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SKILL CHALLENGES IN THE CARIBBEAN:
Phase I Report

SCHOOL AND WORK

Does the Eastern Caribbean Education System Adequately
Prepare Youth for the Global Economy?

November 5, 2007

A Report by

The World Bank
Human Development Sector
Caribbean Country Management Unit
Latin America and the Caribbean Region



Acronyms and Abbreviations

| | | | |
|---------|---|--------|---|
| AACC | American Association of Community Colleges | GoCA | Government of Canada |
| CAIC | Caribbean Association of Industry and Commerce | ICT | Information and Communication Technology |
| CANTA | Caribbean Association of National Training Agencies | HEART | Human Employment and Resource Training (Training agency in Jamaica) |
| CAS | Country Assistance Strategy | LAC | Latin America and the Caribbean |
| CDB | Caribbean Development Bank | LSC | Learning and Skills Council (UK) |
| CDU | Curriculum Development Unit | MoE | Ministry of Education |
| CFD | Caribbean Forum for Development | NELP | National Education and Literacy Program |
| CEE | Common Entrance Exam | NGO | Non Governmental Organization |
| CHA | Caribbean Hotel Association | NSDC | National Skills Development Center |
| CIDA | Canadian International Development Agency | OAS | Organization of American States |
| CKLN | Caribbean Knowledge and Learning Network | OECD | Organization for Economic Cooperation and Development |
| CARICOM | Caribbean Community | OECS | Organization of Eastern Caribbean States |
| C CSLC | Caribbean Certificate of Secondary Level Competence | OEDP | OECS Education Development Project |
| CFD | Caribbean Forum for Development | OERU | OECS Education Reform Unit |
| CSEC | Caribbean Secondary Education Certificate | PISA | Program for International Student Assessment |
| CSME | CARICOM Single Market and Economy | SKN | St. Kitts and Nevis |
| CTO | Caribbean Tourism Organization | SLHTA | St. Lucia Hotel and Tourism Association |
| CVQ | Caribbean Vocational Qualification | STL | St. Lucia |
| CWC | Cricket World Cup | SVGCC | St. Vincent and the Grenadines Community College |
| CXC | Caribbean Examinations Council | SVG | St. Vincent and the Grenadines |
| DFID | Department for International Development | TAMCC | T.A. Marryshow Community College |
| DOM | Commonwealth of Dominica | TIMMS | Trends in International Mathematics and Science Study |
| ECCB | Eastern Caribbean Central Bank | TVET | Technical and Vocational Education and Training |
| ECCU | Eastern Caribbean Currency Union | UK | United Kingdom |
| EC\$ | Eastern Caribbean Dollars | UNESCO | United Nations Educational, Scientific and Cultural Organization |
| ESDP | Education Sector Development Plan | US | United States of America |
| ETF | Education and Training Fund (Barbados) | USD | United States Dollars |
| EU | European Union | UTECH | University of Technology (Jamaica) |
| FIAS | Foreign Investment Advisory Services | UWI | University of the West Indies |
| GDP | Gross Domestic Product | UWIDEC | University of the West Indies Distance Education Centre |
| GRD | Grenada | NVP | Net Present Value |

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1 Introduction and Summary: The Eastern Caribbean Economy is Transforming and so should the Education System

As the global economy rapidly changes and new technologies are introduced, more highly skilled workers are required. In the Organization of Eastern Caribbean States (OECS), firms struggle to fill skilled positions due to a lack of qualified candidates, while the number of unemployed low skilled workers is growing. This paradox especially affects youth. Even during recent economic booms, youth unemployment has remained high, indicating a mismatch between skills acquired in school and the critical skills demanded by the labor market. There is a clear need for more relevant education and training to prepare young people for the demands of work. In this context, the OECS governments are seeking ways to foster economic growth and competitiveness and strengthen their human resource base.

Eastern Caribbean governments requested from the World Bank an analysis and concrete policy suggestions, tailored to the OECS, to improve the employability and competitiveness of their work force. The Bank has committed to provide analytical and advisory services in a phased manner, linked as appropriate to financial support for pilot programs. This report comprises the first phase of analytical activities and focuses on the relevance of the education and training systems in the OECS. Its findings confirm the importance of strengthening the link between OECS education and training systems and employers' needs. Analytical findings have also informed the design of a project in St. Lucia to pilot a new market-driven training model requiring close partnership between the public and private sectors. The second phase has already been discussed with the OECS governments and is in the preparation stage. It will develop innovative approaches to expand, diversify and finance nurse training programs to efficiently reduce local shortages within the context of a growing global demand and migration of trained nurses from the Caribbean. The third phase is expected to investigate the factors contributing to learning outcomes, particularly at the primary and secondary levels. The study will inform policies and actions that could lead to improved education quality, which Caribbean stakeholders have identified as fundamental to ensuring a more competitive regional workforce in the longer run. The choice of topics for subsequent phases will be determined through continuation of the dialogue established during the first phases, following a demand-driven approach.

The request from the OECS governments for the first phase emerged from the policy dialogue surrounding the OECS Growth and Competitiveness report, *OECS: Towards a New Agenda for Growth* (World Bank, 2005a), which found that lack of competitive skills was a major hindrance for economic competitiveness. The ensuing report, *School and Work in the Eastern Caribbean*, draws on a decade of World Bank engagement in education and training in the OECS and includes information and conclusions from analytical background papers authored by Caribbean and other international experts. It is also informed by insights gained from the recent preparation of two skills training projects and the preparation and implementation experience of four secondary education projects in the OECS over the last six years. The report's analyses and conclusions confirm many views expressed by government officials, educators, youth, students, teachers, labor union members, private sector representatives, and development partners who participated in two events: (i) the St. Lucia Industry Roundtable for Skills for the Tourism Industry, in November 2005, and (ii) the Caribbean Lifelong Learning Forum in May 2006.¹ The report also was reviewed both internally at the World Bank by leading experts in education and training, and externally by OECS stakeholders,

¹ *see* <http://www.oecs.org/oeru/caribforum.htm> (at time of publication).

including government officials, the Caribbean Examinations Council (CXC), and the West Indies University.

All citizens of the Eastern Caribbean should receive an education that prepares them adequately for the world of work. This report reviews current education and skills training options in the OECS and asks whether the prevailing education policies achieve this laudable goal. An important objective of the report is to stimulate debate and offer concrete suggestions that could contribute to wider reform of the education system. In this context, the report seeks to comprehensively examine how the economic transformation of the Eastern Caribbean affects demand for education and skills. Further, it considers the CARICOM Single Market Economy and resulting free movement of labor, and the implications this has for common standards and certification. The report provides in-depth analysis and relevant international cutting-edge practices to guide policymakers, educators and private sector leaders in fostering a creative, productive and well-paid workforce. Specifically, it makes the case for why the OECS education and training systems need to be more responsive to changing labor market demands in the region, and discusses how this could be achieved, taking into consideration the latest education and training policies in the region.

The background papers underpinning the report offer new educational and economic research linking education and economic outcomes in the Eastern Caribbean. The papers include: (i) a case study on skill provision in the hospitality industry; (ii) a survey of early labor market experiences; (iii) an overview and analysis of Technical and Vocational Education and Training (TVET) programs in the OECS; and (iv) a review of the education and training systems from a lifelong learning perspective. The findings of these papers have contributed to a deeper understanding of skill policies in the OECS.

The report is organized into six chapters. After this brief introduction, the second chapter makes the argument for why skills matter to the OECS countries. The subsequent three chapters emphasize how education (school) is intrinsically linked to the labor market, both in providing initial preparation and training and in updating workers' skills throughout adulthood (lifelong learning). Thus, the third chapter discusses how adequately the schools in the OECS prepare youth for the labor market.² The fourth chapter focuses on the transition from the education system to the labor market. The fifth chapter analyzes the opportunities for workers to continue learning while in the labor force. The final chapter summarizes the main policy recommendations for improving education and training in the OECS. Three transversal themes run through the report: (i) deepening sub-regional collaboration; (ii) increasing involvement of the private sector in education and training; and (iii) enhancing collaboration across different levels of the education and training systems.

MAIN FINDINGS:

The economic transformation in the Eastern Caribbean increases the demand for skills, which creates both great opportunities and risks. The human capital development challenges posed by this transformation are captured in the statistics summarized in Box 1. Since 1980, services have been the most important source of growth in the OECS countries. Private and public services now account for almost four-fifths of the economy. The service sector relies extensively on skilled labor to prosper, pay good salaries and create jobs. Even niche manufacturing and agriculture are changing and now require more skills because of changes in crops, demands for quality improvements, and increased need for management. The economic transformation has fueled

² Besides preparing school leavers for a productive life, a key role of the education system is also preparing youth for a healthy and socially responsible life and good citizenship. However, the report does not treat these latter issues. It concentrates on the title question for the report: “*Does the Education System in the OECS Adequately Prepare Youth for the Global Economy?*”

demand for skilled labor and is expected to continue to do so. Already, shortage of skills appears to be severely hindering firm competitiveness in the OECS. Therefore, education and training are essential for job creation, competitiveness, and economic growth. The demand for skills opens doors to qualified workers, but it carries downside risks. Fewer low skilled and manual workers will be sought or needed. A paradoxical situation is emerging whereby large numbers of unskilled workers are looking for jobs, while companies are eager to hire but unable to find employees with the right skills. Those school leavers with unneeded competencies are more likely to remain unemployed. This could lead to marginalization of such groups which, in turn, could lead to their engagement in deviant behaviors. On the other hand, the increased demand for skills generates great opportunities for improving living conditions in the OECS. The new positions are expected to be better remunerated and therefore lead to an improvement in living standards and reduction in poverty.

Box 1 Key Statistics to Remember

- **79%:** share of GDP produced by the service economy in the OECS. This signals the importance of training people to work in this crucial sector of the economy.
- **79%:** share of expected new hires in St. Kitts and Nevis in 2006 in the tourism industry. The training and education systems need to groom school leavers and unemployed youth to fill these vacancies.
- **41%:** share of business firms in Grenada rating workers with lack of skills and education as a severe obstacle for their competitiveness, an indication that the education and training systems are not grooming school leavers and the unemployed for the available jobs.
- **100%:** transition rate from primary to secondary education in St. Kitts and Nevis and St. Vincent and the Grenadines. The other OECS governments are taking steps to achieve universal transition rates and access to secondary school. This strongly indicates the OECS governments' strong commitment to education.
- **0:** number of international examinations beyond the Caribbean in which any OECS country has participated, a statistic that indicates a lack of accurate information regarding the level of learning outcomes in the OECS on a global comparative basis.
- **88%:** share of employers in St. Kitts and Nevis rating "attitude to work" as very important. This number exemplifies the demand for behavioral life skills among employers in the Eastern Caribbean.
- **14 months:** average time needed in St. Vincent and the Grenadines for a CXC graduate to find his/ her first employment, evidencing the difficulties school leavers face in the transition from school to work.
- **56%:** estimated youth unemployment rate in Dominica, another strong indication of the difficulties of finding the first job, which seems linked to insufficient preparedness of school leavers.
- **149:** number of enrollees in sewing and garment production in St. Lucia in 2005, where the textile industry is small and declining, and where there were only 390 machine operators of which only some are sewing machine operators. This signals that unemployment training in the Eastern Caribbean is, at times, out of sync with labor demand.
- **48%:** share of business firms that provide training to their employees in Grenada, a key statistic which, in comparison to international data, suggests that the incidence of job training and further education of the OECS labor force is low.

Based on the findings, the report argues that the education system is not adequately preparing young people for the new skilled jobs. School leavers—understood to be all pupils, including those that graduate successfully and those that leave school before completing a degree—often do not possess the skills required for the service jobs in the new global economy (*evidence is provided in Chapter 2*). Despite having received up to 11 years of formal education, school leavers often have no diploma or marketable skills. These young people can take an exceptionally long time to find employment. In particular, in this group of school leavers:

- **Some struggle with daily use of basic skills**, such as reading, writing and arithmetic, as indicated by the results of Common Entrance Exams (CEE) at the primary school level and secondary school Caribbean Examination Council (CXC) exams in English and mathematics.

- **Many face difficulties demonstrating behavioral life skills that are valued by employers**, such as team work, pro-activeness, critical thinking, and communication.
- **Most have not acquired professional skills linked to a specific career or technical skill in demand**, such as Information and Communication Technology (ICT).
- **Few will receive labor market training while in the labor force**, since research shows that firms are more likely to offer training to highly skilled workers. Those that do receive training are sometimes trained in areas of relatively low demand, such as sewing and cake decoration.

RECOMMENDATIONS:

The OECS education system should provide cutting-edge knowledge, teaching, and research to assist the economy to specialize in globally competitive niches. Further, the gap between labor market needs and schooling in the OECS needs to be bridged. The education sector has to transform to keep pace with the changing economy. This represents a major challenge to the Eastern Caribbean education system. Existing literature and research presented in this report suggest the following prioritized actions:

Formal education should be more relevant to the needs of the Eastern Caribbean economy.

This could be achieved in several ways:

- **Improve governance of education institutions in the Eastern Caribbean by including broader societal representation on their governing boards and by further empowering the boards.** In particular, the private sector has weak representation in the governance of the CXC, some post-secondary education institutions, training institutions, and school boards. This hinders crucial communication between the education institutions and employers. The private sector should be better represented, and the boards should be sufficiently empowered to set strategic directions for their institutions.
- **Enhance accountability.** Learning outcomes, such as graduation rates, CXC exam results, and employment rates, could be made available to families, school boards, and parent-teacher associations to evaluate the performance of each school. It is also highly recommended that the OECS participate in a global learning assessment to gain a better understanding of how their education system compares to international standards. Furthermore, the goals and objectives of post-secondary education and training institutions should be limited in number, clear and measurable, and if possible agreed to in multi-annual performance contracts between the institutions and the government.
- **Improve the quality of education.** Efforts towards achieving universal secondary education in the OECS are laudable. Increased access should be accompanied by better quality education at the primary and secondary levels, a strong focus on reading, writing and mathematics, and greater support to students with a wide range of abilities. Mastery of these basic cognitive skills by all workers is the basis for a productive human resource base and their gateway to further professional education. Governments should support ongoing training to teachers and counselors and continue to promote literacy and numeracy at the primary and secondary levels.
- **Better nurture behavioral life skills of students.** Cooperative teamwork skills, problem solving and pro-activeness could be better nurtured in the schools. Informal classroom observations indicate that this would require further in-service training of teachers and curriculum modifications.

