

DONNA L. GOVERNOR
University of North Georgia
Assistant Professor of Science Education
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EDUCATION

<i>University of Georgia, Athens, GA</i> Doctorate of Philosophy, Science Education	May, 2011
<i>University of West Florida, Pensacola, FL</i> Education Specialist, Curriculum & Instruction/ Instructional Technology	May 1999
<i>University of West Florida, Pensacola, FL</i> Early Childhood Education	May 1988
<i>University of West Florida, Pensacola, FL</i> Elementary Education	December 1982

RELEVANT WORK EXPERIENCE

<i>University of North Georgia, Dahlonega, GA</i> Assistant Professor of Science Education Courses Taught: ISCI 2001 Integrated Earth/Life Science ISCI 4002 Integrated Earth Science SIED4184 Elementary Science Methods SIED4500 Secondary Science Methods EDGE6001 Characteristics of the Gifted Child Research Interests: Informal Science Education, Instructional Strategies, Integrated Curriculum, STEM Teaching and Learning	August 2016 - Present
<i>Forsyth County Schools, Cumming, GA</i> Classroom Teacher Teaching Assignments: Primary Gifted, K-3, Mashburn Elementary, 2002-2003 Advanced/Gifted Science, Grades 6, 7 & 8, Liberty Middle School, 2003-2013 High School Earth Science, North Forsyth High School, 2013-2016 AP Environmental Science, North Forsyth High School, 2014-2016 Extracurricular Activities: Science Fair Coordinator, 2005-2013, Liberty Middle School Robotics Coach, 2006 -2010 (est.), Liberty Middle School Family Science Night Coordinator, 2007-2016, Liberty Middle & North Forsyth High	August 2001 – August 2016
<i>Escambia County Schools, Pensacola, FL</i> Classroom Teacher Teaching Assignments: Fourth Grade, Jim Allen Elementary, 1984-1985 Kindergarten – Fifth Grade, Multi-age 4/5, Hallmark Elementary, 1985-1998 Integrated Curriculum/Multi-age 6-7-8, Brown Barge Middle School, 1998-2002	August 1984 – August 2002

RELATED WORK EXPERIENCE

<i>Independent External Project Evaluation</i> Program Evaluator	June 2010- Present
Program Evaluator:	
Faculty Institutes for Earth & Space Science Education	2012-2014
Robotics for 21 st Century Students, Univ. of Wyoming	2010-2012
Launch Pad, Univ. of Wyoming	2016
<i>JASON Project</i>	2017
Curriculum Developer, World of Waves	
<i>University of Wisconsin</i>	2016
Adjunct Online Instructor	
Action Research	
<i>Cengage Learning</i>	2015
Textbook Reviewer	
<i>Environmental Science, Sustaining Your World</i> (pub. 2016)	
<i>University of Wyoming</i>	2012 – 2013
Adjunct Online Instructor	
Hubble Universe; Archaeoastronomy	
<i>Montana State University</i>	1998 – 2010
Online co-Instructor	
Geology of the Moon, 2010	
Astrobiology for Teachers, 2009 - 2010	
Astronomy for Teachers, 2004 - 2009	
Astronomy for Elementary Teachers, 2002 - 2003	
Comparative Planetology, 1998 - 2002	
<i>DataStreme Project</i>	1999 – 2000
Implementation Leader	
<i>University of West Florida</i>	1999 - 2000
Adjunct Instructor Science Methods	
<i>NASA CERES Project</i>	1997 - 2000
Online Curriculum Developer	
<i>YOKOH Public Outreach Project</i>	1997
Online Curriculum Developer	
<i>Network Montana Project</i>	1995 – 1998
Online Curriculum Developer	

SPEAKING:

<i>Catching the Wave</i> Keynote Speaker	June, 2017
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Jason Learning annual conference, Washington, D.C.

