



**THE TYPES OF SKILLS AND EDUCATION NEEDED
FOR A NEW INDUSTRIAL STRATEGY
IN BARBADOS**

by

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Background

The World has been in a new economic era for almost two decades in which the central driving force has been the globalisation of markets and competition. There is no evidence that this era may end anytime soon and it is expected to continue into the first quarter of the 21st Century. The length of this time is given because currently there may be about a billion people who are now integrated into the global economic system and another five billion that aren't.

The main impact of globalisation is that it is creating both challenges and opportunities for everyone. Challenges in terms of a more volatile environment, and more competition and opportunities in terms of increasing the number of markets and bigger markets. Added to this, small markets like Barbados and CARICOM are peculiarly faced with another significant consequence of globalisation. That is, trade liberalisation. It is already creating challenges that are impacting negatively on domestic production.

A world being driven by globalisation of markets and competition has as its main trend more change, a faster moving environment and shorter product cycles. This suggests that we need to rethink corporate, manufacturing, government and educational systems and organise ourselves to take charge of the future and not respond to it.

Globalisation has virtually reconfigured the bases of comparative and competitive advantage of nations. It should neutralize the disabilities arising from small size, the lack of a wide variety of natural resources and absence of scale economics, which have been regarded as constraints to Caribbean economics.

The technological revolution in information communications and transportation has transformed the global society from the industrial to the Information Age.

Information has replaced energy, commodities and natural resources as the basic raw material in the production process. It has brought fourth a new knowledge based skill intensive, service oriented production possibilities which can readily be exploited by all societies that spare the effort to develop their human capital and the institutional capacity required to master use of information.

The creation of wealth in the world has changed. In the 19th Century, wealth was created through owning land and raw materials. In the 20th Century, through plant and machinery (industrialisation). As we approach the 21st Century wealth is now being created through the leveraging of knowledge in the so-called Information Age.

We can use the economic theory of comparative advantage to illustrate this point. This theory depended on two things, natural resources endowments and factory proportions. If a country had an abundance of farmland, it produced farm products. If the country had an abundance of capital, it produced capital-intensive products. However Barbados, which has an abundance of labour cannot produce labour intensive goods because of the high cost of labour here. Since this is the case, Barbados can create a niche for itself by harnessing its intelligent abundance of labour (we boast of a 90% literacy and an intelligent labour force, this is generally accepted but no research has been done to verify this) in order to access wealth in the information age. Harnessing in this context refers to providing education and training skills that will allow our nationals to seize opportunities as they occur in the global market place. In other words our aim for the 21st Century should be to create an intelligent human intellectual capital resource base for Barbados, which can compete with brainpower industries anywhere in the world. Second, to produce new goods and provide new service and not only depend on the current industries and tourism.

The Prime Minister intends for Barbados to become the most competitive economy in CARICOM. He envisages that in order for this to become reality, industry and international business must play the pivotal role. He hopes that the Caribbean "will grasp the initiative and become robust and successful economics in the decades ahead."

Challenges will occur out of our WTO obligations for trade liberalisation. However the technological under pinnings of globalisation will facilitate the viability of thousands of new producers in Barbados and the Caribbean, provided that we are prepared to respond positively and proactively.

New Perspectives for Success in the Changed Global Arena

1. Strategic planning (long term strategic goals looking at where we wish to be in say 20 years time)
2. A New Educational Training Strategy.
3. A managed market approach to economic affairs.
4. New strategic alliances with Latin America, Central America and African States.
5. Become high quality producers of the range of goods and services, which meet our resource capabilities and are internationally competitive.
6. Development and enhancement of social norms. The norms, interpersonal trust, social networks and organisation that are created when institutions, groups and organisation develop the ability to work together for mutual productive gain.

An Education/Training Strategy for Barbados

Training strategy: Continuous training and life long learning must be given the highest priority with flexible and proactive training systems.

Aim: to create training and education strategies for increasing national competitiveness, improving efficiency of enterprises and promoting employment growth.

