

Pre-Conference (continued)

2:00 p.m. - 4:00 p.m. » Off Campus

STEM/STEAM Site Visits (optional)

Sites:

- BMW Manufacturing Company (tour begins at 3pm)
- Boys & Girls Club at Cleveland Academy of Leadership
- Carver Middle School
- Chapman Cultural Center
- Michelin US3 Truck Tire Plant
- Milliken Innovation Center – Transportation Provided
- Roper Mountain Science Center
- The Clemson University International Center for Automotive Research (CU-ICAR)
- The Children's Museum of the Upstate – Transportation Provided

4:30 p.m. - 6:00 p.m. » End-of-Day Reception

Reception and Showcase Displays

Jennifer C. Evins Lobby

Speaker: Ken May, Executive Director, South Carolina Arts Commission

Music: Daniel Z, vibraphonist

Hors d'oeuvres and beverages accompanied by delightful music and compelling conversation. Cash Bar.

Our sincerest thanks to the following sponsors of the South Carolina STEM Education Summit

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Milliken & Company

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John and Susan Bennett Memorial Arts Fund of the Coastal Community Foundation of SC

South Carolina Arts Commission

National Endowment for the Arts



South Carolina STEM Education Summit

STEM and the Arts In and Out of School

Monday, September 29

9:00 a.m. - 5:00 p.m.
10:00 a.m. - 5:00 p.m.

Registration
Exhibits Open

Jennifer C. Evins Lobby
Zimmerli Plaza

Pre-Conference

South Carolina Stakeholders Summit

Exploring Minds and Opportunities: STEM and the Arts In and Out of School

11:00 a.m. » Welcome in Chapman Cultural Center Theater

Panelists:

- Welcome | Introductions** The Honorable Rita Allison
South Carolina House of Representatives
- Greetings** The Honorable Dot Harris, Deputy Secretary
United States Department of Energy
- Moderator** Charles Weathers
The Weathers Group
- Panel**
- Panel Questions | Answers**
- Panel Wrap-up**

- Ashlyn Barton,
Boys & Girls Club Youth of the Year
- Dr. Russell Booker,
2015 Superintendent of the Year, Spartanburg School District 7
- The Honorable Dot Harris,
U.S. Deputy Secretary of Energy
- Molly Spearman,
Candidate for SC State Superintendent
- Tom Thompson,
Candidate for SC State Superintendent
- John Tully, President,
Michelin Development Company

12:15 p.m. » Pick Up Lunch in Jennifer C. Evins Lobby

12:30 p.m. - 1:25 p.m. » Breakout Sessions

- Topic A:** located in Dance Center 2, M-1
Expanding Quality STEM Work In and Out of School
Moderator: Victoria Wegener, Partner, Mainspring Consulting
- Topic A2:** located in Dance Center 3, M-1
Expanding Quality STEM Work In and Out of School
Moderator: Nan Dempsey, S²TEM Centers SC
- Topic B:** located in Dance Center 4, M-1
Aligning and Growing STEM in Formal and Informal Settings
Moderator: Maryann Stimmer, STEMeducators
- Topic B2:** located in Science Center, M-2
Aligning and Growing STEM in Formal and Informal Settings
Moderator: Traci Young Cooper, Ed.D. Chair-Elect,
SC State Board of Education, Fifth Judicial Circuit

Topic C2: located in 2D Studio, M-2
Policy Development
Moderator: Alice Gilchrist, S²TEM Centers SC

Topic D: located in Spartanburg Art Museum, CM-1
College and Career Readiness/Workforce Development
Moderators: Amy Love, South Carolina Department of Commerce,
and Susie Teague, S²TEM Centers SC

Topic D2: located in Artists' Guild, CM-1
College and Career Readiness/Workforce Development
Moderator: Del Ruff, North Carolina Center for Afterschool Programs

Topic E: located in Crowley Conference Room, CM-1
Collaboration – Bridging the Gap Between Out of School Time and In School
Moderator: Darren Prevost, S²TEM Centers SC

Topic C: located in Chapman Meeting Room, M-2
Policy Development
Moderator: Lauren Heintz, National Conference of State Legislature

1:45 p.m. » Announcement

This School's Got Talent/STEM! Jennifer C. Evins Lobby



Tuesday, September 30

8:00 - 9:00 a.m. » Registration in Jennifer C. Evins Lobby

9:00 a.m. - 9:45 a.m. » Securing the Future Through Innovation

Keynote Address by Chris DeSoiza, Vice President of Research, Milliken & Company

Chapman Cultural Center Theater



Chris DeSoiza is Vice President, Research & Development at Milliken & Company. Chris has company-wide responsibility for profitable growth through innovation. He also has organizational responsibility for Milliken corporate research, testing and prototype laboratories.

