

STEM Leadership Council 2016-2018

- **Kattie Nash**- STEM Teacher, Prescott South Elementary, Putnam County School System
- **Sarah Jessie**- Instructional Science Specialist, Rutherford County Schools
- **Amy Smith**- Science Teacher, Millington Middle School, Millington Municipal Schools
- **Evelyn Bishop**- STEM Coordinator, Clarksville-Montgomery County School System
- **Randy Puckett**- CTE STEM Teacher, William Blount High School, Blount County Schools
- **Melissa Abel** – Secondary Instructional Supervisor, Germantown Municipal School District
- **Jessica Minton**- High School Science/STEM teacher, Germantown Municipal School District
- **Andrea Allen**- Science Supervisor K-12, Knox County Schools
- **Laurie Drummond**- School Counselor (K-5), W.A. Wright Elementary School. Wilson County Schools
- **Meri Kock**- School Counselor (9-12), Summit High School, Williamson County Schools
- **Keri Randolph**- Director of Innovation, Hamilton County Department of Education
- **Clark Knight**- CTE Director, Shelby Municipalities
- **Holly Cross**- CTE Director, Oak Ridge City School System
- **Dr. Ashley Aldridge**- Elementary Principal, Jack Anderson Elementary, Sumner County Schools
- **Gordon Williams**- Mechatronics Program Director, Roane State Community College
- **Dr. Arrita Summers**- Director, TCAT Dickson
- **Dr. Stephanie Weeden-Wright**- Professor of Practice Electrical & Computer Engineering, Lipscomb University
- **Joelle Phillips**- President, AT&T Tennessee
- **Henry Schulson**- Executive Director, Creative Discovery Museum
- **Jan McKeel**- Executive Director, South Central Tennessee Workforce Alliance
- **Wesley Hall** – Director, Tennessee STEM Innovation Network (TSIN)
- **Dr. Stephanie Ivey**- Project Director, West Tennessee STEM Hub and Associate Professor with the Department of Civil Engineering and Director of the Intermodal Freight Transportation Institute and the Southeast Transportation Workforce Center at the University of Memphis
- **Heather Justice** – Executive Director, Career and Technical Education
- **Dr. Tammy Shelton** - Executive Director, Content & Assessment Design
- **Deborah Knoll**- Council Lead and STEM Career Cluster Consultant, Office of CTE

- **Tennessee Department of Education STEM Leadership Council Advisors:**

- **Candi Norwood-** Director of Student Success, Office of CTE
- **Brian Caine-** Coordinator of Science, Office of Content & Assessment Design
- **Melissa Haun-** Math Coordinator, Office of Content & Assessment Design
- **Leigh Bagwell-** Coordinator for School Counseling, Office of Student Readiness & Early Postsecondary
- **Robbie Mitchell-** Executive Director of Academic Strategy & Operations, Office of Academic Strategy & Operations
- **Chelsea Parker-** Executive Director of WBL and TCCTE, Office of Work-Based Learning
- **Patrice Watson-** Director of Early Postsecondary, Office of Student Readiness & Early Postsecondary

Kattie Nash

Katie Nash received a Master's Degree in Educational Technology from Tennessee Technological University (TTU) in 2013, and a Bachelor's Degree in Elementary Education in 2006. Ms. Nash holds many awards and distinctions. She was selected Prescott South Elementary School (PSES) Teacher of the Year (2014-2015), Putnam County Teacher of the Year (2014-2015), and Regional Teacher of the Year (2014-2015). She was also selected as the Tennessee Science Educator of the Year in 2012. In the past she has served as an adjunct professor at TTU. She also completed the TSIN Innovative Leaders Institute during the 2014-2015 academic year. Currently, she is in her ninth year of teaching with three years as the PSES STEM instructor. She serves as the Elementary STEM Advisory Representative and School-Wide STEM Family Engagement Coordinator. Recently she was chosen by the Governor to serve as a member of the Science Recommendation Committee. She is a member of Delta Kappa Gamma professional sorority. She also volunteers her talents as a Girl Scout Leader helping girls to develop confidence and independence. Ms. Nash currently resides in Cookeville, TN.

