



## Conclusions

*Education is not the filling of a pail, but the lighting of a fire.*

W. B. Yeats (1865–1939)

Although developing countries contain more than 80 percent of the world's population, they account for just half of its higher education students, and for a far smaller proportion of those with access to high-quality higher education. Overcoming these gaps is a daunting challenge that will require a concerted effort between developing and developed countries.

In this concluding chapter we return to the three core questions asked in the Introduction, summarizing the report by synthesizing the answers to each question as they cut across the various chapters.

- What is the role of higher education in supporting and enhancing the process of economic and social development?
- What are the major obstacles that higher education faces in developing countries?
- How can these obstacles best be overcome?

The preceding chapters broke these overarching questions into a set of manageable and reasonably self-contained—though not exhaustive—issues. We have tried to frame each issue and to explain its importance today and, more significantly, the role it is likely to play in the twenty-first century. We have concentrated on what higher education offers society as a whole, emphasizing those aspects of higher education where the public has interests that are distinctly different from or more extensive than private interests.

It is clear that higher education institutions come in all shapes and sizes, and this means that solutions will need to be organic. A standard set of remedies is also doomed to fail when countries are so diverse. Despite this diversity, the main objective of the Task Force has been to determine strategies for higher education reform, as well as general guidelines and principles for assessing the operation of higher education systems and institutions. These benchmarks offer guidance for informed dialogue aimed at educational reform—helping to cut through the often confusing thicket of institutions and practices. Our analysis and conclusions are a blend of research and discussion with colleagues from around the world and the professional expertise of our members. We have consciously tried not to emphasize the lessons of one country at the expense of others.

This report's findings can be boiled down to two simple conclusions.

- *Significant obstacles.* Higher education must overcome formidable impediments if it is to realize its potential contribution to society. Some of these impediments—such as demographic change, fiscal stringency, and the knowledge revolution—are determined by external forces of considerable power and must be taken as given. Others can be removed or mitigated. One example is the ineffective management that plagues so much of higher education, yet this is largely

within the overlapping domains of higher education institutions and national governments to overcome. Change will not be easy. The problems are deep-seated, and efforts to rationalize and strengthen systems and institutions will require sustained effort. This work will certainly span several political cycles in most countries.

- *Hope for progress.* The problems facing higher education are not insurmountable. Existing resources can be used more effectively, and there are already a number of areas in which the mobilization of additional resources, both economic and political, will result in big gains. Conversely, countries that continue to neglect higher education will tend to become increasingly marginalized in the world economy, suffer from relatively slow social and political progress, and find it ever more difficult to catch up. Progress is most likely in countries that develop a clear vision of what higher education can contribute to the public interest. Piecemeal fixes must be avoided in favor of a holistic approach, focusing on the complementary and mutually reinforcing nature of a range of possible solutions.

## How Higher Education Supports Development

Statistical analysis, case study, and common observation all point to the fundamental importance of higher education to development. Higher education promotes the following:

- *Income growth.* The vitality of higher education is a fundamental—and increasingly important—determinant of a nation's position in the world economy. It contributes to labor productivity, entrepreneurial energy, and quality of life; enhances social mobility; encourages political participation;

strengthens civil society; and promotes democratic governance. It does this by creating public goods such as new knowledge—a catalyst for rapid development—and by providing a safe space for the free and open discussion of the values that define the character of a nation's development. Economic growth is a powerful determinant of poverty alleviation and improvements in people's lives. Higher education's contribution to growth, therefore, means better living standards for people at all levels of a society.

- *Enlightened leaders.* Higher education can give leaders the confidence, flexibility, breadth of knowledge, and technical skills needed to effectively confront the economic and political realities of the twenty-first century. It also generates cadres of well-trained teachers for all levels of the education system.
- *Expanding choices.* Development is fundamentally concerned with expanding the choices people can make. As such, an accessible higher education system—offering a wide range of quality options for study—is a major achievement, bolstering social mobility and helping the talented to fulfill their potential.
- *Increasingly relevant skills.* Higher education is absolutely necessary for training scientists, engineers, and others to help invent, adopt, and operate modern technology in all sectors. When scientists in developing countries are inspired to define and address local problems, they are likely to contribute to appropriate solutions in such vital areas as environmental protection, the prevention and treatment of illness, industrial expansion, and infrastructure provision.

These benefits are not automatic. They are linked to the character of higher education systems and institutions, as well as to the

broader social, political, and economic systems within which they are situated. Even a well-functioning higher education system, operating under the most favorable of circumstances, is not *sufficient* for social and economic development. But better higher education will certainly be *necessary* in most countries, if more vibrant development is to take place. Indeed in some countries, especially those with extremely low levels of per capita income, higher-education initiatives will not dominate the policy agenda for the foreseeable future. Higher education will remain important for these countries, but they may do best by relying, for the time being, on institutions outside their countries, possibly with donor assistance, as a prelude to building stronger higher education systems of their own.