Many young people will need assistance in transitioning from school to the labor market. Improving the quality and relevance of education are the most effective measures to prepare youth

for the labor market. However, this will take time. In the short run, there is a staggering high share of unemployed youth that would benefit from employment assistance programs. In this regard, an important recommendation would be to:

- **Scale up youth training programs.** Scaling up existing programs of proven quality could be combined with policies to increase the relevance of training. In particular, international experience emphasizes private sector-driven training, with co-financing from employers, combining life skills and technical skills training and inclusion of traineeships to provide on-the-job training. Further, there is important scope for regional collaboration in such a program.

Actions to increase job training of the work force could include the following:

- **Foster a regional market for training.** This could be achieved gradually by using harmonized rules of application, accreditation and financing of training in the Eastern Caribbean. This would stimulate the development of specialized training providers, adding more value to training and reducing costs through economies of scale.
- **Channel all public funding for training through a single transparent and competitive fund.** Funds for which trainers could transparently compete, based on demonstrated outcomes of the training (unemployed participants gain a well-paid job), would increase value for money. Further, an up-front involvement by the private sector, such as a mandatory co-payment, would ensure that training is relevant.
- **Encourage firms and labor unions to devote more attention to training of workers.** Training could become a key element in future labor negotiations. Business executives should invest resources in training and skills councils and participate on the boards of education and training institutions to make institutions aware of their labor needs.

To ensure that there is sufficient capacity to implement priority actions, policy makers will need to be highly selective in the choice of actions. Equally important would be strong political will to carry out reforms and to undertake effective regional collaboration.

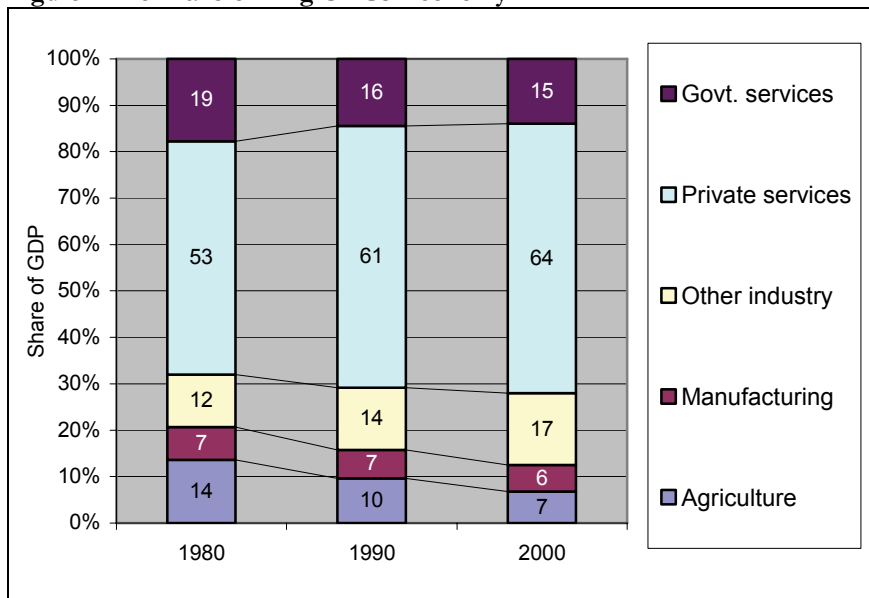
2 School Matters: The Crucial Role of Skills in the New Eastern Caribbean Economy

This chapter examines the importance of education and training for individuals and business firms. The evidence is clear: education is essential to individuals to find gainful employment and is equally important for firm competitiveness. The numbers suggest that the OECS is one of the world's most affected regions in terms of the way firms' competitiveness is severely constrained by the shortage of skilled workers. Further, the benefits to skilled workers are expected to increase due to intensified use of skill-biased technology and trade liberalization. As more value is placed on skilled workers, there is an increasing risk of marginalizing low-skilled workers and youth. An expanding gap between those that have and those that do not could negatively affect social cohesion in the OECS countries, potentially worsen inequality, and aggravate crime. On the upside, there are significant opportunities for improvements in employment, economic growth, and well-being.

Decades of reliance on traditional markets and trade preferences have given way to a new reality, where a much harsher and more competitive international wind blows. Adapting to the demands of the new reality will require a greater focus on sustaining and improving competitiveness. As described in *"OECS Towards a New Agenda for Growth,"* the crucial elements of such a strategy are to: (i) formulate a long-term vision that positions the OECS Economic Union in the global economy; (ii) reorient the basic development model toward greater openness, competition and a more level playing field in the sub-regional economy; and (iii) create new capacity in the labor force and the private sector to take advantage of emerging opportunities in the global market place and the public sector to coordinate and support the process of deeper regional (and global) integration.

The OECS economy is transforming and so is demand for skills. Services were the most important source of growth in the OECS countries from 1980 to 2003. The share of private services in GDP increased from 53 percent in the 1980s to 64 percent during 2000-2003 (*see Figure 1*). At the same time, the share of agriculture halved from 14 to 7 percent. Understandably, the employment patterns have changed as well. Agricultural jobs have declined. Data from the early 1990s to 2000

Figure 1 The Transforming OECS Economy



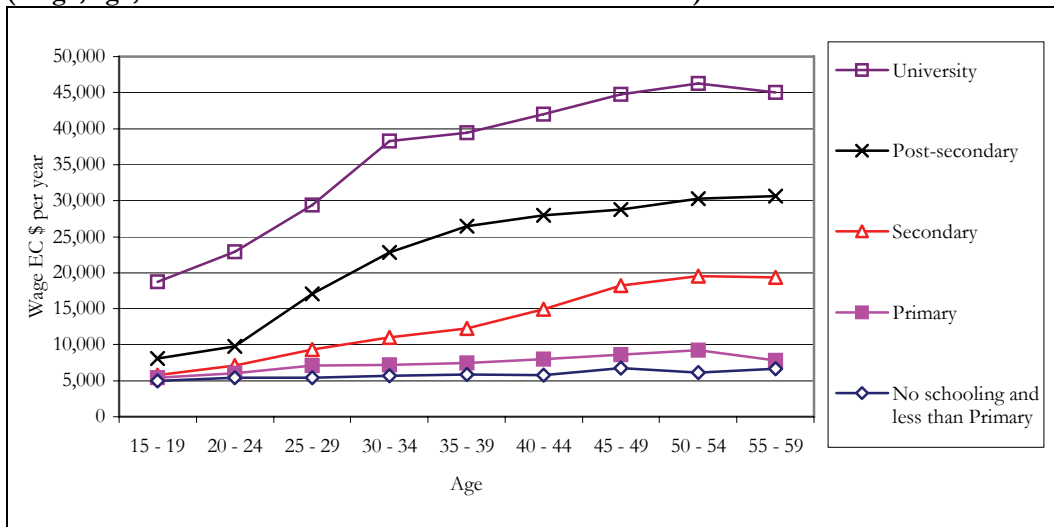
Source: World Bank (2005) based on ECCB data

shows that the share of agriculture in employment declined by 5 percent in Dominica, by 11 percent in St. Kitts and Nevis, and by 3 percent in St. Lucia (World Bank, 2005a). Meanwhile, employment in tourism has grown. In St. Kitts, for example, according to an employer survey, eight of every ten job vacancies were expected to be in tourism in 2006 (OECS Secretariat, 2005). Further, the OECS countries have

moved into higher value-added service products and limited niche manufacturing. Given its relatively high wages, it is unlikely that the OECS can be competitive in labor-intensive manufacturing or in traditional agricultural production in a more open market trading regime (World Bank, 2005a). The current trend of specialization into services and niche products of high added value is therefore very likely to continue. In the future, new jobs will predominantly stem from growth within these sectors.

Education is often a person’s most valuable asset. Data on labor market earnings from St. Vincent and the Grenadines provides an example of just how powerful education can be for escaping poverty and increasing personal welfare. In 2001, 24-year-old workers with incomplete primary education received on average EC\$5,400 in yearly salary, while workers who had completed primary, secondary, post-secondary, and university education earned 12 percent, 31 percent, 80 percent, and 324 percent more, respectively (see Figure 2). These differences increase notably with the accumulation of job experience. When taking into account schooling costs and the impact of experience, the rates of return to primary, secondary, post-secondary and tertiary education are 13 percent, 13 percent, 24 percent, and 19 percent, respectively.³ These are high returns to education and imply that few people with completed secondary education are trapped in poverty, and even fewer with post-secondary education. The high returns point both to the tremendous influence that education asserts on labor market income and reduction of poverty, and to the scarcity of skills in the OECS countries.

Figure 2 Education, the ultimate poverty fighter
(Wage, age, and education in St. Vincent and the Grenadines)



Source: St. Vincent and the Grenadines Population and Household Census 2001

Shortage of skills appears to present a real obstacle to increased firm competitiveness in the OECS. Several surveys of business executives and investors conducted by governments, the World Bank, and the OECD, all indicate that a lack of skilled workers hinders firm growth (see Box 2). Indeed, in the only internationally comparable survey conducted in the OECS, Grenadian firms seem to have greater difficulties finding workers with the required skills and education than any other country in the entire Western Hemisphere.

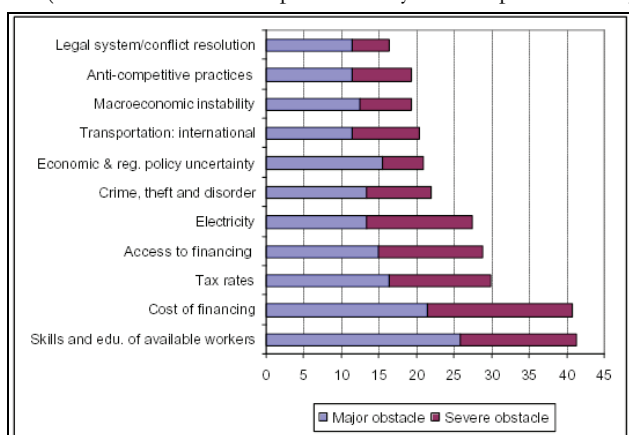
³ These rates of return are estimated using the internal rate of return method. Besides foregone earnings while studying, the private cost of primary and secondary education is assumed to be zero. The cost for post-secondary is assumed to be EC\$2,000 per month, while the private cost for tertiary education is estimated to be EC\$20,000 per month.

Box 2 What do firms and investors in the OECS say about availability of skills?

Employers are often overlooked when it comes to evaluating the availability, quality and relevance of skills. This is partly because employers, in most cases, can offer a slightly higher salary to attract demanded skills. Therefore, individual employers are often less concerned with sufficient availability of skills. However, in small labor markets, like the Eastern Caribbean, demanded skills often cannot be acquired by offering higher salaries, because there are no workers with the demanded skills. Hence, employers are especially affected, and the low availability of skilled workers becomes a major issue at the national and company levels. In St. Lucia, 64 percent of surveyed firms rated availability of qualified personnel and technicians as the third largest obstacle for competition. A similar share feels that there is low availability of well-trained workers. Furthermore, eight of every ten employers felt that productivity was low to moderate. In Antigua and Barbuda, the fifteen largest investors regarded labor costs as high and the quality of public education as moderate (OECD, 2006). In Grenada, unavailability of skills was the largest hindrance for investors; 41 percent of interviewed executives rated this obstacle as either major or severe (see Figure 3). This represents the highest percentage of investors to complain about lack of skills in any investment survey climate undertaken in Latin America and the Caribbean (see Figure 4).

Figure 3 Lack of skills is considered the biggest obstacle for Grenadian firms

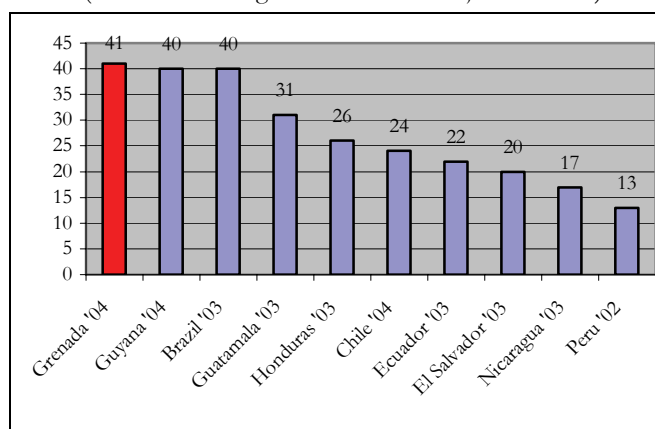
(What obstacles are important for your competitiveness?)



Source: Grenada Investment Climate Assessment (FIAS, 2004)

Figure 4 The Grenadian skills gap is the most severe in the Western Hemisphere

(% of firms rating lack of skills as major or severe)



Source: Grenada and Guyana Investment Climate Assessment (FIAS, 2004) and (FIAS, forthcoming). The survey year is indicated after the country.

Demand for skills is already high and is expected to further intensify. Although the lack of skills in the Eastern Caribbean seems comparatively severe on an international scale, other countries are experiencing a similar surge in demand for skilled labor, which is increasing the value of skills (see Box 3). There is no reason to expect this demand to diminish in the future. On the contrary, factors driving the increase - expanding and contracting industries, outsourcing, increased capital flows, skill-biased technology, and drive for quality and innovation - are expected to continue in the future. In particular, the OECS economy remains one of the most protected economies in the world. Therefore, we can expect that over time increased competition and trade will continue to drive up demand for skilled labor.

Box 3 What is driving the rising demand for skilled labor?

