Weekly Vignettes in November & December 2021

HOSTED BY:
Maynard Okereke "Hip Hop M.D."

PRESENTED BY:
AstraZeneca
The Spark of STEM (SoS) Coffee Break Series was designed to inspire and equip K-12 educators with innovative STEM learning tools for the classroom. Due to the generous support of AstraZeneca, we were able to offer the series at no-cost to educators.

The series was broadcast as five 15-minute vignettes that premiered on Thursdays in November and December 2021. The vignettes were immediately made available for on-demand viewing after they premiered. This brief and flexible format was designed to offer educators digestible content to fit within their demanding schedules. Many of the attendee quotes included below demonstrate how this format was well-received by the audience.

More than 1,100 educators registered to attend the series. We put outreach efforts into Title 1 schools around the country to reach educators with a high percentage of underrepresented students and we are encouraged by the results. Forty-six percent of the U.S. public school educators registered were from Title 1 schools.

Attendees were provided with free resources and other takeaways from each episode. These resources remain available to on-demand viewers [here](#).

The SoS Coffee Break series featured passionate educators and leading STEM professionals. The workshops covered no cost resources, experiments, advice, and other STEM tools for teachers to engage and inspire kids in the classroom. The series was moderated by engineer and science communicator, [Maynard Okereke, aka the Hip Hop M.D.](#).
Episode Lineup

Jason Lindsey
“Mr. Science”, Hooked on Science
**EPISODE:** Holiday-Themed STEM Activities

Dr. Padhu Seshaiyer
Mathematician, George Mason University
**EPISODE:** Making Math Meaningful

Jennifer Colvin
Chief Innovation Officer, Learning Undefeated
**EPISODE:** Engineering Design Challenges for Every Classroom

Prof. Kelly Knight
Forensic Scientist, George Mason University
**EPISODE:** The Real CSI - Forensic Science for K-12 Students

Maynard Okereke
“Hip Hop M.D.”
**EPISODE:** Backyard Science Activities

Watch On-Demand Here
REGISTRANT / VIEWER INFORMATION

Total Registrations: 1157

Total Views: 2734*
Live Views: 152
On-Demand views: 2582

*2734 views translates to a potential student impact of over 164,000 (based upon 20 students per elementary educator and 100 students per middle/high school educator)

U.S. Registrants: 83%
International Registrants: 17%

BREAKDOWN OF REGISTERED ATTENDEES BY REGION

Northeast: 36% (DC, DE, MA, ME, MD, NH, NJ, NY, RI, CT, VT, PA)
Southeast: 29% (AL, FL, GA, KY, LA, MS, NC, SC, WV, VA, TN, AR)
Midwest: 12% (IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI)
Southwest: 10% (AZ, NM, OK, TX)
West: 13% (AK, CA, HI, NV, CO, WY, MT, ID, WA, OR, UT)

We also had representation from 36 countries including American Samoa, Antigua and Barbuda, Australia, Azerbaijan, Belize, Botswana, Canada, Cayman Islands, Columbia, Ecuador, Egypt, Eswatini, Ethiopia, Georgia, Greece, Honduras, India, Indonesia, Iran, Iraq, Italy, Jamaica, Kenya, Macau, Malaysia, Mexico, Montserrat, Morocco, Namibia, Nigeria, Pakistan, Palestine, Panama, Philippines, Saudi Arabia, Singapore, South Africa, South Korea, Suriname, Taiwan, Thailand, Tunisia, Turkey, Uganda, Ukraine, United Arab Emirates, United Kingdom, Venezuela, Vietnam, and Zambia.

BREAKDOWN OF REGISTERED ATTENDEES BY SCHOOL TYPE

Traditional Public Schools 54%
Private Schools 15%
Homeschools 12%
Charter or Magnet Schools 4%
Other 15%

46% of US Public School educators were from Title 1 schools
### BREAKDOWN OF GRADE LEVELS REPRESENTED*

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Elementary School K-2</td>
<td>34%</td>
</tr>
<tr>
<td>Upper Elementary School 3-5</td>
<td>46%</td>
</tr>
<tr>
<td>Middle School</td>
<td>52%</td>
</tr>
<tr>
<td>High School</td>
<td>46%</td>
</tr>
</tbody>
</table>

*Percentages exceed 100% due to educators who teach multiple grade levels

### BREAKDOWN OF REGISTERED ATTENDEES BY GENDER:

<table>
<thead>
<tr>
<th>Gender</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>79%</td>
</tr>
<tr>
<td>Male</td>
<td>16%</td>
</tr>
<tr>
<td>Prefer not to say</td>
<td>5%</td>
</tr>
</tbody>
</table>

### BREAKDOWN OF REGISTERED ATTENDEES BY RACE/ETHNICITY*:

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian</td>
<td>12%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>23%</td>
</tr>
<tr>
<td>Hispanic or Latina/Latino</td>
<td>8%</td>
</tr>
<tr>
<td>Native American or Alaskan Native</td>
<td>1%</td>
</tr>
<tr>
<td>Native Hawaiian or Other Pacific Islander</td>
<td>1%</td>
</tr>
<tr>
<td>White</td>
<td>49%</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
</tr>
<tr>
<td>Prefer not say</td>
<td>10%</td>
</tr>
</tbody>
</table>

*Percentages exceed 100% due to attendees who selected multiple options
ATTENDEE FEEDBACK

89% of attendees who took our survey said they were likely or very likely to use the tips from the series in their classroom.

