

Educating Filipinos for the Knowledge Economy

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A New Challenge to Academe: Educating Filipinos for the Knowledge Economy (and Why “Back to Basics” Education Won’t Be Enough)

In the last decade, a confluence of technological, economic, and social developments has dramatically changed the way people live and work. The central element in this sea change is *knowledge*.

Centuries ago, the main basis of wealth was land. The more land you could use for growing crops or raising livestock, the richer you became. When the Industrial Revolution came about, the prosperity of individuals and countries no longer depended on how much land they owned or tilled, but on how much physical resources (raw materials from the mountains and the seas, water, electrical power, brawny human bodies, etc) they could harness to support the factories that had begun to flourish. The more industrial goods you could make and sell, the more affluent you got. And that was the case until way into the latter half of the 20th century.

Since the 1990s, however, large sectors of the globe have been shifting, perhaps irreversibly, from an economy based on physical resources to one based on knowledge. The world is seeing the rise of what is called the *knowledge-based economy* or simply the *knowledge economy*.

Distinctive Features of the Knowledge Economy

The emergence of the knowledge economy shows itself in many ways, especially in the developed countries. Among its signs is a marked shift from the production of physical goods to growth based on services employing high skills and innovative technology, along with the rapid dwindling of low-skill, blue-collar jobs. Another equally distinctive feature of the knowledge economy is the increasing rate at which information is being turned into digital form and knowledge being “codified”—i.e., captured or “downloaded” from people’s heads and stored in books, manuals, videotapes, compact discs, and other modern media. Hence, vast amounts of information and knowledge are being turned into virtual commodities that can be easily accessed and even instantaneously moved through electronic networks.

New Growth Leaders: Knowledge-Based Businesses

The emergence of the knowledge economy has brought with it the rise of *knowledge-based businesses*. These are businesses whose operations are characterized by the intensive and extensive application of knowledge. Central to

success in these businesses is *knowledge work* in the form of complex problem solving, technological innovation, the creative exploitation of new markets, and the development of new products and services.

In many of the developed economies, knowledge-based businesses (KBBs) have become the main engine of economic growth and change. In the US, KBBs are the fastest-growing segment of the economy. In Canada, they are growing at a rate of at least eight percent a year and are expected to account for 20 percent of the gross domestic product in the next decade. Employment in these businesses is expanding by 25 percent a year. Moreover, a study has shown that for every person employed in the knowledge-based sector, four to five other jobs are created elsewhere in the economy. This pattern has been noted in other developed economies, where knowledge-intensive and high-technology businesses tend to be the most dynamic in terms of output and employment growth.

In the Philippines, the following KBBs are expected to lead economic growth in the next decade or two:

1. Computers
2. IT and IT-enabled services
3. Telecommunications
4. Biotechnology
5. Consultancy services
6. Integrated marketing communications
7. Higher education
8. Professional services in media
9. Professional services in entertainment
10. Professional services in health care
11. Logistics
12. Professional services in tourism

The expected rapid growth of these KBBs does not mean the Philippines will leapfrog into the ranks of the developed countries in the next two decades. Millions of Filipinos will continue to depend on agriculture, manufacturing, and other traditional industries for their livelihood for many years to come. The country will also continue to struggle to catch up with its neighbors. But the emerging KBBs will give the Philippine economy much-needed dynamism, as well as new sources of jobs and income.

The Knowledge Economy's Impact on the Workplace

The rise of the knowledge economy is transforming the workplace all over the world. The impact of the knowledge economy on the workplace is being felt in three main areas: the way business firms organize themselves and operate, the way they use and manage knowledge, and the way they define and structure jobs within the organization.

The knowledge economy has inspired new organizational concepts and models—e.g., the “high-performance workplace,” the “learning” or “knowledge organization,” the “boundaryless organization,” and the “flexible organization.” The names and descriptors of the new organizational paradigms vary, but there is a common core of operative norms: speed, adaptability, flexibility, networking, teamwork, participation, innovation, and continuous learning.

The emergence of the knowledge economy has also pushed knowledge management to center stage in business organizations. This is understandable because today competitive advantage is generally acknowledged to depend on what a firm knows, how it uses what it knows, and how fast it can know something new. In many business firms, the strategy-making process focuses on enhancing the knowledge and expertise of people in the organization and harnessing these intellectual assets for competitive advantage.