Studies show that salaries of skilled workers are increasing compared to the salaries of unskilled workers in most countries around the world. Since the mid-nineties, scholars have agreed that there are strong indications that trade liberalization invigorates demand for skilled labor, outstripping growth of supply of skills and thereby raising the “skill-premium.” However, there is a debate as to why trade liberalization leads to increased demand for skilled labor. Five main channels have been identified:

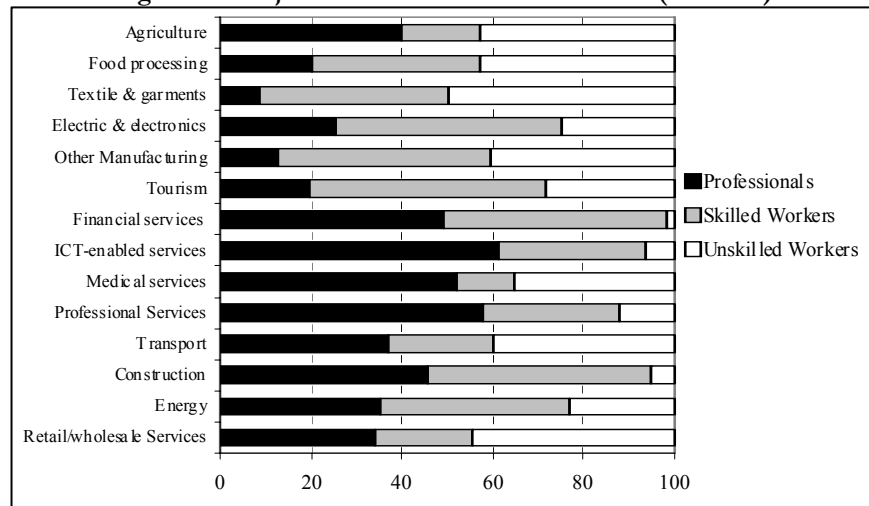
- Competition from low-wage countries. With trade-liberalization, middle-income countries like the OECS are pressured to move from low-skilled sectors into medium-skilled sectors as a result of competition from low-wage and more natural resource-abundant countries. For example, the OECS economy is losing jobs in the production of bananas and sugar, but gaining in tourism.
- Outsourcing. Borderless trade leads firms in high-income countries to outsource part of their production, which increases requirements for medium skilled workers in low and middle-income countries. For instance, some US firms outsource telecenters to the OECS.
- Capital flows. Trade-liberalization intensifies capital flows, which increases investment in physical capital in developing countries. Since capital often is skill-intensive, demand for skills rises as a result. One OECS example is increasing foreign direct investment in cellular telecom.
- Skill-biased technological change. New technology is introduced in developing countries as trade flows increase. The new technology enhances productivity of skilled workers and thereby increases their value to employers. The increased use of ICT in the OECS is one example of new technology that is spurring demand for skilled workers.
- Quality upgrades within sectors. Increasing foreign competition stimulates domestic firms to differentiate and upgrade their products to gain competitiveness. This innovation requires skilled labor. For instance, this seems to be happening slowly in the agricultural sector in the OECS, where former banana farmers are seeking to supply local restaurants with quality vegetables, but lack of skills and training seem to hamper this process of innovation and quality upgrading.

Source: Goldberg and Pavcnik, 2005 with OECS examples by authors.

Jobs in growth sectors require medium- or high-skilled employees. The current economic growth in the OECS is driven primarily by expansion in business services, construction, and tourism. These sectors overwhelmingly require skilled labor. In Grenada, for example, in the business service sectors (ICT, medical, financial and professional), more than half of employees are professionals

expected to have credentials from post-secondary education. In construction, four in ten are professionals, five in ten employees are skilled workers expected to have completed secondary education or learned a trade, and only one in ten is unskilled. Even in tourism, 75 percent of staff are skilled or professional (see

Figure 5 New jobs in the services demand skills (Grenada)



Source: Grenada Investment Climate Assessment, (FIAS, 2004)

Figure 5). These are representative of the jobs being created currently in the OECS. It is unlikely that a significant number of jobs will be created in low-skilled industries like textiles, other manufacturing or food processing, even if wages were to decline. Costs, other than labor costs, such as energy and transportation, are too high to compete with imports unless niche products are created and well-marketed (World Bank,

2005a). Hence, future jobs will favor skilled workers, so the education and training systems need to train youth to meet the demands from the expanding sectors to ensure their future employment.

The new demand for skilled labor generates great opportunities for improving living conditions in the OECS. Most importantly, higher productivity and financial rewards should accompany the better qualifications. Similarly, these more qualified employees will be more likely to receive training as a consequence of their improved competencies (*as discussed in Chapter 4*). The jobs will also entail less routine work and more variation (*as discussed in Chapter 3*).

However, without the appropriate policy response and actions, the changes could jeopardize the social cohesion of the OECS countries. As with all great opportunities, there are risks. In the new economy, those who are unskilled and/or lack the necessary behavioral skills risk being marginalized in the formal economy. The disadvantaged group of low skilled workers faces higher unemployment (*as discussed in Chapter 3*). This could lead idle youth to increasingly engage in illicit and criminal actions (*as discussed in Chapter 4*). At the same time, well qualified and educated Eastern Caribbean citizens could experience rising living standards. Without assuring an equal distribution of skills and educational opportunities in the OECS, the Eastern Caribbean could divide into an unhealthy dual society of those with skills and opportunities and those without. It is therefore paramount that the education and training systems adequately prepare *all* OECS citizens for well-paying jobs in the new global economy.

3 Preparing Youth for the Labor Market

Evidence provided in Chapter 2 confirms that the level of schooling strongly influences one's opportunities in the labor market. The governments of the OECS have made a strong push towards universal secondary education to better prepare youth for the future. Access to education is an important first step. However, does the formal education system teach students the kinds of skills that lead to productive employment in the labor market? This chapter discusses whether the basic, vocational, professional, and behavioral skills imparted in school match those demanded by employers. First, this chapter analyzes whether there is a general disconnect between the education system and the labor market in the Eastern Caribbean. Second, the chapter examines the relevance of the secondary education currently offered. Third, the report investigates whether school leavers lack specific skills for today's work world, especially key behavioral competencies like teamwork, proactiveness and reliability, and technical competencies like ICT skills. Lastly, the availability and preparation of specialized and highly skilled workers are analyzed. Box 4 defines the skills concepts used in this report.

Box 4 Definitions of Skills Concepts

Skills are abilities, usually learned, to perform actions. “**Skills**” is generally interchangeable with “**Competencies**”, although skills occasionally refer to only (acquired) vocational skills, while competencies are sometimes understood in a broader sense to include innate abilities. “**Skills**” is different from “**Knowledge**”, which is information of which someone is aware. The types of skills discussed in this report include:

Thinking skills, such as critical and creative thinking.

Life skills also called behavioral and soft skills, which include perseverance, self-discipline, teamwork, the ability to negotiate conflict, and manage risks.

Basic skills denotes the set of minimal abilities needed for further learning, work, and life, including numeracy and literacy and basic levels of behavioral skills such as perseverance, self-discipline, and self-confidence.

Post-basic skills include thinking skills and higher order behavioral skills (decision-making skills, the ability to negotiate, and specific knowledge applied to real life situations).

Vocational skills are a mix of specific knowledge and skills to perform jobs that rely on clearly defined tasks. Vocational skills are often obtained via training.

Professional skills are a mix of specific knowledge and skills to perform a profession that involves non-routine, context-specific, and complex tasks. Professional skills often require use of post-basic skills and are normally imparted in post-secondary education.

Source: Adapted from (World Bank, 2006) and (Webster's, 1985)

I. A General Disconnect between the Education Sector and the Labor Market

There seems to be a general disconnect between education and the world of work in the Eastern Caribbean. In a Caribbean survey of 130 well-established companies, of which 105 were from the OECS, the majority of business representatives stated, “*There has never been a strong nexus between the two bodies [education and business]. The relationship between education and business is disjointed.*” (CKLN, 2006) A workgroup under the Caribbean Forum for Development, consisting of representatives from the labor unions, private sector, education system, and government, analyzed the connections between the labor market and the education and training systems. The group concluded that a review of secondary and post-secondary training activities was urgently needed, particularly in respect of technical and vocational education, as the training did not seem to be synchronized with labor market trends. According to Salling-Olesen (2006) (*see Background Paper I*), formal education in the Eastern Caribbean is seen more as a way to gain social elevation, which in particular seems to be the case for higher education. Education is used as a screening device for

white collar positions in civil service and trading without regard for the effectiveness of the screening for actual jobs in the productive sector. The over-emphasis on academia leads to an education system that does not necessarily impart skills related to the labor market (CDB, 2006; also see CARICOM, 2006; OAS, 2006; CAIC, 2006; and SLHTA, 2005). This results in a paradoxical situation where educated workers are trained for careers weakly related to the productive and exporting industries of the region (Salling-Olesen, 2006). Further, it may have contributed to a perception of vocational skills as inferior, as discussed below. This disconnect is not uncommon in developing countries. Box 5 offers a potential historical and economic explanation. The following two chapters of this report will bring additional evidence to this disconnect between the education system and the labor market as it relates to outcomes, programs, and policies for youth transitioning from education to the work world and to on-the-job training. Any initiatives to improve the match or reduce the disconnect between education and labor demand will require profound changes.

Box 5 Did the Disconnect between Education and Labor Market Needs Arise from Past Endowment and Policies?

Historically, economic development in the Eastern Caribbean has not relied on education and skills teaching, but rather on the use of natural resources. In particular, the economy relied extensively in the past on sugar and banana agriculture. The exploration of natural resources for many years counted on a monopoly or trade-protection (World Bank, 2005a and 2005b). Drawing upon better studied cases, summarized below, it is conceivable that the natural endowment, historical context, and economic policies of the Eastern Caribbean created an economic model where: (i) demand for skills and technology from the dominating economic sectors was lower than it would have been under a competitive and open trade policy and (ii) education functioned more as a luxury and signaling mechanism than as an essential input into economic development. Therefore, the education system was never linked closely with the main economic sectors. Confirmation of this hypothesis would require primary data collection on education and economic sectors that goes beyond the scope of this report. Nevertheless, three in-depth case studies from other parts of the world lend some support to this economic historical explanation of the link between education and labor demand:

- (i) Latin America: Maloney (2006) examines the historical reasons behind the lackluster development of skills and technology in Latin America. Based on past production of university and technological institutes, he finds evidence that the primary objective of higher education institutions in Latin America, developed under the colonial rule, was education for the sake of education and culture. The economy was based on simple exploration of natural resources and economic rents which demanded a relatively low level of skills and technology. Consequently, there was never a strong economic need for close linkages between education and the productive sector until late in the 20th century;
- (ii) Sweden: Blomström and Kokko (2006) trace the inter-play between Sweden’s education sector and economic development. They find that strong competition from neighboring countries in exploration of minerals and in agriculture, along with migration, provided a strong demand for new skills and technology to enhance labor productivity. Technical schools and universities were therefore created to supply this demand. A vibrant nexus between the education institutions and the productive sectors emerged;
- (iii) The US: Goldin and Katz (1998) studied the economic circumstances surrounding the massification of secondary education in the US during the 1920s and 1930s. They found that the westward expansion of the US resulted in abundant land and scarcity of labor. This combination created a strong stimulus for skills and technology to farm the abundant land and supply goods to the rural population. Consequently, public policies sought to expand education institutions to supply the growing economy with skills and technology for the agricultural and manufacturing sectors.

Lack of labor market information contributes to the gap between the education sector and the labor market. Few of the colleges, school officials, or Ministries of Education can base education policy on regular reporting of labor demand and labor shortages. For example, there is no report or statistics on the number of vacancies of craftsmen in the OECS. It is difficult for the Ministry of Education and schools to respond to a need that remains unexpressed. Likewise, students and families do not receive guidance to select careers in high demand. Notwithstanding, a formal report or labor market needs assessment would have limitations. It could not substitute completely for direct communication between employers and educators, nor could it convey the subtleties and dynamic aspects of labor demand. Therefore, educators and employers need to regularly discuss the

skills needs of main industries in skills councils and at governing boards of education and training institutions. The government could facilitate and even require institutions to do so (discussed further later in this chapter). Besides exchanging emerging skills needs at the institutional level, communication and joint strategies are called for at the sectorial and local level. The United Kingdom (UK) Learning and Skills Councils are probably the best example of a model that could be adapted in the Eastern Caribbean because: (i) the Eastern Caribbean education system has, for historical reasons, many similarities to the UK system; (ii) the model has been evaluated extensively and it works; and (iii) it can be implemented relatively easily in steps (*see Box 6*).

Box 6 How UK Learning and Skills Councils Coordinate Demand and Supply of Skills at the Local Level

The UK Government has instituted two types of skill councils to ensure better coordination between demand and supply of skills:

- At the local level, each Learning and Skills Council (LSC) has representatives from employers, learning providers, and community groups. For example, the Board of the local LSC in Kent and Medway, in southeast England, consists of a bank director, a business proprietor, the director of a real estate company, one union member, four local government representatives, and four members from education and training institutions. In 2006, the local LSC oversaw the development of 12 sector studies of skills needs for Kent and Medway, which included ICT, health and social care, hospitality, the financial and business sector, retail, construction, and the land-based and food sector, among others. With this local analysis and interaction, employers and education and training providers can ensure that supply of skills matches demand. This reduces unemployment and increases the value of training and firm competitiveness.
- At the sectoral level, there are 25 Sector Skills Councils. Each council is an employer-led, independent organization that covers a specific sector across the UK. The four key goals are: (i) to reduce skills gaps and shortages; (ii) improve productivity, business and public service performance; (iii) increase opportunities to boost the skills and productivity of everyone in the sector's workforce; and (iv) improve learning supply including apprenticeships, higher education and National Occupational Standards. The sector councils provide employers with a forum to express the skills and productivity needs that are pertinent to their sector.