Launch Pad: Improving Science Literacy through Words and Media

February, 2017

Invited Speaker

American Association of Physics Teachers (AAPT), Atlanta, GA

Lifeline of Stars

November, 2016

Invited Speaker

Shanghai STEM+ Summit, Shanghai, China

PUBLICATIONS:

Refereed Publications:

Governor, D. (est. 2019). *Butterfly Wings and Related Things: Integrating the Curriculum with Monarch Butterflies*; *Science & Children*. NSTA Press, Arlington, VA

Governor, D., Webb, D. (2019). *Staging Family Science Nights*. NSTA Press

Governor, D., Bowen, M. & Brunsell, E. (2016). *Big Data, Small Devices*. NSTA Press

Governor, D., Hall, J. & Jackson, D. (2012) Teaching and learning science through song: Exploring the experiences of students and teachers, *International Journal of Science Education*. (V35, n 18). p 3117-3140

Governor, D. (2010) Mapping worlds. *Classroom Astronomer* (V1, n3)

Governor, D., Cetin-Dindar, A., Doney, P., Harper, J., Jenkins, L., Ortiz-Blanco, C., & Tippins, D. (2009) Solar paths: An international and integrated look at the sun and seasons, *Science Scope* (V32, n8)

Governor, D. (2007) Invite an alien to astronomy night, *Science Scope* (V31, n 3)

Governor, D. & Helms, S. (2007) Books, biodiversity & beyond, *Science Scope* (V30, n5)

Slater, T., Beaudrie, B., Cadiz, **Governor, D.,** Roettger, E., Stevenson, S., & Tuthill G. (2001) A Systematic approach to improving K-12 astronomy education using NASA's internet resources, *Journal of Computers in Mathematics and Science Teaching* (V20, n2)

Prather, E., **Governor, D.,** Simmerman, Al. (2000). *Planetary Zone of Habitability – The Goldilocks Problem*, Great Ideas for Teaching Astronomy, 3rd edition, Brooks/Cole Publishing

Dissertation:

Governor, D. (2011). *Teaching and learning science through song: exploring the experiences of students and teachers* (Doctoral Dissertation). University of Georgia, Athens, GA.

Curriculum Materials:

Governor, D., Texley, J. (2017), JASON Project *World of Waves* Curriculum

In Review:

Childers, G., **Governor, D.,** Britton, S., & Osmond, D. (n.d.). *Science Cafes: Exploring adults' motivation to learn science in a community space*. Submitted IJSE 1/28/2019

In Production:

Governor, D., Choi, S., Nelms, A., Osmond, D., Vazquez-Dominguez, M. (2019). *Reshaping Preservice Teachers' Pedagogical Content Knowledge with Primary Source Documents*. Chapter for Open Educational Resources (OER) Pedagogy and Practices, Zhou, M., Editor, IGI Global

Governor, D., Childers, G., Osmond, D. (n.d.). *Bringing adult learners to the table: Starting a Science Café in your community*. Manuscript in preparation.

Greer, K., **Governor, D.**, Childers, G., James, V. (n.d.) *Oh the Places We Learn! Science at Science Fiction Conventions*. Manuscript in preparation.

CONFERENCE PRESENTATIONS & PAPERS

Research Conferences (Peer Reviewed)

Childers, G., Jarrard, M., Sacchitello, T., **Governor, D.**, & Simanton-Coogan, L. (April, 2019). *Science Festivals: Promoting Science Learning, Science Literacy, and Fun*. National Association for Research in Science Teaching Conference, Baltimore, MD.

Childers, G., Jarrard, M., Sacchitello, T., **Governor, D.**, & Simanton-Coogan, L. (January, 2019). *Science Gets Personal: Engaging the Public through Science Festivals*. The Association for Science Teacher Education International Conference, Savannah, GA.

Greer, K., **Governor, D.**, Childers, G., & James, Vaughan. (January 2019). *Bridging science fiction and science fact: Science Fiction Conventions as Informal Learning Environments*. The Association for Science Teacher Education International Conference, Savannah, GA.

Childers, G., **Governor, D.**, & Britton, S. (April, 2018). *Science and the community: Exploring individuals' motivations in attending science cafés*. American Educational Research Association, New York, NY.