Sarah Jessie

Sarah Jessie has been the Elementary Science director for Rutherford County Schools for sixteen years. She oversees the preparation of all elementary teachers to teach science using STEM, inquiry, hands-on, and integrated methods. The Hands-on Science Resource Center, which she manages, provides workshops, materials, curriculum, and assistance to teach STEM for all RCS classrooms. Sarah, a Rutherford County native, earned her B.S. in Elementary Education, her Master's Degree in Curriculum and Instruction, and her Education Specialist Degree in Administration, all from Middle Tennessee State University in Murfreesboro, TN. She taught in the Rutherford County School System and in the early 1990's became the lead teacher for a Goals 2000 project and later a \$5.5 million NSF grant to improve the teaching of science. She was awarded the "Teacher of Excellence" award in 1997 and spent two years working both at Tennessee State University and as a Curriculum Coordinator with RCS on various projects including the Hands-on Science initiative. Sarah has presented at many National, State, and local Conferences on STEM and integration of content areas topics. She has been a consultant for several science-related corporations including National Geographic, Carolina Biological, and Kendall-Hunt. Sarah (or YaYa to James, age 5) is also the exuberant grandmother of a budding scientist/engineer.

Amy Smith is a 7th Grade Science and STEM teacher at Millington Middle School in Millington, TN. She has a Bachelor's of Business Administration and a Master's of Arts in Teaching from The University of Memphis and an Educational Specialist degree from Union University. She has been awarded Millington Middle School Teacher of the Year (2010 – 2011, 2013 – 2014) and WREG TN Lottery Educator of the Week (December 2015). Entering her 13th year of teaching, Mrs. Smith serves as the yearbook sponsor and STEM Coordinator for MMS. Mrs. Smith and her husband, Jeff, have two sons, Hunter and Cameron. In her spare time, Mrs. Smith enjoys horseback riding, Memphis Grizzlies games, and marching band competitions.

Evelyn Bishop

Evelyn Bishop currently serves as Clarksville-Montgomery County STEM Coordinator. Mrs. Bishop holds a Bachelor of Science and a Medical Technology Certificate from Puerto Rico, a Teaching Certificate from Texas and Master of Administration and Supervision from Austin Peay State University in Clarksville, Tennessee. Mrs. Bishop has 13 years of high school teaching experience; and 5 years of supervision experience as an assistant principal and principal of a middle school. During her administrator years, Mrs. Bishop helped pilot the first STEM middle school integration program within the district. Currently, she collaborates with each school STEM administrator and teachers in grades third through ninth as they implement STEM within the science and math curriculums. Through STEM education, Mrs. Bishop hopes to transform the future of Tennessee students by preparing them for college, careers and life.

Randy Puckett

Randy Puckett is currently the STEM program of study teacher at William Blount High School in Maryville, Tennessee, and has been a science teacher there since 2005. He is also an Adjunct Professor of Education at Tennessee Wesleyan College in Athens, Tennessee teaching Elementary (K-5) Science and Math Methods. Randy has a MS in Science Education from the University of Tennessee and a BS in Biology from Tennessee Wesleyan College. Randy also did graduate work at Tennessee Technological University in Environmental Biology and Civil Engineering with research emphasis in Ecology, Hydrology, Aquatic Chemistry, acid runoff mitigation, and toxicity bioassays from heavy metals in continual flow environments. He has led teacher professional development in STEM PBL unit design and integration, using natural history specimen collections in science, visual learning, RAFT and summative writing, nature poetry, standards breakdown and unpacking, incorporating the NGSS practices of science and engineering in science classes, and ARC GIS mapping.

Randy was a small business owner for over twenty years selling fasteners, hardware, and industrial supplies. He also led Appalachian Trail Conservancy back-country trail crews in the Great Smoky Mountains for two summers and continues to serve as a volunteer and advisor to the ATC. He is an avid hiker, cyclist, trail runner, and just recently began flat water kayaking. His wife Amy is a business teacher in Knox County. He has two daughters; Heather is a Vet and Andrea a missionary working in Haiti.

