

# **GSTA District II Science Teachers Conference**

*Experiential Learning and Inquiry for Physical Science Educators*

## ***E.L.I.P.S.E. 5.0***

**Registration:**

**GSTA Member \$5, non-member \$10.**

**Lunch will be provided with takeaways,  
conference t-shirt,  
& door prizes.**

**Grand Prizes: 4 \$50 gift certificates for  
Education Innovations and NSTA  
bookstore!**

**University of North Georgia  
Gainesville Campus – Science Building**

**3820 Mundy Mill Rd. Gainesville  
30503**

**Saturday, January 26, 2019  
from 8:30a.m. - 4:00p.m.  
Weather related make-up date  
Saturday, February 23, 2019**

## Miscellaneous Information

- UNG Public Safety contact information: (706) 864-1500 or [publicsafety@ung.edu](mailto:publicsafety@ung.edu)
- Register to receive one Professional Learning Unit (PLU): <https://goo.gl/forms/i3uidS3ltgxrBnq2>
- Post-Conference Survey: <http://bit.ly/2sALh6a>

## Agenda

### Registration, 8:00 am to 8:55 am

#### Registration and Breakfast

Science Building Atrium

8:00 am to 8:55 am

### Plenary Session, 9:00am to 9:55 am

#### Welcome and Opening Remarks

Student Center Stage

Dr. JB Sharma

UNG ELIPSE Conference Committee

#### Opening Plenary Session

Student Center Stage

*A Brief History of the Manhattan Project and Early Nuclear Weapons*

**Dr. John Leyba**, Associate Dean of the College of Science and Mathematics

Please make your way to the Science Building for concurrent sessions starting at  
10:00 am

## Session A1, 10:00 am to 11:50 am

### **Max Vazquez Dominguez, Cristina Washell, and Annmarie Jackson**

Presider: April Nelms

Science Building 216

#### *Engineering vs Alexander T. Wolf*

In this presentation, we use children's literature to show science integration through 3-dimensional learning. Using everyday materials, participants will apply their experiences and/or creativity to build wind resistant structures. Also, we will explain each of the components of 3-dimensional learning to promote the use of the language of science and scientific/engineering practices for this activity. K-5 grades.

### **Jane Woodall**

Presider: Amanda Carter

Science Building 228

#### *Fuel Lab*

Energy comes in many forms. Fuels are a form of chemical energy which are converted to thermal and electromagnetic (radiant) energy. Fossil fuels such as coal and petroleum are a major source of energy in our country. Coal burns slowly and produces a minimal amount of light. Petroleum burns bright producing large flames and burns much faster than coal. An alternative to petroleum is ethanol. Similar to petroleum, ethanol burns bright, but it burns much quicker than petroleum. One topic that will be addressed is how that impacts your car's use of fuel. Participants will receive information and activities they can use to help their students understand why our culture is dependent on fossil fuels.

### **Panel: Grant Champagne, Cherie Hathcock, and Deborah Huffman**

Presider: JB Sharma

Science Building 103

#### *Student Competitions and Coaching Student Teams*

In this panel session, participants will learn about various competition opportunities for students. In addition, the panel membership consists of experienced coaches and competition representatives so that you will have an opportunity to learn from their experiences, learn what is required to have a student team, and discuss your questions.

## Session B1, 10:00 am to 10:50 am

### **David Osmond**

Presider: John Alberts

Science Building 201

#### *Introducing Dark Matter in your Science Lessons.*

We are going to explore Perimeter Institute for Theoretical Physics activity on dark matter. Students will explore the concept of dark matter through a series of simple activities. Students will make predictions, observations, and formulate explanations through short activities that model the existence of dark matter.

### **Donna Governor and Denise Webb**

Presider: KC Chan

Science Building 262

#### *Plan and Present Successful Family Science Nights*

Our experiences, both separate and shared, have found holding “Family Science Nights” to be one of the best ways to get students excited and parents engaged with science together in an informal learning environment. In these events, students and their parents participate in activities to build science literacy, broaden perspectives about careers in the science field, and greater involvement in science studies. For elementary students, these events engage learners with science at an early age. Young students ask better questions, discover new interests and are better prepared for learning science in the classroom. For middle and high school students, running Family Science Night events develop leadership skills and enhance students’ self-efficacy as learners of science. Students who never see science as something they can do are able to participate in the culture of science. Regardless of the age, these events seemed to bring out the science enthusiast in every one who participates. In this session we propose to share our 10+ years of success in running student-led events to help other teachers and informal science educators plan and present engaging Family Science Nights.