The knowledge economy is also changing the nature, content, scope, and requirements of jobs. Because KBBs have knowledge-intensive operations, most of their employees are highly educated and highly skilled. Thus, these employees are being given more responsibility and authority. This means they need to have a broader base of functional, technical, and administrative skills. Likewise, there is increased requirement for cognitive abstract qualifications. These include decision-making, judgment, accuracy, an understanding of the organization, and the ability to analyze and solve problems in new or unexpected situations.

High-performance work systems also involve greater and more immediate reliance of employees on one another's work. Hence, there is increased interdependence and collaboration of people in these workplaces. Moreover, business firms are giving much greater importance to service and responsiveness to customers. Roles and activities involving interface or direct contact with external or internal customers now form a higher proportion of job content. There is likewise a greater need for social competencies (e.g., customer orientation, responsibility, and cooperation) that enable people to integrate the various tasks they are given to do both on their own and in conjunction with others.

Employees of knowledge-intensive businesses thus feel the need to learn and develop new competencies, rather than rely on a static knowledge and skill base. Moreover, the types of knowledge and skills that employees need to be successful are changing. Aside from “knowing how”, employees need to “know

why” and “know whom.”

Can Academe Stand and Deliver?

Clearly, success in the knowledge economy requires a change in social and organizational culture, as well as the development of a new breed of *knowledge workers*. Surveys of recent graduates in many countries indicate that a university or college degree has become the standard entry qualification for almost all high-level occupations. And since knowledge begets more knowledge, the need for knowledge workers grows as the tasks in the workplace become more complex. The rapid expansion of the knowledge economy will thus require higher education on a mass scale.

Business leaders, however, fear that higher education institutions may not be preparing the number and kind of people who can measure up to the demands of knowledge-intensive jobs. Even in the developed countries, there is a perceived gap between what business employers look for in graduates and the kind of preparation that college students get. In the case of the Philippines, where the higher education sector is widely perceived to be deficient on several counts, the following questions become even more crucial.

- * How responsive is academe to the needs of business and industry, especially for educated manpower?
- * How aware are Philippine higher education institutions of the new realities in the global economy and the educational implications of the rapid pace of change in the knowledge economy?
- * Are our universities and colleges preparing their students for the workplace of the future, not that of the past?

In many Asian countries, there is a sense of urgency to invest in higher education as a strategic response to major changes in domestic needs, as well as in the dynamics of global competition. There is a real danger, therefore, that the Philippines may lag even further behind its neighbors if its tertiary education sector continues to underachieve. If Filipino university and college graduates are poorly educated and inadequately prepared for the workplace, Philippine business firms and the country as a whole cannot compete in the global knowledge-based economy.

Can Academe Rise to the Challenge?

The emergence of the knowledge economy and the rise of KBBs have many strategic implications for Philippine higher education. I have identified at least eight such major implications and issues:

1. The challenge of meeting the expected surge in demand for higher education and of managing the expansion of the tertiary education sector in the country

2. The entry of new and nontraditional providers and the competitive threat they pose to established universities and colleges
3. Various questions related to curriculum and pedagogy
4. The need to strengthen graduate education programs and improve teacher training
5. The issue of “internationalization” of Philippine higher education institutions (HEIs), i.e., the integration of an international or global dimension into their outlook and operations, especially if they want to produce graduates who can be competitive in a global knowledge-based economy
6. The need to distinguish university education from technical training
7. The need for clearer role differentiation among Philippine HEIs and the challenge of strategic positioning
8. The need for better articulation between higher and basic education

The need for closer collaboration among academe, business, and government policy makers

Whether our universities and colleges can effectively deal with these strategic implications and issues in the next decade or so remains to be seen. Ultimately, however, it becomes a question of whether Philippine HEIs are willing to change and to adapt to the changing local, regional, and global environment in which they operate.

Why “Back to Basics” Won’t Be Enough

For some time now, there have been calls from various quarters for “going back to the basics” as a way out of the educational quagmire that the country seems to be in. It is a sound first step. However, this response falls way short of what Filipinos will need to thrive in the knowledge economy.

The reasons are clear: The demands of the workplace have significantly changed and will continue to change in many ways. It used to be that if you worked hard and played by the rules, a high school diploma would be enough for you to land a good job and maybe even rise to the top. Today, even a bachelor’s degree may not get you anywhere. It is still possible to get low-paying entry-level jobs, but for the really good jobs, a solid academic foundation beyond high school, along with a base of occupational knowledge or expertise, has become indispensable. Moreover, practically everyone in knowledge-intensive firms and positions is expected to have a set of “soft skills” that were formerly required only of senior managers and professionals. Indeed, the knowledge economy has “upped the ante” in terms of the individual competencies and qualities needed for performing well in today’s and tomorrow’s workplace.

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