

Hong Kong Student Science Project Competition 2006

Feedbacks from Advisors on Team Projects

At the Sharing session with advisors on 4 March 2006, teams had the opportunity to present their project ideas to the advisors for expert comments. After the Sharing Session, the advisors have pulled together more inspiring advice for teams in preparing their projects and are categorized into the following:

I. Literature Review

- A thorough literature review on relevant references is a MUST for a good research.
- Teams are encouraged to make effective use of information available on the internet. Advisors found many teams have not been searching the internet about their project ideas.
- Teams must be very careful when trying to repeat the project ideas/topics that have been done by others, the projects must have some different points of view, methods or approaches when comparing with the previous one. To avoid the overlapping of project findings, review of past HKSSPC projects at www.hksspc.gov.hk and searching internet and library records would be very useful.

Some Useful Links:

1. Hong Kong Science and Technology Parks
香港科技園
<http://www.hkstp.org/eindex.php>
2. Hong Kong Applied Science and Technology Research Institute Company Limited
香港應用科技研究院有限公司
<http://www.astri.org/en/company.php>
3. Hong Kong Invention Association Ltd
香港發明協會
<http://www.hkia.com.hk/>
4. The Hong Kong Association for the Advancement of Science and Technology
香港科技協進會
<http://hkaast.org.hk/HKAAST/chi/index.htm>
5. Institute of NanoMaterials and NanoTechnology (INMT)
納米材料技術研發所
<http://www.ust.hk/~inmt/>

II. Generating Project Ideas

- Some ideas seems innovative but are far lack of theoretical support. Teams should beware of this insufficiency which may lead to unnecessary waste of time and energy.

- Ideas and problems are sometimes not clearly and well defined. This might also be due to the lack of effective literature review or theory support. In turn, it may make the execution of experiment/investigation a disaster.
- Some ideas are very similar, repeated and lack of originality. It is natural and justified to adopt ideas from our daily problems, such as prevention of SARS and unhealthy diet, however teams may try to expand their perspectives by thinking critically and divergently, try not to adopt directly from what the media and people around have been telling you.
- Some teams are trying to do similar tests the Consumer Council has been doing, such as testing the safety of certain products. Teams are reminded that this is a Science Project Competition and their projects should be a scientific investigation rather than a consumer product testing. The big difference is that a scientific investigation will bring out insights or innovative ideas for further scientific development.
- Advisors have a hint for teams that there are a lot of things that could be done with computer simulations, an area which teams should really explore.

III. Execution of Project

- Teams must ensure that safety is seriously observed when planning and executing their projects. For example, a team planned to test gas in their project that could be very dangerous to the team.
- Some teams are not using the appropriate experiment to test their hypotheses, that may result in unsuccessful findings.
- Some teams relied too much on the instruments which are out of their reach that may reduce the versatility of their inventions.
- It is also found that there is a general lack of careful and detailed execution plan. Teams are encouraged to work harder on this aspect and advisors will be difficult to give their comments if teams cannot clearly tell what exactly they are doing.

As a conclusion, a thorough and effective literature review will generate innovation project ideas, and a well-defined and theoretically strong idea leads to careful and scientific execution that eventually bring new lights to our scientific development. So let us all work hard on it and wish you all the success at the coming initial judging on 13 May.