### **Lesley Simanton-Coogan**

Presider: Frank Lock

Science Building 232

#### *UNG Coleman Planetarium: Exploring Field Trip Resources*

The UNG Coleman Planetarium offers low cost field trips for students to learn about the universe from a unique perspective. The planetarium dome allows us to create a realistic simulation of the day and night sky from North Georgia, and our full-dome digital projection system allows us to fly into space to visit the Sun, Moon, and planets close up. Come learn about the standards covered in our planetarium field trip shows for K-12 students and the exciting resources offered by your local planetarium for unforgettable space exploration.

## Session B2. 11:00 am to 11:50 am

### **Karen Henman**

Presider: Kelli York  
Science Building 132

#### *Energy Usage and Carbon Release*

Would you like to have a quick way for upper elementary and middle grades students to visualize their energy usage and the release of Carbon Dioxide into the atmosphere? Numerous activities will be introduced in which participants will be able to take back to their classrooms. Additional activities will be made available immediately through Population Education to those in attendance.

### **Mark Spraker, Sanghee Choi, and April Nelms**

Presider: Lesley Simanton-Coogan  
Science Building 264

#### *Using Virtual Reality in Science Classrooms*

This session will discuss the potential uses of virtual reality technology in K-12 classrooms. Specific equipment will be available for use and demonstration during the session. Participants can step into an astronaut's shoes, dive coral reefs, visit archeological digs, and tour the world all from their classrooms.

### **Frank Lock**

Presider: Carl Ohrenberg  
Science Building 104

#### *Flip Your Classes for Better Learning Outcomes*

This presentation will include an introduction to Flipped Classroom strategies, information about the assets of using Flipped Classroom strategies, the challenges involved, and the "Laws" of well-flipped classrooms. Participants will work through a lesson involving Flipped Classroom strategies with a goal of enabling them to begin using the strategies or improve the flipped classroom strategies they are already using.

**Lunch, 12:00 pm to 12:50 pm, Science Building Atrium - Rooms 103 & 104**

## Session A2, 1:00 pm to 2:50 pm

### **Donna Governor, Kelli York, and Amanda Carter**

Presider: Karen Henman  
Science Building 264

*Explore hands-on investigations utilizing the 5E instructional model for 3-D learning.*

During the presentation we plan on demonstrating how the 5E Model of Instruction facilitates 3-dimensional learning in K-5 education. For the first part of the presentation we will present a 5E example lesson and have the participants break down the lesson into each of the 5E segments. Next, we will present the pedagogy of the 5E model within a 3-dimensional frame. To engage the participants, we will discuss how important it is to use phenomenon, and for the exploration we will focus on the idea of giving students an activity before teaching content. During the explore stage we will discuss this is where cross-cutting concepts can come into play and after that you can engage the students in science/engineering practices in the elaborate/extend stages. For the evaluation portion of the 5E model, we will discuss how journaling can be used. Given the time, additional lessons that are written in a 5E implementation model will be shared.

### **Frank Lock and John Alberts**

Presider: Jane Woodall  
Science Building 228

*Climate Science: What Your Students Should Know*

This presentation will introduce participants to ideas important to understanding climate science. The presentation will encourage those attending to actively participate. Topics presented will include how and why science works, some Laws of Nature, important aspects of climate science, the value of making accurate predictions using science, and using climate science predictions as a guide for the future.

### **K.C. Chan**

Presider: Max Vazquez Dominguez  
Science Building 216

*Shoot me! Using Rubber Band Constructs to Impart Concepts of Work, Energy, Energy Conversions, or Chemical Energy*

The humble and ubiquitous rubber band turns out to be a fascinating tool for teaching/learning abstract concepts such as work, energy, work/energy conversions, and even chemical energy in addition to motions and forces. Starting with a single rubber band, followed by simple constructs, participants of this workshop will immerse in hands on participatory/inquiry learning strategies that help crystalize work-energy related concepts.

## Session B3, 1:00 pm to 1:50 pm

### **Denise Webb**

Presider: Sanghee Choi  
Science Building 104

#### *Engaging Today's Elementary Students K-5*

This workshop will provide hands on experiences that you can take back and use right away with your students! We will explore lessons that will excite and keep young minds K-5 engaged during your science lessons. Strategies for quick formal assessment will be shared. We will also tie in the integration of 3-Dimensional Learning to the lessons.