Shifting Demands for Skilled Labour

Employment of skilled labour workers has been on the rise in both developed and developing countries. Between 1981-96, the growth in jobs in advanced economies has been highest for professionals and technicians. In developing countries, the same occupational categories have also experienced high growth rates, but to a lesser degree. By contrast, the growth in jobs for production-related workers, which include skilled manual and craft workers as well as mostly un- or semi-skilled workers, has been low, or even negative, in developed as well as developing countries. The exception on this is in the area of sales and services. Growth in this sector of unskilled workers reflects a shift towards services in developed economies, as well as a tendency towards polarization in skill requirements in service sector jobs.

The ILO has stated that the diffusion for new technology worldwide has both created and destroyed jobs and has brought with it a change in the organization of the workplace. Among these is greater responsibilities for workers, especially at the lower end of the skills spectrum. At the same time, employees now need higher skill levels or must be multi-skilled, implying a need for more enterprise-level training and lifelong learning. Many firms, instead of training and retraining, resort to hiring part-time workers or subcontractors. Part-time, low-wage jobs have also increased in the low-skills sales and service sector, with the result that "the increased polarization in labour is evident in the low wages and/or worsening unemployment situation of the less skilled."

The result, the ILO says, is that "Skills have become increasingly important in determining the employability of the individual, and at the macro level, the competitiveness of the country. Training policies therefore assume great importance both in addressing the greater demand for skilled labour and the needs of those who lose out because of these labour market developments."

Education and Training: The Root and Branch of Global Competitiveness

The ILO's World Employment Report 1998-99 points to increasing evidence that education and skill levels of the workforce are significant determinants of success or failure and urges an "activist" human-resource led strategy to meet the challenges of global competition. The report insists that training and education were at the heart of Southeast Asia's economic miracle and could well provide a way out of underdevelopment and poverty for millions of workers in other parts of the world.

While investment and training are "prime elements" in the effort to reach and maintain high levels of international competitiveness, the ILO report suggests that the sustainability of high growth rates is in many cases dependent upon a country's human resource capacity. It says, "Countries which have high rates of income and productivity growth have high rates of investment and output growth." For three decades Southeast Asia has been the primary exemplar of this tendency; in light of the crisis which afflicted the region, Pacific Asia may also be the best exemplar of the need to continually revise and rejuvenate the skills of a competitive workforce.

The report noted that in the current economic climate of trade liberalization and rapid technological progress, competition is the only truly enduring feature. Success, as the crisis in Asia demonstrated, risks becoming ephemeral in even the most competitive economies. This means that constant upgrading of skills and adaptability of workers and enterprises to new market opportunities are essential features of long-term prospects. The exigencies of the global economy translate into faster turnover of machines and technical progress in the form of new capital goods, which require greater learning by doing and quicker development of new products.

Moreover, high education and skills levels are vital factors in attracting investment from external sources, notably multinational enterprises, which tend to locate investment in areas where skills are readily available or can be rapidly generated. "The ability of a country to attract, successfully absorb and benefit from foreign direct investment (FDI), and the transfer of technology which it may bring, depends to a large extent on its own

workers' ability to acquire new skills more effectively. It is a necessary prelude to becoming productive and employable. To access the labour market, workers, or would-be workers need to be invested with a "pyramid" of skills, the first being "foundational skills" such as literacy and numeracy that are acquired in primary education. These skills are necessary to ensure that individuals function productively as full-fledged citizens, with an understanding of both their social rights and obligations.

Built on this broad base, which should be accessible and mandatory for all, are "general occupational skills" of the sort learned in secondary vocational and technical schools. Further up the pyramid are "firm-specific skills" which are most often acquired through work experience and training during employment or apprenticeships. Nearer the apex of the pyramid are "professional skills" acquired through academic study, work and training and life experiences. These are likely to be more individually driven and financed than other types of skills (involving university and post-graduate instruction) and should be transferable across a wide range of employers and work institutions.

While the ILO authors insist that there is no ideal training system, they argue that any successful system needs to take account of three factors: a solid educational base; an appropriate incentive structure in which training priorities are fuelled by real economic demand; and institutional arrangements in which the social partners – notably employers, workers and government – contribute to improving performance and efficiency.

Types of Skills and Education to focus on:

1. Technology and Information technology: new technologies, new materials, biotechnology, robotics, telecommunications, micro technology, software, chips, semi conductors' etc.

