**K-12 Student Outreach**

**Digital Outreach Live Panel Event**

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| **1. Section/Branch** | Central PA YMG |
| **2. Section/Branch Size** | Small |
| **3. Project Contact** |  |
| Name | Danielle Schroeder |
| Phone Number | N/A |
| Email | danitheengineer.asce@gmail.com |
| **4. Project Category** | K-12 Student Outreach |
| **5. Project Description** | This project involved hosting a virtual outreach event for students in theGreater Philadelphia and Central PA area schools to discuss civil engineering. |
| **6. The Process**(What you did, When andHow) | Worked in collaboration with the ASCE Philadelphia YMF K-12 Outreach co- chairs to hold a collaborative event. The event had 7 panelists and over 50 attendees from both the Philly and Central PA area schools. For outreach of the event, we reached out to the Philadelphia STEM Ecosystem as well as ENGINE (Empowering Next Generation of Innovators and Entrepreneurs)of Central PA. In the RSVP form, we asked the following questions:Email address to send Zoom link toApproximately how many students will be joining from this location? What questions would you like our Civil Engineering panelists to cover?The last question was especially helpful as we then had preset questions from those who were tuning in case there was a pause in the beginning.Form also included the materials for the activity that each student would need as well as the following note: “NOTE: If you are not able to obtainthese materials for each student, you are more than welcome to sign off the call after the Panel Portion or to watch the hands-on demonstrationwithout replicating the activity.”The panel included civil engineers in a variety of fields and covered topics including the engineering design process, current challenges facing our infrastructure in this 21st century, and favorite part of being an engineer. We closed out this event with a hands-on demonstration of Fireworks in a Jar. (https://[www.youtube.com/watch?v=JgNOuNh0Okg).](http://www.youtube.com/watch?v=JgNOuNh0Okg))A week after the event, an email was sent with some follow up links about |

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| model examples, free software, sinkholes detection by geophysical methods, and recommended ASCE activities to further learn about civil engineering. |
| **7. Those in Charge** (Committee, Task Committee, Etc.) |  | Section President and Philadelphia YMF K-12 Co-chairs |
| **8. Time Frame** (When Started, When Completed) | One-hour presentation, 15 minutes for introduction slides and panelist introductions, 30 minutes panel portion, 15-minute Hands-on ActivityAbout 4 hours of preparation time for slide creation and panelists coordination. |
| **9. Success Factors**(The Parts that WorkedReally Well) | Panel portion went great! One of the panelists also served as moderator to direct questions to specific panelists to keep the conversation going. |
| **10. Setback Factors**(The Parts that did NotWork Well) | Different Teachers tuning in had different expectations of what they wanted their students to do (have their video on/off, unmute to ask questions/only use the chat to ask questions, etc.) We ultimately kept mentioning to please see the chat to see the specific instructions from your teacher. |
| **11. Creativity**(This is something off thewall that we did) | You can take advantage of the virtual setting since the panelists are not tuning in from the same location. For example, one of our panelists is from Michigan. It was really awesome to have civil engineers from different states to share their perspective. |
| **12. Administration** (What was most Important?) | Utilizing our local STEM Ecosystems: https://stemecosystems.org/ |
| **13. Follow-Up** (What was most important?) |  |  | Coordinate with the schools and STEM Ecosystems early and often. |
| **14. Recommendations**(What you should ALWAYSdo with this project?) | Ask about recording of the event in the RSVP form. |
| **15. Cautions**(What you should NEVERdo with this project?) | Having too many introduction slides which can lose the interest of the students. |
| **16. The Outcome** |  | Students gain a better understanding of what a Civil Engineer does and consider a career in engineering. |
| **17. Ongoing Activity**(Would you do it again?) | Yes |
| **18. Speaker Contact****Information**(person from your Regionwho would be willing to speak about the Best Practice) |
|  |  | Name | Danielle Schroeder |
|  | Address | N/A |

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| Phone Number | danitheengineer.asce@gmail.com |
| Email |  |
| **19. Additional****Comments**(We strongly recommend attaching relevant photos and graphics) | Happy to discuss this further with anyone who plans to host a similar K-12Outreach Event! |