### **Mark Spraker and JB Sharma**

Presider: David Osmond  
Science Building 201

#### *Observing the Laws of Reflection and Refraction by Ray Tracing*

The operational principles of geometric optics are based on the phenomena of reflection and refraction. In the geometric optics limit, the wavelike nature of light can be ignored and light can be treated as a ray. This workshop will involve activities with reflective and refractive surfaces in which the path of the light ray can be 'traced' using thumb-tacks. Participants will be able to observe the laws of reflection and the laws of refraction and the phenomena of total internal reflection. Hands-on activities will be followed by a discussion of the applications of the laws of reflection and refraction including image formation and fiber optics.

### **Carl Ohrenberg**

Presider: April Nelms  
Science Building 104

#### *Modeling the Scientific Method for Better Student Understanding in K12 Physical Science Courses*

Too often science is taught as a set of known principles. Science is an activity, so what if we let the students actively discover these principles themselves by using the scientific method? Participants in this presentation will experience a series of activities centered on learning about the scientific method. One will be a hands-on activity focused on developing, testing, and revising hypotheses. The others will provide a model for taking scientific demonstrations and using them to discover scientific principles by making direct observations and developing hypotheses/explanations to account for these observations.

## Session B4, 2:00 pm to 2:50 pm

### **Karen Garland**

Presider: Lesley Simanton-Coogan  
Science Building 132

#### *Mission to Mars: Can You Hear Me? Can You See Me?*

Join us for an engaging hands-on mission about the properties of light and sound. You will become astronauts who have traveled for months to arrive at Mars - but due to an unanticipated storm, did not land according to plan. You will be challenged to engineer devices to signal Mars Base Camp to apply your knowledge of light and sound. The Mars Base Camp contains food, oxygen, and a rover, which will locate and retrieve your team of astronauts, if signaled. Good luck on this mission!

### **Tracey Wiley**

Presider: Yulissa Ramirez  
Science Building 262

#### *Exploring GPB's Free Digital Integration Resources for the Physical Sciences*

Participants will receive an introduction to the thousands of multimodal Physical Science resources available to all Georgia students and teachers at no cost via GPB. We will navigate through the learning management systems provided by PBS LearningMedia and Discovery Education, focusing on how to find and organize relevant content, manage personal folders, and create output using the productivity tools. Hands-on activities will include digital exploration tips and model teaching strategies, with emphasis on DE's science literacy enhancing tools and activities, comprehensive lesson plans, and searching by standards. Teachers will also model a lesson from GPB's new Chemistry Matters series and learn associated strategies for planning and carrying out investigations with their students.

## Closing Remarks, 3:00 pm to 4:00 pm

Student Center Stage

Dr. Karen Henman, Introduction  
Dr. Donald White, GSTA Executive Director  
Christina Curtis, GSTA District II Director  
Dr. April Nelms, PLU Certifications, Conference Evaluations  
Dr. JB Sharma, Closing Announcements  
Door Prizes

We look forward to seeing you at the 2020 ELIPSE 6.0 Conference at UNG.

We would like to thank the following for their support of the ELIPSE 5.0 Conference:

Brenau University, College of Education

Georgia Science Teachers Association

Student and Faculty Volunteers

UNG College of Education

UNG Foundation

UNG College of Science and Mathematics

and

the ELIPSE 5.0 Conference Committee

Dr. JB Sharma

Dr. Karen Henman

Mr. Frank Lock

Dr. David Osmond

Dr. Mark Spraker

Dr. April Nelms

## Presenters' Biographies

### **John Alberts**

Originally from Massachusetts, John earned a B.S. in Biomedical Engineering from Georgia Tech and an MAT in Secondary Physic from Georgia State University. As part of the physTEC program at GSU John was one of 18 well-qualified physics teachers to earn a teaching degree between 2014 and 2018. He is a first- year physics teacher at Dekalb Early College Academy, focused on using the physics modeling curriculum. John is a Woodrow Wilson Teaching Fellow and a member of the American Association of Physics Teachers.

### **Amandar Carter**

Amanda Carter is an ECE/ SPED major and College of Education Senior Ambassador at the University of North Georgia. She is in her second year of membership in the NSTA Student Chapter at UNG and currently serves as the chapter's President. A major focus of her professional development with the Student Chapter has been learning about inspiring and facilitating community interest in authentic hands-on science learning, through family science nights and science festivals.

