The 4th HKUST Teaching & Learning Symposium 2011
Notes of Group Discussion Session
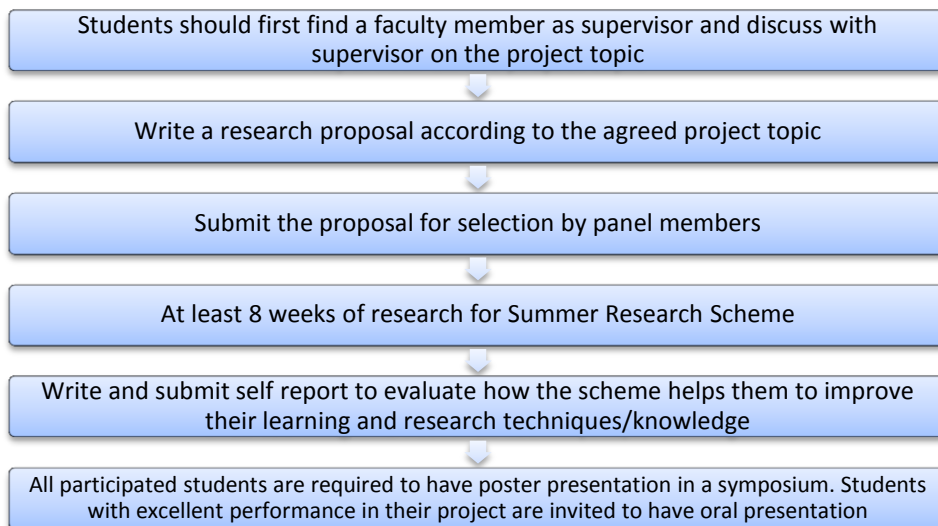
Group   :   **UROP**
Session   :   **AM (11:15 am – 12:00 pm)**
Chairperson   :   **Prof Michelle YIK (HKUST)**
Note-taker   :   **Dr Theresa KWONG (HKBU)**

Experience Sharing – Past Successes and Current Challenges in Undergraduate Research

A. Practices of local institutions

<u>A1. HKU</u>

- Two Schemes (i. Summer Research Scheme; ii. Overseas Research Fellowship Scheme) are offered at HKU (Faculty of Science) which are funded by Alumni;
- Both schemes are similar except that the students will have overseas research experience under the Overseas Research Fellowship Scheme;
- All first year and second year students can apply these two schemes and they need to undertake the following procedures in these schemes:

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│ Students should first find a faculty member as supervisor and    │
│ discuss with supervisor on the project topic                     │
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│ Write a research proposal according to the agreed project topic  │
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│ Submit the proposal for selection by panel members              │
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│ At least 8 weeks of research for Summer Research Scheme          │
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│ Write and submit self report to evaluate how the scheme helps    │
│ them to improve their learning and research techniques/knowledge │
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│ All participated students are required to have poster            │
│ presentation in a symposium. Students with excellent performance │
│ in their project are invited to have oral presentation           │
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- Students who participate in the Overseas Research Fellowship Scheme are entitled a fixed amount stipend and their air ticket can be reimbursed for up to HK$12,000;
- In the past 3 years, 66 students participated in the Summer Research Scheme while 18 students participated in the Overseas Research Fellowship Scheme.

A2. HKUST

- Undergraduate Research Opportunity Program (UROP) was first launched in 2005 as a Summer Program;
- There are 200-300 applications each year.
- Students are required to work on a research project for several weeks and each of them could receive HK$8,000 stipend in the past for on-campus housing (many of them are from Mainland);
- After a review of the program through focus group interviews, it was decided to reduce the stipend to HK$4,000;
- Students who have successfully completed the program will have the recognition appear on the transcript;
- Supervisors of student participants can nominate good student projects for competition. Winners can have chances to get travel grant to attend conferences.
- HKUST also offer credit bearing UROP but only students who have CGPA of B- or above can apply for this credit bearing program.

B. What skills do we want our students to get from the Undergraduate Research programs? What are the activities?
- Get to know one subject very well;
- Skills for employment;
- Publication techniques (writing);
- Intensive research experience;
- Teamwork skills;
- Generic skills improved;
- Figure out how to divide their work;
- Work with electronic databases;
- Research methodology;
- Critical thinking skills.

B1. Skills for Capstone Project
- Integration;
- Learning how to identify problems;
- Application skills to a problem → when to apply, when not;
- Identity → need to think/work as a manager.

B2. Learning Activities to fine tune the skills
- Give students time to fail → do not give too much instructions on solving problems;
- However, skills need to be given instructions.

C. Authenticity of Assessment
- Are the students able to connect ideas?
- Are the students able to connect people as well (teamwork)?

D. Challenges
- Getting all stakeholders to involve;
- Ethical clearance.