Both types of councils are continuously evaluated both qualitatively and quantitatively (*see Policy Research Institute 2006, LSC 2006a, LSC 2006b, BMG 2007, and SSDA 2005*).
 Source: www.lsc.gov.uk and www.ssda.org.uk

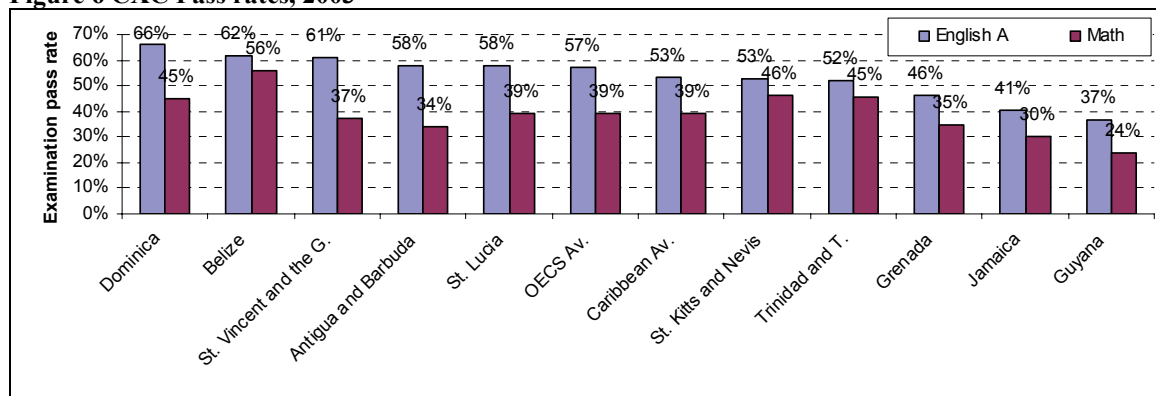
II. The Relevance of Secondary Education

Universal secondary education in the OECS is a bold step that will be handsomely rewarded in the future, as long as quality education is ensured and the curriculum is relevant. In the education community, there is consensus that competencies learned in secondary education lay the foundation for productive work and lead to lifelong learning. Without this foundation, a person faces difficulties gaining and maintaining a job that requires ongoing learning to adapt to new technologies, new products and new organizational forms. Hence, in today's world it is crucial that all young people receive the opportunity to complete secondary education. The OECS countries are taking bold steps to create additional spaces in secondary schools for all graduates of primary education. At least two governments in the OECS - St. Kitts and Nevis and St. Vincent and the Grenadines - have succeeded in providing universal access to secondary education. Nevertheless, this policy has presented many challenges to teachers and school administrators who have had to adapt to ensure sufficient classroom space, available qualified teachers, and different teaching methods to accommodate all pupils, including those that are less prepared or experience learning difficulties. In this regard, efforts are being made to improve the quality of primary education to ensure that all students are sufficiently prepared for secondary school when they transition from one level to the next.

Attendance is not enough; learning to read, write and calculate is required for success. The most important basic competencies are the mastery of the 3 Rs: Reading, wRiting and aRithmetic.

Literacy and numeracy are the gateways to future learning and are linked to better labor market outcomes. For example, a higher score on the math Caribbean Secondary Education Certificate (CSEC) exam was statistically significantly correlated with a higher wage among secondary school graduates from St. Vincent and the Grenadines in 2002. The finding suggests that each point on a five point scale increases the monthly salary by EC\$80 (see *Background Paper III*). Results on the math exam also were linked with the time required to find employment after the exam, although the findings were not statistically significant. Better math performers found jobs more quickly; each point of the exam scale correlated to one month less of search time to find a job. It is of concern, therefore, that many students moving from primary to secondary school have not sufficiently mastered the 3 Rs. Poor literacy and numeracy skills lead to poor performance at the secondary level, and well-known statistics for the Caribbean Examination Council (CXC) exams show an average pass rate of only 48 percent for those OECS students who sat the CXC in 2003 in General Proficiency in English A and Math (see *Figure 6*). OECS Ministries of Education face an enormous challenge in ensuring that all school leavers gain acceptable literacy and numeracy levels. Most of the countries have launched national literacy and numeracy campaigns to tackle this challenge, and under the OECS Education Development Projects (OEDP), literacy and numeracy policies have been established, coordinators have been assigned to schools, training has been developed, and resources have been purchased. Textbook rental schemes also ensure that poor students have access to books. Finally, some MOEs have set student achievement targets and are using the CXC exam results and other means to measure the impact of these activities and progress towards meeting their goals. The report will not go further into the quality, delivery and measurement of the 3Rs and education in general, since it requires an independent and in-depth analysis due to the complexity of the educational, institutional and political economy aspects of teaching. Such an analysis lies outside the scope of this report. Instead, the report focuses on the desired outcomes of teaching for the new global economy.

Figure 6 CXC Pass rates, 2003



Source: CXC 2003

Note: General Proficiency examinations

The success of universal secondary education will be determined by its relevance to labor market demands. In many developing countries, the secondary education curriculum remains abstract and alien to social and economic needs. It relates to an education introduced decades ago that has not fundamentally changed, though education has changed substantially in high-income countries. Low relevance of education contributes to unemployment of graduates and low productivity. Further, it leads to higher dropout and failure rates among students (World Bank, 2005b). The OECS Ministries of Education and the OECS Education Reform Unit (OERU) are involved in ongoing curriculum reform, but no formal studies have been carried out to determine labor market needs. The reform efforts could benefit from inclusion of voices from the private

sector. In particular, employers should play a key role in determining relevance of education for the labor market.⁴

The positive impact of a curriculum reform will only be fully achieved if it is accompanied by concurrent changes to CXC-administered exams. In the OECS, the number of CXC exam passes matters greatly. A graduate's passes are used extensively as a screening device for entry to community colleges and the University of the West Indies (UWI), among others. Further, most job announcements in the region refer to a desired number of CXC passes. As long as this holds true, teachers and students will continue to devote marginal attention to competencies that are not assessed by the CXC exams or another certification mechanism. Hence, in the OECS, as in the rest of the Anglophone Caribbean, the success of any curriculum reform depends on concurrent enhancement to the relevance of the CXC exam (OERU, 1999). It should be noted that the CXC has recognized the need to update exams and introduce additional certificates and has recently introduced an alternative secondary level certificate which is further described below.

The CXC-administered Caribbean Secondary Education Certificate (CSEC) could be more aligned with the labor market needs. Relevance of education is difficult to objectively measure, because this requires a determination of how relevant education is to labor market needs, economic and cultural development, further education, social behavior, health behavior, among others. A key objective of OECS secondary education is relevance for the labor market and economic development (OECS Communique of Ministers of Education, 2005). A thorough assessment of the relevance of the CXC exams, syllabi, and indirect curriculum for the labor market is not available. However, the business community has concerns regarding the viability of subjects taught and the ability of the education system to prepare students to be productive in the job market. *"Students need to be oriented as to what business is all about. Survival (economic) is related to changing curriculum quickly..."* (CKLN, 2006). In a presentation at the Caribbean Forum for Lifelong Learning, the Caribbean Association of Industry and Commerce (CAIC) stated that, *"...educators and policymakers understand the need to educate graduates for employability, but obsolete information is used to develop curricula and to deliver training and assess programs."* (CAIC in OECS Secretariat, 2006) Former pupils also question the relevance. For instance, in a focus group of St. Lucian youth, *"...several were of the view that the education system and the irrelevance of the curriculum have contributed to their inability to get a job, to move out of poverty, and to function effectively in community life."* (CDB, 2006) Further, in an analytical background paper to this report, the author examined the Eastern Caribbean education system from a lifelong learning perspective and found that it, *"...seems to be mainly informed by academic standards of higher education."* (see Background Paper I).

The perceived low level of relevance of secondary education could stem from an overly strict focus on academic preparation for tertiary education. While adequate preparation for post-secondary education is important, it remains highly pertinent only to those who continue with studies at that level, estimated to be between 20 and 55 percent.⁵ Further, unless post-secondary education

⁴ A workgroup on Skill Development under the Caribbean Forum for Development (CFD) also recommends that, *"...a more fundamental and comprehensive curriculum response to changing Caribbean production patterns might be needed, and this should be the subject of ongoing dialogue with policy makers, educators, employers and trade unions with a view to devising an education and curriculum strategy that could meet the new needs."* (CFD, 2006).

⁵ The importance of the role of the CXC exam as an entry exam to tertiary education is proportional to the share of students transitioning from secondary to post-secondary education. Two information sources were used to estimate this transition rate: (i) average gross completion of secondary education in the OECS was 55 percent in 2001 (latest year with available comparable data), and gross enrolment into post-secondary education in the OECS was 11 percent (World Bank, 2005a-f and World Bank, 2003c). This suggests a relatively low average transition rate from secondary to post-secondary education of 20 percent (World Bank, 2005); and (ii) the survey of CXC graduates from St. Vincent and the Grenadines, in which 55 percent (214 graduates out of 391) continued education at the post-secondary level (A-level, technical, nursing college, or tertiary education)

expansion keeps pace with the expansion of secondary education opportunities from 2004 to 2006, the transition rate from secondary to post-secondary education will decline. For those who do not continue with further studies, the relevance of their secondary studies to the labor market is more important. As suggested by the focus group in St. Lucia, the low relevance could be one reason why more than 70 percent of people aged 17 to 30 in St. Lucia have no education credentials despite having attended more than eight years of school. This situation has a negative impact on job prospects, future learning, and youths' self esteem (CDB, 2006).

The governance structure of the CXC council is geared towards academia. The CXC council sets the agenda in the classrooms across the English-speaking Caribbean. Its exams and syllabi drive the actions of the ministries, schools, teachers and pupils. For the 2006 to 2008 period, all 42 members of the CXC council are educators from regional universities, national ministries of education or the teaching profession.⁶ The heavy representation of educators on the Board could contribute to the strong academic orientation of the CXC exams. The composition of the Board was appropriate when the CXC was created in 1972, because the CSEC was designed as an entry exam for tertiary education. The CSEC exam is still primarily thought of in this regard and is less oriented towards labor market needs. Yet, with the introduction of the new Caribbean Certificate of Secondary Level Competence (CCSLC) exam, the Caribbean Vocational Qualifications, and a possible adult secondary education equivalence exam, the main objective of the CXC is no longer preparedness for tertiary education, but preparedness for life. In light of this shift, a broader spectrum of society, including employers, should be given a voice and represented on the council.

Despite limitations of the CXC exams, the Caribbean Examination Council offers an important regional scope and has been responsive to emerging needs in its decision to develop a new more labor market-oriented certificate. Development and application of exams and other assessment activities carry substantial fixed costs. Therefore, there are significant savings for all 14 territories by collaborating to develop assessment tools. Since the CXC provides common assessment tools, it is essential that the governments of the English-speaking Caribbean ensure that the CXC is efficient and responds to the needs of its client members, especially as the use of learning assessments is likely to increase in the future. As previously mentioned, the CXC is answering to emerging needs and demands. The CCSLC was developed in response to the influx of students with a wider range of abilities, this as a result of universal secondary education policies across the region. The CCSLC measures a core set of desired skills, knowledge, values and attitudes in: (i) English and Mathematics and (ii) three additional subjects to be chosen from one of six groups, including CXC subjects, TVET, creative and expressive arts, and locally-certified enrichment programs. The CCSLC was introduced in June 2007 and should provide a greater share of secondary school leavers with credentials that will enable them to gain employment or post-secondary training opportunities (CXC, 2006).

The CXC exams offer country comparisons at the regional Caribbean level, yet the OECS countries have not participated in any broader international student assessments to gauge whether students are receiving adequate preparation for the global economy. In the new

(see Background Paper III). The two estimates are rough estimates. They are compatible if a large number of pupils complete Form 5 but do not sit the CXC exams.

⁶ The CXC council is composed of the Vice Chancellor of the University of the West Indies; the Vice Chancellor of the University of Guyana; three representatives of the University of the West Indies appointed by the Vice Chancellor of the University of the West Indies; one representative of the University of Guyana appointed by the Vice Chancellor of the University of Guyana; two representatives appointed by each of the Participating Governments of Barbados, Guyana, Jamaica and Trinidad & Tobago; one representative appointed by each of the other Participating Governments; and one representative of the teaching profession appointed by each National Committee (http://www.cxc.org/The_Council.htm). At the subject level, there is private sector participation in some CSEC syllabus development panels.

knowledge-driven service economy, skills may be the most important input for competitiveness. As the OECS strives to become more competitive in the global economy, it is crucial for governments to understand how well their students and education system perform on a global scale. An accurate measurement would assist the governments to determine whether the learning outcomes of their education and training systems meet international standards and to gauge the importance of other globally measured factors for competitiveness. Global assessments are useful for benchmarking, diagnostics, and as an accountability mechanism. For example, the average performance of German and US pupils in the PISA assessments in 2000 spurred interest and widespread public debate about the need for better preparation of youth and public pressure for improvements to the education system.

III Specific Skills Sought after in Today's World of Work

Part of the general disconnect between the education system and the labor market is manifested in the need to teach new specific skills. The transformation of the Eastern Caribbean economy has stimulated increased demand for some specific skills. The report discusses three of them: learning to learn, life skills, and ICT skills.

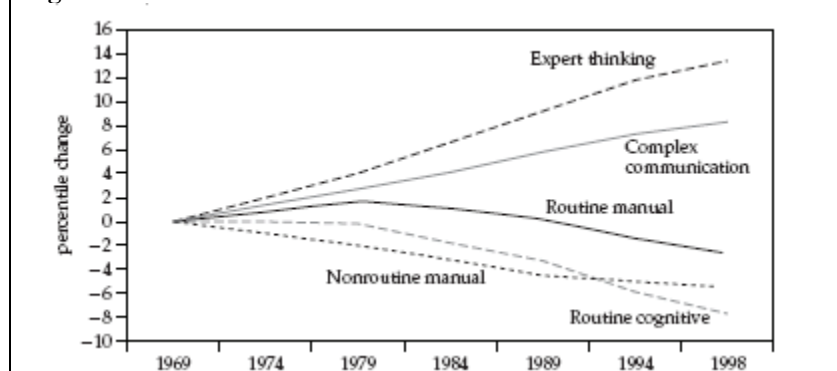
Rote memorization does not provide school leavers with enough necessary job skills; schools should teach “learning to learn.” In an economy where workers are expected to annually improve productivity and constantly deliver new innovative services, learning takes center stage. Box 7 shows how the knowledge economy has changed the competency requirements for the US labor force. Requirements have shifted away from routine competencies towards complex and expert ones. Labor-specific skills related to well-defined technologies, products, sectors and work functions only represent the visible part of the competency iceberg. More essential are the competencies which enable acquisition of new skills, adaptation to new technologies, and acceptance of new work forms. It is therefore necessary to apply a broader interpretation of skills than the specific knowledge and skill needs that can be deduced from foreseen or desired economic developments. Stimulating such meta-cognitive and creative capital has profound implications for teaching and pedagogy for the teachers and schools in the OECS.

