Technical Program
Engineering Education for a Global Economy
October 20-24, 2002
People's Republic of China

Purpose

This seminar is the fourth in a decade-long series of dialogues between representatives from the principal sectors of the science and technology enterprise in the two countries. Its theme was selected to provide opportunities for broad-based discussions around changing demands for engineering education in the knowledge-based economy. Underlying the selection of this theme is the assumption that a deeper understanding of and appreciation for differing perspectives and approaches to associated issues will improve planning and implementation—nationally, bilaterally, and regionally—for the effective and balanced development of a global workforce.

Program Topical Areas

Session I. Lifelong Learning & Distance Education

The rapid pace of technological change necessitates means for engineers to learn continuously throughout their careers. How can they best achieve life-long learning and how can universities and companies best provide opportunities for such learning? What role should universities play in retraining engineers for career changes later in life?

Session II. Globalization of Engineering Education

The development of the global economy has made more companies multi-national based. International cooperation and collaboration for engineering is becoming a common phenomenon. Countries are establishing supportive public policy agendas, and mutual recognition of credentials is of growing importance since engineers are more frequently moving from one place to another across nations. Engineering designs need to take account of both local and global cultural perspectives. All these have added demands for new engineers with international perspectives. What influence should globalization have in shaping related policies and policy making? How should engineering education curricula and programs be adapted to match this changing environment? How should accreditation in different countries be handled?

Session III. Innovation and Creation in Engineering Education

The soul of engineering is innovation and creation. The rapid advancement of science and technology has made this issue even more crucial for engineering education. Increasingly, knowledge management systems and industry-university partnerships, as well as incubators and technology transfer offices, are playing significant roles. Explicit knowledge is generally taught well and transferred easily. Implicit or tacit knowledge,

frequently referred as “know-how,” is not taught well and becomes an even more difficult objective in the global science and engineering environment. How can the principles of knowledge management be applied to strengthen engineering education in the global economy? How can we strengthen students' identity, encourage critical thinking and empower students with the capability of innovation and creation? What role can partnerships and research parks play in preparing students to be future innovators?

Structure of Sessions

A principal purpose of this seminar is providing an opportunity for extensive dialog. Consequently, each session is scheduled in a manner to allow ample time for questions and discussion during and following each presentation. Every speaker must approach his or her presentation with this goal in mind. As a firm guideline, each presentation must not exceed 30 minutes in length, leaving at least 15 minutes for questions and discussion. All participants are encouraged to engage in active discourse, as this will contribute in a major way to the success of the seminar in meeting the objectives of the sponsoring organizations.

Shanghai Portion

Sunday, October 20, 2002	
5:00 – 6:00 PM	Registration and Reception
6:00 – 8:30 PM	Opening Banquet

Monday, October 21, 2002		
Time	Session	Speaker
8:30 – 9:00 AM	Coffee Social	
9:00 – 10:00 AM	China Keynote	Keynoter 1
10:00 – 10:30 AM	Break	
10:30 – 11:15 AM	II. Globalization of Engineering Education	Speaker 1
11:15 – 12:00 PM	II. Globalization of Engineering Education	Speaker 2
12:00 – 1:30 PM	Lunch	
1:30 – 2:15 PM	II. Globalization of Engineering Education	Speaker 3
2:15 – 3:00 PM	II. Globalization of Engineering Education	Speaker 4
3:00 – 3:30 PM	Break	
3:30 – 4:15 PM	I. Lifelong Learning and Distance Education	Speaker 1
4:15 – 5:00 PM	I. Lifelong Learning and Distance	Speaker 2

	Education

Tuesday, October 22, 2002		
Time	Session	Speaker
8:30 – 9:00 AM	Coffee Social	
9:00 – 10:00 AM	US Keynote	Keynoter 2
10:00 – 10:30 AM	Break	
10:30 – 11:15 AM	I. Lifelong Learning and Distance Education	Speaker 3
11:15 – 12:00 PM	I. Lifelong Learning and Distance Education	Speaker 4
12:00 – 1:30 PM	Lunch	
1:30 – 2:15 PM	III. Innovation and Creation in Engineering Education	Speaker 1
2:15 – 3:00 PM	III. Innovation and Creation in Engineering Education	Speaker 2
3:00 – 3:30 PM	Break	
3:30 – 4:15 PM	III. Innovation and Creation in Engineering Education	Speaker 3
4:15 – 5:00 PM	III. Innovation and Creation in Engineering Education	Speaker 4

Wednesday, October 23, 2002	
8:30 – 10:00 AM	China-US Roundtable[1]
10:00 – 10:30 AM	Break
10:30 – 11:30 AM	Closing Session

Depart for Beijing

[1] The Roundtable is intended as a forum for a moderated discussion of the main issues raised during the various sessions.

Beijing Portion

Thursday, October 24, 2002		
Time	Session	Speaker
8:30 – 9:15 AM	China Keynote	
9:15 – 10:00 AM	US Keynote	
10:00 – 10:30 AM	Break	
10:30 – 11:15 AM	II. Globalization of Engineering Education	Speaker 1
11:15 – 12:00 PM	II. Globalization of Engineering Education	Speaker 2
12:00 – 1:30 PM	Lunch	
1:30 – 2:15 PM	III. Innovation and Creation in Engineering Education	Speaker 1
2:15 – 3:00 PM	III. Innovation and Creation in Engineering Education	Speaker 2
3:00 – 3:30 PM	Break	
3:30 – 4:15 PM	I. Lifelong Learning and Distance Education	Speaker 1
4:15 – 5:00 PM	I. Lifelong Learning and Distance Education	Speaker 2
6:00 – 9:00 PM	Closing Ceremony and Banquet	