Chris began his career with Milliken as a Senior Research Engineer in 1986 following his graduation with a B.S. in Chemical Engineering from the University of Florida. Throughout his career, Chris has held several leadership roles at Milliken. He served as a plant manager from 1993 to 1996 and as a manufacturing manager from 1996 to 1998 for package dye and warping. In 1998, Chris moved to strategy as the Director of Planning for Milliken's automotive division. Between 2001 and 2006, Chris focused on new ventures and acquisitions, serving as the New Ventures Leader for the apparel division and leading key new ventures for nonwovens. He also earned an M.S. in International Logistics from the Georgia Institute of Technology in 2002. In 2006, he took on his current role as Vice President of Research for the company.

Chris was the Technical Advisory Board President of the Institute of Textile Technology. He also serves on the boards of South Carolina Chemical Engineering, SCRA and SC Innovation Council and is active with InnoVenture.

BLOCK 1 » 10 - 11:15 a.m.

Art & Earth: A STEAM Collaboration by Wofford College

From Play Script to Setting Through Math by Southeast Center for Arts Integration

Lighting the Fuse with Glass by John O'Rourke & AMP; Karoline Shaffer

Motivate Your Students and Power Your Classroom with STEAM by SC Department of Education

Project Draw for Science by University of SC Center for Science Education

Real World Design Leads to the Ultimate Engagement by SC Science Academy

STEM and the Arts: Building a Better Workforce for SC by S2TEM Centers SC

A World in Motion: Primary Literacy-Based STEM Workshop by SAE International

Look Into the Future: Seeing is Believing by Southeastern Institute of Manufacturing and Technology

Meaningful Applications of Math and Science in Global Service by The Riley Institute of Furman

On the Front Lines: Educators' Perspectives on STEM & Workforce Development by S2TEM Centers SC

Wisdom-Based vs. Knowledge-Based Education: A Discussion on STEM/STEAM Schools by NEXT High School

Art: A Person Journey to Discovery by University of SC

Cracking the Code: Taking Reading, Writing and Arithmetic to the Tech Level by S2TEM Centers SC

Hands On, Minds On! An Overview of the Maker Education Movement by EdVenture Children's Museum

When I Grow Up: Longitudinal Workforce Development in an Afterschool Setting by EdVenture Children's Museum

Digital Badges 101: An Introduction and Case Studies from The Smithsonian by Smithsonian Institute

Artists' Guild Gallery (CM-1)

Black Box Theater (T-B)

2D Studio (M-2)

Dance Center 1 (M-1)

COLORS Studio (M-2)

Green Room (T-B)

Dance Center 2 (M-1)

Chapman Meeting Room (M-2)

Dance Center 3 (M-1)

Dance Center 4 (M-1)

Crowley Conference Room (CM-1)

Jennifer C. Evins Lobby (T-1)

Youth Theatre Classroom (T-B)

History Museum (CM-2)

Spartanburg Art Museum (CM-1)

Nourish (CM-1)

Theater (T-1)

11:30 a.m. - 12:15 p.m. » Pick Up Lunch in Jennifer C. Evins Lobby

Please feel free to take your lunch to any areas of the Chapman Cultural Center facility and network.

BLOCK 2 » 12:30 - 1:15 p.m.

Clemson's STEAM Strategy: Driving Innovation by Clemson University

Community P"ART"nerships: Providing Entry Points to STEAM for all Community Members by EdVenture Children's Museum

Developing STEM Activities for Scouts by Spartanburg Methodist College

Developing Success for a Quality STEAM Program by SC Department of Education

Linking Drawing to Academic Achievement in Science by USC Center for Science Education

TRANSFORMATIONAL STEM: Student Space Flight Experiments by Colleton County Middle School

Creating a Digitally Skilled Workforce by Columbia College

Making STEM Visible: In-School STEM Showcases by Spartanburg County School District 7

Science on the Move: Mobile STEM Education for Inside and Outside of the Classroom by 4-H Science on the Move

STEM and Leadership: Using Group Problem-Solving to Reinforce Content and Build Soft Skills by Patriots Point Naval & Maritime Museum

STEM Education, an Industry-Business-Education Partnership by Fairfield Central High School

