.org/pds](http://www.auburnschools.org/pds) (2007-2009)
* Field Experiences Committee (2008-2010)
* Faculty Sponsor, Student Alabama Education Association (SAEA) Auburn University Chapter (2003-2010)
* Member, West Alabama Learning Coalition – Truman Pierce Institute (2000-2006)
* Member, Technology in Education Programming Committee (2003-2004)
* Member, National Education Association sponsored Department of Defense Professional Development School Initiative with Auburn University (2002-2004)
* Professional development school team member with Loachapoka School and Sanford Middle School (Lee County). (2000-2004)

**Department**

* Learning and Innovations Committee (2015-present)
* Math Education Search Committee, Chair (2015-2016)

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* Chair, Untenured Faculty Mentoring Committee (2010-present)
* Member, Distance Learning Committee (2013-present)
* Member, Graduate Studies Committee (2001-present)
* Faculty Senator (2009-2011)
* Chair, Elementary Mathematics Education Assistant Professor Search Committee (2008)
* Program Coordinator, Secondary Science Education (2002-2007)
* Chair, Secondary Science Education Assistant Professor Search Committee (2002)

**Professional service**

National

* Professional Development Committee – Association of Science Teacher Educators (2014-present)
* Elections Committee – Association of Science Teacher Educators (2008-2010)
  + **[This is an internationally elected position].**
* Editorial Review Board, *Journal of Elementary Science Education* (2008-present)
* Faculty Consultant, National Sciences Resource Center – Smithsonian Institution. Strategic planning institutes for school systems (2007-2009)
* Associate Editor, *Electronic Journal of Science Education* (2006-2009)
* Editorial Review Board, *Journal of Science Teacher Education* (2004-2009)
* Reviewer, *Science Education*, Section on Teacher Education (2003-present)
* Reviewer, Electronic Journal of Science Education (2000-2006)
* Member, AETS Membership Committee (2002-2009)

Regional & Local

* AMSTI Preservice Teacher Trainer, Alabama AMSTI (2011-present)
* Regional Director, Association for the Education of Teachers of Science (AETS) (2001-2004)
* President, Southeastern Association for the Education of Teachers of Science (SAETS) (2000-2001)
* Member, Committee on Science and Public Policy – Alabama Academy of Science (2000-present)
* Preservice Director, Alabama Science Teachers’ Association (ASTA) Board (2003-2004)
* Member, Forest Ecology Preserve Programming Committee (2002-present)
* Member, Auburn High School Remedial Student Advisory Committee (2001-2004)
* Member, LASER K-8 Science Curriculum Committee – Auburn City Schools (2001-present)
* Consultant, East Alabama Regional Inservice Center (1998-present)