We have not asked whether higher education matters more than other key sectors such as agriculture, health, transportation, and basic education. But we are absolutely confident that it is much more important to development than one would surmise from the comparative neglect it has received in most quarters of the international development community in recent decades. Higher education's benefits must now be recognized more widely so it can take its place in the mainstream of the international development agenda. The information revolution that is driving the new economy is dependent on educated and literate workers; and more than ever, the new ideas fueling this expansion have come from people with tertiary degrees.

## The Major Obstacles

The experience of higher education in developing countries has been disappointing to date. Its contribution to social and economic development has not mirrored its accomplishments in developed countries. The signs of this failure are most apparent when judged

by international standards as demanded by the emerging world economy. Poor educational quality, a dearth of significant contributions to knowledge, and a failure to advance the public interest are all too common.

Strategies for addressing these problems need to proceed from an understanding of their underlying roots. We believe higher education in many developing countries is significantly weighed down by four sets of conditions.

- *The absence of vision.* The social and economic importance of higher education systems, and of individual institutions within those systems, is insufficiently appreciated. Unlike primary and secondary education, there is little in the way of a shared vision about the nature and magnitude of the potential contribution of higher education to development. But this understanding is crucial to a sector that requires long-term investment in return for social benefits that are difficult to measure. Without it, higher education institutions are treated, essentially by default, in the same way as other large bureaucracies, leaving them without the power to make choices that improve their individual and collective performance.
- *Lack of political and financial commitment.* Policymakers face a host of pressing problems under conditions of severe resource constraints and highly competitive political settings. It's no surprise in such a policy environment that higher education often misses out. There is a common view that it is not deserving of political support because it is the preserve of the elite, who are eminently capable of taking care of themselves. While investment in higher education will surely benefit many already wealthy students, its social benefits outweigh this, raising a nation's average income and reducing its poverty. Meanwhile, demand is in-

creasing at a great rate, creating complex challenges associated with managing the expansion of any system. Without significant national support and guidance for managing and planning expansion, quality inevitably suffers.

- *Conditions of initial disadvantage.* Higher education in developing countries is severely disadvantaged by its poor baseline. Knowledge begets knowledge. Fruitful scientific inquiry is often aided by having a suitable intellectual culture. And a critical mass of scholars and teachers is often required before higher education can thrive. Escaping this low-level trap necessarily requires substantial and wide-ranging improvements, rather than the all-too-frequent patchy and incremental steps.
- *The disruptions of globalization.* The best and brightest faculty and students will continue to be attracted to the wealthier countries, and competition for quality graduates will remain fierce. The money markets will ensure that economic fluctuations travel rapidly around the world, potentially jeopardizing institutional budgets when currencies collapse. Institutions are at great risk of falling behind if they do not keep up with the rest of the world in the information revolution and take advantage of the opportunities it offers. It is a two-sided coin, however, and information technology in the form of the Internet can ensure that universities are not pushed further outside the information network.

These ills will not cure themselves. They must be confronted now, and aggressively. Otherwise, developing countries will miss out on the powerful boost higher education can give to development, and will face increasingly daunting barriers to system improvement.

## What To Do?

This report offers numerous suggestions for unleashing the potential of higher education's contribution to society. In doing so, our aim has been to stimulate and provoke, and to demonstrate that a menu of creative options exists. Higher education is, by its nature, optimistic and forward-looking. It is in this spirit that we offer our conclusions. In addition, a strategy for educational reform must be closely tailored to conditions in different countries—it makes little sense to endorse specific suggestions for application in any generic context. Policymakers must also be careful to do more than emulate developed-country models. Many richer countries have outdated systems that are also in need of reform. Developing countries have the opportunity to leapfrog outmoded models, planning for tomorrow's world, not yesterday's.

The Task Force's recommendations fall into two main categories: increasing resources, and improving the efficiency with which resources are used. A larger and more diversified resource base is needed for:

- improving educational infrastructure, especially computer and Internet access, scientific laboratories, and equipment, but also more traditional infrastructure such as libraries, classrooms, dormitories, and recreation and cultural facilities;
- the design, testing, and implementation of new curricula and academic programs, including the expansion or introduction of general education;
- the recruitment, retention, motivation, and long-term development of well-trained faculty;
- increasing access for economically and socially disadvantaged populations; and

- conducting more and better science education and research, both basic and applied.

Investment in the quality of secondary education is also needed to strengthen higher education, by improving the preparation of its new entrants. Also, if higher education institutions are more respected and accessible, secondary students will feel it is worthwhile to strive to attend them.

Although the Task Force urges international donors to increase their support for higher education, the majority of additional resources will necessarily have to come from within developing countries. There is no generally accepted formula for assigning responsibility for the generation of these resources, and the Task Force did not dwell on this important issue. Nevertheless, common sense suggests that beneficiaries should share responsibility, with students, private firms, and the public all included. Countries should focus on rational and effective use of existing resources, while remembering that outside partners are happier placing good money on top of good money. Institutions that squander resources and supply substandard education should not be surprised if they continue to find resource mobilization difficult.