Learning Mathematics through Movement by LiveWell Greenville

Math Circles by Newberry College

New and Engaging ETV Resources by SCETV

STEM on a Milk Crate by Allen University STEM Outreach

T.A.L.E.S. - Teaching and Learning with Engaging Stories by College of Charleston

Smithsonian Quests: Bringing the Smithsonian to You by Smithsonian Institute

Dance Center 2 (M-1)

Nourish (CM-1)

2D Studio (M-2)

Dance Center 1 (M-1)

COLORS Studio (M-2)

Black Box Theater (T-B)

Spartanburg Art Museum (CM-1)

Artists' Guild Gallery (CM-1)

Science Center (M-2)

Crowley Conference Room (CM-1)

Youth Theatre Classroom (T-B)

Chapman Meeting Room (M-2)

Jennifer C. Evins Lobby (T-1)

Dance Center 4 (M-1)

Green Room (T-B)

Dance Center 3 (M-1)

Theater (T-1)

BLOCK 3 » 1:30 - 2:45 p.m.

Arts Integration: STEM to STEAM by Arts in Basic Curriculum Project

Full STEAM Ahead: Reaching to the Top of Bloom's Taxonomy by First Ward Creative Arts Academy

How to Tell a Good Story by SCETV

Integrating STEM into the Statistics Classroom by Gaffney High School Statistics

Lighting the Fuse with Glass by John O'Rourke & AMP; Karoline Shaffer

Digitally Supported Pathways Transitioning Students into STEM Fields by Clemson University Center for Workforce Development

Look into the Future: Seeing is Believing by Southeastern Institute of Manufacturing and Technology

Paving the Way for SySTEMatic Change for Workforce Development by S2TEM Centers SC

Robotics in Education: Connecting Students to STEM Careers by Fairfield Central High School

Wisdom-Based vs. Knowledge-Based Education: A Discussion on STEM/STEAM Schools by NEXT High School

1 of 3 States to Receive 2014 EPA Grant - Details and Outcomes by SC National Heritage Corridor

Code for All: How to Lead Google CS First by Google CS First

Cracking the Code: Taking Reading, Writing, and Arithmetic to the Tech Level (BYOD) by S2TEM Centers SC

Engaging Young Learners in Diversity: Celebrating Difference by The Riley Institute at Furman

Jr. Solar Spirit by City Year

Youth Capture the Colorful Cosmos by Children's Museum of the Upstate

Hands-on Workshop: How Would You Implement Credentials in Your Own Way? by Smithsonian Institute

COLORS Studio (M-2)

Green Room (T-B)

Black Box Theater (T-B)

Youth Theatre Classroom (T-B)

2D Studio (M-2)

Crowley Conference Room (CM-1)

Dance Center 3 (M-1)

Dance Center 2 (M-1)

Science Center (M-2)

Chapman Meeting Room (M-2)

Spartanburg Art Museum (CM-1)

Dance Center 2 (M-1)

History Museum (CM-2)

Artists' Guild Gallery (CM-1)

Dance Center 4 (M-1)

Nourish (CM-1)

Theater (T-1)

3:00 p.m. - 3:45 p.m. » Theme Synthesis

Panel and Discussion

Chapman Cultural Center Theater

The STEM Learning Ecosystem

"A STEM learning ecosystem encompasses schools, community settings such as after-school and summer programs, science centers and museums, and informal experiences at home and in a variety of environments that together constitute a rich array of learning opportunities for young people." Key characteristics of a STEM learning Ecosystem are a shared vision, collaboration, unique contributions from each sector, and designed pathways to enable young people to succeed. *Report from the Field, Traphagen & Trill, 2014*

Panel Discussion Questions

- (1) What unique contributions can your sector (STEAM, Workforce, Afterschool, Digital Badging) bring to the SC STEM ecosystem?
- (2) What cross-sector collaboration most inspired you?
- (3) What next steps might your sector take to improve the design of student pathways to success in STEM?
- (4) How will we know when SC STEM providers/advocates are aligned in their vision?

3:45 p.m. - 4:45 p.m. » Wrap Up and Reflection

For Sponsors, Planners, and Presenters Only

Jennifer C. Evins Lobby

2014 STEM Education Summit - Conference Tracks

STEM and the Arts Workforce Development Afterschool/Informal Digital Badges

Thanks to all exhibitors located in Zimmerli Plaza and Jennifer C. Evins Lobby.

Thank you for attending the 2014 STEM Education Summit!