Childers, G., Heimberger, T., **Governor, D.**, Linsky, L., & Kent, R. (April, 2018). *What does Appalachia mean to me? Investigating elementary and middle grades students' perceptions of Appalachian culture during Camp Appalachia*. Appalachian Studies Association Conference, Cincinnati, OH.

Childers, G., **Governor, D.**, & Britton, S. (March, 2018). *Promoting science through public engagement: Exploring citizens' science interest and motivation in attending science cafes*. National Association for Research in Science Teaching Conference, Atlanta, GA.

Childers, G., **Governor, D.**, & Britton, S. (January, 2018). *Bridging the gap between science and society: Exploring citizens' motivations and influences in attending science cafés*. The Association for Science Teacher Education International Conference, Baltimore, MD.

Childers, G., **Governor, D.**, & Britton, S. (October, 2017). *Science and the public: Engaging communities through science café experiences*. The Southeast Association for Science Teacher Education International Conference, Pensacola, FL.

Governor, D. (Feb. 2017). *Improving Astronomy Literacy through Science Fiction Writing and Media*. APPT, Atlanta, GA. (Invited)

Educational Conferences:

Governor, D., Bowen, M. & Brunsell, E. (2019). *NSTA Press Session: Big Data, Small Devices*. National Science Teachers Association (NSTA) National Conference, St. Louis, MO.

Holzer, M., **Governor, D.,** (2019). *NESTA and MEL2: Going Beyond the Controversy by Promoting Critique, Evaluation, and Argument in Earth Science*. National Science Teachers Association (NSTA) National Conference, St. Louis, MO

Governor, D., Webb, D., (2019). *NSTA Press Session: Staging Family Science Nights*. National Science Teachers Association (NSTA) National Conference, St. Louis, MO.

Governor, D., Carter, A., York, K., (2019). *Staging Family Science Nights*. Georgia Science Teachers Association (GSTA) National Conference, Columbus, GA

Governor, D., Carter, A., York, K., (2019). *3D Learning through 5E Investigations*. Georgia Science Teachers Association (GSTA) National Conference, Columbus, GA

Governor, D., Strickland, K. (2019). *Model-Evidence-Link Diagrams: Promoting Critique, Evaluation and Argument in Earth & Environmental Science*. Georgia Science Teachers Association (GSTA) National Conference, Columbus, GA.

Governor, D., Carter, A., York, K., (2019). *Staging Family Science Nights*. E.L.I.P.S.E 5.0 Conference, Gainesville, GA.

Governor, D., Carter, A., York, K., (2019). *3D Learning through 5E Investigations*. E.L.I.P.S.E 5.0 Conference, Gainesville, GA.

Governor, D., Strickland, K. (2018). *Going Beyond the Controversy: Promoting Critique, Evaluation and Argument in Earth Science*. National Science Teachers Association (NSTA) Regional Conference, Charlotte, NC.

Vazquez-Dominguez, M., Choi, S., Grant, C., Childers, G., **Governor, D.,** & Hitz, M. (2018). *Breakthrough breadboards: Building STEM knowledge, practices, and skills through computer electronic engineering*. National Science Teachers Association (NSTA) National Conference, Atlanta, GA.

Governor, D., Bowen, M. & Brunsell, E. (2018). *NSTA Press Session: Big Data, Small Devices*. National Science Teachers Association (NSTA) National Conference, Atlanta, GA.

Governor, D., Osmond, D., (2018). *Flipping the Science Content Classroom for Preservice Elementary Teachers with the NSTA Learning Center*. National Science Teachers Association (NSTA) National Conference, Atlanta, GA.

Governor, D., Patterson, H., Martin, J. (2018). *Catch Them Early! Establishing NSTA Student Chapters for Preservice Teachers*. National Science Teachers Association (NSTA) National Conference, Atlanta, GA.

Governor, D., (2018). *Big Data, Small Devices: Using BYOT Technology for Real-Time Investigations in Earth and Environmental Science*. E.L.I.P.S.E 4.0 Conference, Gainesville, GA.