Box 7 Jobs in Business Require Expert Thinking and Complex Communication

What types of skills and competencies are increasingly in demand in the knowledge economy? Research carried out by Levy and Murnane (2004) on the skills requirements for tasks performed in the US labor market is revealing. The authors divide the tasks performed by today's labor force into five broad categories:

- **Expert thinking:** solving problems for which there are no rule-based solutions, such as diagnosing the illness of a patient whose symptoms seem strange;
- **Complex communication:** interacting with others to acquire information, to explain it, or to persuade others of its implications for action; for example, a manager motivating the people whose work she supervises;
- **Routine cognitive tasks:** mental tasks that are well described by logical rules, such as maintaining expense reports;
- **Routine manual tasks:** physical tasks that can be well described using rules, such as installing windshields on new vehicles in automobile assembly plants;
- **Non-routine manual tasks:** physical tasks that cannot be well described as following a set of "if-then-do" rules and that are difficult to computerize because they require optical recognition and fine muscle control; for example, driving a truck.

Figure 7 The decline of routine and manual tasks



In Figure 7, each trend reflects changes in the share of people employed in positions emphasizing that task. The importance of each task in the US economy is set to zero in 1969, the baseline year.

Tasks requiring expert thinking and complex communication grew steadily from the 1970s to the 1990s. The share of

the labor force employed in occupations that emphasize routine cognitive or routine manual tasks remained steady in the 1970s and then declined over the next two decades. Finally, the share of the labor force working in occupations that emphasize non-routine manual tasks declined throughout the period.

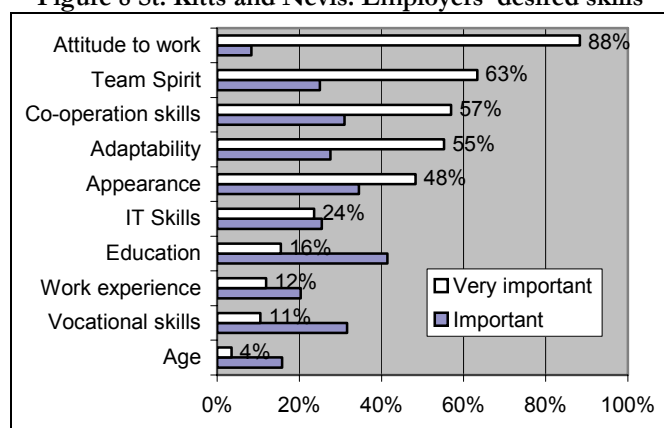
Source: Levy and Murnane (2004)

Employers seek workers with behavioral life skills. There is a remarkable unequivocal request for behavioral skills, also called "soft skills," by firms. These include cooperative skills, communication, work ethic, entrepreneurship, and commitment (Salling Olesen, 2006b). The results of several surveys of private employers highlight the extent to which they desire these skills (see Figure 8 and Figure 9). For instance, in St. Kitts and Nevis, firms' top three desired skills were attitude to work, team spirit and cooperation skills. In another survey of employers for the wider Caribbean, honesty and integrity, work ethics and problem solving were the top skills required to obtain a job.⁷ Paradoxically, young students and workers are unaware of this high demand for life skills. In a survey of school leavers in St. Vincent and the Grenadines, only 3 percent of the youth reported that they lacked soft and interpersonal skills. The lack of recognition of the importance of "life skills" in the Eastern Caribbean is not unique. Many OECD countries have ongoing working groups to identify and improve teaching to incorporate these skills (see Box 8). These life skills represent a basic dimension of behavior and attitude which has a skills component but cannot be taught or learned separately. They are clearly related to work life because they are needed for successful performance at work, but they are of a more general nature applied to any sphere of life. There is, therefore, an important element of culture and up-bringing for which the school cannot be uniquely responsible.

⁷ A work group on Skill Development under the Caribbean Forum for Development similarly found that many school leavers did not have the requisite soft skills to function adequately in the work place (CFD, 2006).

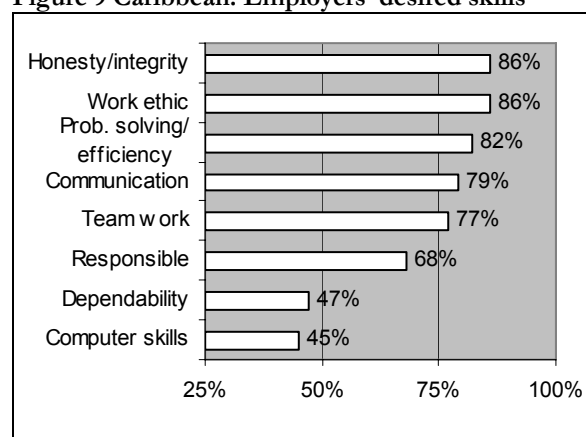
However, some life skills refer to very concrete attitudes and social behaviors that can and should be nurtured in a school setting, such as team work and problem solving.

Figure 8 St. Kitts and Nevis: Employers' desired skills



Source: OECS Secretariat, St. Kitts and Nevis: Retraining the Sugar Workers, 2005

Figure 9 Caribbean: Employers' desired skills



Source: Caribbean Knowledge and Learning Network: Labor Market Survey, 2006

Box 8 The Teaching of Life Skills is also a Major Challenge in OECD countries

Many OECD governments are concerned about whether their education system imparts the right set of skills to ensure their citizens a productive and successful working life. They have launched studies and working groups to identify the best skills for this purpose.

In Canada, the government launched the Essential Skills initiative. Essential skills are those skills needed for work, learning and life. They provide the foundation for learning all other skills and enable people to evolve with their jobs and adapt to workplace change. Through research, the Government of Canada and other national and international agencies have identified and validated nine Essential Skills. These skills are used in nearly every occupation and throughout daily life in different ways and at different levels of complexity. They are: (i) reading text, (ii) document use, (iii) numeracy, (iv) writing, (v) computer use, (vi) oral communication, (vii) working with others, (viii) continuous learning, and (ix) thinking skills. The last four relate to life skills.

In the US, Michigan State University conducts a regular employer survey. In 2006, 864 companies were surveyed. The survey revealed that candidates are expected to possess more than academic skills. They are expected to have “the full package.” This includes, in particular, communication skills, leadership, teamwork, interpersonal abilities, and personal traits.

In 2004, the OECD undertook a program to define and select key competencies. The program assessed the key variables that determine students’ success in life. They found three life skills to be highly influential for success: (i) social competencies, including cooperation, (ii) lifelong learning abilities, and (iii) communication competencies.

Source: Michigan State University (2006), OECD (2005), and GoCa (2007)

Opportunities abound for workers with technical skills; ICT skills are especially sought after.

The results of employer surveys, previously presented in Figure 8 and Figure 9, show that ICT is the most demanded technical skill. Further, employers, government officials and trainers frequently point to lack of technical skills for careers such as plumbers, air condition technicians, and maintenance staff. This view is corroborated both by the enterprises surveyed for the Investment Climate in Grenada and for the case study on Skills for the Tourism sector in St. Lucia. Employers report that key skills shortages are found in technical areas such as industrial engineering, and managerial positions at middle and senior management levels. Higher availability of technical and managerial skills would: (i) reduce the upward wage pressure, which otherwise would escalate labor costs, for example in the construction sector, which currently is booming in several of the OECS countries; (ii) allow more businesses to invest in productivity-enhancing ICT and other cutting edge technology;

and (iii) create jobs and business in specific niche industries that are intensive in technical skills, such as yachting in Grenada.

Although many pupils have some access to ICT training in secondary schools, the knowledge of ICT among secondary school leavers seems insufficient, as judged by both employers and students. In a survey, conducted for this report, of secondary school leavers sitting the 2001 CXC in St. Vincent and the Grenadines, only 30 percent knew that the file extension of a word document is “.doc.” When asked where the school leavers lack skills, the highest share, 28 percent, answered, “Computer skills.” Thus, more widespread use and access to ICT is imperative in the OECS schools in order to adequately prepare youth for the global economy. This may require moving beyond the current configuration and use of computer labs. ICT should be incorporated across the curriculum and developed as a tool for learning. New Zealand’s curriculum provides a very good example of conscious integration of ICT skills across all subjects. Teachers would require additional training to implement this approach.

Almost all secondary schools offer technical and vocational subjects; however, quality seems low. Quality of education is difficult to measure. Therefore, it is inappropriate to make blanket statements about the quality of technical and vocational education in the OECS. Nonetheless, the following observations suggest problems with quality and relevance of technical education: (i) based on site visits, the teaching equipment available is outdated and the level of training of teachers seems low (McArdle, 2006) and (ii) in the survey of school leavers from St. Vincent and the Grenadines, there was no link between passed CXC exams in technical subjects and better labor market outcomes, as measured by higher salaries or less unemployment. Neither schools nor teachers could estimate job-placement rates of recent graduates, and there is no formal tracking system to determine whether the schools are adequately preparing students for work.

IV Improving Availability and Relevance of Professional Skills

The above paragraphs highlight the need to stress learning to learn abilities, life skills and ICT skills in the education system. This section discusses the gains from a closer alignment of professional skills with the demands of the labor market.

Specialized and highly skilled professionals, the output of post-secondary education institutions, are not readily available in the Eastern Caribbean. Yet rates of return to post-secondary and tertiary education are high in the Eastern Caribbean, as demonstrated with the case of St. Vincent in Chapter 2. As will be shown in *Figure 13* in the next chapter, young workers with post-secondary education and tertiary education also have the lowest unemployment among all young workers in St. Lucia.⁸ This indicates that general demand for graduates of post-secondary education is relatively high compared to supply. Further, various studies find a shortage of people with specialized skills among the OECS countries. In an investment climate survey of 201 firms in Grenada, firms reported having difficulties finding management skills, in particular. The median delay to fill a vacancy was eight weeks, compared to four weeks for a skilled worker and one week for an unskilled worker (FIAS, 2003).

⁸ The International Standard Classification of Education (ISCED) defines post-secondary, non-tertiary education as an independent level of education (ISCED level 4). This level straddles the boundary between upper secondary programs and post-secondary education. The next level in the ISCED is Level 5A, which is the first stage of tertiary education with a minimum of two years full time equivalent. The community colleges in the Eastern Caribbean offer a mix of post-secondary, non-tertiary education (ISCED level 4) and tertiary education (ISCED level 5A). This section analyzes the two levels of education together and refers to them as post-secondary education.

A serious mismatch exists between supply and demand of professional skills in the tourism sector. The economic importance of the tourism sector should not be underestimated, for it is the largest foreign exchange earner in the OECS. It accounts directly for 25 percent of GDP in Antigua and Barbuda. Over 16 percent of St. Lucians are directly employed in this sector, and in St. Kitts and Nevis more than three-fourths of all new jobs for 2006 were expected to arise in the tourism industry (World Travel and Tourism Council, 2004 and OECS Secretariat, 2005). A case study analyzing skills for the tourism sector in St. Lucia, carried out for this report (*see Background Paper IV*), identifies the following type of workers as critically lacking: culinary and executive chefs, managers, and, to a lesser extent, waiters, spa workers, and maintenance staff. The first two of these positions offer salaries substantially above the OECS average. Companies are often forced to attract expensive foreign born and trained staff for these positions to the detriment of local economic benefits and competitiveness. For example, a study of the yachting sector in St. Vincent and the Grenadines finds that skills for administrative/clerical, sales and services are available in the country. However, specialized managerial skills required for marina or yacht charter company management are not available. This is exemplified by the fact that the managers of three of the four main yacht charter companies in St. Vincent are non-Vincentians (ECLAC, 2003). As was the case for Grenada, the case study of the St. Lucia tourism sector in 2006 detected a need for managerial skills. Manager skills were the second hardest skills to find. On average, it took 6.7 weeks to fill a manager position in the tourism sector compared to one week for an unskilled worker. The hardest skill to find was Chefs and Sous-chefs, another specialized skill usually trained by post-secondary level institutions (*see Background Paper I*). The education sector will need to adjust its curriculum to better prepare school graduates with the skills needed for tourism, the islands' foremost economic sector. It is not the objective of this report to identify all specific careers that are in short demand. This should be left to a labor market needs assessment. However, it is essential for the report to highlight that the current supply of professional skills has important shortages and mismatches with demand.

Four factors explain the shortage of professional and highly skilled workers in the OECS: (a) a low enrolment rate into post-secondary education; (b) a high out-migration of highly skilled labor; (c) a need to better link the career programs of the OECS community colleges to demand; and (d) the relatively small size of the individual Eastern Caribbean labor markets. The following four sections briefly analyze these factors.

a. Low enrolment rate in post-secondary education

Overall enrolment into post-secondary education in the Eastern Caribbean is low, which is principally due to low supply of seats in tertiary education. The high returns to tertiary education fuel young people's decision to demand access to tertiary education. The number of students that completed secondary education in the last decade far surpassed the enrolment numbers for tertiary education. In 2001, an estimated 55 percent of a cohort completed secondary school in the Eastern Caribbean - the gross completion rate - but only 11 percent of a cohort entered post-secondary education - the gross enrolment rate (World Bank, 2004). This large gap between completion of secondary education and enrolment into post-secondary education may be due to the fact that not all those who completed secondary education passed the sufficient number of CXC exams to qualify for post-secondary education. For example, in the survey of school leavers in St. Vincent, only 55 percent of those that sat for CXC exams subsequently attended post-secondary education. There seems, therefore, to be sufficient demand for post-secondary education. Hence, in the short run, the bottleneck for expansion of tertiary education seems to be an inadequate supply of post-secondary education.⁹

⁹ Nevertheless, in the medium to long run, quality post-secondary education will only expand in the Eastern Caribbean if CXC pass rates (and learning outcomes) improve.

