THE JEKL FOUNDATION FOR STEAM EDUCATION

FACILITATED STEAM WORKSHOPS

PREPARED FOR: COLLEGE OF CHARLESTON
WORKSHOP FACILITATOR: ANTOINETTE N. MASSEY

Delivered on: October 1, 2018
Think Like A Girl! In Pursuit of STEM Girls OR Recognizing (and Eliminating) the Discouragement of Women in Math and Science in Higher Education & Its Direct Impact on Their Pursuit of STEM Majors and STEM Careers

Description:
This courageous half-day workshop creates a safe space for the use of humor and data to help us recognize how even those of us with the best intentions have contributed to the unconscious discouragement that may redirect girls and women from pursuing careers in STEM. Participants will take part in interactive games, discussions, and activities to encourage us to look a little deeper as we acknowledge subconscious biases and gain new tools and strategies to leverage our strengths as educators to change the narrative and close the gaps.

Objective and outcomes:

- Participants will understand bias, why we have bias and how to recognize and overcome bias.
- Participants will become aware of how subconscious discouragement impacts girls pursuing math, science and engineering early in academia and how we can redirect them in higher education.
- A measurable benefit will be realized from the activities learned, tools utilized and strategies acquired during the workshop.
Description:
This half-day workshop explores the impact the absence of multiculturalism in STEM education has on diversity and inclusion within the STEM disciplines, a student's choice to enter STEM majors and their pursuit of STEM careers. Participants will take part in interactive discovery, discussions, and activities to encourage us to acknowledge the critical significance of multiculturalism.

Objective and outcomes:
- Participants will understand the measurable impact of an inclusive, multicultural STEM curriculum.
- Participants will gain perspective and multicultural awareness in the STEM disciplines may directly and positively affect the number of women and people of color who pursue STEM careers.
- A measurable benefit will be realized from the activities learned, tools utilized and strategies acquired during the workshop.
About Toi Massey

Antoinette “Toi” Massey is a Certified Six Sigma Black Belt, the President & CEO of ANM Innovative Solutions (ANMIS) and the Founder and Executive Director of The JEKL Foundation, both of which are based in Denver, CO. With over 24 years of successful senior and executive leadership experience in the Federal, Aerospace Defense and private sector industries, Toi's involvement with The White House National Initiative on Historically Black Colleges & Universities, Denver My Brothers Keeper Executive Governance Board, State of Colorado MLK Humanitarian Award Recipient, Keynote speaker at University of California Long Beach Women In Engineering Conference and several local and national initiatives make her a voice in demand and an energy that must be experienced. A native of Detroit, Toi holds a Masters of Engineering degree in Mechanical with a concentration in Nuclear Engineering from Howard University, Washington, DC and a Batchelor of Science in Physics, Xavier University of Louisiana, New Orleans, LA. Passionate about closing the gender and cultural resource gap in the STEM disciplines, Toi founded The JEKL Foundation for STEAM Education in 2010, incorporating art and design as the collaborative thread across the science, technology, engineering and mathematics (STEM+Art=STEAM) disciplines. Since it founding, JEKL has touched nearly 3000 young lives, reaching as far as Guinea, West Africa with laptops and JEKL STEAM IN THE BOX! interactive science kits!

Antoinette is a member of Society of Women Engineers, National Society of Black Engineers, Delta Sigma Theta Public Service Sorority, Inc, MBK25, The Links, Inc, and former member of Jack & Jill of America.
JEKLFUNDATION

SCIENCE TECHNOLOGY ENGINEERING ART MATHEMATICS

Partnering to embrace the uninitiated & change the face of technology

JEKLF Programs

Engineers, Innovators & Entrepreneurs Think Tank:
6 Workshops & A Shark Tank

Think Like A Girl!
STEAM for Girls

Tech the Teacher, A Transformation
Culturally Responsive Staff Development Strategies

I AM SCIENCE
A Digital Campaign

Music Is Math
A Jazz Masters Initiative

Cupcake Chemistry
& Other Edible Science

Genius Workshops & From
Backpacks to Briefcase

STEAM Boot Camp
Students & Their Advocates

Scalable Game Design:
Code Like A Girl & Code Like A King!

SPeaker SerIes & cURRICuLUM

CoHerent Partners
American Petroleum Institute • Atlanta
Silverbacks • Asian Pacific Development
Ctr • Blair Caldwell Public Library •
Denver Museum of Nature & Science •
Denver Public Schools • Denver TechxAll
FabFems • Holly Community Campus •
I'MUNIQUE • International Arts
Foundation • Jack & Jill of America •
LINKS, Inc • MACM • Million Women
Mentors • My Denver • My Brothers •
Keeper • Nija Educational Services •
STEM NOLA • University of Wyoming
University of Colorado Boulder • HOG
Vickers Boys & Girls Club • STEMqwest
Heart & Hand • Curbs On The Block • Star
Girl Empowerment • F’steen • D’S•AKA

Antoinette N. Massey, Founder
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Background

Conceived from a repeated reality in my personal professional experience that girls and students of color are under represented in the STEM disciplines. While these disciplines are a natural part of their everyday lives, children of color and girls, in particular, are seldom afforded a direct association between their common activities and STEM; inclusion and learning opportunities targeted to specifically encourage STEM discipline pursuit is often and unnecessarily beyond reach. Additionally, without role models to provide a common connection to groups, communities, culture and experiences, recruitment and retention efforts have historically failed. Finally, noting that art and artistic talent is never lost on children, who illustrate incredible stories of innovation and exploration through drawings, paintings, sculpting, etc., art + design was incorporated into the Foundation’s theme and in 2012 we became The Jekl Foundation for STEAM Education, an organization with a strategically global mission!

MiSSion

Embrace the uninitiated & change the face of technology forever.

ViSion

To introduce sustainable new solution programming. To erect JEKL STEAM Centers of Excellence & Innovation Imaginaries in rural and urban communities across the country.

 GOAL

Innovative New Solution Programming that promotes not just a better way but a different way of thinking that leads to economic empowerment as every aspect of a student’s life is transformed.

PRogram POrtfolIo

Our Program Portfolio incorporates two collaborative programs:
1) Relevant, useful and measurable experiences in STEAM.
2) Support to teachers with personalized, scalable solutions that can quickly be adopted and broadened.