

international students including flexible work/study options, allowing part-time employment while studying, and permitting international students to stay longer after graduation to find employment.

Immigration and other policies have been strategically aligned to attract international students. Canada, for example, expects that recent immigration policy changes and the easing of employment restrictions for international students will increase enrollments from abroad by as much as 20,000. Other policies include a point-based immigration system that is favorable to highly skilled professionals (as found in the United Kingdom) or the granting of permanent residency to professionals in designated high-demand fields of engineering, computer sciences, and hard sciences (as practiced in Germany).

Non-English-speaking countries are increasingly offering programs in English to appeal to international students. For example, the Netherlands, Sweden, Finland, Poland, Turkey, and Japan offer from 50 to more than 1,000 programs in English. In Korea there are 10 English-only universities.

A strategy that can potentially be very successful is the creation of regional education hubs. In 1999, Singapore announced that it would attract “world-class” academic institutions to become the regional destination of choice for students, researchers, and industry. The Middle East is home to two emerging educational hubs—Knowledge Village in Dubai (United Arab Emirates) and Education City in Doha (Qatar)—both of which are establishing themselves as hosts of various foreign education providers and training centers.

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CONCLUSION

The United States continues to receive the largest number of international students. However, recent trends indicate that the global landscape is changing. Although potential demand is high, a redistribution of international students among host countries is under way. This change may be due to perceptions that the United States is unwelcoming, vigorous competition from other countries, and successful national strategies of other countries to recruit international students.

Author's note. This article is based on “Students on the Move: The Future of International Students in the United States,” by Olga Bain, Dao Luu, and Madeleine Green, available at the ACE Web site: <http://www.acenet.edu>. ■

Demographic Challenges and the Future of the Higher Education

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The demographic prospects certainly add a new dimension to the familiar pressures on higher education. It is surprising then that these factors are so rarely addressed in relevant scholarly literature or in the higher education policy arena. The aim of this special section of *International Higher Education (IHE)* is to highlight demography in higher education planning and to encourage further research on this theme. The articles in this special section of *IHE* result from presentations at the Salzburg Seminar session, Shifting Demographics in Higher Education, conducted in November 2006.

Higher education is rapidly becoming a universal aspiration. Over the past decades, the number of students has been increasing steadily across the world, and according to some projections the student number will almost double to reach 160 million by 2025. This trend, however, will play out in very dissimilar ways given the diverging demographic developments in different parts of the world. Studies predict that until 2020 and beyond in most of the developed world, especially in Europe, populations will decline rapidly, while in developing countries, especially in Asia and Africa, the number of people will continue to grow. At the same time, life expectancy is also undergoing dramatic changes, rising continuously where countries prosper, but remaining stagnant or even decreasing where countries are falling behind.

These demographic trends have far-reaching implications for higher education. In regions where the anticipated increase in population is matched by the prospect of an overall improvement of socioeconomic conditions, as in Asia, the rising demand for higher education will accelerate. By comparison, the declining birthrates in Europe combined with a stable socioeconomic situation may result in an excess supply of higher education in terms of domestic demand. While some regions will struggle to provide education, especially quality education, for all eligible individuals, others will engage in an ever fiercer “battle for brainpower,” as described in an article in the *Economist* (October 6, 2006). The new knowledge society requires a steady turnout of an increasingly highly qualified workforce as well as a substantial pool of competent knowledge producers. To be able to accomplish these tasks, any high-

er education system needs a critical number of student intakes, whether domestic or foreign, “traditional” (i.e., 18-to-24-year-olds) or “nontraditional” older students.

IMPLICATIONS FOR ENROLLMENTS

Demographic projections of the student population combine the number of actual births or birthrates with the expected percentage of people who will seek higher education. These projections are further fine-tuned by factoring in the anticipated mobility or migration of prospective students, both those leaving their home country to seek higher education abroad and those likely to enter a given country. The projections are also used to take into account the effects of a growing percentage of lifelong learners who in some countries are already outpacing the growth rate of traditional students. On the institutional level, the projections can also take account of the competition for talents between universities domestically and abroad.

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Generally speaking, however, despite the data that are available, the issue of demography is receiving only minimal or shortsighted attention among decision makers at the political as well as the institutional level.

The projections by the Organization for Economic Co-operation and Development alert us to the significant shifts in the number and the nature of the student population by 2050. Europe is facing a rapid decline in birthrates, resulting in an inverse population pyramid with a shrinking proportion of 18-to-24-year-olds and a growing segment of the aging population. It is predicted that only through immigration can Europe reverse this trend. Some people argue, as do Mizikaci and Baumgartl in their article, that even a (politically highly controversial) expansion of the number of immigrants would ease but not undo this trend. Participation in higher education grew in almost all countries in Europe over the last decade, with most spectacular increases in central and eastern Europe after the end of the post-1989 planned access policy. However, there exist clear indicators that the demographic impact is likely to result in a decline of total student numbers before 2020, despite a growing demand for education generally and the rising number of mature students. The potential implications for higher education are enormous: unless foreign students are being imported in large numbers, higher education institutions in Europe will inevitably be reduced in numbers and size.

