

Student feedback on TeenTech Awards 2020

*It was amazing to receive positive and constructive feedback from national supermarkets such as Waitrose and Sainsbury's for our idea. This experience has inspired us to be more involved in stem subjects as we have enjoyed the engineering side of TeenTech. Participating in the Awards has allowed us to be creative and build an idea we are passionate about as well as having the opportunity to share it with others. **Lucy and Isobel,***

*Through this process we have had to interview people, problem solve, design websites, investigate facts and information and make a business plan. We have also learnt a lot about climate change and how people are helping to fix it and others who are not aware that the production of fast fashion and designer clothing heavily effects the world. We also learnt about those who are aware yet do nothing to help. **Sophia and Lucia***

*I had to practice drilling a precise hole (1.5mm) into a 3mm thick wall. So that I didn't drill into the wall and it split on my prototype. I have also learnt to try and use my time effectively to make sure I can finish the project. **Oliver***

We've learnt about some of the most common renewable materials and power sources and how they can be used to create a more efficient home, and that many towns and cities in Britain are already using the eco-home idea. We have also found out that an eco-home, whilst costing only 5% more than a regular home, is favoured by many people, but is also rather expensive for others. In addition, we have learnt that there other types of buildings could adapt to become more efficient and eco-friendly - not just homes.

*The primary thing we learnt when conducting research is the extent of the problem that overpopulation presents and the effects that is having on the people, economy and the environment. Another thing we have found out about is the lack of affordable housing already available on the market, and how this makes it difficult for people who don't yet have housing to get on the property ladder. One key discovery played an essential role in the design of our project that of the space-efficiency of hexagons: we mimicked the design of beehives to create the pods for the facility. If we were to do the project again, we would design facilities not just in India, but the rest of the world by doing different designs for multiple climates or one design that is adaptable to its climate. **Cory and Ben***

Thurston Community College

*I have learnt how to develop an idea into an innovation. I've learnt skills including how to do a survey. I have learnt from doing this that I can work on my own very well and can be good at something if I try. **Bethany,***

*The problems we have faced as a team within our project have been numerous but we have pushed past these issues in order to become a stronger team. There were, of course, times when our decisions were not unanimous and as a team we had differing views on the use of certain information or other aspects of our project. In many ways we found this unavoidable so we chose to always go with the idea that shared the majority view and rationally put forth our views so that we could discuss what would be the best outcome. This strengthened our team and allowed us to work well and efficiently together. **Lina, Mara and Amy***

*Doing this project has changed the way we think about technology, but we have also had to look at our project from different points of view and learn all about people with allergies. Although we don't have allergies ourselves, we realised how hard it is to live with even the most "mild" allergy as it shapes your life and stops you from doing certain things. Apart from this, we started off with an idea and thanks to our teachers and teen tech we have been able to begin turning our idea into a real thing, able to help people which inspired and motivated us into perhaps going into medicine, technology or something environmental when we get older and we would love to have a chance to bring this into reality. We also have developed our coding skills and even created our own, functioning app! **Emily and Eliza***

Reflecting on the past seven months, this TeenTech project has developed us hugely, acquiring a range of new skills such as public speaking, by talking to the Microsoft UK CEO in front of a large group and developing an appreciation for the application of maths skills for data handling and graph construction from our survey. We enjoyed making a project timeline template for the first time, experiencing the steps to manage and plan our time, making the project our own. We have learnt not to be afraid to reach out to external experts for advice, developing connections with specialists in the field very willingly passing on their knowledge to help our project. **Karina and Anna,**

This project has been a real challenge, but we have really enjoyed it and enjoyed learning lots of new skills. We are immensely proud of what we have managed to actually complete especially how much of it was built when schools were closed. We have learnt about viruses; bacteria; antibiotics; resistance; high risk

patients; treatments and so on. After this experience we will be choosing Computer Science as an option and in the future we want to work in something to do with STEM either engineering or medicine. Thank you for taking the time to read our project. **Kiran and Kuneet,**

We learnt so much whilst designing BioClear. From power point skills to researching it's been an invaluable experience that will surely help with future projects. Furthermore, in such an unknown area of science surrounding both microplastics and microspectrophotometry we've both learnt lots of new information and carried out experiments that will help us remember important facts and methods. Also, we were so privileged to meet with some of the top STEM industry professionals that've really inspired us and helped our project along the way. **ELSPIE AND LARA**
TEAM ELEKTRICA