Governor, D., Webb, D., (2018). *Lights, Camera, Action! Family Science Nights*. E.L.I.P.S.E 4.0 Conference, Gainesville, GA.

Governor, D. (2017). *Using BYOT Technology for Real-Time Investigations in Earth and Environmental Science*. Pacific Basin Teaching Conference, Kona, HI

- Governor, D.** (2017). Panelist. VOICES Virtual Conference., Online at: <https://www.causeweb.org/voices/>
- Governor, D.** (2017). *Earworms and Melodies: Teaching Science Through Songs*. National Science Teachers Association (NSTA) National Conference, Los Angeles, CA.
- Governor, D.,** Bowen, M. & Brunsell, E. (2017). *Using BYOT Technology for Real-Time Investigations in Earth and Environmental Science*. National Science Teachers Association (NSTA) National Conference, Los Angeles, CA.
- Governor, D.** (2017). *Big Data, Small Devices: Using BYOT Technology for Real-Time Investigations in Earth and Environmental Science*. Georgia Science Teachers Association (GSTA) Conference, Stone Mountain, GA.
- Governor, D.** (2017). *NSTA learning center: The ultimate science teacher resource*. Georgia Science Teachers Association (GSTA) Conference, Stone Mountain, GA.
- Governor, D.,** (2017). *Using Real Time data on Personal Devices to Teach Earth and Environmental Science*. E.L.I.P.S.E 3.0 Conference, Gainesville, GA.
- Governor, D.,** Webb, D. (2016). *Science Ambassadors: Partnering Elementary and High Schools for STEM Night Events*, National Science Teachers Association (NSTA) National Conference, Nashville, TN.
- Governor, D.,** (2016). *Earworms & Melodies: Teaching Science through Song*. National Science Teachers Association (NSTA) National Conference, Nashville, TN.
- Governor, D.** (2016). *Lifeline of Stars*, Invited speaker, Shanghai STEM+ Summit, Shanghai, China
- Governor, D.** (2016). *Big Data, Small Devices: Using BYOT Technology for Real-Time Investigations in Earth and Environmental Science*. Georgia STEM Forum, Athens, GA.
- Governor, D.** (2016). *NSTA learning center: Unlimited resources for K-12 teachers*. Georgia STEM Forum, Athens, GA.
- Governor, D.** (2015). *There's an App for That!* Georgia Science Teachers Association (GSTA), Macon, GA.
- Governor, D.** (2014). *There's an App for That!* Georgia STEM Forum, Athens, GA.
- Governor, D.** (2014). *Utilizing the NSTA Learning Center for Professional Development*. Georgia STEM Forum, Athens, GA.
- Governor, D.** (2013). *Teaching Engineering Design in Science Classrooms*. Florida Association of Science Teachers (FAST), Miami, FL.
- Governor, D.** (2012). *Teaching Science through Songs*. Georgia Science Teachers Association (GSTA), Atlanta, GA.
- Governor, D.** (2012). *Teaching Engineering Design in Science Classrooms*. Georgia Science Teachers Association (GSTA), Atlanta, GA.
- Governor, D.** (2011). *Family Science Nights*. Georgia Science Teachers Association (GSTA), Atlanta, GA.
- Governor, D.** (2009). *Science Fair and Georgia Performance Standards; Flip Sides of the Same Coin*. Georgia Science Teachers Association (GSTA), Savannah, GA.

