

Summary of Discussion
at Exchange Session with Academia
on 25 September 2013

A meeting was held on 25 September 2013 among ICT departments of tertiary institutions, continuing education institutions and OGCIO to discuss and explore collaboration opportunities for the development of ICT manpower in Hong Kong. In particular, the meeting discussed the following issues —

- A. How to outreach to secondary students to arouse their interest to study ICT in senior secondary and post secondary?
- B. How to attract university students of Science Faculty / Engineering Faculty / Business Faculty to choose ICT stream after their first year study?
- C. Any need to seek more internship opportunities for university ICT students/graduates and how?
- D. How to bridge the competency gap between our ICT tertiary education and industry demand?
- E. How to gauge and bridge supply from ICT education and continuing training and demand of ICT industry amid the rapidly changing ICT business and technological landscape?

In summary, meeting participants reckoned that ICT plays an important role in fuelling economic and social developments. It has become a major driving force for the globally competitive economy, underpinning innovation, competitiveness and long-term prosperity. We must ensure that Hong Kong has an agile and competitive ICT workforce to harness the benefits of ICT for our community. While participants considered that everyone is free to make his/her own choice whether to take ICT study and pursue ICT as a career, we should —

- ✓ Provide timely and accurate information about ICT study, career and profession to enable stakeholders (especially students and parents) to make informed choices.
- ✓ Facilitate the younger generation to discover and develop their interest, passion and talent on ICT as early as possible.
- ✓ Promote a positive image of the ICT industry, profession and career.

For secondary students

It was observed that –

- Fewer secondary students choose to study ICT or show interest to consider ICT as a future career option and there are not enough students to fill ICT classes.
- ICT curriculum can be more interesting.
- ICT DSE result is not generally recognized for university admission.
- Students and parents do not quite understand the values, contributions and prospects of the ICT profession.

It was suggested to –

- Reach out to students (and parents) to facilitate them to appreciate that ICT knowledge and skills are useful for further studies and daily lives, and ICT offers a promising career comparable to other professions.
- Engage ICT teachers (e.g. via Hong Kong Association for Computer Education) to connect with (some 500) secondary schools, teachers and students to help deliver promotion messages.
- Make ICT study more interesting, attractive and rigorous beyond ICT literacy. For example, mobile apps, robotics and ICT programming projects should be incorporated in the ICT curriculum to unleash students' creativity and logical thinking.
- Encourage tertiary institutions to consider HKDSE ICT subject as an admission criteria/preference.
- Provide alternate means for students to learn ICT, e.g. facilitating students to participate in ICT summer programmes, featuring more ICT related subjects under the DSE Applied Learning Courses.
- Support continuing training for ICT teachers.
- Facilitate academia and industry to organise visits, talks, competitions, exhibitions to enable students (from junior secondary) to understand more about ICT study, career, profession and industry.

For post-secondary students/graduates

It was observed that –

- Many Year 1 students will opt for other disciplines such as business or civil engineering over the ICT discipline.
- Some ICT graduates will not choose ICT as their career.
- Employers expect that fresh graduates should have ICT working experience and exposure.
- There is a constant need to align what and how ICT is taught with the changing demand of the industry.

It was suggested to –

- Facilitate closer industry-academia collaboration, such as on curriculum development, career talks, competitions and exhibitions, research and internship activities, etc.
- Reach out to (year 1) students to enable them to understand more about the ICT industry, demand for ICT talents and prospects of an ICT career in Hong Kong and worldwide. For example, the ICT profession offers broad and promising career paths such as ICT architect, business analyst, ICT security specialist and auditor, as well as starting up their own business. Being business change agents, ICT professionals can often transverse to high executive positions such as in financial, insurance and logistics fields.
- Ensure that tertiary education in ICT keeps up with local, regional and global demands, especially in areas where Hong Kong has a competitive advantage such as business intelligence, big data analytics, cloud computing, user experience design, quality assurance and testing, as well as IT in health care business.
- Facilitate ICT students to work on research and development, and to develop their business and soft skills to set up startups.
- Encourage and facilitate ICT students to participate in enrichment and enhancement activities such as ICT competitions, events, visits etc.
- Encourage students to take up internship/placement opportunities so that they can gain experiences and observe professional best practices and ethics from the workplace earlier.
- Facilitate non-local graduates to work in Hong Kong.
- Encourage students to take double-degree or combined degree courses with ICT.
- Facilitate internship/placement opportunities in overseas/Mainland.
- Develop best practice reference guide for making effective internship/placement opportunity.

For ICT practitioners

It was observed that –

- Continuing professional development is necessary for ICT practitioners to stay competitive in the rapidly changing IT landscape.
- Senior ICT practitioners often transverse to different career paths other than IT.

It was suggested to –

- Establish a professional qualification and recognition scheme similar to chartered engineer profession.
- Facilitate industry, employers and academia in identifying new competencies/skills requirements, and to develop new courses and materials to meet market demand.
- Continue to support ICT practitioners to upkeep and expand their competencies such as contract management and service management, as well as new and emerging IT technologies and applications.

In conclusion, participants agreed that we need to foster closer industry-academia collaboration to promote ICT study, career and profession, to organise visits, talks, competitions, exhibitions for students, and to support curriculum development, research and internship activities, continuing professional development, etc.

**Industry Facilitation Division, OGCIO
October 2013**