Panel 1: National and Regional Contexts: Priorities, Capabilities, and Strategies

Panel Summary

The opening panel to the 2013 Strategic Leaders Global Summit was designed to provide participants with a broad view of the national and regional contexts that shape the uses of technology in graduate education. Members of the 2013 Steering Committee offered perspectives from seven different countries and regions: Australia, Brazil, Canada, China, Hong Kong, Hungary, and the United States. While speakers were invited to offer views that were specific to their own graduate institutions, the framing questions for Panel 1 focused primarily on larger national contexts. Speakers were asked to address the following general topics and issues:

- *Capabilities*: What is the capacity of institutions in your country or region to take advantage of new technologies being developed for use in graduate education and education?

- *Needs and Benefits*: In what areas of graduate education are new technologies most needed? What are their benefits—real or potential?

- *Tools and Processes*: What types of technological tools are already commonly used to support graduate education and research? How have these tools affected university processes and educational and research quality?

- *Challenges and Risks*: What challenges do institutions in your country or region face when integrating new technologies into graduate education and research? How have graduate education leaders in your country sought to meet or solve these risks and challenges?

- *Priorities:* Of all the technological resources available to institutions in your country and region, which are considered the most promising, i.e. worth the greatest investments of time, money, and human resources?

Presentations on these topics demonstrated the breadth of technologies now used in support of graduate education worldwide. **Zlatko Skrbis** (Monash University) outlined five overlapping categories of tools that graduate institutions in Australia—and internationally— must now consider in supporting their missions: administrative systems technologies, research enhancing technologies, "value-adding" technologies such as alumni tracking tools, that support good practice in graduate education; curricular technologies, and "cutting-edge" technologies such as Massive Open Online Courses (MOOCs). Other presentations delved into the questions raised by specific technologies in these categories. **Robert Augustine** (Eastern Illinois University)**, Liviu Matei** (Central European University), and **Nirmala Rao** (The University of Hong Kong) focused on the development of online graduate programs and the challenges and questions they pose for institutions, countries, and regions. **Noreen Golfman** (Memorial University of Newfoundland)

described the "cautious" relationship of Canadian institutions to the development of MOOCs. Representing China, **Yang Desen** (Harbin Engineering University) described the development of plagiarism software to ensure the quality of theses and dissertations in his country. **Eduardo Kokubun** (São Paolo State University) noted the expansion of Information and Communication Technologies (ICT) in Brazil, and in particular, the creation of a national digital online resource that allows Brazilians to search for information about research and graduate education. The session's moderator, Dr. Matei, suggested that it is important for institutions to have a clear sense of how these various technologies differ and develop strategies for implementing each type.

Discussion Themes

Among the themes that emerged in the discussion, a recurring topic was the need to ensure that online learning technologies meet objectives for student learning and faculty teaching. Dr. Augustine emphasized that one of the "best practice" principles guiding the development of online programs at his university is that Student Learning Outcomes (SLOs) be taken seriously. Dr. Rao echoed this position, noting that in China, it is important to ensure that in-demand online programs promote "knowledge construction" on the part of students—not merely "knowledge transfer" through online lectures.

A second theme to emerge was the need for institutions to ensure that new technologies always support the goals of graduate education. Technology should not be treated as an end in itself, stressed **Hans-Joachim Bungartz** (Technische Universität München). Dr. Bungartz added that the goal of educational technologies is not necessarily to make graduate education less expensive—a common perception—but rather to enhance the quality of educational experiences. Complicating this view was **Shireen Motala** (University of Johannesburg), who noted that outside the resource-rich universities of the West, universities may be more focused on using technologies to broaden access to education for large numbers of students with limited resources. In this sense, the purpose of technology may be, in a sense, to make education less expensive on a per-student basis. Enhancing quality is important, but expanding capacity may receive special stress in developing countries.

These discussions raised a question: Is technology really changing graduate institutions, or are graduate institutions marshalling technology to effect change? Evidence for both phenomena was abundant. On the one hand, as **Nick Mansfield** (Macquarie University) observed, new technologies are changing the cultures of graduate institutions, most directly by transforming students' expectations about the kinds of educational and social experiences they will have while enrolled. On the other hand, many graduate institutions are using their own priorities to drive curricular and other changes, using technology, in the words of **Debra Stewart** (Council of Graduate Schools) as another "tool in their institutional toolboxes." While these views of technology might appear to be in tension with one another, it was clear from the discussion that both trends are taking place simultaneously, and graduate institutions must be prepared to respond thoughtfully to both.