During this process, I have learnt making key design and business skills. One being the ability to make direct contact with your customers and knowing exactly what they want. In terms of design I have learnt that it is important to have an array of designs and prototypes, all different shapes, colours and sizes, to approach your customer with if perhaps they don't know what they want. I've managed to develop my design skills on solidworks, As a designer I learnt that it is crucial to have a plan. A plan of the different stages of your designing process. However, it is also important to tweek that plan if you need more time to meet customers needs or you need more time on designing etc.
Ruby, Warminster School

We have both loved participating in Teen Tech and creating and developing our idea. It has inspired us both and made us realise that we really can make a difference and have great ideas even though we are just young girls. It has taught us more about the part of STEM. Teen Tech has been a very positive and enjoyable experience and we look forward to see where it goes next!
RAICHAEL and AMELIA

This project has been extremely useful to me, in the sense that it has made me realize the importance of technology in medicine and the great potential it has to help completely change the way many forms of healthcare are being delivered. For example, in terms of ease; this would of course improve. The use of VR in aiding osteoporosis was in particular very interesting for me as it allowed me to research a section of biology which we would probably never had covered otherwise in class, it was in this part of my research that I truly

realized the important ways in which science and technology work together, especially in such a digitalised age it is easy to see how one cannot flourish without the support of the other and so it also helped further my resolve to go into a stem based profession, whether it be in healthcare or research.

Ultimately however, I think the most enjoyable aspect of this project was the interactions I made with the healthcare professionals. From the offset emailing so many people was a little daunting, given that no matter how much research I had done on the matter these people would still be experts in their field but with each new email I was further encouraged to see this project out until the end, their comments allowing me to consider new ways in which VR could be utilised in this particular area of Medicine and healthcare, challenging me to broaden my research to consider cost, suitability and challenges for the masses as oppose to a minority - a major question being how we could potentially monitor whether people were actually utilizing their headset, after all, all of this research would be for nought if people weren't actually taking advantages of the resource given to them. It was these challenges more than anything that I relished and has truly encouraged me to pursue science in the future and so, despite such challenges I think this project was worth every second of the time spent on it. **Melika**

I have learned that the dangers of electricity and electrical fires are a serious issue, as they take a long time to put out. no matter what the product is, it must be designed to withstand punishment and be durable. Electricity is a brilliant power source, but it can come with hazards which need to be controlled. In conclusion, all small flaws with any design, are still flaws and can be improved upon. **OLI**

We have learnt that there is a need for oral hygiene checks all over the world whether via our method or any other, this isn't a widely discussed problem and more should be done to help as this problem isn't just going to go away We have learnt how we could make the environment and your health much better just by simply changing a small few things in your life. **Rowan and Ben**

It was stressful at times, but it has taught us to keep going even when it gets hard and that we can do it, (even though we are not the best at computing and can both get side-tracked quite easily). Our solution has become better and stronger by working in a team and has developed through our creative minds working alike. It was also fun in some more creative cases e.g. designing and thinking what to do next. TeenTech has been interesting and different and I

would recommend it to people who enjoy a challenge. I would have preferred more time; it has flown by. **ANNABELLA AND ILANA**

As the Lab Rats, we believe we can change the daily lives of youth as our idea allows people to learn through play what is happening inside their bodies. This will help them 'know' how to keep healthy via the info provided, so they learn and change habits in a fun and enjoyable way.

We are especially proud of the time we spent researching as this made our time designing much easier. In conclusion, this TeenTech project has stretched us as scientists and engineers. We have surpassed our own expectations in what we could achieve in this time frame, creating a worthwhile project that could help people in the future. **Sukamji and Amanjot**

We have all learned some coding! None of us had any experience in coding before we participated in this challenge and we have learned new things, using our mentors to help us. After this challenge we will continue to learn more about coding as we found it fun but we have lots more to learn. We have extended our knowledge about all of the different aspects of STEM, including calculating the volume of water used, learning and hydro-powered turbines and many more. We also learnt more about teamwork and coming up with new ideas, skills we can use in the future in all aspects of life.

Lilia, Ella and Emily

This project has really given me an insight to how much work you need to put in to think, research and design an innovative project which can eventually change the world. I have learnt so much from researching the individual components and how they work together to create a functional robot which I truly believe can save lives and money in Low Income Countries, **Samuel**