

Group 4 Project 2022

Science in Hollywood

With virtually every other film in recent years being monopolised by the DC and Marvel comics franchises, with superheroes and superfluous storylines aplenty, it is time to call out those lazy screenwriters and sloppy film producers. Questions need to be asked. Not just the simple observation of ***'where has the originality in Hollywood gone?'*** but also ***'Is there still any truth and honesty in our premier form of fictional entertainment?'***

Therefore, the theme of this year's Group 4 Project was ***'Science in Hollywood'***. This broad title of investigation encouraged our Year 12 students to explore famous scenes from their favourite movies. They then had to prove or disprove whether what they saw on the silver screen can be replicated in reality.



Group 4 subjects are made up of the Sciences. And there are other Sciences nearly as important as Sports Science I can confirm. Group 4 subjects taught at BIS HCMC include Sport and Exercise Health Science, Biology, Chemistry, Physics, Computer Science, Environmental Science and Design Technology.

The Group 4 Project aims to bring the students of Science together in a transdisciplinary environment so that each small group has a member of all subject areas. Each student then uses their

knowledge, understanding and expertise of their individual subject specialism to enhance their group's grasp of a broad thematic title or answering of a question. Hence, how can sport, the core sciences, technology and environmental understanding conclude that ***'YES, Elliot could cycle ET into the sky (ET - the Extra-Terrestrial)'***, or ***'NO, Neo cannot dodge bullets in such a way (The Matrix)'***.

By eliciting students to be risk takers and self manage their title, research, experiment and conclusion, it allows our students to display the very best characteristics of being a BIS HCMC student. The ***Perseverance*** needed for the in-depth level of weeks worth of ***Enquiry*** in the build up to the event, ensures that the students ***Care*** about their subject specialism enough to be sure of a detailed justification from their part.

By enabling others to have their say, being open minded and appreciating the importance of one another's opinion, promotes the skills of ***Reflection*** in each student. This encourages the communication and contribution of others and leads to the ***Respect*** for and from all group members.

By facilitating hours worth of principled and knowledgeable research, the need for balanced thinkers can be utilised in order to answer a complex question with ***Integrity***, knowing that every Science has been used to prove or disprove a theory. This then develops a multifaceted Scientist who has a broader horizon of other Sciences and not just of their subject area studied.

For this years Group 4 Project, famous Hollywood scenes depicted and dissected by our scientists included;

- Is the house in the movie **'Up'** capable of being lifted by balloons? If not, how many balloons would it take to lift a house?
- Is Rapunzel's hair in the film **'Tangled'** strong enough to support a human? If not, how much hair would be needed to support the weight of a human?
- Is it possible to outrun the T-Rex in **'Jurassic World'** wearing high heeled shoes? If not, how fast could a person really run in high heels?

This day-long event saw our students fully engaged and happily working independently to create a marvellous atmosphere of collaboration and contribution from all involved. Enjoyment of the project is excellently summed up by our fantastic students below:

- *"The G4P improves teamwork and communication skills by working with people you don't normally work with. It forces you to show creativity and problem solving because you work without direct supervision within your group"* (Group 1: Jerome, Hannah, Edie, Mahe)
- *"I have enjoyed working with people from other science areas. Learning other strands of Science has been interesting. It has been good to be taught by our friends from other Science classes rather than by our usual teachers".* (Group 11: Gaily, Rachael, Yu Jeong, Jessica)
- *"It has been fun to have a day of interest. The title of the project has been excellent for avenues of exploration that may or may not be new to you. Subjects coming together to contribute and have expertise has been cool and to see how they are and are not related is eye opening"* (Group 18: Bao, James, Khoa, Tony, Betty, Ploy)
- *"The Group 4 Project is great, not just for teamwork but also for team building. The collaboration skills being developed help us to destress at this busy time. It is also good to see similarities and overlap between the subjects"* (Group 20: Ji Hee, Rosie, Leah, Adele)



BIS HCMC students are renowned for their holistic education and are often acclaimed for their contributions to society around the world. Hollywood should take note. If movie producers want to be credible in a fictional world of film, then our Y12 students have the knowledge and understanding of the Sciences to make that work!

Mr Husband , Director of Sport, BIS HCMC