### **K.C. Chan, Ph.D.**

Dr. K. C. Chan received his Ph.D. in Physics on magnetism from Texas Tech University. He was a research fellow at Emory University before becoming a faculty at Albany State University (ASU). In his tenure at ASU, he rose the rank to become a full professor, served as the department chair, received over \$10 millions in federal grants, one of which funded summer institutes for secondary science teachers for over a decade while others for STEM education and research. His life time interests is in finding a better way to teach physics; in research the growth patterns found in nature. Presently he is a Professor Emeritus at University System of Georgia.

### **Dr. Sanghee Choi**

Dr. Choi is an Associate Professor and Coordinator of Science Education at the University of North Georgia. She is teaching science content courses for elementary and middle schools and science methods as well as research and curriculum/assessment courses to undergraduate and graduate students. The areas of her research interests are inquiry-based learning, STEM, teacher preparation, and professional development through online and interactive workshops. She has been developing a series of workshops, which emphasize on bringing more inquiry-based and STEM-focused experiences into science learning in K-8.

### **Dr. Max Vazquez Dominguez**

Max Vazquez Dominguez is an assistant professor of science at the University of North Georgia. He has worked in numerous science and literacy programs with middle school science teachers, ESOL teachers, emergent bilingual students and their families. His research interests include using the emergent bilingual students' interests and passions in the teaching/learning process, family involvement, science and soccer, the use of the space to enhance science learning, and bilingualism in science.

### **Karen Garland**

For the past 6 years, Karen Garland has been the K - 5 Discovery Science Lab teacher at Clark Creek Elementary STEM Academy in Acworth. In addition, she was an environmental educator for over 18 years where her duties included writing curricula and teaching workshops. She currently serves on the advisory committee for the Environmental Education Alliance of Georgia, the Cherokee Farm to School Committee, and is a State of Georgia Science Ambassador. Lastly, Karen is a Georgia Master Gardener, beekeeper, and backyard chicken farmer.

### **Dr. Donna Governor**

Donna Governor is an Asst. Professor of Science Education at UNG. She left the classroom in 2016 after 32 years K-12 teaching experience. Donna has been active in GSTA and NSTA and is the Georgia 2007 Presidential Awardee in Science Teaching. She has written two books for NSTA press, the most recent "Staging Family Science Nights" was co-authored with Denise Webb.

### **Cherie Hathcock**

Cherie Hathcock has been teaching for 22 years. She has taught in Georgia, Virginia and Alabama. She received her BS degree in Early Childhood Education from West Georgia College in 1988. She has also completed her gifted endorsement and science certification. She has coached Science Olympiad for the past 5 years. During that time, she has had 7 teams from her school compete in Science Olympiad. Five teams have competed in the State Competition at Kennesaw State University.

### **Karen Henman, Ph.D.**

After teaching middle school science for 33 years in Indiana, Karen moved to Gainesville, Georgia to join the faculty at Brenau University where she works with undergraduate and graduate students. Her specialization is science education. She is a past president of the Hoosier Association of Science Teachers and the Indiana Audubon Society. In addition, she served for 4 years as the District 2 Director with the Georgia Science Teachers Association.

### **John Leyba, Ph.D.**

Dr. John Leyba received his Bachelor of Science degree in chemistry from Northeast Missouri State University (now Truman State University) in 1986 and obtained his Ph.D. in nuclear chemistry from the University of California, Berkeley, in 1990. He held the positions of Senior Scientist, Senior Scientist A, and Principal Scientist with Westinghouse Savannah River Company at the Department of Energy's Savannah River Site between 1990 and 2000. In addition, he was the Radiochemistry Group Leader for Rust Federal Services' Clemson Technical Center located in Anderson, SC. He also held an appointment as a Visiting Assistant Professor in the Chemistry Department and as an Adjunct Assistant Professor in the Department of Environmental Engineering and Science at Clemson University. From 2000 to 2002, Dr. Leyba was the Denver Area Director of Operations for Canberra Industries. Dr. Leyba joined the faculty of Newman University in Wichita, KS in 2002. He left Newman in 2014 as a Professor of Chemistry and Chair of the Division of Science and Mathematics. Dr. Leyba joined the faculty of the University of North Georgia in 2014 as a Professor of Chemistry and Chair of the Department of Chemistry & Biochemistry. He served in this capacity until July of 2014. In January of 2014, Dr. Leyba became the Associate Dean of the College of Science and Mathematics at UNG. Dr. Leyba's research interests involve fast chemical separations and detection of radioactive materials. Dr. Leyba has authored multiple books and lab manuals, 30 peer-reviewed publications, and 22 technical reports. In addition, Dr. Leyba was on the team that discovered Mendeleevium-253, a new isotope of element 101. Finally, Dr. Leyba has a passion for science in general and specifically for space-related discoveries. Dr. Leyba has personally met four of the twelve moon walkers.

