# **EDUCATION**

Ed.D. Curriculum and Instruction, University of South Carolina, Columbia, SC, 2009
M.A. Interdisciplinary Studies, Area of emphasis: Earth Science. University of South Carolina, Columbia, South Carolina, 1992
B.A. Elementary Education, University of South Carolina, Spartanburg, South Carolina, 1986

#### PROFESSIONAL EXPERIENCE

Maryville College, Maryville, TN Founding Program Director, M.A.T. Secondary STEM (2020-present) Chair, Division of Education (2019-present) Director, Education Preparation (2018-present) Associate Professor (2018-present)

Formulate and implement data analysis for Tennessee/CAEP accreditation, and ensure compliance with all requirements of the College accrediting bodies. Oversee twelve undergraduate and one graduate educator preparation programs leading to initial teacher licensure, and collaborate with faculty to continuously improve the division's academic programs. Manage the division's budget and resources effectively. Serve as the primary spokesperson for the Division of Education in interactions with local, state, and federal officials. Report directly to Vice President of the College.

Key Accomplishments:

- Obtained a successful accreditation review from the Tennessee State Board of Education.
- Introduced a data management process and streamlined the quality assurance system.
- Created a new Master of Arts in Teaching program that is the first graduate program offered by the College.
- Established a new Elementary Education degree program for K-5 teacher licensure.
- Developed a Minor in Education Studies.
- Expanded partnership with The Great Smoky Mountains Institute at Tremont.
- Added a dual-enrollment course in Education.

#### Lander University, Greenwood, SC Department Chair (2014-2017) Associate Professor (2009 – 2018) Coordinator of Elementary Education (2011-2014)

As Department Chair, responsible for overseeing undergraduate and graduate teacher education programs. Additional responsibilities included: collecting and analyzing annual data for accreditation, scheduling courses for fall, spring, and summer; managing the department budget; coordinating an annual department retreat; assigning advisors, and mentoring teacher candidates. In addition, ensured that teaching loads were balanced to allow for scholarly research and service activities. Key Accomplishments:

- Obtained a successful Elementary Education Specialty Area Program Review.
- Maintained annual data collection, analysis, and reporting for CAEP and State review.
- Orchestrated major revisions to the Elementary Education program.
- Instituted foundational STEM coursework in the Elementary and Early Childhood Education programs.
- Partnered with the College of Mathematics and Sciences to write a proposal adding a Secondary Chemistry program. Proposal was approved by the Commission on Higher Education.
- Acquired a Math & Science Partnership grant in collaboration with Greenwood School District 50.
- Expanded the Teacher Cadet partnership and established an annual Lander Campus Day.
- Furthered U.K. exchange programs with Winchester University and University of Brighton.

# RECENT PROFESSIONAL DEVELOPMENT

Deans for Impact Fellow (2021-present)

Appalachian College Association Teaching & Leadership Institute, Leadership Development (2019) Association of Independent Liberal Arts Colleges for Teacher Education, Leadership Workshop (2019) Data Security course (2019)

Council for the Accreditation of Educator Preparation Site Visit Training (2018) Title II Coordinator Reporting Services Training (annually)

# PROFESSIONAL SERVICE

#### Maryville College:

- Director, Graduate Programming, (2019-present)
- Conference Abstract Reviewer, Association of Independent Liberal Arts Colleges for Teacher Education (2019-present)
- TN Department of Education Educator Preparation Working Group, (2018-2020)
- Annual Report Reviewer, CAEP (2018-2020)
- Teacher Education Committee (2018-present)
- Educator Preparation Program Advisory Council, Chair (2018-present)
- Faculty Advisor, Chi Iota Chapter of Kappa Delta Pi (2018-2021)

#### Lander University:

- University Teacher Preparation Executive Council (2010-2018)
- Teacher Preparation Accreditation and Accountability Council (2010-present), Chair (2015-2017)
- Teacher Preparation Accreditation and Accountability Council Sub-Committee (2010-2018), Chair (2017-2018)
- Director, Teacher Cadets program (2014-2018)
- Faculty Advisor for Palmetto State Teachers Association (2013-2018)
- Study Abroad Committee (2013-2018)
- Honors College Committee (2013-2015)
- Formative Assessment Committee (2010-2015)
- Agenda Committee (2012-2013)
- Faculty Senate (2010-2013); Faculty Senate Secretary (2012-2013)

# SELECTED SCHOLARLY PRESENTATIONS

International Presentations:

Gardner, C., and Sacerdote, C. (accepted for 2023). Take the spin challenge. ITEEA, Minneapolis, Minnesota.

Gardner, C. (2019). Success in middle school science: A model for professional development. ASTE, Savannah, Georgia.

#### National and Regional Presentations:

- **Gardner, C.** and Sacerdote, C. (2020). *Take the spin challenge*. STEM Forum & Expo, Louisville, Kentucky. Accepted to present/Conference cancelled due to coronavirus.
- **Gardner, C.** and Sacerdote, C. (2020). *Cinderella, the places you will go. . . if we can get you there*. NSTA, Boston, Massachusetts. Accepted to present/Conference cancelled due to coronavirus.
- Gardner, C., and Sacerdote, C. (2018). *Talk the talk: Building science vocabulary in STEM experiences*. STEM Forum & Expo, Philadelphia, Pennsylvania.

State and Local Presentations:

- Gardner, C., and Ross, D. (2022). Preparing teachers to teach integrated STEM in grades 6-12. Appalachian College Association Summit 2022, Pigeon Forge, Tennessee.
- Cox, M., Evans, B., **Gardner, C.** and Risinger, J. (2017). *Using the station approach in science*. South Carolina Science Council, Columbia, South Carolina.
- **Gardner, C.**, and Risinger, J. (2017). *Success in middle school science*. South Carolina Association for Middle Level Education, Myrtle Beach, South Carolina.