Increases in private financing are critical for increasing supply and enrolment of post-secondary education. The OECS countries rely almost exclusively on public financing for provision of post-secondary education. The OECS invested an average of 0.8 percent of GDP in post-secondary education, of which only one eighth is from private funds (0.1 percent of GDP) (see Table 1).¹⁰ Continued reliance on public financing to expand post-secondary education is untenable for three reasons. First, many Eastern Caribbean countries are in a distressed fiscal situation and cannot afford such an increased long-term recurrent expenditure.¹¹ Second, public spending on post-secondary education is regressive in the Caribbean, since the majority of students come from high-income families. For example, in Jamaica, 77 percent of all post-secondary students come from the richest quintile of the population. Third, a significant share of graduates leaves the country, thus significantly reducing the benefit of the public investment to the national government. Therefore, increasing private financing is critical for expansion of post-secondary education. Other nations have increased private investment in post-secondary education by broadening the revenue base, including reforming tuition fees and attracting non-governmental providers.¹²

Table 1 Low Enrolment and low private investment in Post-Secondary Education

| Country | Gross enrolment rate | Investment | |
|--------------------------------|----------------------|------------|---------|
| | | Public | Private |
| Dominica | 7.5% | 0.5% | 0.1% |
| Grenada | 13.0% | 0.6% | 0.2% |
| St. Kitts and Nevis | 12.0% | 1.4% | 0% |
| St. Lucia | 14.0% | 1.0% | 0.1% |
| St. Vincent and the Grenadines | 5.0% | 0.5% | 0% |
| OECS Average | 10.3% | 0.8% | 0.1% |
| Comparator countries | | | |
| Barbados | 41.2% | 2.4% | n.a. |
| Dominican Republic | 28.8% | 0.3% | 1.0% |
| Jamaica | 14.6% | 1.0% | n.a. |
| OECD Average | | 1.0% | 0.8% |

Source: (World Bank, 2003e) and (World Bank 2004a-c) based on national budgets and educational statistics. For OECD: (OECD, 2005b). Year: 2002, except for Jamaica and Barbados (2003), and Dominica Republic (2001).

Note: n.a. not available. For the OECS, private investment is defined as household payments to meet fees for students enrolled in the OECS community colleges and does not include fees for attending foreign institutions.

To increase available financing, the community colleges could broaden their revenue base. Figure 10 compares the revenue sources of the T.A. Marryshow Community College and the Sir Arthur Lewis Community College with those of public community colleges and universities in the US. Like in the US, revenue generation and student fees could be tapped more to increase investment into post-secondary education. For example, tuition fees account for 18 percent and 20 percent in the US, depending upon the type of education, while they only account for 7 percent in Grenada and 10 percent in St. Lucia. The two Eastern Caribbean colleges seem to rely markedly

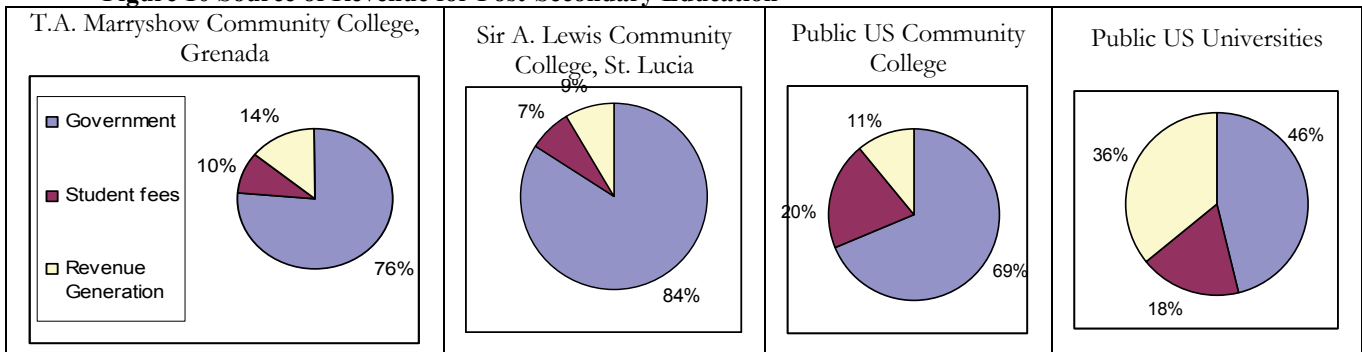
¹⁰ This includes public funding allocated to the University of the West Indies. Years of reference are 2002 and 2003. For further analysis, see Annex 2 to this report, which summarizes a series of World Bank Public Expenditure Reviews for the OECS.

¹¹ In line with good practice, governments maintained funding of primary and secondary education during the periods when fiscal restraints were necessary. This has benefited low and middle-income segments of the population.

¹² Developing a strong non-governmental sector for tertiary education could pose greater difficulties in the Eastern Caribbean than in larger countries. The small size of the individual islands and the multi-country setting is likely to reduce the interest of private providers, since delivery of tertiary education entails significant economies of scale and requires regulatory stability. This explains why only one private institution in the Eastern Caribbean offers tertiary education to nationals. The notable example is the partnership between Grenada's T.A. Marryshow Community College and the private St. George University. This partnership allows local youth to benefit from the quality programs offered by one of many offshore universities (i.e. institutions which are located in the Caribbean but cater to students from the US). Such a situation would call for a greater public effort to attract private providers. One line of action could be financial incentives to seek greater public-private partnerships.

more on government subventions. A working group of Caribbean rectors, academics, and policymakers concurred with the need for increased revenue generation and recommended that post-secondary education institutions develop "...a strategic plan to guide fundraising efforts, and establishment of functional structures to facilitate revenue generation."¹³ The working group also suggested that, "A change in the administrative system/institutional culture with respect to efficiency and timeliness..." should take place. "Heads must change their view of the world; leadership is critical. Heads may have to undergo training in management and entrepreneurial skills in order to achieve a holistic approach. There is a need for performance-based management." Institutional performance-based management can be stimulated by performance-based funding. Performance-based funding provides incentives for the education institutions to improve and increases accountability for funds. This is especially important for the community colleges in the Eastern Caribbean, since they do not have strong incentives from the government to perform (World Bank, 2003e and World Bank, 2004a-c).¹⁴ Two types of performance funding can be distinguished: (i) the government negotiates specific targets with the education institution in exchange for funding. One such goal could be to increase the share of revenue generation from the current level to a mutually agreed higher level, and/or (ii) the government provides financing to all tertiary institutions based on pre-established criteria, which might be unit cost per graduate (Thorn, Holm-Nielsen and Jeppesen, 2004 and CHEPS, 2001).

Figure 10 Source of Revenue for Post-Secondary Education



Source: Arthur Lewis Community College and T.A. Marryshow Community College, and Chronicle of Higher Education for the US. Year is fiscal year ending summer 2003, and 2000 for the US.

b. Migration of highly skilled workers

Multiple studies have shown that Caribbean workers with post-secondary education are likely to seek employment outside the region (Adams, 2003; Wodon, 2003; and Mattoo, Neagu, and Ozden, 2005). This leads to at least a temporary brain drain and reduction in competitiveness. However, the out-migration also carries significant benefits in terms of remittances and improvement in the economic wellbeing of the migrants. Further, experiences from India, Korea, and China show that the Caribbean diaspora can be an economic advantage if the OECS countries succeed in drawing upon their skills, knowledge and business connections (World Bank 2006b). Nevertheless, the large outflow of graduates reduces the economic benefits to the state from public investment in education, since the benefits from education in terms of taxes and higher ability to assist firms in the adoption of new technology do not accrue to the country. Therefore, education policies should be adjusted to this significant outflow. First, the government could ask households to pay a larger share of the costs of post-secondary education, for example through increased tuition that can be financed by a student

¹³ The working group was part of a Symposium co-hosted by the Caribbean Development Bank and the University of the West Indies, held in November 2005 to discuss "Tertiary Education Financing in the Anglophone Caribbean" (CDB, 2005).

¹⁴ The cited reports review public expenditure in four OECS countries. In only one instance, Dominica, was funding to the local community college linked to specified goals. However, it was not specified how success or failure to meet that goal would affect funding.

loan, as has been successfully implemented in New Zealand, the United Kingdom (UK) and Australia. This would reduce the loss to the state, should the graduate decide to leave the country. Second, the government could consider the feasibility of specialized education programs in disciplines with high global and local demand.¹⁵ Third, education programs should be more closely linked to private sector needs in order to create immediate job opportunities for graduates. This would reduce the likelihood of out-migration.

c. The need to better link the career programs of the OECS community colleges to demand

The governing bodies of the Eastern Caribbean community colleges are responsible for ensuring that the education offered in their institutions is relevant. A greater enrolment into post-secondary education and a lower migration rate would result in a larger pool of highly skilled workers in the OECS. However, it would not necessarily fill the identified gap of specialized workers unless the enrolment increase took place in fields linked to the skill gaps. Judging from the available firm surveys, economic analysis of labor surveys, and ad-hoc evaluations of private sector associations - cited previously in this chapter - the current output of graduates from the OECS community colleges do not meet sufficiently the demand.¹⁶ It is key to undertake further assessment of the relevance on a case-by-case review of each institution to verify the above information and examine ways to improve relevance. To better link the programs to demand, many governments in high-income countries have focused on the governing aspect of post-secondary education institutions (USdED, 2007). Improvements in governance seek to empower those who will ultimately benefit from the institutions. This is primarily achieved by giving employers and wider society a significant role in the leadership of the institutions. Further, governance improvements focus on setting clear goals for each institution, for example through performance-based funding described above, and empowering management of the institution to reach those goals (*see*

¹⁵ The Caribbean region, and specifically the English-speaking countries of CARICOM, faces a substantial shortage of nurses. Concerned with the impact on access and quality of health services, governments, who in general shoulder the major burden of the provision and financing of nurse training, increasingly respond by expanding the capacity of public training programs. As out-migration is the main source of attrition among the nurse workforce, simply expanding public training programs is not an efficient solution as long as significant investments in nurse education result in uncompensated returns offshore. Given the importance of this outflow for economic, educational and health reasons, the World Bank has initiated a study aimed at developing alternative approaches to expand, diversify and finance nurse training programs that efficiently reduce local nurse shortages in the context of a growing global demand.

¹⁶ The University of West Indies (UWI) conducted in 05/06 a series of consultations with non-campus countries (the UWI-12) to respond to the needs of these countries, UWI (2007).

Box 9).

Box 9 Global best practice on governance of post-secondary education institutions

Worldwide, the post-secondary education systems are under pressure to better respond to a marked increase in demand for post-secondary education and to society's knowledge economy needs. Fielden (2007) reviews recent governance changes in Australia, Czech Republic, Denmark, Kenya, New Zealand, Pakistan, South Africa, Tanzania, the UK, and the US, among others. In order to help post-secondary education institutions better respond to the needs of society, new best practices on governance have emerged:

- Legislation that establishes universities as autonomous independent entities. This implies a withdrawal of the State from certain detailed control and management functions and the devolution of responsibility to universities themselves.
- The creation of agencies to carry out some of the detailed financial control and supervision functions.
- Confirmation of the role of an Institutional Board as having overall responsibility to the Minister. Civil society has significant representation on the Institutional Board.
- Expectations of managerial competency by the Board and the President.
- The development of new forms of accountability and financing through reporting on performance and outcomes in achieving nationally set goals for the sector, as well as institutionally set targets. One example is performance-based funding, where an element of public funding is based on performance; the most common example of this is where part of the grant is linked to the number of students who complete a given program and successfully graduate.
- Adoption of funding models that encourage Institutions to develop new sources of income.

In most cases, these practices were manifested as outcomes by national post-secondary education commissions, consultations and evaluations.

d. Small size of the market for tertiary education in the Eastern Caribbean

OECS characteristics, namely small size and geography, demand innovation and collaboration to provide the full range of professional skills required. A community college in the OECS, or anywhere else, cannot offer curricula and courses to educate all professions of a modern society, ranging from assistant dentists to anthropologists. Course development is expensive for small institutions (HIU, 2003). Other regions in the world face similar geographical and educational challenges. They have successfully developed new organizational, technological and educational solutions to overcome geographical difficulties. They have done so in at least two organizational ways, both of which take advantage of ICT to increase economies of scale: (i) forming networks of disperse community colleges, like the Universities of Highlands and Islands. This is a highly relevant example to the Eastern Caribbean. It is a partnership of colleges and research institutions, along with an associated network of outreach learning centers, which offers vocational courses, diplomas, undergraduate and postgraduate degrees throughout the highlands and islands of Scotland. This university involves collaboration among the existing small colleges and specialization of each college into a narrower set of coursework, thus developing more specialized knowledge and higher quality education; and (ii) contracting of post-secondary education institutions to provide a blend of on-line and in-person teaching to students in rural towns with no post-secondary education institution. The government furnishes the ICT equipment necessary for the delivery of the courses and contracts an education provider. This is the case of the *Centros Regionales de Educación Superior* in Colombia, and the contracting of *Tech Milenio* of Mexico in the state of Quintana Roo, Mexico. In both cases, specialization and collaboration are indispensable. Similar collaboration would allow the OECS community colleges to: (i) increase economies of scale through teaching a large number of students via ICT; (ii) develop more courses linked to the specific demands of the key labor shortages of the region, for example, cutting-edge management courses for the tourism sector and culinary arts programs in partnership with the private sector; and (iii) through collaboration with a recognized international university with distance learning courses, offer specialized courses with a smaller number of students without having to invest in the development of such courses.

There are several on-going initiatives to provide ICT infrastructure and foster regional collaboration among the colleges. The Caribbean Knowledge and Learning Network (CKLN) was

launched by the Caribbean Community (CARICOM) and the OECS in 2004, with support from the World Bank. The CKLN is designed to enhance the competitiveness of Caribbean countries by: (i) leveraging ICT to connect the region to the global pool of knowledge; (ii) developing human resources; and (iii) facilitating greater regional integration. Building on past experience in the region and elsewhere, the CKLN is taking a phased approach to the introduction of new technologies and open and distance learning approaches. The initiative has focused first on awareness raising, capacity building, the introduction of pilots, and the development of relationships to support the forthcoming investment phase. Supported by the World Bank, the European Union, and several other donors, the CKLN is steering donor investments in ICT and tertiary education and supporting existing regional efforts to advance the definition of regional standards and other necessary reforms. The CKLN is operating as an umbrella initiative in partnership with The University of West Indies Distance Education Center (UWIDEC), Commonwealth of Learning, and UTECH. It is crucial that policymakers provide incentive to the existing community colleges to take advantage of this new ICT-based initiative.

POLICY RECOMMENDATIONS TO IMPROVE RELEVANCE OF FORMAL EDUCATION:

In the analysis part of this chapter, three main opportunities were derived to improve the relevance of formal education: (i) better connect the education sector and the labor market; (ii) improve relevance of secondary education through measurement of learning outcomes at the global level and increased focus on sought after skills such as learning-to-learn abilities, life skills, ICT skills, and quality vocational skills; and (iii) increase availability and relevance of professional skills.