**Frank Lock**

From 1974-1979 Frank taught middle school science outside of Niagara Falls, NY. From 1979 – 2009, he taught chemistry, physics and astronomy at Lemon Bay H.S. in Englewood, FL. In 2003, he received the Distinguished Service Award from the Florida Section of AAPT. He was selected as Charlotte County Schools 2005 Teacher of the Year, awarded the Pittcon Citation for Excellence in Science Teaching in March of 2006, and was selected as a member of the NASA Network of Educator Astronaut Teachers in 2004. Frank retired in 2009, and relocated to Gainesville, Georgia. From August, 2014, through May, 2018 he was the physTEC Teacher in Residence in the Georgia State physics and astronomy department.

**Dr. Annmarie Jackson**

Annmarie Jackson is an assistant professor in the University of North Georgia Teacher Education Department Elementary and Special Education Program. Her research interests are teacher development, culturally relevant teaching, and preservice teachers' understanding of literacy. She leads a mobile literacy program in Gainesville, GA.

**Dr. April Nelms**

April Nelms is an Associate Professor and Department Head of Teacher Education at the University of North Georgia. April completed her Ed.S. and Ph.D in Curriculum and Instruction: Secondary Education, Science at the University of Alabama. She has taught science content and science education pedagogy courses in the middle school, high school, and university setting over the past thirteen years. April's research interests focus on how pre-service and in-service teachers acquire pedagogical content knowledge.

**Dr. David Osmond**

David Osmond is an Assistant Professor in the Teacher Education Department at the University of North Georgia. David obtained his Ph.D. in Biomedical Sciences from Georgia Regents University and completed postdoctoral training in Cell Biology and Physiology at the University of New Mexico. Prior to arriving at UNG, David taught high school in Rio Rancho, NM. His research interests include innovative curriculum development and teacher strategies for content retention. David enjoys designing physics toys and is married with two children.

**Carl Ohrenberg, Ph.D.**

Carl Ohrenberg is the Assistant Director for the Center of Teaching, Learning, and Leadership and an Associate Professor of Chemistry at the University of North Georgia. He earned his Ph.D. in Inorganic Chemistry from Kansas State University. Prior to becoming a faculty member at UNG, Carl taught at a number of universities and colleges, both public and private, across the country. He has also been a substitute teacher in the Hall County public school system. These experiences have exposed him to a variety of different teaching methodologies and activities, many of which he has incorporated into his own classroom. His research interests include engaging students both inside and outside of class. Currently he is investigating the ways students read textbooks and take notes.

### **Dr. J.B. Sharma**

Dr. J.B. Sharma is a professor and assistant department head of the UNG physics department. He has been the UNG eminent professor of teaching and learning since 2009. He earned his B.S. from Jacksonville State University and M.S. and Ph.D. from the University of Georgia. He was awarded the Georgia Professor of the Year in 1999 and was elected as a Fellow of the American Association of Physics Teachers in 2018. His research interests are in physics and remote sensing education, geographic information science and multi- sensor image analysis.

### **Lesley Simanton-Coogan, Ph. D.**

Lesley Simanton-Coogan is the Planetarium Director and a Lecturer at the University of North Georgia in the Department of Physics. She received her B.A. degree in physics at Albion College (Albion, MI) and her Ph.D. in physics at the University of Toledo (Toledo, OH). She has researched populations of star clusters and galaxy evolution. Currently, she is working on science outreach through the planetarium and learning animation techniques for planetarium graphics.

### **Dr. Mark Spraker**

Dr. Mark Spraker is a professor of physics at UNG and is associated faculty at Duke University, where he has conducted research since 1995. Dr. Spraker graduated with a PhD in Nuclear Physics from Indiana University in 1995 and did postdoctoral work at Indiana University and Duke University. His research in nuclear physics has been supported by a U.S. Department of Energy grant since 1997. His research deals with low-energy, nuclear astrophysics and gamma-induced reactions. Along with two faculty from UNG's College of Education, Dr. Spraker helped found the North Georgia Undergraduate Education Program with funding from the National Science Foundation to bolster the number and ability of STEM-prepared secondary education teachers in north Georgia. He also collaborated with faculty from the college of Education to provide STEM content and pedagogical training to 70 elementary teachers from counties in the UNG service area over the last four years. He is also a past chair of the Southeastern Section of the American Physical Society (SESAPS).