The Task Force has highlighted a number of approaches to increasing the effectiveness with which resources are used. We believe that poor management is often the single greatest obstacle to stronger higher education. Management practices can be vastly improved by adhering to the principles of good institutional governance described in earlier chapters. Equally large gains can be enjoyed by designing a more rational and coordinated architecture for the system as a whole. This will help eliminate unnecessary duplication of effort, and cater to neglected social interests in areas such as curriculum, teaching materials, admissions processes, and informa-

tion systems. In meeting increased demand at a reasonable cost, new information technology affords remarkable opportunities. But more work needs to be done, especially in communicating how these opportunities can be advantageous. The public sector must also assume an increased role in providing constructive oversight for private institutions, thus helping to expose the system to greater internal competition, which is in itself an important driver for educational quality and managerial efficiency.

Perhaps the most natural starting point for higher education reform involves crafting a vision of a rational system—one based on verifiable facts and justifiable assumptions. To achieve this reform, a transparent and informed dialogue needs to take place, bringing together educators, industry, government, prospective students, and other relevant stakeholders. The system must be customized to fit a country's stage of development, political system, social structure, economic capacities, history, and culture. It is also important to avoid the process becoming too political, where a long wish list is produced and agreement is only for the least objectionable measures. A common vision should yield a framework to guide expansion and reform of higher education, while also organizing and managing the system in a way that is compatible with societal goals. This work will require long-term political and financial commitment, as well as high-level support to convince the public of the widespread importance of higher education.

Effective efforts to improve higher education in developing countries will reflect an overlapping division of labor among tertiary institutions, public policymakers, and international donors. As we have argued, institutions must take the lead in:

- strengthening their internal governance;

- improving the quality of existing academic programs such as those involving science and technology, and developing new programs, especially for the provision of general education and for helping bright and motivated students from disadvantaged backgrounds to overcome their academic deficits; and
- developing and motivating strong faculties.

#### Public Policymakers Have Primary Responsibility For:

- developing the architecture of a rational system of higher education and orchestrating its smooth operation in a manner that promotes both mass education and excellence;
- advancing the public interest in higher education, by:
  - providing special support for the natural sciences and the preservation of culture;
  - combating the tendency for financial concerns to sideline the principle of equal opportunity;
  - setting standards for degrees, and ensuring that the international trade in bogus credentials is brought to public attention;
  - generating and disseminating unbiased and relevant information about different institutions and degree programs;
  - protecting higher education as a venue for free and open discourse on a range of matters, even if the subjects are sensitive from society's point of view;
  - investing in the establishment of learning commons through which students from many institutions gain access to educational resources that individual schools sometimes cannot afford; typical examples would be the Internet, libraries, and laboratory facilities;
- regulating the private portion of higher education so as to encourage high standards while deterring abuses; and
- addressing all planning issues in a global context, and considering how their systems can be linked to the wider world.

Finally, international *donors* would do well to support activities where the principal goals involve:

- catalyzing self-reliant and sustainable initiatives, including assessments of higher education systems and institutions;
- providing international public goods, which frequently arises from agricultural, medical, and environmental research, and can help foster cross-national research partnerships as well as student and faculty exchange programs; and
- promoting equity between and within countries through, for example, scholarship programs such as the Japanese-funded World Bank Scholars program, or by facilitating access to textbooks, computers, or other equipment.

The Task Force also emphasizes the importance of implementation. The field of international development is littered with good ideas that have yielded no fruit. Only rarely does the policy design process adequately anticipate the harsh and unforgiving realities found in the field. Projects routinely fail because they do not take adequate account of the competence and experience of the staff who will be relied upon to administer the policy or manage the project. Other projects fail because they do not involve stakeholders early in the planning process. We must—above all—be practical if we are to achieve successful reform.

## The Bottom Line

Currently, two billion people live in the world's low-income countries. Their average income has a purchasing power of less than one-sixteenth of that enjoyed by the one billion people who live in the high-income countries. Even more astonishing is the ratio of the average income of the poorest and the richest one billion people on the planet: it is—conservatively—in the region of 1 to 80. The disturbing truth is that these enormous disparities are poised to grow even more extreme, impelled in large part by the progress of the knowledge revolution and the continuing brain drain.

The Task Force believes that strengthening higher education is a rational and feasible way for many countries to mitigate or avert further deterioration in their relative incomes, while positioning themselves on a higher and more sharply rising development trajectory.

Higher education cannot be developed to the exclusion of other policy initiatives. The

development of infrastructure, better governance, public health improvements, trade reform, and financial market development—these and others will be needed as well. The benefits of higher education require a long gestation period. There may be shortcuts to establishing educational infrastructure, but influencing people to understand and convey higher education values and best practice will take decades, as opposed to a few years. For this reason the Task Force urges policymakers and donors—public and private, national and international—to waste no time. They must work with educational leaders and other key stakeholders to reposition higher education in developing countries. Only then will it produce larger and better trained pools of graduates and research of higher quality. The chance is simply too great to miss. As H.G. Wells said in *The Outline of History*, “Human history becomes more and more a race between education and catastrophe.”