PREFACE

he Sixth Glion Colloquium brought together university leaders from around the world in Glion above Montreux, Switzerland, to consider the challenges, opportunities and responsibilities presented to higher education by the emerging global, knowledge-driven economy. Launched in 1998 by Professors Luc Weber (University of Geneva) and Werner Hirsch (University of California), the Glion Colloquium has brought together university leaders from Europe and North America to discuss the future of higher education, frequently joined by leaders from business, foundations and government. Topics have included the rapidly changing nature of research universities, university governance, the interaction between universities and society, the future of the university and the responsibilities of higher education, as articulated in the important document, The Glion Declaration: The University at the Millennium, prepared for the UNESCO World Conference on Higher Education in 1998. The papers presented and associated discussion at each colloquium have subsequently been published in a series of books that can be found on the Glion Colloquium website at http://www.glion.org.

The Glion VI Colloquium departed from its customary transatlantic dialogue by broadening participation to embrace global representation, including university leaders from around the world representing 18 nations and five continents, to consider the globalization of higher education. The emergence of a global, knowledge-driven economy is driven by a radically new system for creating wealth that depends upon the creation and application of new knowledge and hence upon advanced education, research, innovation and

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entrepreneurial activities. Both mature and developing nations are making major investments in building the knowledge infrastructure — schools, universities, research institutes, high-tech industry, cyberinfrastructure, public policies and programmes — necessary to achieve prosperity and security in the knowledge economy.

In parallel with these trends, there is a strong sense that higher education is also in the early stages of globalization, both through the increasing mobility of students and faculty and the rapid growth in international partnerships among universities. Some even conjecture that soon we will see the emergence of truly global universities, which not only intend to compete in the global marketplace for students, faculty and resources, but also are increasingly willing to define their public purpose in terms of global needs such as public health, environmental sustainability, and international development. The aim of this meeting was to provoke a stimulating discussion among leaders of research universities from around the world — both from mature nations in Europe. North America and Asia and from developing nations throughout the world — to explore both the challenges and opportunities inherent in the globalization of higher education. Using the highly interactive framework of the Glion meetings, the aim was to identify the key issues and build the relationships necessary for higher education to play a key role in the global economy. The colloquium was organized into six sessions, each structured around the presentation of several papers accompanied by extensive discussion. These papers and a summary of the associated discussions have been included in this book.

The first session aimed at providing a context for the subsequent discussion of the impact of globalization on the university from the perspective of a university leader (Deepak Nayyar), an industry executive (Wayne Johnson) and a foundation president (Carl Schramm). It was noted that despite the common image of isolated ivory towers, universities have long embraced the world beyond their national horizon. Initially scholars travelled from country to country in search of a student audience. Now students in millions are internationally mobile in search of university degrees and cross-cultural experiences. Yet globalization is a deeper and more profound phenomenon, implying integration into the world economy and extending far beyond economics to include culture and politics. Market forces driven by global competition have reshaped many aspects of higher education as businesses, while rapidly evolving information and communications technologies are obliterating the constraints of space, time and monopoly to enable the emergence of entirely new paradigms for learning. It was noted that nothing provides clearer evidence of global competition in higher education than the recent popularity of worldwide rankings of universities.

Yet, while some economic sectors such as industry have been restructuring their processes and work flows to forms better suited to a globalized world, uni-

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versities are only at the beginning of their comparable journey. Concerns were raised not only about the ability of universities to adapt to the rapidly changing, highly entrepreneurial, and aggressively competitive nature of the global economy, constrained as they are by tradition, culture and campuses, but also about whether in their efforts to adapt — to globalize — universities would leave behind some of their most important roles such as serving as critics of society or sustaining their regional cultures.

The second session turned to the global strategies of established universities from several nations: the United States (Robert Berdahl), the United Kingdom (Howard Newby), Austria (Georg Winckler), Australia (John Niland), Japan (Yuko Harayama & René Carraz) and Russia (Vladimir Troyan). There were several common themes of this discussion. The workforce competitiveness requirements of the global economy has stimulated massification, the effort to expand the proportion of the population receiving higher education qualifications. International competitiveness also demands that nations sustain and enhance the quality of their higher education systems, even as they expand them. Yet governments around the world seek to expand the sector and enhance quality while simultaneously reducing the burden of resources this requires from public finances, if not in absolute, then certainly in proportional terms. To enable universities to respond to these conflicting challenges, many governments are beginning to grant greater autonomy to institutions, e.g. "incorporating" them separate from government, to enable more agility, flexibility and freedom from bureaucratic controls — and perhaps as well less public support.

A quite different perspective was provided by the participants in the third session, discussing strategies for emerging universities and university systems and representing China (Jie Zhang), Singapore (Tony Tan), Korea (Nam Suh), and Brazil (Carlos de Brito Cruz). All of these nations were experiencing very rapid economic growth, both stimulated by and requiring increasingly sophisticated workforces, technological capability and global reach. While Singapore and Korea had rapidly developed higher education resources to achieve high levels of participation, others such as China and India faced considerable challenges in meeting the higher education needs of vast populations. Just as for established universities, all were sensitive to the importance of building universities capable of competing at world-class quality, both through substantial investments and partnerships with other leading universities.

The next two sessions turned to a broader discussion of global competition and cooperation within the context of changing paradigms in higher education, with participants from an unusually broad range of institutions including business schools (Peter Lorange), industry (Dennis Tsichritzis), scientific academies (James Duderstadt), open universities (Brenda Gourley) and tech-

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nology institutes (Charles Vest and Patrick Aebischer & Jean-François Ricci). Here the focus was very much on changing paradigms in education and research, driven and enabled by rapidly evolving technologies such as the Internet, and whether these would lead to truly global universities. It was noted that the open university paradigm, best exemplified by the United Kingdom's Open University, had already achieved global span through the use of many technologies and practices such as lifelong learning, distance education, open source and content educational resources, and peer production. Yet there were also concerns raised that many of the characteristics of global business such as standardization, networked resources and virtual organizations seemed incompatible with the fundamental characteristics of contemporary universities, currently based upon highly customized, campus-based, and face-to-face educational experiences.

The final session turned to a discussion of the broader global responsibilities of higher education from the perspective of Europe (Luc Weber), the Middle East (John Waterbury) and America (Robert Zemsky and David Ward). It was stressed that in their efforts to globalize, universities should resist the tendency to adopt colonial strategies, in which their outreach activities were primarily designed to attract new resources — students, faculty, fee income — for their home campuses. Instead they should attempt to be not only responsive but also responsible in their globalization efforts by accepting responsibility for enhancing the development of higher education systems elsewhere along with a broad commitment to enabling sustainable societies in all their facets: environmental, economic, and political. Here there was also the caution raised that universities were most effective and constructive when they focused on their traditional roles of education and scholarship within academic communities based upon academic freedom and democratic processes.

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