



STEAM+ Arts Integration Conference

Program Summary Report

July 28-30th, 2017 | Washington, DC

www.jrevesteam.com





In order to increase awareness of STEAM+ education and Arts Integration, J Rêve International provides global arts education programs for educators. Our efforts have currently reached over 40,000 people globally including over 1,000 educators, 50 community partners and schools who are spread out over 5 different continents speaking 5 different languages.

Through educational excursions, such as our recent programs in Cuba, France, and our Inaugural STEAM+ and Arts Integration Conference July 2017 in Washington, DC, we continue to reach educators, students, policy makers, and governments to increase awareness of STEAM education and better prepare them for growing intellectual demands, student performance, and creative thinking.

By collaborating with a variety of speakers from backgrounds such as education, art, programming, and real-time learning opportunities, this program gave participants a first-hand look at the importance of arts engagement and education. This year's conference continues to achieve our goal of increasing STEAM+ education for diverse and empowered professionals.































Paul S. Devrouax, Jr. Memorial Lecture



















www.jrevesteam.com





Welcome-

STEAM+ Arts Integration Conference

July 28, 2017

As Mayor of Washington, DC, it is my pleasure to welcome the participants of the STEAM+ (Science, Technology, Arts, Mathematics) Arts Integration Conference.

This event increases awareness of STEAM education to better prepare educators, students and governments for growing intellectual demands, diversified student performance and achievement, competitive problem solving, and creative thinking. This conference also provides an opportunity to share best practices and model school curriculum in STEAM education.

I am delighted that you have chosen Washington, DC, to host your meeting this year. While you are here, I invite you to enjoy all that our city has to offer and I encourage you to visit our museums, monuments, restaurants and diverse neighborhoods.

On behalf of the residents of Washington, DC, I wish you a

successful and productive event.

Muriel Bowser

Mayor, District of Columbia



J Rêve International hosted its Inaugural STEAM+ Arts Integration Conference in Washington, D.C. from July 28-30th, 2017.

Through events at various locations such as the Pepco Edison Place Gallery, American Institute of Architects, the National Endowment for the Arts, and the National Museums of Women in Arts and of African American History and Culture, participants had the opportunity to celebrate achievements of those in the visual, performing and literary arts, as well as learn from delegates from leading arts and education institutions in the nation.

J Rêve International continues to rely on those on the front line to make the ultimate difference. By empowering educators, creatives, scientists, artists, and programmers with the tools they need, they can continue to enlighten and empower the generation of tomorrow.

"Together, we can continue to diversify the classroom for improved and increased learning," says Jacqueline Cofield, founder of J Rêve International.

"We've organized the STEAM+ Professional Development Program as a hands-on conference where participants will collaborate to produce tangible steps towards integrating arts as an important facet of multi subject education."

Friday, July 28





The first day of the conference started off full steam ahead with a briefing from Lakita Edwards, Arts Education Specialist, on the programs and resources the National Endowment for the Arts (NEA) provides to support educators, communities, and institutions conducting arts education.

The NEA arts education grant program focuses on pre-K to 12th grade students, the educators, and the civic leaders who support them, as well as the communities and schools that serve them, to help ensure Americans of all age have the opportunities to learn, create, and grow.

From 1966 to 2016, the NEA has funded \$238.6 million through the arts education programs. And, in 2016, the NEA awarded \$5.8 million through 194 grants to support lifelong learning, including support to arts education projects for pre-K through 12th grade.

Edwards, the speaker at the NEA segment responded, "Employers need curiosity, creativity, passion. Identifying problems and ideas these are all habits of the mind that can come from art learning. It's all the more critical that we have opportunities for students and practitioners to engage in the arts in a significant and purposeful manner."

Art education continues to remain an important aspect of our education system as it develops creativity and is noted as an important attribute and one of the top five skills employers desire for the 21st century.

The aim of the Inaugural STEAM+ and Arts Integration Conference was to foster collaboration between interdisciplinary artists, programmers, policy makers, and educators on issues relating to development, learning, and the implementation of arts education.

As a way to delve right into the importance of the implementation of arts education, participants took a visit to the National Museum of Women in the Arts (NMWA) on Friday afternoon.





The NWMA is known as the only major museum in the world solely dedicated to celebrating women's achievements in the visual, performing, and literary arts. The museum states that 51 percent of visual artists working today are women, however, that they only earn 81 cents for every \$1 earned by their male counterpart.