Missy Abel currently serves as the Secondary Instructional Supervisor for the Germantown Municipal School District. Her 19-year teaching career began with AP Computer Science, Pascal Computer Programming, and then various levels of high school math and ACT math & science preparation. She earned her B.S. in mathematics from Blue Mountain College and M.A. in Instructional Leadership from Bethel University.

After leaving the classroom to serve legacy Shelby County Schools as the District Lead Math Teacher from 2011-2013, Missy moved into the STEM Advisor role in the unified SCS district through the Career and Technical Education department. Additionally she was a Math & Science Fellow in the Shelby Scholars STEM Summer Institute, igniting middle students' interest in STEM-related studies and careers. One of her most rewarding roles was serving as a TNCORE math coach for three years. She worked with teachers across the state to implement the instructional shifts of focus, coherence, and rigor in mathematics instruction.

Ms. Abel recently completed her two-year term on the Tennessee STEM Leadership Council. The team developed a strategic plan to address the need for fully integrated K-12 STEM education. Passionate about providing effective professional development for teachers, she co-facilitated the statewide CTE new STEM teacher certification training the past three years. In 2013, she served on the development team to write the state standards for the CTE STEM Education courses. She is also honored to partner with K-16 faculty, industry and government professionals on the West TN STEM Hub Steering Committee.

Jessica Minton

Jessica N. Minton is an experienced and innovative Secondary Science Teacher who has taught various levels of biology, physical science, general and environmental science. She holds a Bachelor's Degree in Biology for Teacher Licensure from Maryville College, a Master's Degree in Science Education from the University of Tennessee-Knoxville, and an Ed.S. in Curriculum and Instruction from Lincoln Memorial University. Jessica teaches students first, science second; understands that each individual learns differently and uses various techniques to reach everyone earning a reputation among teachers and parents for creativity. She won several awards including a Presidential Award for Excellence in Mathematics and Science Teaching Tennessee state finalist and is extremely honored at the opportunity to be a part of the STEM Leadership Council.

Andrea Allen

Andrea Allen has been in education for 21 years as a teacher, gifted teacher, instructional coach, and supervisor for Knox County Schools. Bringing community support to science education has been a focus of the Knox County district and Andrea has served on boards and leadership positions for The MUSE Knoxville, Southern Appalachian Science and Engineering Fair, Tennessee Science Teachers Association, and Leadership Knoxville. Andrea became the Science Lead for State of Tennessee Science Standard Development in 2014 and has continued that work the past few years with the state of Tennessee. Ms. Allen is a national presenter for NSTA Author Sessions and consults for districts in other states to share strong science teaching practices. Her passion is to strengthen the support for K-12 science education and provide scientifically literate communicators and thinkers for our communities.

Laurie Drummond received her undergraduate degree in Social Work from Ball State University, and completed her Master's in Social Work at Indiana University. After working over a decade in the fields of addiction counseling and mental health in Indiana and Illinois, she and her husband moved to Tennessee.

In 2003 Laurie completed coursework at MTSU to become licensed as a School Counselor in Tennessee, and she has worked at W.A Wright Elementary in Wilson County ever since. Laurie and her husband have two adult children who live in East Nashville. In her free time she enjoys reading, hiking, and training their Mastiff to be a therapy dog.

Meri Kock

Meri Kock is entering her 28th year in education. During that time she has been a middle school mathematics and Algebra I teacher in Southern California, a NASA Aerospace Education Specialist for Oklahoma State University, and a school counselor in Middle Tennessee. In 2003 she moved to Nashville, TN where she started her school counseling career at Hillsboro High School, and joined the faculty at Summit High School in Spring Hill, TN in 2015. She has a Bachelor of Arts degree in Mathematics from San Diego State University, a Master of Arts degree in Education: Curriculum and Instruction from California State University, Bakersfield, and a Master of Science degree in School Counseling from the University of LaVerne. The Middle Tennessee Counseling Association recognized her at the High School Counselor of the Year in 2010, and the American School Counselor Association named her a top ten finalist for the 2011 national ASCA School Counselor of the Year.

