Civic Scholar Senior Project | Class of 2021

World of Chemistry Workshops
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The overview of this project is a series of virtual chemistry workshops for 6th and 7th graders, where students learn selected topics in chemistry and engage in at-home experiments to explore and visualize topics further. The plan for this project was to introduce chemistry to middle schoolers before they would learn in school to give them the advantage of understanding these crucial concepts early. This will help them with their future education, as generally everyone takes chemistry in school and often many also struggle and end up disliking the subject. The goal was to introduce chemistry to the students in a fun and interesting way to teach them practical knowledge and engage their interest in exploring chemistry more.

I do believe the goal was met in this project, as students demonstrated through fun kahoot quizzes their understanding of the subjects taught, and were excited and engaged during our experiments together.

The larger issue at the core of this project is underfunding in schools, which reduces the opportunity for students to experience extracurricular topics like this and also explore and develop their potential interests.
This was a partnership with the Orange school district, and I specifically worked with 6th and 7th grade students from Lincoln Ave. The project was aided significantly by staff from the school district, such as Stephanie Desanges who coordinated with me to deliver the experiment supplies to the school and distribute them to students on a schedule, Principle Iannucci who campaigned for and approved this and other workshops to the school board, and the teachers at the school who signed on for after-hours time to be present and help with the running of the workshops (Ms. Hagan and Mr. V). The success of the planning and execution of these workshops was due to their help and guidance.

This project can surely be sustained, as anyone can continue with their own workshop topic within STEM or continue on with chemistry and re-teach the same topics and experiments in their own way to a new group of students.
This project helped me develop and exercise a number of crucial skills.

This required detailed planning over many months to enact, with coordination between multiple contacts within and outside of Drew. I had to adhere to the overall timeline and develop my own timelines for researching and creating each lesson plan and powerpoint, which helped with time management, organization, and communication.

Developing the lesson plans for students required creativity in determining how to engage students while learning, and critical thinking in choosing the right topics and experiments for the knowledge level of the students that are both important yet also fun.

Executing the workshops required flexible communication skills in teaching to the students in an understandable way. This was especially so for an age group of students I have not worked with before, so learning how to communicate and guide them during the lessons was a large area of development for me. I also learned how to create effective lesson plans, which helped with teaching skills.

Overall, it was personally enjoyable to be able to give these students this experience, and I had a lot of fun guiding them through the experiments and seeing their excitement.