Participants had the opportunity to engage in a Collection Highlights tour, which includes more than 4,500 works from the 16th century up to contemporary works. Specifically, some of the participants enjoyed included intriguing pieces by Chakaia Booker, Frida Kahlo, and Lalla Essaydi.

Brianna Alexander, a science K12 teacher from upstate NY noted, "this is the first time I've seen a Frida Kahlo painting in person. It's so interesting to learn about women artists from the USA, to Morocco, and around the world. I didn't realize this important aspect of history."



Participants examine a Frida Kahlo painting at the National Museum of Women in the Arts.

By incorporating the visit to the NMWA, participants were able to realize a range of historical and global perspectives and establish a new appreciation for the significant role that women have played in the arts throughout history.

Following the NWMA experience, we wrapped our day up with a reception hosted by Paul S. Devroaux, Jr. Memorial



Lecture (PSDML), Brenda Devroaux, and J Rêve International, featuring Dr. Christine Mann Darden at the American Institute of Architects. With a theme of "On the Shoulders", the reception aimed to showcase the success of women in STEM. In addition, the presentation also demonstrated how these influential women have paved the way for women of NASA such as Dr. Darden. Dr. Darden was also featured in the book Hidden Figures for her exceptional career achievements.



Virginia STEAM educator Susan Bardenhagen poses with Hidden Figures book personality, mathematician Dr. Christine Mann Darden.

Dr. Darden, the youngest of five children and a native of North Carolina, retired as a member of The Senior Executive Service in March 2007 from NASA Langley Research Center, after serving for nearly 40 years of service. As the Director of the Office of Strategic Communications and Education (OSCE), in her final assignment, she was responsible for the Center's external and internal communications, governmental relations, and community and educational outreach.

She is a current or former member of several professional or honorary societies including: Associate Fellow of the American Institute of Aeronautics and Astronautics, Past National Secretary of the National Technical Association, and Beta Kappa Chi National Scientific Honor Society – among several other societies.

Dr. Darden spoke about her work over decades in sonic boom technology working to shorten flying times for airplanes: "Failure is part of the process," Dr. Darden said is the advice she would give young girls interested in STEM who were feeling discouraged after experiencing set-backs.

And, it is apparent that advice worked:

"Dr. Darden is a trailblazer. As I stared at a picture in my office of Women in NASA, I noticed a picture of Dr. Darden and I realized I am here because of her," NASA Education Manager Joeletta Patrick said.

Ms. Patrick attended the conference on behalf of NASA and gave inspiring introductory remarks at the reception.



Jacqueline Cofield presents Inspiring Leader in STEAM Award 2017 to Dr. Christine Mann Darden

Saturday, July 29



CAFE, Inc. students co-led roundtable discussions with their advisors.

"STEAM + is a good way for those who may not have an artistic mind or are very logical thinkers to open up and access another part of their learning and mind," Brian Fouche, conference participant said.



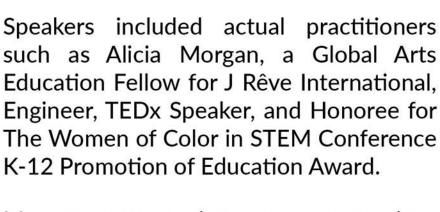
Jeff Poulin, Arts Education Program Manager at Americans for the Arts shares insights on Arts Advocacy.

Our second day was full of valuable lessons provided by well-rounded those and insightful professionals who were invited to speak at the Inaugural STEAM+ and Arts Integration Conference. These discussions help uphold our mission of giving educators, policy makers. and other industry professionals the opportunity to collaborate with like-minded individuals.





A few of the discussion topics included: Building Social Capital for Education Leadership with Dr. Melody Cofield – a thought leader who is best known for her creative work which empowers women, youth, and communities, and Community and Parental Engagement with David Thorpe – a Software Engineer and Architect who works to bring exposure and a love of technology to kids around the US and in the Caribbean.



Morgan gave a signature presentation, teaching attendees how "Leading with Your Strengths and Values" is the key to making your human capital stand out through innovative and creative problem solving.



Teaching Artist Richena Brockinson coaches participants on practical methods for Arts Integration.

This conference was a very unique experience. It's rare to have true STEM Leaders and Artists in the same room for strategic discussions about STEAM+ Arts Integration," Alicia Morgan, a conference speaker, said.

The conference strategic discussions on STEAM+ Arts Integration included perspectives of Dr. Iris Wagstaff, The STEM Director of the American Association for the Advancement of Sciences (AAAS).