Keri Randolph

Keri Randolph currently serves as the Director of Innovation for Hamilton County Department of Education. Previously, she was the Director of the Southeast Tennessee STEM Innovation Hub and Vice-President of Learning for the Public Education Foundation in Chattanooga. In these roles, she worked with educators and school districts from Southeast Tennessee to support and promote high-impact STEM education. She created and directs several teacher leadership and educational technology initiatives including the Teacherpreneur Incubator, Dev Dev (a digital literacy initiative), the 1:1 technology pilot in Hamilton County Schools and the iPLC. She also serves as the co-PI on a NSF-EAGER grant which allows high school students to conduct microbial ecology research projects remotely with University of Southern California faculty through access to a 4K microscope over a gigabit internet connection. Prior to these roles, Keri worked at the University of Tennessee- Chattanooga in the UTeaChattanooga program training pre-service math and science teachers. She was born and raised in Robertson County and was an award-winning high school science teacher in North Carolina for ten years before moving back home to Tennessee in 2010. Keri serves on the boards of the Enterprise Center and the Benwood Foundation, and she is currently the president of the National Science Education Leadership Association.

Clark Knight is the 6-12 supervisor of CTE for the school districts of Arlington, Bartlett, Collierville, Germantown, and Millington which includes 9 middle schools and 5 high schools. Prior to his current position, he was the CTE Director for Shelby County Schools. He has served on the CTE State Leadership Council 2013- 2015. Currently he serves on the Tennessee CTE Executive Directors Council, Tennessee Work-Based Learning Council, and the West Tennessee STEM Council. He has a Bachelor of Science and Masters of Science in education from the University of Memphis and an EDS in Administration from Union University. He lives in the Memphis area with his wife and two sons. He enjoys reading, golfing, and attending University of Memphis sporting events.

Holly Cross

Holly Cross was classroom teacher for 5 years; curriculum and technology coach for 5 years; and a district-level coordinator/supervisor for the past 5 years; Holly Cross is now focusing on increasing opportunities for students in Career and Technical Education in Oak Ridge Schools as well as serving as the district Communications supervisor. Holly attended Colorado State University for two years; earned a B.S. and M.S. in Education from the University of Tennessee, and an Ed.S. in Educational Leadership from Lincoln Memorial University. She is married to Rice Cross for 26 years, she is the mother of two University of Tennessee students, Natalie and Daniel.

Ashley Aldridge

Dr. Ashley Aldridge is the principal of Jack Anderson Elementary, an AdvancEd Accredited and Certified STEM School, which was honored as one of the top ten STEM schools nationally in January 2016 by FETC. Dr. Aldridge has led in Hamilton, Knox, and Sumner counties. Having professional experience in urban, the private sector, magnet, suburban, and STEM schools, Dr. Aldridge brings valuable insight that children must be equipped with STEM cross- cutting skills, so that they are prepared to compete in the global marketplace.

Gordon Williams

Gordon Williams is the Program Director for Mechatronics and Advanced Manufacturing at Roane State Community College where he is responsible for the day to day management of the Mechatronics AAS Degree and Certificate Programs and the Clinton Higher Education and Workforce Development Facility. He previously served as the robotics coach for Oak Ridge High School's internationally recognized FIRST Robotics Team 4265 and was ORHS's lead instructor for Project Lead the Way (PLTW) Engineering courses. His robotics team was runner up in the FIRST Robotics World Championships in 2015. Mr. Williams was a practicing engineer for 20+ years in the textile instrumentation and needle trades industry prior to becoming an educator. He is a co-inventor on 9 US Patents on textile measurement and instrumentation. He received both his Bachelor and Master of Science degrees in Agricultural Engineering from Texas A&M University, and his Education Specialist degree in Curriculum and Instruction from Tennessee Tech University. Mr. Williams holds the following industry certifications: Siemens Mechatronics Level 1 and Level 2 Instructor, and FANUC Robotics Tool Handling and Operations Programming.