### **Dr. Cristina Washell**

Cristina Washell, Ed.D. is an Associate Professor and program coordinator for the Elementary and Special Education at the University of North Georgia in Dahlonega, GA. Prior to commencing her career in higher education, Dr. Washell accumulated over 15 years of experience working in alternative schools where she provided individualized instruction and interventions for K-12 ESOL students including those with learning disabilities and emotional behavioral disorders. Dr. Washell's areas of specialization include working with English Learners (ELs) with disabilities, in particular, those with reading disabilities. Her research interests include the impact cultural factors have on special education; Latinx views related to disabilities; international perspectives on special education teacher preparation programs, and pre-service teacher attitudes on equity education.

### **Denise Webb**

Denise Webb has been teaching for 26 years. She has taught all the grades from kindergarten to sixth grades. She is currently teaching K-5 science and engineering and serves as science integration resource teacher in Forsyth County. She is a facilitator of professional development for teachers in literacy, curriculum integration, hands on science and engineering, science integration and 3D learning. She has served for 4 years on Georgia Science Teachers Association and Georgia Finalist for Presidential Award for Excellence in Science Teaching.

### **Tracey Wiley**

Tracey Wiley serves as the education outreach specialist for north Georgia, building content and providing educator support and training for GPB Education's array of free digital resources. Tracey has been involved in education since 1986 where she first taught as an interpreter at Discovery Place and Nature Museum in Charlotte, North Carolina. She went on to work as a naturalist and environmental educator for the North Carolina State Parks and as an elementary school teacher in Otavalo, Ecuador. Since then, Tracey has been involved as an instructor and consultant at various educational organizations throughout metro Atlanta including Georgia State University, the Dunwoody Nature Center, the Georgia Aquarium, and Zoo Atlanta. Tracey is a graduate of the University of North Carolina at Chapel Hill with a bachelor's degree in biology and concentration in photojournalism. She received her master's degree in marine policy from the University of Delaware.

### **Jane Woodall**

In her 16th year of teaching, Jane Woodall has taught science, math, and social studies in grades 6th through 10th. While physical science is her favorite subject to teach, the younger scientists (students) bring so much eagerness to learn and curiosity about their world. She is the Science Lead for Gainesville Middle School (GMS) in Gainesville, GA where she developed and taught the Science Exploration course for 7th grade students struggling in their conventional science classes. At GMS, Ms. Woodall has taught science in 6th, 7th, and 8th grades and has been teaching 6th grade Earth Science for the past 3 years. Her degrees include a BA in philosophy from UNC-Chapel Hill, a BS and MA in Education from Brenau University, an EdS in Curriculum and Instruction from Piedmont College, and an MS in Educational Psychology from Capella University. She lives in Gainesville with her fiancé and two children, Paul and Addee, who love to help mommy do "speriments."

### **Kelli York**

Kelli York is a Dahlonega native and an Undergraduate student in the College of Education at the University of North Georgia. She is graduating in May 2019 with her Elementary and Special Education degree with a reading endorsement. She is currently the Vice President of the National Science Teacher Association chapter on campus, and a Student Ambassador for the College of Education. During the first annual Science Festival in Dahlonega, she was a student activities coordinator. Kelli has also volunteered at the annual ELIPSE conference held at the Gainesville campus. Through the College of Education Ambassador program, she volunteered to assist in a school STEM certification project and has participated as an ambassador for the annual PAGE Future Georgia Educators Day.

## Post-Conference Survey

Please complete the survey digitally: <https://goo.gl/forms/9IJ7yG2zyWDiu22v1>

1. What grade and content do you teach?
2. How many years have you taught?
3. What school system do you teach in?
4. What was outstanding about the conference?
5. What needed improvement?
6. What time during the spring semester is it better for you to attend the ELIPSE conference?  
January, February, March, April, May
7. What would you like to see at a future ELIPSE Conference?
8. Is there a specific instructional technology training that you need?
9. If yes, what would that look like?
10. What specific science pedagogy training would you find interesting?
11. At the ELIPSE conference, which presentation did you find to be outstanding, and why?
12. Please provide your feedback regarding the structure of the schedule (overlapping sessions, session lengths, session formats, etc.).

## NOTES