99% of attendees who took our survey said they would like to see more content for educators and students in this 15-minute format.

How did you hear about the SoS Coffee Break Series?

<table>
<thead>
<tr>
<th>Source</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>USASEF Newsletter</td>
<td>65%</td>
</tr>
<tr>
<td>Social Media</td>
<td>13%</td>
</tr>
<tr>
<td>Title 1 School District Outreach</td>
<td>12%</td>
</tr>
<tr>
<td>Search Engine</td>
<td>3%</td>
</tr>
<tr>
<td>Other</td>
<td>7%</td>
</tr>
</tbody>
</table>

MEDIA AND PROMOTION

The series was promoted heavily on our website and to our newsletter list of over 100k teachers, parents, and homeschool educators.

We endeavored to promote the series to Title 1 schools. We reached out to over 200 school districts across the country that represent high concentrations of Title 1 schools. As stated in the demographics above, 46% of the public school educators registered were from Title 1 schools.

We also reached out to ten educator associations with the Spark of STEM Series information.

SOCIAL MEDIA

The series and speakers were heavily promoted across all of our social media platforms. Speakers and their organizations also touted their participation on social media. The following pages illustrate the event's reach across social media.
Coffee Break Series Media Reach

Total Media Impressions from the Spark of STEM Coffee Break Series

2.97M Impressions

Impressions Breakdown:

1.8M
Facebook Ads

781K
USASEF Newsletter

393K
USASEF Social Media Accounts

FB Ad Statistics:

13
Number of ads

1.8M
Impressions from ads

2,923
Clicks to registration page/YouTube playlist

ACCOUNTS OF THOSE WHO SHARED SCIFEST POSTS WITH LARGE FOLLOWINGS:

Twitter:
MATHCOUNTS- @MATHCOUNTS: 4,750
George Mason University College of Science- @GMU_COS: 2,046
Learning Undefeated- @LearningUNDFTD: 1,131
Spark 101- @Spark101STEM: 1,129

Instagram:
Dr. Erica Colon- @nittygrittyscience: 25.9K
Hip Hop M.D.- @hiphopscienceshow: 14.4K
Prof. Kelly Knight- @kellythescientist: 11.3K
Jonte Lee- @jonterlee: 5,511
Mr. Science- @hookedonscience: 3,007
George Mason University College of Science- @mason_science: 1,505

All impressions gathered by Facebook, Instagram, Twitter, LinkedIn, and Iconosquare. Data pulled from October 2021- January 2022.
Coffee Break Series Sample Media
ATTENDEE QUOTES

“The Spark of STEM Coffee Break Series is a fantastic addition to my teacher toolbox. The flexible 15 minute format allows me to hear about new projects focusing on STEM innovation that are easily transitioned into lesson activities for my students. The activity sheets and resources are amazing!”

“I think these Spark of STEM Coffee breaks are a fun and innovative way of helping educators promote STEM in their classrooms! :)

“As a teacher, I have extremely small amounts of breaks in my day and after school, so the 15 minute workshops are the answer to helping me to stay current in my practices.”

“I love the STEM coffee break series. The lessons are presented in a way that can be easily adjusted to fit your needs and your classroom without losing any content or engagement. I hope they keep adding to the series!”

“I absolutely love the 15 minute format as I can watch over my lunch break. The episodes are easily digestible and the tips are easy to integrate into the classroom. Thank you for hosting this for educators.”

“Great ways for teachers to get fresh new ideas for classroom activities, so students can get more hands-on activities and new ways to help students understand subjects.”

“Short videos are great for providing those little sparks of STEM. New ideas help keep my content exciting and it is great to hear from experts on what works for them.”

“Spark of STEM Coffee Break Series is a dose of inspiration during this challenging time to be a teacher. Thank you.”

“Wonderful segments and clips were short, enjoyable, and truly motivated me. Love the theme of ‘Coffee Break’”

“Excellent resource that both INSPIRES and provides TAKE-AWAY ideas to use in the STEM classroom! Thank you!”

“It was convenient! Watching it on demand allowed me to watch programming when I could during a lunch period.”

“I liked the length of the videos. The presenters were engaging and the activities were age appropriate. It really was a fun coffee break.”

“This series of information is something every teacher can use to create, imagine, and validate the skills for our 21st century STEM education. This series will set the tone for the school year.”
"I enjoyed the engaging presenters and the activities they chose to demonstrate. The length of the videos was perfect and the activities they shared will be easy to use with students as we prepare for our STEM themed summer academies. Thank you!"

"It's nice to smile nowadays especially when learning new ideas."

"I found the coffee breaks convenient and helpful - I really like that they are available to watch on my time."

"I love the variety of guest presenters and the attention grabbing intros. I liked the addition of how forensic science was fun in the classroom and is also a career path that a student could pursue. Linking what we do in the classroom to the real world."

"I enjoy getting new ideas that we can incorporate into our homeschooling. I love hearing from these experts and I appreciate their enthusiasm for educating young people!"

The Spark of STEM Coffee Break series can be viewed on-demand [here](#).

This program would not be possible without the generous support of AstraZeneca. We look forward to working together again and continuing our mission to inspire educators and students with high quality STEM content.

- The USA Science & Engineering Festival Team