**Visiting Group 4 Project**

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| Name and Number | 22 Extracting Heat from a Compost Pile |
| Questions you asked | How high the temperature can reach using this method?  Have you taken the strong smell in the heating process into consideration that can affect surrounding negatively?  Why the waste will produce land erosion? |
| Strength of the group? | The strength of this group lies in the its creativity and innovation. The topic is really starting from something small but what they do can make a huge difference.  The project is practical and have real-life application: it can be used to heat the crops for a circular system;  Also, advanced equipment for heat measuring was used;  Graphing real-time variation of temperature over time for modelling;  The connection between the data and conclusion is strong. The conclusion was made that at least 30% of energy is stored in the waste. And the data collected, even not sufficient due to time limitation, shows that there are a lot of heat produced and still have many energies stored inside. |
| Areas of Improvement | Sufficient data is needed;  They still need to consider how to do this on a larger scale if they really want to launch their product.  Better presentation is needed; may be better if there are visual aids |
| One thing you learned from this project | I did not think about this way of recycling before; what people usually did is just use the waste as fertilizers, but they never take the land erosion into consideration; think critically, see the advantage and make improvement based on disadvantages. |

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| Name and Number | Group 12, the Effect of Abiotic Factors towards the Lake Water |
| Questions you asked | How does the mechanism work in the system?  Why the data from the first position shows that the temperature is highest even though there are covers on top that protect it from sunshine? |
| Strength of the group? | Great presentation with posters and pictures;  Control groups and experimental groups are divided clearly;  Three repetitions are made for each location.  Detailed and thorough justification and explanation given for the results drew from the experiment;  The equipment used is advanced—Pasco: advanced water quality fit;  Ways of improving the project were given.  Very strong relation between conclusion and data.  The standard was well set; the data is accurate with repetition; the conclusion was made that in three locations of 2, 3 and 4, the results are positive; also, detailed explanation was given for why those different conditions can all meet the standard. |
| Areas of Improvement | The project is almost perfect except that there seems to be no correlation between the 4 indexes they tested, and thus the conclusion drew can be stronger. It will be better if the drew the connection between these values including BODJ, COD, TOC, TIX and IP.  More collaboration is needed; only one person presented the results to us. |
| One thing you learned from this project | The most valuable lesson I learned from this project is that when you find something unexpected in your experiment, what you need to do is to think more critically about all the factors that can influence the result, and you can always find something interesting by doing that. |

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| Name and Number | Group 4, reducing water wastage while washing hand |
| Questions you asked | How do you determine that the data you collected are statistically scientific?  How much water approximately can you save using this method?  Why you think this is going to help with saving water? I think the quantity of water is the same even if you use this product.  How can you eliminate the psychological effect people have if they know the purpose of your experiment? |
| Strength of the group? | It pays attention to a very small detail in real life—critical thinking;  Awareness of sustainability;  Also, they showed strong collaboration through the designing process;  Their presentation was above standard with a lot aid and detailed explanation. |
| Areas of Improvement | They cannot draw a full conclusion based on their limited data and the errors were not diminished;  Their product is not convenient because they need to hold it all the time while washing hands;  The decrease in time of washing time is not significant;  The comfortability of using the product may not be high. |
| One thing you learned from this project | While making a product, various perspectives should be considered, including both customers’ satisfaction and environmental friendliness. |

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| Name and Number | Group 38 3D-printing |
| Questions you asked | How did you solve the problem of high temperature required for the printing process?  What further application does this investigation have?  What is the difference with these different materials you chose to investigate on? Why not others?  What challenges do you expect to meet when you apply this into real life scenarios? |
| Strength of the group | Great collaboration shown while presenting and designing their product, as everyone’s advantages was used in the design;  Presentation was above standard with models well displayed and posters put up;  Various perspectives considered in the experiment;  Detailed analysis of all the results drew and wise decision making in the end;  Sustainability was taken into consideration; |
| Areas of Improvement | The model is just a hollow structure without inner materials, which cannot be used in real life;  Each experiment was done for just once because of time limitation;  No further explanation given for how this design will be applies in medicine and operation. |
| One thing you learned from this project | The best way of collaboration is to utilize everyone’s advantage and make that into a big project concerning various areas in real life. |

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| Name and Number | 15, Purifying Kuncheng Lake Water |
| Questions you asked | Why do you want to purify the water?  How can you purify that large amount of water using this device? What improvement are you planning to make?  How did you change the PH value in water using this device? |
| Strength of the group? | The PH value was tested for different groups of water sample and comparison was made before and after;  The calculation was precise and scientific data was used from Changshu report office;  The conclusion is strongly connected with the data; the qualitative data shows that the water is not drinkable but can be used better for irrigation, as the PH value and purity testing show; |
| Areas of Improvement | The product cannot be put into massive production yet;  Also, the efficiency of purification should be improved;  Maybe more areas of application can be concerned. |
| One thing you learned from this project | When different methods are present, like the case of this project, including the most basic method of filtering and the method of reverse osmosis, we need to view the pros and cons from different aspects including practicality as well as efficiency. |