- Governor, D.** (2009). *Family Science Night Events: Ideas and activities for themed events*. Georgia Science Teachers Association (GSTA), Savannah, GA.
- Governor, D.** (2008). *Invite an Alien to Astronomy Night*. Georgia Science Teachers Association (GSTA), Athens, GA.
- Governor, D.** (2008). *Comparative Planetology: A systems approach to understanding our Solar System*. Georgia Science Teachers Association (GSTA), Athens, GA.
- Governor, D.** (2008). *Science Fair and Georgia Performance Standards; Flip Sides of the Same Coin*. Georgia Science Teachers Association (GSTA), Athens, GA.
- Governor, D.** (2008). *Comparative Planetology: A systems approach to understanding our Solar System*. National Science Teachers Association (NSTA) National Conference, Boston, MA.
- Bartolone, L., **Governor, D.** (2008). *The Ancient Heavens: Exploring the History of Astronomy*. National Science Teachers Association (NSTA) National Conference, Boston, MA.
- Governor, D.** (2007). *Comparative Planetology: A Systems Approach to understanding our Solar System*. National Science Teachers Association (NSTA), St. Louis, MO.
- Governor, D.** (2007). *Reaching out to Multiple Intelligences: Using Music in the Science Classroom*. Georgia Science Teachers Association (GSTA), Athens, GA.
- Governor, D.** (2007). *Archaeoastronomy & Myth: Following the Sun through the Seasons*. Georgia Science Teachers Association (GSTA), Athens, GA.
- Governor, D.** (2007). *Comparative Planetology: A Systems Approach to understanding our Solar System*. Georgia Science Teachers Association (GSTA), Athens, GA.
- Governor, D.** (2006). *Reaching out to Multiple Intelligences: Using Music in the Science Classroom*. Georgia Science Teachers Association (GSTA), Columbus, GA.

Presentations made prior to 2005 not listed and include:

- National Science Teachers Association (1998-2004)
- National Middle School Teachers Association (1999-2000)
- National Teacher Training Institute (1997-2000)
- Florida Council of Elementary Teachers (1998)
- Florida Educational Technology Conference (1998)

WORKSHOPS

- Governor, D., Lombardi, D., Bailey, J., Matayos, A., Klavon, T., Strickland, K.** (2018). *Engaging Students in the Scientific Practices: Evaluation in Secondary Earth and Environmental Science Classes*. Forsyth County Schools, Cumming, GA.
- Governor, D., Patterson, H., Osmond, D.** (2017). *Georgia's New Standards for Excellence in Science*. Lumpkin County Schools, Dahlonega, GA.
- Governor, D.,** (2017). *Georgia's New Standards for Excellence in Science*. Banks County Schools, South Homer, GA.
- Texley, J., **Governor, D., Patterson, H.** (2017). *World of Waves*. JASON Annual Conference, Washington, D.C.

Morris, L., **Governor, D.** (2010). *Robotics for the 21st Century*. Sheridan, WY.

GRANTS AWARDED

Engaging the Public in Science: A UNG-Community Partnership—University of North Georgia Presidential Award (\$5,000) 2017-18: Principal Investigator (co-chair of the Dahlonega Science Festival; led organization, planning and production of the Science Festival).

Engaging Students in the Scientific Practices: Evaluating Evidence and Explanation in Secondary Earth Science – National Science Foundation (\$2.3 million) 2017 - 2021: Principal Investigator (workshop development, project materials development, coordinating Georgia workshop, research team)

Authoritative Science Publications for Education Majors (ASPEM) - Affordable Learning Georgia Textbook Transformation Grant (\$10,800) 2017-18: Principal Investigator (materials development, team leader)

Building STEM Knowledge and skills through the Computer Electronic Engineering (CE2) Project and Multidisciplinary Collaborative Efforts—University of North Georgia Presidential Summer Incentive Award (\$10,000) 2016-17: Principal Investigator (led curriculum development and coordinated with project teachers)

PENDING GRANT PROPOSALS

Governor, D., Greer, K., Childers, G., Bradshaw, L. (2018). *Putting the Science in Fiction: Science Fiction Conventions as Avenues for Broadening Participation in STEM*. Submitted to NSF AISL program

He, Y., **Governor, D.**, (2018). *UNG Startalk: Chinese language immersion program with a STEM focus on Astronomy*. Submitted to National Security Agency / National Foreign Language Center

UNFUNDED GRANT PROPOSALS

Governor, D., Greer, K., Childers, G., James, V. (2017) *Science Fiction Conventions as Avenues to STEM Learning*. Submitted to NSF AISL program, Unfunded.