(i) Recommendations to connect the education sector and the labor market

The most effective action would be a governance improvement of the leading education institutions in the Eastern Caribbean. Education institutions exist to serve the needs of society. Therefore, a wide set of stakeholders from society should have a voice in the governance of the educational institutions, including examination councils, colleges and schools. This could be considered the most effective action because it is, by default, the board of an institution that has the power to change the direction and paradigm of said institution. Broad stakeholder representation on the board would increase the probability that institutions would be more responsive to all needs of society, including labor market needs.

At the secondary education level, one way to improve governance might be to seek better balance among members of the Council of the Caribbean Examination Council. The inclusion of private sector representatives and other labor market-oriented stakeholders on the CXC Council would encompass broader societal representation to more accurately determine the needs for the different assessment tools.

At the tertiary level, the governance and accountability of the region's community colleges could be strengthened by focusing more on labor market needs. Following global trends, the governments could consider increasing accountability and setting goals for each college. In particular, the OECS governments could negotiate performance contracts, establishing a few clear, strategic, and multi-annual goals with tied funding agreements. This would include rewards and penalties based on periodic external assessment of whether the institution had reached the agreed goals and would go hand in hand with increased autonomy of the college to independently determine how to reach those goals. As such, this action would lead to a better alignment of the supply of professional skills with the demand.

The countries should bring industry and education providers together on a regular basis through skills councils. Currently, the private sector and education institutions have few

opportunities to discuss and agree upon national or industry skills needs, for example in the tourism sector. This lends itself to an environment of poor communication and distrust between these two key partners. Governments could consider establishing skills councils in key industries with the participation of employers, labor unions, education institutions, and the Government. However, it is important that the institutions have incentives in the form of governance and funding to cater to local labor market needs.

More labor market information to schools and students is part of the solution. An OECS-wide labor market needs assessment capturing labor shortages in each country would be an appropriate first step to remedy this lack of information. Undertaking the assessment at the OECS level would provide substantial cost savings, rather than financing a series of assessments in each country using different methodologies. Subsequently, this information could be regularly updated and broadly communicated to students, families, schools, colleges, and government officials. One way to share the information in schools would be through the school counselors, who could assume responsibility for some aspects of career counseling. This would better guide students in making important life decisions and help them understand the preparation steps (exam requirements, selection of appropriate programs, application to universities, and so forth) to reach their goals..

(ii) Recommendations to increase relevance of secondary education

OECS students' learning should be assessed against international standards. In particular, the government could consider participating in the Program for International Student Assessment (PISA) or the Trends in International Mathematics and Science Study (TIMSS), which have become the gold standard for global student assessments. Global assessments are useful for benchmarking, diagnostics, and as an accountability mechanism. As the OECS strives to compete in the global economy, it must understand how well their students - their future workforce - and their education system perform comparatively on a global scale.

Teaching methods and curricula should develop “learning to learn” abilities and stimulate critical thinking in students. For this, the OECS primary and secondary school system needs to emphasize more interactive teaching methods, active participation, case-based training, simulations, and team projects - in short, more of a problem-oriented curriculum. Schools could also encourage different forms of pedagogical experiments, using the actual contexts of engagement of learners to increase relevance and task-specific learning. Teacher training - both pre-service and in-service - is indispensable to a move towards formation of adaptable, proactive and lifelong learning graduates.

Education should nurture life skills in teaching at all levels. The early lessons learned from OECD countries suggest that: (i) teaching should use participatory methods and cooperative learning, such as group work, to induce behavioral change; (ii) teaching should be problem-based; (iii) new assessment measures need to be developed to assess learning of life skills; and (iv) teacher training and development of new material and curricula is necessary.

Technical and vocational education should meet regional quality standards and provide training to meet demand. As further discussed in Chapter 5 of this report, technical and vocational training in secondary education could be better linked with labor market training and post-secondary level courses to create recognized career and learning paths in the trades. Once such policies are in place, investment in teacher training, didactic material and labs for technical and vocational education could be undertaken with quantifiable benefits. Policymakers should address the lack of career and

education opportunities in technical and vocational education and facilitate labor market recognition by bestowing diplomas that are quality assured and valued by employers.¹⁷

(iii) Recommendations to better align supply of professional skills with demand

The governments should stimulate greater private investment in post-secondary education in order to increase enrolment. The governments could consider increasing tuition fees, possibly implemented jointly with a student loan and scholarship program for students that cannot shoulder the fees. Further, the governments could provide incentives for the colleges to broaden their revenue base. The extra investment would allow the Eastern Caribbean community colleges to increase the number of available seats in their institutions, and thereby enroll more students.

The community colleges need to specialize and gain higher quality in specific demanded areas. The OECS colleges could more aggressively partner among themselves and with outside institutions to adapt curricula and use technology to offer cutting-edge courses in more subjects, for example through the Caribbean Knowledge and Learning Network (CKLN). This would involve entering into transfer agreements and partnerships with other OECS colleges, the medical “off-shore” institutions operating in the OECS, the University of the West Indies, and foreign providers. The CKLN is well suited for facilitating such partnerships. The agreements would serve the benefits of the students through higher quality and internationalized curricula. Working students and firms could be asked to contribute to the costs.

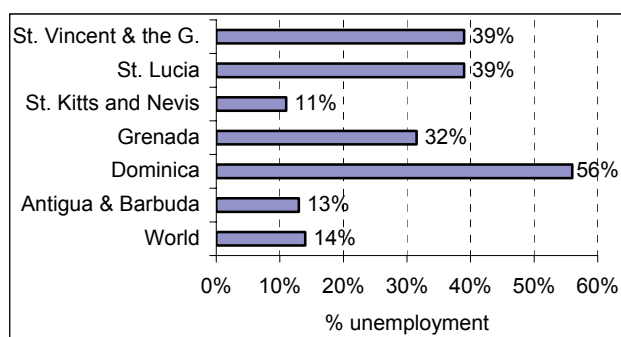
¹⁷ This recommendation is consistent with the recommendations of the Caribbean Development Bank regarding TVET: (i) avoid early streaming into TVET; (ii) broaden TVET and include certification; (iii) improve the prestige of TVET through higher relevance; (iv) link TVET in secondary education to tertiary education to create learning pathways and career options; and (v) involve post-secondary education institutions more in technical and vocational training in emerging sectors (CDB, 2006). Also see similar recommendations in CARICOM, 2006.

4 From School to Work: Building Skills for Youth's Transition to the Labor Market

Chapter 3 described how the Eastern Caribbean countries have achieved broad access to basic education and have established universal secondary education as a top priority. Improvement in learning is also paramount, especially learning of behavioral and technical skills relevant to the job market. Chapter 4 focuses on how school graduates in the OECS transition from school to work. A disproportionate number of young people are unemployed with great costs to their economic and social well-being. The main reasons are twofold. First, youth are poorly prepared for the labor market, and second, little assistance and guidance exists for those who have problems finding a job. These marginalized and unemployed young people deserve a second chance. Several good second chance programs operate in the Eastern Caribbean, but they need to be scaled up and improved. In particular, training is not strongly linked to labor demand. A highly recommended step forward would be a regional training program that: (i) assists many more young unemployed people; (ii) supports the existing training programs in a transparent, coordinated and competitive manner; and (iii) improves the programs by increasing relevance of training, ensuring collaboration across the OECS, and training to common, recognized standards.

Young people have exceptional difficulty finding employment in the Eastern Caribbean. In

Figure 11 Exceptionally High Youth Unemployment in the OECS



Note: Data from 2001, except for St. Lucia, Grenada and World, where data is from 2005, 1998 and 2003, respectively. Youth unemployment for ages 14 to 25. Source: World Bank (2005) and World Bank (2006)

every region of the world, youth face difficulties entering the labor market. However, according to the latest available data, youth unemployment in the OECS is also high on a comparative global scale. Average youth unemployment in the OECS is 32 percent compared to a global rate of 14 percent in 2003 (see Figure 11).¹⁸ Moreover, this high youth unemployment rate is not driven by a high overall unemployment level. As shown in Figure 12, the ratio between youth unemployment and total unemployment is exceptionally high in the Eastern Caribbean and in the Caribbean in general. This suggests that

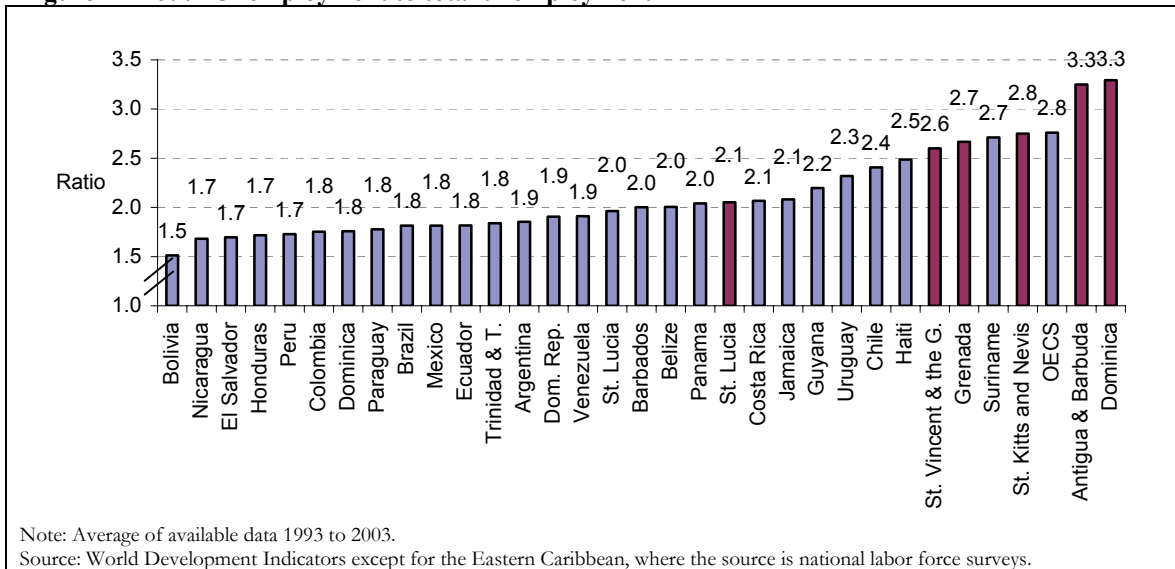
there are factors particular to the Caribbean that are causing youth unemployment.

One characteristic of youth unemployment in the Eastern Caribbean is the time it takes a school leaver to incorporate himself/herself into the labor market. In the survey of 400 Vincentian secondary school graduates from 2001, it took on average 14 months for them to find the first job, including a temporary or intermittent job. A survey of youth from 60 developing countries found that after leaving school, youth spend an average of 17 months in temporary or intermittent work and spells of joblessness before permanently entering stable employment. Therefore, it appears that youth in other countries take approximately the same time to find stable employment as young St. Vincentians with CXC credentials to find a first job, temporary or otherwise. The above St.

¹⁸ The youth unemployment rate measures how difficult it is for youth that are looking for work to find work. While this indicator reflects well the difficulties in transition from school to work, it does not convey a full picture of the labor market for youth. In particular, labor market economists also compute the jobless rate, which includes those who are neither working nor in school (World Bank, 2007). However, this indicator is not available on a global comparable basis.

Vincent data can also be compared to the average duration of an unemployment period for a young person in Argentina, Brazil, or Mexico - 8.7 months, 1.6 months, and 3.6 months, respectively (Cunningham, 2007). Although the first unemployment spell can be expected to be longer than the average spell, the comparison suggests that St. Vincent youth take longer to transition into work when compared to peers from the above-mentioned Latin American countries.

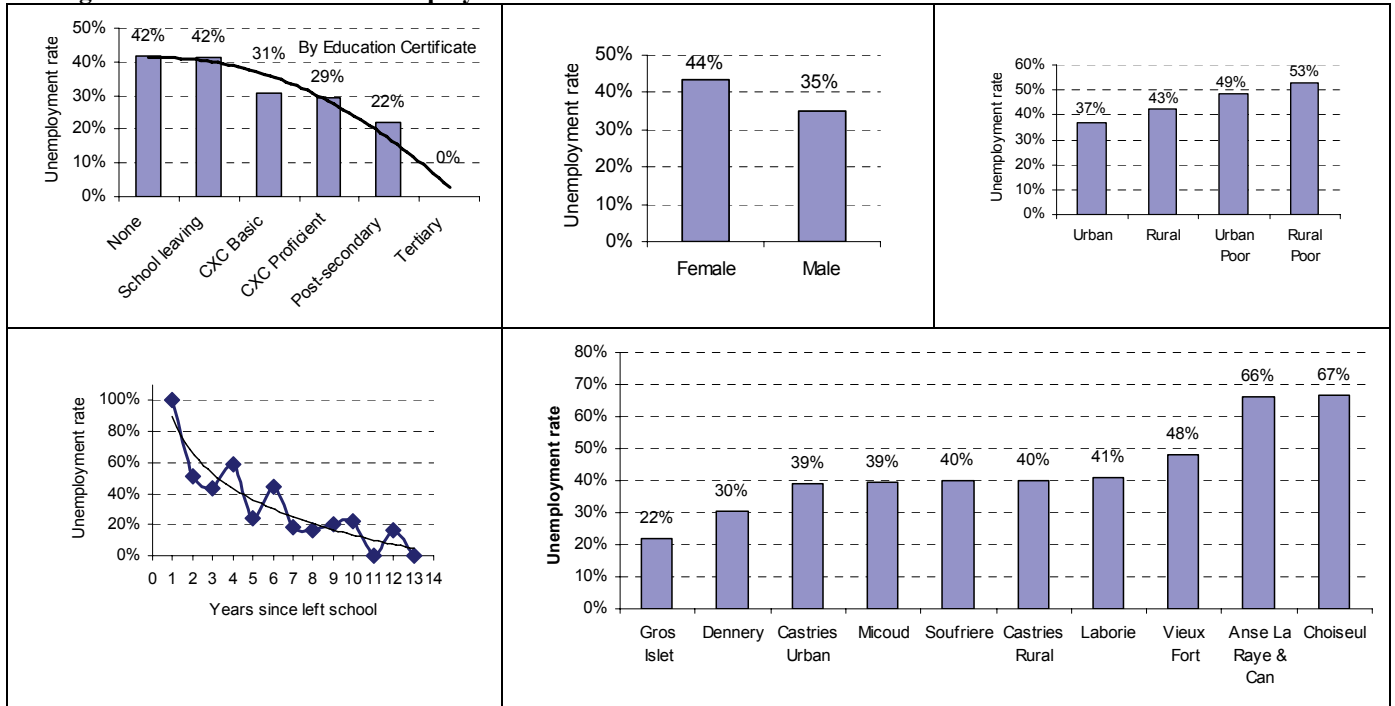
Figure 12 Youth Unemployment to total unemployment



In St. Lucia, the characteristics most associated with unemployed youth are: low-skilled, recently left school, rural, poor, and female (see Figure 13). Further, it is striking to observe the difference in youth unemployment by district. Despite the relatively small distance (only one hour by land transport), youth unemployment in the south of St. Lucia (Choiseul, Vieux Fort, Laborie) and in Anse la Raye and Canneries is two to three times higher than in the northern part of the island (Gros Islet), where tourism is more developed.