Dr. Iris Wagstaff discusses STEAM Education Policy with participants during the roundtable sessions.

These diverse perspectives on current K-12 STEM and STEAM policy were greatly appreciated.



Panelists discuss issues and creative solutions for approaches to STEAM+ Education



Participant asks questions about STEAM+ Arts Integration approaches for special needs students.

And, the conference was a big hit among attendants:

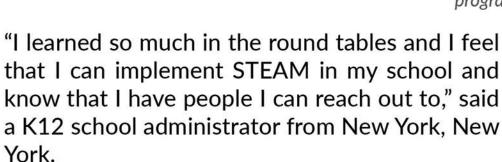
"The program went way beyond my expectation. Not only was the networking amazing, but I learned so much about how integration is the future for education," said a conference participant from Rochester, New York.

My main take-away is that there is so much that the STEAM community can learn from each other and initiate we can advocate for together. We are a significant movement and we should maximize this moment in history and time," said a participant from Chicago, Illinois.

Through the rotating roundtable discussions during the speaking session, participants had the opportunity to truly engage with the speakers and others who have a passion for STEM.



Participants discuss fundraising for STEAM+ Arts Integration programming during a roundtable session.



"We all agree that the arts and creativity are crucial for a well-rounded education, but we must embrace the idea that communities need to work together to make STEAM a reality in schools across the country," said another K12 school administrator from New York City.



Jacqueline Cofield poses with Artist/Gallerist/Art-Ed Programmer Margery Goldberg, who presented on cultivating young people's creativity through arts engagement.



Participants discuss ways and means to involve students and parents in STEAM+ Arts Integration programming.



Speakers Craig and Cory Stevenson discuss their Augmented Reality student programs in Chicago.

Other participants also shared their personal success from implementing STEM into their lives and how it has attributed to their current career.

"We talk a lot about the importance of STEM and STEAM and as we look throughout history there is a lot of examples of people who were also scientists and artists. This is really an example of what I learned trying to figure out my career as an engineer. You will see it all come together in this particular piece," said Pat Hunter, Software Engineer and Live Painting Artist.

Through the interactive opportunities and the informative discussions provided by the speakers, participants offered valuable feedback.



Dallas based engineer and artist Patrick Hunter showed how his skills as engineer influence his artistic process during an exciting upside-down live painting demonstration





Conference participants were enthusiastically engaged in the roundtable discussions led by experts and also including student leaders who shared their perspective on enhancing student engagement. In particular, Jonathan, a student leader at The Cultural Academy for Excellence (CAFE) remarked that, "arts programs are too often just 'sprinkled' into another program and don't provide impactful deeper learning experiences. Rather, it feels like surface (superficial) learning." The young man intrigued participants during each roundtable session.



Scholastic Magazine Art and Math Editors, Katie Brickner and Jennifer Hackett shared editions with all conference guests



Jacqueline Cofield presents the Exemplary Educator in STEAM Award 2017 to Susan Bardenhagen.

"It was wonderful to be here and meet such inspiring people," Katie Brickner, Scholastic Magazine Arts Educator, said.

Three awards were presented at the conference:

- Inspiring Leader in STEAM Award 2017 was presented to NASA Mathematician Dr. Christine Mann Darden.
- Exemplary Educator in STEAM Award 2017 was presented to Virginia based educator Susan Bardenhagen.
- Emerging Leader in STEAM Award 2017 was presented to Dallas based engineer Alicia Morgan.



Felroy Dsouza was acknowledged for traveling the furthest (Australia) to attend the conference.



Jacqueline Cofield presents Emerging Leader in STEAM 2017 Award to Alicia Morgan.

Sunday, July 30



Participants visited the exhibitions at the Smithsonian National Museum of African American History

The conference concluded on Sunday with a few final learning experiences for our participants. A networking brunch allowed educators and collaborators to actively discuss what they had learned over the weekend and to come together and establish connections for the future purposes of growing the awareness of STEAM+.

Our last day concluded with a visit to the National Museum of African American History and Culture, a Smithsonian Institution museum that seeks to understand American history through the lens of the African American experience.

Through a variety of valuable experiences that were in line with our mission and the opportunity to hear from several actual practitioners, participants gained valuable learning and networking opportunities that further equipped them to train the students of tomorrow. Overall, the conference offered access to better understanding the importance of Arts and STEM collaborations with industry professionals, as well as the importance of these experiences in every student's success.

13