Childers, G., Jones, M., **Governor, D.**, (2016) *STEM instructional coaching partnership*, submitted to NSF DRK-12 program, unfunded

AWARDS

Etowah River Keepers Teacher of the Year	2016
Georgia Outstanding Earth Science Teacher	2014
Shell Science Teaching Award – Semi-finalist	2011
Channel 11 (Atlanta) Class Act Teacher Award	2009
Liberty Middle School Teacher of the Year, Semi-finalist, Forsyth County (GA)	2008

Presidential Award for Excellence in Science Teaching (Georgia)	2007
District 2 Georgia Middle School Science Teacher (GSTA)	2004
Hallmark Elementary Teacher of the Year; Semi-finalist, Escambia County (FL)	1998

SERVICE

Professional Level

<i>Conference Proposal Reviewer</i> AERA	2018
<i>Association of Presidential Awardees in Science Education (APAST)</i> Secretary	April 2016 - Present
<i>National Science Teachers Association</i> Conference Program Strand Leader	2012; 2016
<i>National Science Teachers Association (NSTA)</i> District V Director, Council Member, Conference Committee Member Liaison between national and state organizations in District Conference committee representative, Liaison to NCSE	June 2013 – June 2016
<i>Georgia Science Teachers Association (GSTA)</i> District II Director, 2010 - 2012 Vice President, 2012 - 2013 President Elect, 2013 - 2014 President, 2014 - 2015 Executive Director, 2015 - 2016 Conference Chair, 2016 Webmaster, 2010 - 2015	April 2010 – April 2016

University Level

UNG - NSTA Student Chapter - Faculty Sponsor	2016 – Present
UNG – Community Engagement Committee	2018 – Present
<ul style="list-style-type: none"> This committee is responsible for the preparing the Carnegie Community Engagement Application 	
COE Committee Member:	
<ul style="list-style-type: none"> Advising, Admissions and Recruitment Committee Assessment Committee Diversity and Recruitment Committee 	2018 – Present 2018 – Present 2018 – Present
UNG - Search Committee	
<ul style="list-style-type: none"> Assistant/Associate Professor, Early Childhood and Special Education – Autism (Fall 2017) in Teacher Education (53001084) 	
UNG – President Award Grant Reviewer	2018
Other UNG Service Involvement:	
<ul style="list-style-type: none"> Regional Engagement Forum 	03.24.17

- Science Olympiad 04.15.17
- Academic Advising 06.19.18
- PAGE Day 10.16.18
- Open House: 11.15.16, 03.25.17, 11.11.17, 11.3.18

Community Level

<i>Dahlonega Science Council</i> Co-Chair: Leadership of the organization responsible for planning, coordinating and hosting the annual Dahlonega Science Festival, est. 2018	August 2017 – Present
<i>Dahlonega Science Café</i> Organizer: Plan, coordinate and facilitate monthly community events	May 2016 - Present
UNG Solar Eclipse Program Collaborate with Dr. Lesley Simanton-Coogan for community event	August 2017
<i>Banks County Schools</i> Workshop: Georgia’s New Standards for Excellence in Science	August 2017
<i>Lumpkin County Schools</i> Workshop: Georgia’s New Standards for Excellence in Science	June 2017

LEADERSHIP APPOINTMENTS

<i>Standards Revision Team - Earth Systems</i> Georgia Department of Education	2015
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CERTIFICATIONS

Georgia Teacher Certification K-5 Primary/Elementary Middle School Science Middle School Language Arts Middle School Social Studies Middle School Math Broad Field Science 6-12 Earth Systems Science 6-12 Gifted In-Field Endorsement Teacher Support Specialist ESOL Endorsement	2002 - 2022
AP Environmental Science	2014

MEMBERSHIPS:

- AERA Member 2018 - Present
- NARST Member 2011 – Present
- ASTE Member 2016 – Present
- Georgia Science Teachers Association 2006 – Present
- NSTA Member 1996 – Present