Dr. Arrita Summers

Dr. Arrita Summers is the director of the Tennessee College of Applied Technology Dickson and Clarksville campus where she promotes a workforce development mission. Throughout her career she has promoted higher education opportunities to the residents of Tennessee with the aim of increasing the number of its citizens pursuing career and technical education and/or a college education. Arrita earned an Educational Doctorate at Tennessee State University and a Bachelor's in Management and Organizational Development from Bethel College. She has served numerous roles throughout her career with the Tennessee Board of Regents, including faculty member and Faculty Regent. She is a member of the American Technical Education Association, Women in Higher Education of Tennessee, Rotary International, and PEO. She is a graduate of two regional leadership programs: Leadership Middle Tennessee and WestStar. Arrita lives in Dickson, TN with her husband Ron. They have three children and two grandchildren. She enjoys spending her free time researching her genealogy and gardening.

Dr. Stephanie Weeden-Wright

Stephanie received her Ph.D. from Vanderbilt University where she specialized in radiation hardening of emerging memory technologies. Throughout her graduate tenure she was a visiting research scientist at NASA AMES research center and USC ISI Disruptive Electronics group. Stephanie has a diverse technical experience and has enjoyed collaborating with a range of scientists, teachers and students. Before joining Lipscomb Engineering, Stephanie was an instructor at the School for Science and Math at Vanderbilt. For the past two years, alongside three Ph.D. scientists, she developed and implemented experiential STEM curriculum for a novel interdisciplinary classroom environment.

Joelle Phillips

Joelle Phillips has served as president of AT&T Tennessee since 2013. She brings more than a decade of telecommunications industry experience and nearly two decades of experience in the legal profession to her current position.

As president of AT&T Tennessee, Phillips works closely with community and business leaders, elected officials and others at AT&T to continue delivering advanced communications technologies, including mobile 4G LTE and other broadband services, to consumers and businesses.

She is also responsible for managing AT&T's extensive philanthropic and community engagement efforts in Tennessee. Phillips serves as a board member for several community organizations, including the Boards of the United Way of Middle Tennessee, the Community Foundation of Middle Tennessee, Jobs for Tennessee Graduates, Leadership Nashville, and the Tennessee Business Roundtable. As chair of the Drive to 55 Alliance, she works with other Tennessee business leaders to advance the goal of ensuring that 55% of Tennesseans have a college degree or certificate by the year 2025 and to recruit mentors for the Tennessee Promise scholars program.

Phillips is a frequent writer and speaker on topics ranging from technology and law to education and communications policy and has been invited to deliver remarks at industry association meetings, schools and

civic organizations as well as providing testimony on telecommunications policy reforms before legislative committees.

Phillips is a 15-year veteran of AT&T and its predecessor companies. Beginning in the legal department, she moved through positions of increasing responsibility at the state and regional level. She has been recognized by the Nashville Business Journal's peer-selected "Best of the Bar" awards as Corporate Counsel as well as a Telecommunications specialist. Prior to joining AT&T, Phillips practiced law with firms in Nashville and Atlanta and served as a judicial law clerk to United States Court of Appeals Judge Rhesa Hawkins Barksdale.

Phillips is a summa cum laude graduate of Washington and Lee University School of Law and holds a Bachelor of Fine Arts from Birmingham-Southern College in Theatre.

Phillips joined AT&T as a lawyer, but her interest in communications technology predated her work as a telecom lawyer. Phillips is a native of Auburn, Alabama, and her father, Dr. Sidney Neal James, taught electrical engineering at Auburn University for 35 years. In addition to his academic career, James worked with NASA and with South Central Bell on telemetry and other communications issues.

Joelle is married to fellow W&L Law alumni Brant Phillips. Brant is a partner with Nashville-based Bass, Berry and Sims Law Firm, where he is a member of the firm's Executive Committee and co-chairs the firm's Securities and Shareholder Litigation Practice Group.