The predictions for the United States are in general less looming. The US population is expected to grow steadily because of relatively high birthrates (primarily among the

African-American and Hispanic population) and the assumption that the flow of immigration to the United States will continue. Accordingly, no significant decline in the demand for higher education, based on demographic shifts, is expected. Also, it seems reasonable to assume that the United States, with some of the finest higher education establishments in the world, will retain its role as the major world importer of foreign students—despite the strong competition for attracting talents from countries such as Canada, Australia or the United States and self-inflicted limitations like the introduction of US visa restrictions.

Most Asian and African countries show different prospects. In both regions, a quickly expanding demand for higher education beyond 2020 is expected. This trend is due to relatively high birthrates (especially in Africa), improved socioeconomic status (especially in Asia), and governments' systematic efforts of removing obstacles hampering access to higher education. In both regions, but especially in Africa (as discussed by Shabani) and among the lesser developed Asian nations (as indicated by Dunrong), the participation rate of the relevant age cohorts in higher education is still very low and the governments as well as international donor organizations are working very hard to improve it.

CHALLENGES AHEAD

Demographic trends will transform higher education systems, though differently across world regions. Where the pool of domestic students in the traditional 18-to-24-year age cohort is expected to decrease, the competition for these students among higher education institutions will become stronger, creating incentives for the recruitment of foreign students and for supplementing the traditional students with lifelong learners. Thus, higher education institutions will have to adjust their academic programs and organizational structures and become more permeable, de-emphasizing their social selectivity and accommodating the needs of an increasingly diverse student population.

These transformations will meet the interest of institutions to maintain their existence as much as in the interest of gov-

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ernments and the business community for a highly qualified workforce and knowledge producers to sustain the dynamic and volatile knowledge economies. These challenges will be further exacerbated by the retirements of academics, which unless coupled with a steady supply of young researchers will result in a shrinking pool of knowledge producers and thus potentially a stagnation of knowledge societies. At the same

time, in other regions of the world (as in China), the dire need to provide more access to higher education and to increase the student population involves the same dilemmas that characterized the so-called massification elsewhere of how to square the circle between funding, structural adaptation, and quality of education. ■

Shifting Demographics in Higher Education in Asia

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The Asian region is now going through a period of rapid and far-reaching economic and social changes, driven particularly by the impact of accelerating globalization, increased economic modernization, and transition toward a knowledge-based society. Higher education in the region has experienced decades of expansion in access that can be characterized as massification. The rapid growth of higher education has transformed higher education systems in many countries from elite to mass, placing colleges and universities under considerable strain regarding infrastructure, resources, and expertise.

Ongoing population growth in many developing countries of the region leads to a steady increase in the number of young people. At the same time, the demand for higher education continues to expand. In China, higher education enrollments rose from 6.4 million in 1998 to more than 23 million in 2005, with the gross enrollment rate going from 9.8 to 21 percent of the relevant age cohort. Even in countries with well-developed higher education systems, increases in enrollments have been impressive. For example, enrollments in the Republic of Korea increased from 2,950,826 to 3,500,560 between 1998 and 2001. Among countries in the region, Japan is unique, for declining birthrates are a real concern for Japanese universities and colleges. The number of 18-year-olds in Japan is decreasing rapidly from year to year. In 1991, the age cohort was 2.05 million in size; it is predicted that the number will decline to 1.2 million in 2009, a drop of almost 40 percent in less than 20 years.

Also, the overall enrollment rates in higher education are still relatively low in many countries. While the region has some of the most prosperous countries in the world (Japan, South Korea, Singapore, and some of the west Asian nations), there are still a large number of developing countries, some are the poorest in the world (Cambodia, Laos, and Myanmar). In addition, gender disparities in higher education participation

persist in the region, although female students outnumber male students in several countries in the region. Despite expansion in enrollments in recent years—especially for women, nonurban populations, and members of minority groups—access and participation remain a problem in the majority of countries in the region.

CHALLENGES

Massification of higher education has and will continue to create a heavy financial burden on the public budget of most countries in the region. Governments and institutions of higher education in the region have to find sufficient resources to offer more and better-quality education to the potential consumers and cope with the needs of a rapidly developing information and knowledge society. For most Asian countries, a major dilemma in the development of higher education involves expanding participation in higher education while securing the quality of higher education at acceptable standards under the pressure of a shortage of resources.

The private sector plays a small but increasing role in some Asian countries, whereas in others private involvement is extensive. Over the past five years private colleges and universities in Malaysia increased in number from about 100 to 690, while in Bangladesh almost 100 new private higher education institutions were established between 1998 and 2001. Over the same period, 46 new private institutions were founded in Mongolia and 20 in Nepal. In Kazakhstan, the number of private higher education institutions rose from 41 to 123 between 1995 and 2001. In 2001, Vietnam had 17 private universities and 5 private colleges. In India, private higher education institutions now outnumber government institutions in a number of states. In Japan, South Korea, the Philippines, and

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Indonesia private universities enroll the majority of students—in some cases up to 80 percent. Most Asian private universities serve the mass higher education market and tend to be relatively nonselective in their admissions.

As a world trend, internationalization greatly affects higher education in the region. The influence is revealed not only in the mobility of international students but also the operation and development of institutions of higher education. In the past decade, foreign education providers have begun to play an important role in Indian higher education. Malaysia has four branch campuses of foreign universities while many of the 690 private colleges have established overseas partnerships. Foreign as well as regional virtual and distance-education institutions are more frequently offering courses in Malaysia as well as in other parts of the region. Asia has long been the