Enhancing Student Learning through Holistic Mentoring Program

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Hong Kong Baptist University
HKBU
7 HKBU Graduate Attributes

**公民**
Citizenship

成為具國際視野，品行高尚，有責任感的社會公民
Be responsible citizens with an international outlook and a sense of ethics and civility

**知識**
Knowledge

掌握對學術專業當前最新學問，並有深厚認識，亦有廣闊的文化知識和通識基礎
Have up-to-date, in-depth knowledge of an academic specialty, as well as a broad range of cultural and general knowledge

**學習**
Learning

以開放接納，獨立探求知識的精神，貫徹終身學習
Be independent, lifelong learners with an open mind and an inquiring spirit

**技能**
Skills

擁有資訊科技、數字處理和解難能力，在生活及工作上發揮所長
Have the necessary information literacy and IT skills, as well as numerical and problem-solving skills, to function effectively in work and everyday life

**創意**
Creativity

具備批判思考及創意思維
Be able to think critically and creatively

**溝通**
Communication

精通兩文三語，能清晰表達有條理的想法
Have trilingual and biliterate competence in English and Chinese, and the ability to articulate ideas clearly and coherently

**群體**
Teamwork

具備領導和服務團隊的想法，實踐健康生活模式
Be ready to serve, lead and work in a team, and to pursue a healthy lifestyle
This project calls for the perfection of the existing mentoring system and with the intent to make it into a full-fledged academic advising system. Through the implementation of a variety of activities, the life experience and caring attitude of the mentor can be used to inspire our mentees in fully developing their potential as independent learners and responsible citizens via the four year of university education at HKBU. Under the advice of the mentor, the in-depth subject knowledge, generic skills and teamwork spirit of our students can be fostered through their participation in the Video Production Competition. The quality YouTube as the deliverables of this competition after uploading in public domain will serve as a tool to promote publicsciences to our community. To offer students more opportunity in polishing their English oral presentation skills, student are encouraged to participate the FameLab, an annual 3-min presentation competition on science topic organized by the British Council. In the pilot run of this initiative, selected colleagues from the Faculty of Science are also involved.
Findings

• ETS Proficiency Profile (ETS)
  – From the US
  – Test students’ achievement in Reading, Writing, Critical Thinking and Mathematics

• Academic Proficiency Test (APT)
  – Local instrument
  – Test on three areas, Use of English, Chinese and Aptitude

• Relatively Strong in Mathematics

• Relatively Weak in Communication skill – particularly in English
FameLab

One of the greatest initiatives in science communication

Let's Talk Science! All it takes is 3 minutes

YOU COULD WIN 有機會贏取：
- A free trip to the UK to compete in FameLab International
- Prizes valued up to HK$5,000
- The Best University Award for the most number of participants
- Free training on presentation skills and public speaking

Submit your video entry or audition in person! Let’s get ready!
Science Video Production Competition

Judging criteria:
1. Scientific accuracy
2. Presentation clarity
3. Creativity
Need for science communication

- *How can we understand science if we are not speaking about science?*
- Most scientists do not receive formal training in science communication to the public
Need for science communication 2

• Underestimate the difficulties
• Current outreaching activities are relatively informal, infrequent, under-recommended by mentors
• Possibility of infuse formal science communication training into the curriculum in higher education
“Science is not finished until it is communicated.”

Mark Walport

Goal: shorten the gap between modernization and public scientific literacy

Prof. Xiangyi Li
UNESCO Kalinga Prize for the Popularization of Science 2013
Feedback from Students
– FameLab Competition (Individual Task)

*Percentage of respondents who agreed their achievement(s) in HKBU GAs*

![Bar chart showing the percentage of respondents who agreed their achievement in different areas.

- Citizenship: 0.0%
- Knowledge: 25.0%
- Learning: 25.0%
- Skills: 100.0%
- Creativity: 75.0%
- Communication: 75.0%
- Teamwork: 0.0%]
Students’ Evaluation – FameLab Competition

• Student A (Communication)
  “I was shortlisted as a finalist and had a chance to participate to a workshop on presentation skills facilitated by a science communicator... I learnt some effective way to explain science topic, by simplifying the concepts or theories for the public audiences.”

• Student B (Creativity, and Communication)
  “Although I didn’t learn new science knowledge from this activity, I knew some creative and simple ways to explain science, such as to made use of daily life examples.”

• Student C (Communication)
  “Some of the events were open to public. It provided me an opportunity to communicate science subject to audiences with different backgrounds.”
# Video Competition Results

<table>
<thead>
<tr>
<th>Group</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific accuracy (40%)</td>
<td>25</td>
<td>30</td>
<td>28</td>
<td>22</td>
<td>not rated</td>
<td>not rated</td>
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<tr>
<td>Presentation clarity (30%)</td>
<td>23</td>
<td>22</td>
<td>17</td>
<td>20</td>
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<tr>
<td>Creativity (30%)</td>
<td>23</td>
<td>13</td>
<td>15</td>
<td>18</td>
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<tr>
<td>Total</td>
<td>71</td>
<td>65</td>
<td>60</td>
<td>60</td>
<td></td>
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</tr>
</tbody>
</table>

## Mentors’ observation

- Learning science - improve motivation =)
- Creativity! =))
- Communication =|
- Knowledge =)
Feedback from Students – Video Competition (Group Task)

Percentage of respondents who agreed their achievement(s) in HKBU GAs

- Citizenship: 14.3%
- Knowledge: 57.1%
- Learning: 35.7%
- Skills: 14.3%
- Creativity: 71.4%
- Communication: 35.7%
- Teamwork: 71.4%
Students’ Evaluation – Video Competition

• Student D (Creativity)
  “One of the objective of this activity was to raise the awareness of science from public audience. Thus, we should not just to demonstrate an experiment… We finally created a story with a mysterious opening to attract the audiences and then explained the concept in a logic and scientific way.”

• Student E (Teamwork)
  “The task was far from individual effort. It required science-based knowledge, IT skills, script writing, giving a speech, etc... Everyone in my group were so engaged. Some focused on topic research, others did the speech and post editing... no one get a free ride.”

• Student F (Knowledge)
  “During the video production, we found an interesting topic about ‘plant blood’ ... I further searched on this topic afterwards and started to think about proposing that as my final year project. As I hope to identify if there was any relationship between plant blood and human blood.”
Issues Identified

• The concept of “Science Communication” is new to our students.

• Science-knowledge-based activities (such as, FramLab and Video Competition) helped raise student awareness on Science Communication.

• Compare to group task, individual task provided more opportunities for student to develop Science Communication.

Suggestions

• Relate the Science Communication with Career Opportunities.

• Provide extra training workshops to students particularly on communicating science to public audience.

• Implement these activities to some curricular subjects.

• Encourage student to have a balanced participation to both individual and group tasks throughout the mentoring programme.