Henry Schulson

Henry Schulson has been Executive Director of the Creative Discovery Museum (CDM) for 18 years and has helped it to become one of the leading children's museums in the country. He began his museum career as a teen volunteer at the American Museum of Natural History in New York City. Prior to joining the Creative Discovery Museum, he served as Director of the Dallas Museum of Natural History for eight years and for 11 years prior to that, he served as Manager of Development and Manager of Membership at the American Museum of Natural History. He is actively involved in numerous civic activities including the boards of the Convention and Visitors Bureau, Causeway, Downtown Partnership and is currently President of Mizpah Congregation. He has been a reviewer for the Institute of Museum and Library Services and the National Science Foundation and served for 10 years on the board of the Association of Children's Museums.

Jan McKeel

Jan McKeel is the Executive Director of the South Central Tennessee Workforce Alliance (SCTWA), a nonprofit that works regionally to develop the workforce through efforts with economic development, education, and employment. The Workforce Alliance provides oversight to American Job Centers located in the eight South Central counties of Giles, Hickman, Lawrence, Lewis, Marshall, Maury, Perry, and Wayne, where over 20,000 job seekers a year are assisted with career development and skill training. Tennessee consistently ranks as a high performer in the public workforce system, and the Workforce Alliance consistently exceeds its' performance standards and receives incentive dollars for outstanding performance.

While a base allocation is received annually of approximately \$2 million, the SCTWA has successfully brought in another \$20 million in the past 7 years to work on related initiatives from reading literacy & adult education, to innovative skill training and initiatives including most recently:

- Workforce Development and Conference Center at Northfield, now housing over 1,300 employees, students, and partners daily;
- Project Learn, which administers Maury County's Imagination Library, and starting in July, Adult Education programs in 13 southern middle Tennessee counties;
- South Central TN Reconnect, which will be the regional 9 county effort to attract adults to complete postsecondary training started and not finished in support of the Governor's Drive to 55; and
- Maury County Jail Career Center, which in just a few short months have served 200+ inmates receiving adult education services, including 25 High School Equivalencies (GEDs) and 25 released and working upon release. This innovative project was recently recognized at the White House as a top project in community collaboration.

Jan and her husband Mickey reside in Columbia, and are the parents of two children, graduates of Lambuth University and the University of Memphis. They operate family owned Firehouse Subs restaurants in Tennessee and Kentucky. Jan and her sister Judy also operate Charles Outland Farms, a grain farm and local grain storage facility in western KY.

Wes Hall

Wes Hall serves as the director of the Tennessee STEM Innovation Network (TSIN), overseeing operations for Battelle Memorial Institute and working to connect stakeholders across the Volunteer State. TSIN is committed to promoting and expanding the teaching and learning of science, technology, engineering, and mathematics in public schools across the state. Prior to joining Battelle, he managed the Tennessee Higher Education Commission's STEM Race to the Top initiatives, focusing on replication of the UTeach teacher preparation model and the administration of STEM professional development grants delivered by the state's higher education faculty to in-service K-12 teachers. Wes previously worked in Knox County, TN government and earned his Bachelor's degree and Master's in Public Administration from the University of Tennessee, Knoxville. Wes currently serves on the state's STEM Leadership Council, the advisory board for Tennessee Scholars, and the University of Tennessee's Young Alumni Council.

Dr. Stephanie Ivey

Dr. Stephanie Ivey is an Associate Professor with the Department of Civil Engineering and director of the Intermodal Freight Transportation Institute and the Southeast Transportation Workforce Center at the University of Memphis. Her research includes focus on journey to school in urban areas, transportation planning, livability assessment in freight-centric communities, and strategies to engage citizens in the transportation planning process. She also has a strong record of focused workforce research and outreach related to increasing representation of women in STEM and particularly in transportation.

Ivey also directs the West Tennessee STEM Hub, and has served as PI/co-PI on over \$3 M in funded projects for STEM education research.

She serves as faculty advisor for the University of Memphis student chapters of the Institute of Transportation Engineers and WTS and Volunteer Coordinator for the ITE Transportation Education Council.