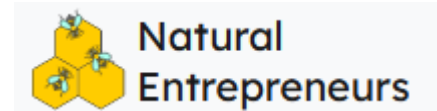


# Young Entrepreneurs Impress with Sustainable Solution Projects



At 9am on a Monday morning, students from LionHeart Academy slowly start arriving into the classroom. Sorted into teams, the first to arrive are provided a password and asked to login into the NatEnt platform. Once there, they start to add a team profile.

Other teams arrive over the next 30 minutes and are given the same tasks. Those first to arrive follow straight on to the next task without invitation, and they look at the challenges they can select from.

With all the students and teams now present, everyone is given a hands-on introduction to biomimicry. They select a natural object and think about its purpose (function) and how it achieves this purpose (strategy). And so, two fundamental skills of biomimicry are introduced. With this knowledge, teams are handed out copies of the challenges from the NatEnt platform and invited to select one and then make their selection on the platform. With this, they are really up and running.

Using the NatEnt presentation, teams are now introduced to all the steps in the Define Phase. They are shown how to understand the context of their selected challenge, and to think about what their challenge will need to do in order to succeed. Already each group is engaging with the NatEnt platform at their own pace; allocating tasks between team members and selecting one person to upload data as others carry out research. They seem very comfortable with this enquiry-based approach.

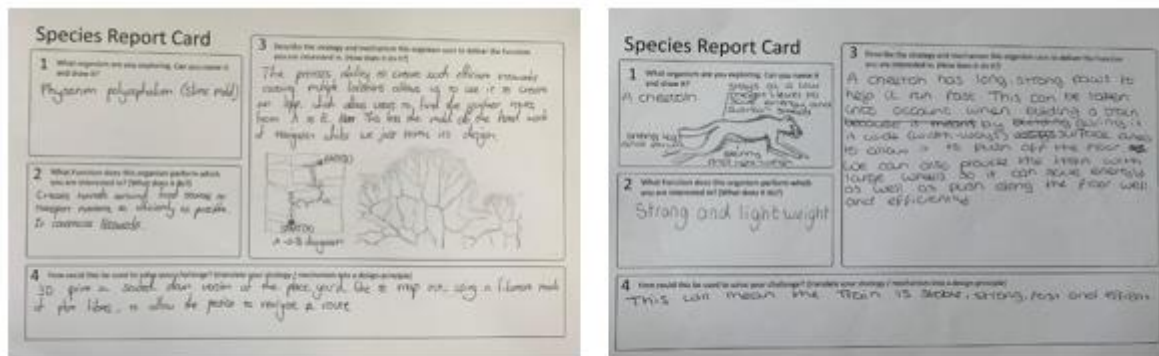


Figure 1: Species Report Cards

Once teams have understood their challenge and what their solution needs to do, they are brought back together and the NatEnt presentation used to lead them through the Discover Phase. They are introduced to searching nature for answers to their research questions, and how to extract strategies from natural examples which could become a part of their design solution. Species report cards are given to each group, and they are encouraged to complete at least five for their team. Importantly, the necessity of research is stressed rather than jumping straight to answers and perhaps missing a vital piece of the puzzle. By the end of the day, the teams are working hard on their own recording their research and adding data to the NatEnt platform.

As Tuesday morning kicks off, teams know what they need to do and carry on with their research. As their research builds, some are starting to think about solutions and what their research is telling them. Bringing all the teams together, the NatEnt presentation now leads them onto the Create Phase and how to turn their research from nature into a design solution to a human challenge.

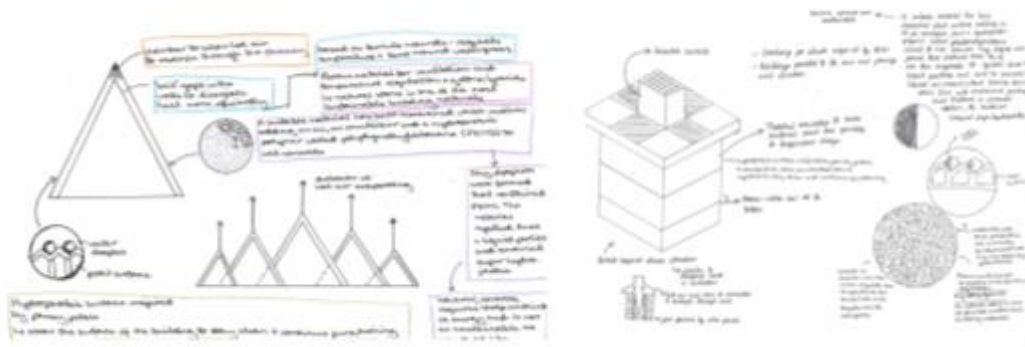


Figure 2: Design Ideas Taking Shape

There is no shortage of energy and ideas. The session has been run by science teachers until now, but they are joined by an art and design teacher. This helps students to start visualizing their design solutions and to come up with realistic presentation of their ideas. Time is now of the essence; each team will present their design solution at the end of the day and are busy ensuring they've understood the science correctly and can explain how their design solution has been inspired by nature. Thankfully, all the presentations pass off without a hitch. Next though, they have been invited by Prof. Turi King at the University of Leicester to present their designs to a panel of experts.

