

While I know the LiA often involves travelling to far away places and helping people you've never had the chance to meet before, I wanted to see if my LiA could help the people around where I live and work every day. If you can't help the people around you, what is the point in helping someone across an ocean?

Yorkshire is home to a lot of low income schools and students who often don't have the resources to learn about the science I do for a living. But, these obstacles can be overcome if someone is willing to take the time to make learning accessible to everyone. This summer, I stayed home in York to work on developing resources to teach young students about fusion physics and get them interested in studying the subject. These video resources will be free to access on Youtube for anyone to watch, and the University of York's physics outreach team will be able to use them on Google Cardboard VR devices when visiting schools and hosting events for disadvantaged students. I've animated five videos showing how fusion works in outer space and in our labs on Earth, as well as what fusion could do in the future if more students join us.

As someone who went to schools without many STEM resources, I became interested in physics by watching Youtube videos as a child. I probably owe my astrophysics degree to Michael from VSauce. I had never seen these topics before I watched the videos I did, and now I study them for a living, so I know the impact that easy to access and easy to understand learning resources can have on young students. Doing this project has been fulfilling in a way that is hard to put into words. I get to provide for others what was provided for me, and continue to garner interest in a field I love dearly.

In addition to giving back to a community that has helped me, I was able to learn valuable skills that I knew nothing about before starting this project. I was able to learn the coding language C# as well as how to use the game development engine Unity through the University of York's Creativity Lab. The Creativity Lab is free and open to the public to access and use these resources for whatever they may need, and the lovely people there were able to help me find the right resources to develop these videos. The skills I've picked up this summer will help me continue to develop outreach materials long after I'm finished at York, and will follow me in my career. You think I could put game development on my CV?

Research means nothing if no one can continue it after you, and this outreach work has helped ensure that someone in the future will be able to continue the research that physicists do. I'm glad I was able to incorporate the element of outreach into my research, and I'm thankful I was able to lead a project that I can say I'm very proud of.