First 6U-HAPPIER FD Workshop November 9th-10th, 2016

For Younger Professors in the Faculty of Engineering at the Six Universities

On 9th November 2016, attendance at the first workshop led by **Professor Rod Smith of Imperial College London** comprised four assistant professors: two male and two female; one Chinese, one Malay, and two Japanese; three from Tokyo Tech and one from Tohoku University. Professors Nishihara and Stewart were also asked to remain as observers and sometime participants. The two-day event was characterized by a free and exhilarating exchange of ideas and opinions, continuing on both days through the lunch break.

The three overall learning goals of this workshop were further broken down into **ten concrete aims** in the following terms on the part of Professor Smith:

- 1 To recognize and encourage the value and importance of good, informed and inspiring teaching
- 2 To balance and distribute time for teaching, research and administration
- 3 To use our own research experience to inform our teaching
- 4 To identify and explore the differences between teaching and learning as well as education and training
- 5 To encourage our students to become lifelong learners
- 6 To support mechanisms of interaction in class with our students
- 7 To discuss the importance of assessment methods
- 8 To encourage ourselves, and our students, to recognize the importance of the role of engineering in solving global issues
- 9 To broaden our interests from just a narrow appreciation of our specialist fields
- 10 To stimulate and support critical discussion and debate in English

The morning of 9th November consisted of a 3-minute presentation prepared in advance on the theme of **"Who Are You?"** Each self-presentation was discussed in terms of its effectiveness and success in addressing this simple aim.

After lunch, Professor Smith made a general presentation on **the history and mission of Imperial College London**, the latter having changed over time, especially after 2007 when Imperial College left London University to become an independent research and teaching institution.

Discussion and questions followed, including comparison and contrast with **Tokyo Tech** and other universities with which the workshop members had been affiliated.

Some time was taken by participants in order to prepare the following day's two short research presentations.

Professor Smith then distributed **a brief anonymous questionnaire** addressing in greater detail some of the issues of HAPPIER'S Database Questionnaire. After

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filling this in, participants listened to **an illustrated introductory talk about the importance of teaching**— based on Professor Smith's personal experience in various schools he had attended followed by the University of Cambridge. He also touched on his own experience as a young lecturer at Cambridge and later a professor at both Sheffield University and Imperial College London.

Following this candid biographical rundown, merits and demerits of a number of teaching and organizational styles were discussed in roundtable fashion based on the previously submitted mini-questionnaire. Professors Nishihara and Stewart were also asked to submit and discuss in order to obtain a broader and fairer perspective.

The remainder of Day One was taken up by the 5-minute presentations by each participant on the topic of "What My Research Is About" targeting a hypothetical appointments (promotion) committee of specialists, but including professors not necessarily affiliated with the applicant's own field of study. Questions were invited in order to clarify research issues, and suggestions were made both about the form of slide presentation, if any, and about content and explanation of technical content. The exercise was made all the more interesting by the diversity of research fields represented by members of the workshop.

Day Two, November 10th, was begun by **parallel presentations of research but this time directed to members of one's own family** or other non-specialists. The results were completely different but contributed to a fuller understanding of speaking to very different audiences. Lunch followed, once more taken together with Professor Smith in the S-5 classroom.

Professor Smith next moved to **the importance of assessment methods** with a brief presentation and the reading of an excerpt from the novelist of academic life David Lodge. The second part of Professor Smith's presentation was given over to "**The Teaching Jigsaw**", including different methods of lecture course presentation and the use of lecture handouts. The topic then turned to a roundtable examination of academic "**League (Ranking) Tables**" focused on the question of "do we believe them, are they important?" This is a topic that has recently led to increased discussion here in Japan.

Day Two closed with a 30-minute talk by Professor Smith on the topic of "Risk: Informing a Skeptical Public". It had been previously given in a slightly different form to the World Engineering Congress & Convention in Kyoto (2015) and provoked a lively discussion as to how the talk met its teaching objectives and whether it might be improved upon in this respect. This segued into a brief exposé and discussion of extracts from an evergreen 2005 article in the *Journal of Engineering Education*, leading to a roundup and close of the first two-day workshop.