### An evening with the experts

The teams are understandably nervous. For many of them this is the first time they have presented to anyone outside of school. The university is a welcoming environment, but even so presenting to one of the best known scientists in Leicester builds tension. However, none of the teams need have worried. The panel of experts is impressed with the research skills and ingenuity of the teams, and all feel that the evening is a great success. In fact, who were the real experts?

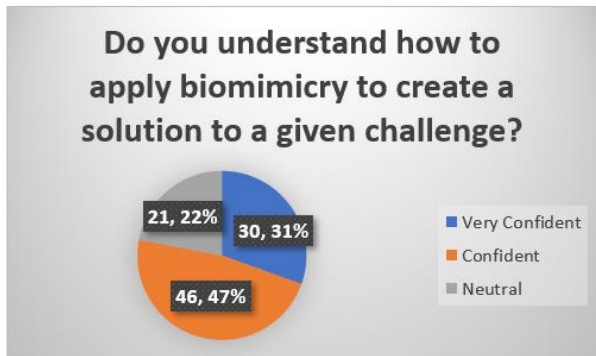
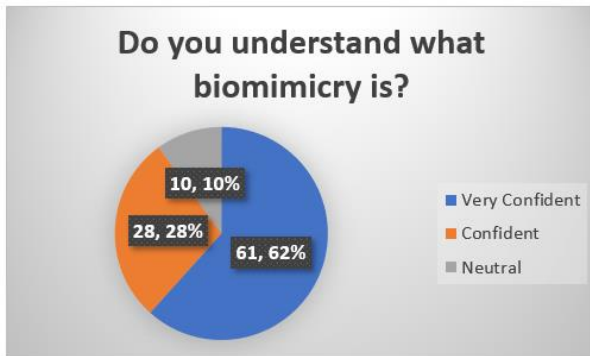
Read how the University described the evening [here](#).



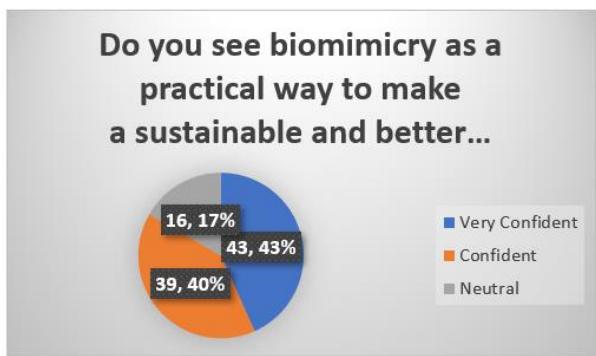
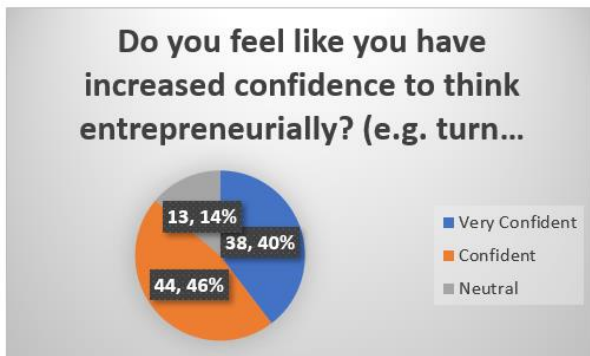
Figure 3: Team Presentations

### And the Results....?

What did students learn from their experience?



“I most enjoyed being in nature and learning about biomimicry.”  
 “I enjoyed the most the last part where we were creative, practical and innovative with real tasks.”  
 “I enjoyed working on the last part of the project, I enjoyed being an inventor and using biomimicry to solve problems, invent new things.”  
 “Getting to know the clever ways that plants sustainably adapt to do their function.”  
 “We can learn that nature has a lot of good ideas that can make this world healthier and a good place to live in by copying what nature does.”



“I really enjoyed creating a solution to a given problem. It was very fun and it gave me different perspective of thinking that I didn't know I had.”  
 “I enjoyed seeing the plan properly develop and became a solid idea than just a thought.”  
 “Yes, I feel this way because I wasn't only told to say what I can or need to do, I was told how to sell it.”  
 “I most enjoyed how biomimicry works and I liked applying it to real life scenarios.”  
 Most interesting... “That you can make a lot of money from learning from nature.”