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HKUST Showcases Innovation in Education

Twelve Hong Kong University of Science and Technology (HKUST) professors and their teaching teams were honored today (12 December) with Teaching Innovation Awards for successfully introducing new ideas, techniques and practices in teaching. The awards were presented at the First Teaching and Learning Symposium and Exhibition, which also opened today.

The Teaching Innovation Awards is a biennial event newly established by HKUST to recognize faculty and instructors' continuing effort to improve the quality of their students' learning through innovative practices or technologies.

Five of the winners also received the Excellence in Teaching Innovation 2001 award for developing new learning tools, teaching technique and models. They were presented the awards by Dr Alice Lam, Chairman of the University Grants Committee. The five recipients were: Prof Nelson Cue from the Department of Physics; Prof Ting Chuen Pong from the Department of Computer Science and his teaching team; Prof David Rossiter from the Department of Computer Science; Prof Surendra Mansinghka from the Department of Finance and his teaching team; and Prof Lydia Ayers, from the Division of Humanities.

The awards were a highlight of HKUST's first Teaching and Learning Symposium, which was held to provide a platform for the sharing of teaching ideas and experiences in areas such as online learning, active learning, student-centered approach and language teaching. Prof [Eric Mazur](#), distinguished scientist and educator from Harvard University, gave the keynote address on "Education: Transferring information or engaging the mind", in which he used his own teaching experience as an example to show ways of actively engaging students in a large class.

Prof Mazur is recognized for both his research in optical physics and his focus on science education. He advocates the use of "peer instruction", a method for teaching large lecture classes interactively through small group discussions. This teaching and learning tool has been adopted and adapted across a variety of disciplines around the world.

In September this year, Prof Mazur received the first National Science Foundation Director's Award for Distinguished Teaching Scholars. The award is the highest honor bestowed by the National Science Foundation of the US for excellence in both teaching and research. Prof Mazur is currently Harvard College Professor, Gordon McKay Professor of Applied Physics, and Professor of Physics at Harvard University.

The Teaching and Learning Symposium was co-organized by HKUST's Senate Committee on Teaching and Learning and the [Center for Enhanced Learning and Teaching](#). To coincide with the Symposium, an exhibition on teaching and learning initiatives is being held on the HKUST campus from 12 to 18 December 2001.

Excellence in Teaching Innovation 2001 award winners:

Nelson Cue developed the world's first Personal Response System, a portable wireless learning tool to promote active and peer learning, and provide immediate feedback in large classes. The patented system has been used at local primary, secondary and tertiary institutions, as well as at universities around the world.

Ting Chuen Pong launched a territory-wide Cyber University Program, which allows gifted secondary students to take university-level courses over the Internet. The program has enriched the learning experience of the participants, who

were also found to ask more questions through the online discussions, and serves as a model for helping students to make a smooth transition from secondary school to university.

David Rossiter motivates students to learn through student-centered task-based projects. His students develop their own programs by manipulating personalized audio, image and video files. His hands-on approach not only makes the textbook come alive but also nourishes the students' creativity.

Surendra Mansinghka provides a supportive and caring learning environment for more than 700 students in a large class. He and his team develop multiple communication channels for students, both inside and outside classrooms, arrange mandatory weekly tutorials, and provide prompt feedback on all questions (within 24 hours) and assignments.

Lydia Ayers adopts a multimedia approach in teaching music to large classes. She uses animations, video clips, live demos, synthesized sound examples and listening guides to stimulate students' interest in world music. Prof Ayers helps bring world cultures into HKUST students' lives and demonstrates the inseparability of art and science.