#### EXTERNAL GRANT FUNDING

Duncan, N., **Gardner, C. (PI)**, Ross, D. *Building STEM Teacher Capacity in Southeastern Tennessee* National Science Foundation NOYCE Capacity Building Grant (2020) \$75,000 (funded)

Funding to increase the number of STEM graduates at Maryville College and create a viable pathway for STEM majors to pursue teacher licensure and obtain a Master of Arts in Teaching.

Gardner, C. (PI), Risinger, J., Slimmer, D., and Vartanian, L. *Success in Middle School Science (SIMSS)* Mathematics and Science Partnership Program 2015-2018 Competitive Subgrant. Year 1 (2015-2016): \$87,321.00 Years 2 and 3 (2016-2018): \$99,141.00 (funded)

Success in Middle School Science (SIMSS) forms a collaborative partnership between Lander University and Greenwood School District 50. The purpose of the SIMSS project is to provide sustained professional development in science content knowledge and pedagogy for 24 middle school science teachers (grades 6-8). This project addresses the lack of science content knowledge and provides research based professional development to increase teachers' content and pedagogical knowledge. Participants receive intensive training in research based instructional strategies throughout the duration of the project.

## PEER-REVIEWED PUBLICATIONS

- Gardner, C. (2018). Success in middle school science: A blueprint for effective professional development. *South Carolina AMLE Journal*, Fall 2018, 17-21.
- Gardner, C. (2012). Morning meeting and science: A winning combination. *Science and Children*, 60-64.
- Gardner, C. (2011). The pet waste project. Green Teacher, 95.

## UNPUBLISHED ACADEMIC CONTENT

Maryville College Academic Life Council, New Program Proposal to add a Minor in Educational Studies (2022)

- Tennessee Department of Education, Specialty Area Program Proposal to add a Master of Arts in Teaching STEM degree program (2021)
- Maryville College Academic Life Council, New Program Proposal to add a Bachelor of Arts degree program in Elementary Education Minor in Educational Studies (2019)

Tennessee Department of Education and Tennessee State Board of Education, Tennessee Comprehensive Review Accreditation Report (2019).

South Carolina Commission on Higher Education, New Program Proposal to add Secondary Chemistry (2017).

#### **COURSE DEVELOPMENT**

- Instructional Methods for Teaching Science (Undergraduate)
- Methods for Teaching Earth & Life Science (Undergraduate)
- Foundations of STEM Education (Graduate)
- Models for Teaching Secondary Curriculum & Methods (Graduate)

#### **COMMUNITY SERVICE**

- Board Member Keep Blount County Beautiful, Maryville, TN (2019-2022)
- Tennessee Achieves Mentor (2019-2020)
- STEM Fair Judge for Clayton Bradley Academy, Alcoa, TN (2019)
- Keep Blount County Beautiful Litter Pick-up (2018-present)
- Board member Keep Newberry County Beautiful, Newberry, South Carolina (2013-2018)

#### HONORS AND AWARDS

- Accepted to serve on the Tennessee Department of Education Educator Preparation Working Group (2018-2020)
- Young Faculty Teaching award, Lander University (2011)
- South Carolina Project Learning Tree Outstanding Educator award (2010)

#### PROFESSIONAL MEMBERSHIPS

- Tennessee Environmental Education Association (2018-present)
- Tennessee Science Teachers Association (2018-present)
- Association of Independent Liberal Arts Colleges for Teacher Education (2018-present)

- Association for Science Teacher Education (2016-present)
- National Science Teachers Association (1988-present)

## SC TEACHING CERTIFICATIONS

- 12 -Science
- 1C Middle School Science,
- 01 Elementary Education
- Gifted and Talented Endorsement
- Certified Child Care Trainer

# **TEACHING EXPERIENCE IN K-12**

# Lake Murray Elementary, 5<sup>th</sup> grade (2005-2009)

Designed and implemented inquiry-based instruction in math and science.

# Saxe Gotha Elementary, Science Coach (2004-2005)

Implemented the Cognitive Coaching model to engage teachers in ongoing professional development and to improve expertise in science instruction.

# White Knoll High School, 9th-12th grades Science Teacher (2000-2003)

Classes taught include Physical Science, Nature Study, Astronomy, Meteorology, and Geology (cotaught with USC faculty for optional college credit).

# Gilbert Elementary School, 4th grade (1991-2000)

Designed and implemented instructional units in all subject areas.

# Jonesville High School, 7th-12th grades (1987 - 1990)

Courses taught: Earth Science (8th Grade), Life Science (7th Grade), Biology II(11th-12th Grades) and Gifted and Talented Life Science (7th Grade)

# SELECTED COURSES FROM CURRENT TEACHING SCHEDULE

EDU 500 Foundations of STEM Education: Candidates are introduced to integrated STEM education, project based learning, and equity and culturally relevant pedagogy in mathematics and science.

FYS 110 First Year Seminar: Introduces students to the expectations and practices of a liberal arts college.

EDU 305 Strategies for Classroom Management: Candidates gain a solid foundation in managing all aspects of the learning environment.

EDU 211 Methods for Teaching Earth & Life Science: Candidates apply concepts learned in BIO 111 to instruct children in both formal and informal educational settings. Taken in conjunction with BIO 111.

EDU 324 Instructional Methods Teaching Science: Candidates gain insight into the methods of teaching science in grades K-5, including selection, organization, presentation and assessment recommended by national science standards.