Technological progress has caused us to realize that the pictures that we may have seen on TV in our youth have a greater probability of becoming reality now than they did back then. It is technological progress that will separate countries in the future. If Barbados hopes to become a first world state it must embrace

technological capabilities, of which the skills and technical knowledge of its workforce are critical components."

The level of foreign direct investment into Barbadian companies monitored by the Barbados Investment and Development Corporation stood at \$ BDS 52.9 million in 1997, \$ BDS 43.7 million in 1998 and \$BDS 51.4 million in 1999. Trinidad and Tobago on the other hand has reported foreign direct investment levels amounting to \$ US 999.6 million in 1997, \$ US 731.9 million in 1998 and \$ US 633.1 million in 1999.

The Government of Barbados is already committed to maintain an environment that is conducive to sustained investment. Evidence of this is seen in its anti-inflationary monetary policies, realistic and stable exchange rates, the elimination of non -tariff barriers to trade, adequate and reliable utilities and a stable political environment. To complete this package it is necessary to have a well-educated workforce, which possess the skills that are required by the multinational firms seeking to set up investments in Barbados.

The ILO report reveals that economic planners in the Asia-Pacific region effectively speeded up their countries' development by circumventing two major obstacles, namely a widespread tendency of markets to fail to provide training and reluctance for enterprises to embrace technological change and innovation.

In general, the report says, "the East Asian economies were able to achieve successful transition to higher value-added production because they maintained strict controls over the education system, the curriculum, and the types of vocational and technical skills acquired from the technical institutes and vocational schools established to meet the needs of new industry."

The training challenge

Based on Barbados' prospects for future employment our educational system should comprise in the simplest of terms, training systems to teach marketable skills and nurture

technological progress. These technologies are also important in enabling Barbados to become attractive to foreign investors.

2. International Business:

E-commerce, intellectual property international trade, Marketing and Financial services: electronic banking, insurance, systems administration, economics, intellectual property rights and marketing.

It is because of the globalisation in production of goods and services, that in their efforts to survive all businesses in Barbados will have to become international businesses which export goods and services. It is therefore essential that firms, which make up industry within Barbados, establish their presence on the Internet now so that they will be able to conduct business via electronic commerce. There will be a need for technological skills in this area to manage e-business and all other related forms of activity.

3. Entrepreneurship – training for opportunity identification, business planning, Credit counseling, marketing and developing management techniques.

The pervasive culture that has developed among primarily among people of African descent and from the educational system is to seek a job and be employed by someone. Globalisation will produce unique opportunities for people to become mobilized in providing specialized services or technical skills on their own thus becoming entrepreneurs. However it is essential that persons be trained to identify such business opportunities as this aspect is currently lacking in Barbados, and has resulted in very few black entrepreneurs.

4. Vocational and Technical Training

No analysis has been found on the demand for skilled labour in Barbados however, labour force statistics show more people have been employed in areas where specific skills are required. A well-diversified base of technical skill is needed in order to maintain an environment conducive to sustained development.

5. Learn to Speak the Spanish Language

Barbados has entered into Trade Agreements with Venezuela, Dominican Republic, and Colombia, and has just initialed a Trade Agreement with Cuba and is negotiating and Agreement with the FTAA. We have not yet begun to exploit these Agreements and if we wish to conduct trade in services we must Learn to speak the language that they do.

6. Standards and Standardisation

As the world we live in converges it is becoming a very technical place where standards like the ISO 9000 will rule the production process. There are standards for everything ranging from certification in education, the calibration of instruments to the size of furniture. This detailed knowledge of the standardization process is only known by a few individuals and needs to be taught and then translated into action so that companies in Barbados can benefit.

Areas to be given special attention:

1. Improving educational and training opportunities of women.
2. Training in the informal sector. The informal sector refers to un-recognised, Unrecorded, unregulated small-scale activities e.g. small enterprises with hired workers, household employers using family labour, the self employed independent service sub-sector maids, street vendors, cleaners, and baby-sitters.
3. Increasing the employability of vulnerable groups:
 - Youth, long-term unemployed
 - Older displaced workers
 - Persons with disabilities

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