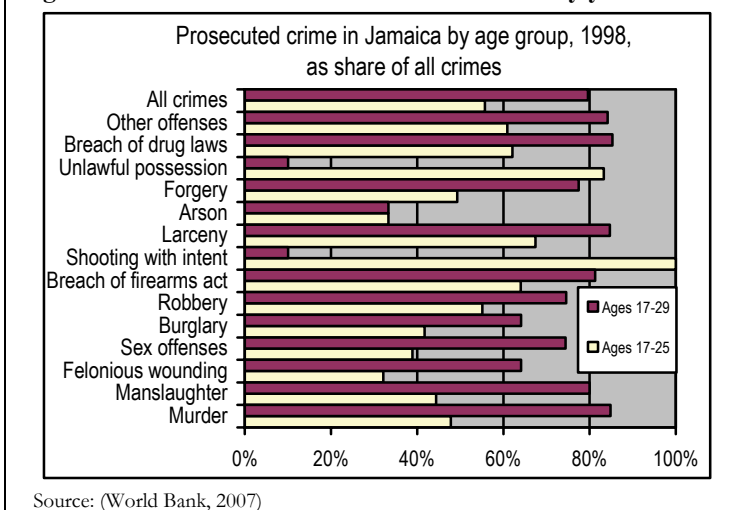
The faltering transition from school to work carries staggering social and economic costs. Some labor economists argue that the high youth unemployment is a peculiar phenomenon of Caribbean life: “Youth like to lime.” They argue that this liming has temporary costs but no permanent costs. However, there are several indications to the contrary. The direct economic costs arise out of lost production and wages. A report on Caribbean youth development (World Bank, 2003) estimates that if youth in St. Lucia were employed to the same degree as adults, the GDP would permanently increase by 2.5 percent. In 2003, this estimated loss in production equaled EC\$48 million (2.5 percent of EC\$1,912 million). Further, studies from Europe on youth unemployment have found a permanent loss to temporary unemployment, the so-called hysteresis-phenomenon. This phenomenon arises because unemployed people gradually lose their human capital and job skills when not using those skills. Some of them never recover the skills and permanently drop out of the labor force with high economic costs to the individual and society (OECD, 2005).

Figure 13 A look at Youth Unemployment in St. Lucia



Source: For the two graphs at the left: St Lucia Survey of Living Conditions, 2005. For the rest: Core Welfare Indicators Questionnaire Survey, 2004.

Figure 14 Most crime in Jamaica is committed by youth



There are also large indirect socio-economic costs of the high youth unemployment. In particular, the high youth idleness is widely believed to lead to high crime rates. There are several indications that high youth unemployment in the Caribbean fuels crime rates. In the US, where more data and research is available, it has been established that higher youth unemployment contributed to an increase in crime in the 1970s and 1980s (World Bank, 2007). In the Caribbean, it is a well-established fact that youth commit most crime. For example,

in Jamaica in 1998, 80 percent of all prosecuted crimes were committed by young people aged 17 to 29 (see Figure 14). Further, empirical research from a survey of 15,500 young Caribbeans found that boys and girls are 66 percent and 55 percent, respectively, less likely to engage in violent activity if they feel connected to school (Blum et al, 2003). Finally, CDB cites youth interviewed in focus groups, arguing that unemployment and poverty lead young people to become involved in illegal and criminal activities (CFD, 2006).

Why is youth unemployment so high in the Eastern Caribbean? The answer is crucial for policies to have the intended impact. Analysis points to a confluence of factors:¹⁹

- **Inadequate preparation for work.** As discussed in the last chapter, there are multiple signs that current school leavers are not adequately prepared for the changing labor market. This translates into increased difficulty in finding employment, which also could be accentuated by little or no career guidance in the schools (since 2003, several OECS countries have increased efforts to place school counselors in secondary schools under the OECS Education Development Project, although their focus is not exclusively career counseling). A large OECD study of 25 countries found that an initial lack of education cannot be offset by more work experience. It can only be somewhat remedied by training and job placement, as discussed below. Access to high quality and relevant secondary education for all is, by far, the best policy to reduce youth unemployment (OECD 2005). The policy options to improve the level of preparation of school leavers were outlined in the previous chapter.
- **Few active labor market policies.** Many interventions in the formal labor market are clustered under the title “active labor market programs.” Such programs may lead to direct job creation (through additional jobs offered by public works schemes), help the unemployed fill existing vacancies (through re-training to meet the new job requirements), or improve the functioning of the labor market (through employment information and labor offices) (Dar and Tzannatos, 1999). Most OECS countries have small training programs (*see below*). These programs also function partly as employment offices to help job seekers find vacancies. However, there are no formal employment offices or other programs that actively seek to improve the functioning of the labor market. This could contribute to the slow transition from school to work. For example, in a survey of CXC graduates in St. Vincent and the Grenadines, respondents were asked how they first heard about the vacancy for the last job they obtained. The most important means were, in order, networking and word of mouth, direct inquiry, and printed advertisement. Employment agencies, schools, training agencies and job fairs played a minor role; only approximately 5 percent of successful job placements were through these formal channels. Hence, it seems that public programs could play a role in improving youths’ job search.
- **Rigid labor regulations.** In contrast to many OECD and Latin American countries, it seems that labor regulations in OECS countries are relatively flexible, compared to the global average. Governments struggle to strike the right balance between labor market flexibility and income stability. Many countries err on the side of excessive rigidity of labor regulations, such as mandatory minimum wage, premiums for overtime work, grounds for dismissal, and severance pay. This discourages employers from hiring new employees, which is to the detriment of businesses and workers alike. In many European and Latin American countries, excessive labor regulation raises youth unemployment (Heckman and Pages, 2003 and OECD, 2005). In contrast, the labor regulations in the OECS rank relatively well on a global scale (*see Table 2*). Therefore, labor regulations are not likely to be the driving force behind youth unemployment in the Eastern Caribbean (*for a richer discussion and more evidence pointing to the same conclusion, see FLAS, 2005a; and World Bank, 2005a*). Nevertheless, policies to increase flexibility of hiring and firing could increase job creation in the OECS (World Bank, 2005a).

Table 2 Ranking of the OECS Labor Regulations

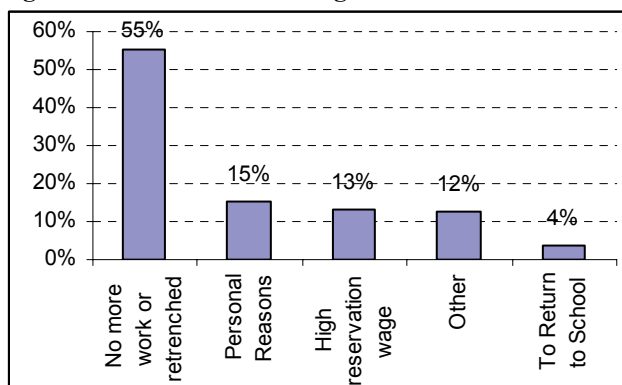
| Country | Global ranking |
|--------------------------------|----------------|
| St. Lucia | 29 |
| Grenada | 34 |
| St. Kitts and Nevis | 35 |
| Antigua and Barbuda | 40 |
| St. Vincent and the Grenadines | 48 |
| Dominica | 50 |

Note: Rankings are the average of the country rankings on the difficulty of firing and the cost of firing indices.
Source: Doing Business in the Caribbean (World Bank, 2006).

¹⁹ Also see ILO, 1996 and World Bank, 2001 for a similar discussion.

- High reservation wage.²⁰ Several studies suggest that the reservation wage in the English-speaking Caribbean is high for three reasons: (i) a high level of remittances can support the unemployed while they wait for a high paying job; (ii) a positive public wage premium encourages the unemployed to wait for civil service openings; and (iii) migration to a high-wage economy could encourage youth to seek migration opportunities (World Bank, 2006). On the other hand, there are two indications that suggest that many young persons in the Eastern Caribbean are involuntarily unemployed and actively seeking a job. First, in the survey of CXC graduates in St. Vincent and the Grenadines, 70 percent of the unemployed were actively searching for a job. Second, only 13 percent of unemployed youth aged 15 to 30 in St. Lucia left their job because of a low wage or unwillingness to work, which are indicators of a high reservation wage. The majority, 55 percent, had to leave because there was no more work or they were retrenched (*see Figure 15*).²¹ There are few policy options to counter high reservation wages, but measures that raise the market wage of the candidate, such as education and training, and reduce queuing into the public sector (waiting for a government job) can mitigate the negative impact of a high reservation wage.
- Macro-economic conditions. Young people suffer disproportionately from slow economic growth because the rate of new hires declines and the workers with less experience are let go first (OECD, 2005b and World Bank, 2007). Further, the impact of active labor market policies, such as training programs and job search assistance, are also more successful during good economic times (Dar and Tzannatos, 1999). Stable macro-economic policies, an enabling investment climate, and other pro-growth policies are, therefore, also important for the reduction of youth unemployment.

Figure 15 Reasons for Leaving Last Job



Source: Authors' calculation based on St. Lucia Living Condition Survey, 2005

Note: Among unemployed who left a job within the last 12 months. No more work aggregates the answers: "no more work available," "fired," "retrenched," and "seasonal job." Personal reasons aggregates: "Illness," "home duties" and "pregnancy." High reservation wage is the sum of "did not want to work" and "wages are too low."

Vulnerable young people - those who started to work too early in life, failed to acquire literacy, or never obtained a job in the work force - need a second chance. From an equity perspective, public intervention is needed to support the most vulnerable and to offer them a second chance to reintegrate into the work force. Providing them with the relevant skills to enter or reenter the workforce reduces inequities in the labor market and increases their productivity and ability to break out of poverty traps. Second chance training programs are costly and therefore have to be well-targeted, designed to increase youth skills, and geared to labor market needs as further detailed below. If they meet these criteria, they could be cost effective. The costs of not intervening are overwhelming.

²⁰ Reservation wage is the term used by economists to designate the minimum wage for which an individual is willing to work. If the individual cannot obtain a wage above the reservation, she/he opts for voluntary unemployment.

²¹ The survey only measures the importance of a high reservation wage among those that have had a job in the last 12 months. To fully gauge the importance of a high reservation wage, the survey should have covered all the unemployed.

Several good second chance programs exist in the Eastern Caribbean. Most such programs offer a combination of behavioral skills - conflict resolution skills, counseling, and so forth - and vocational training for the trades, beauty services, bartending, and so forth. These are institutions such as the National Skills Development Centre (NSDC) and CARE in St. Lucia, and the New Life Organization in Grenada. These institutions are semi-public or NGO-based and funded by government, foreign donors, private donors, and to the extent possible, co-payments from youth. These institutions are well respected by youth, local communities, and companies. Although no formal data exists to confirm this widespread opinion, these institutions seem to make a positive difference in young, marginalized people's lives. Any initiative to scale up support to young people should build upon these capacities. However, there are opportunities to improve these programs:

- Available spaces are clearly outpaced by need. For example, in 2006, NSDC in St. Lucia had over 700 unemployed waiting for training but had funds to train less than a third of these people.
- Training is not closely linked to demand. Training seems to be more supply driven and guided by the traditional desires of learners. For instance, a background study to this report (*see Background Paper II*) found that in St. Lucia in the academic year 2004-2005, 149 persons enrolled in sewing and garment production classes. According to the national household survey, there were only 390 machine operators, of which only some worked as sewing machine operators. Further, the manufacturing sector accounts for only 5.5 percent of total value-added in the national economy, and the textile and wearing apparel sector declined in 2005 in St. Lucia (ECCB, 2006). Hence, it is likely that many of the trainees did not find employment within their area of training.²² Also, according to McArdle (2006), too many students currently select - and the institutions enroll them in - the traditional subjects, such as auto mechanics, hairdressing, cake decoration and cosmetology, although there may not be sufficient employment opportunities in these specialized areas.
- The private sector plays a small role in the training programs. As discussed in the last chapter, there is considerable distance between the public and private sectors in the OECS. Increased training would benefit both sectors. Therefore, both partners should have an interest in training programs. Programs from around the world have shown over decades that up-front involvement of firms increases the relevance and impact of training (*see the ample evidence in LADB, forthcoming and Gill and Dar, 2003*). Further, if correctly designed and implemented, firms are willing to assume part of the training costs and thereby increase private investment in training. Also, the public training institutions in the OECS are fully occupied with the task of delivering services to their citizens. An increase in the involvement of the private sector in delivery of training would leave more time for the public institutions to invest in evaluations, capacity building, and improvements.
- Training lacks formal value. The training diploma is neither recognized by the formal education system nor provides further opportunities for professional development. Both providers and trainees are encouraging the government to formally recognize their training (NEWLO, 2006; NSDC, 2006a; and NSDC 2006b).
- There is little formal accountability for public funds. The government supports various public and non-governmental providers of training. Nevertheless, there is not a formal system to measure which institutions are most effective and transparently reward these with more funds.

²² Similarly, 163 persons were trained in cake decorating. It was not possible to determine how many of the trainees in cake decorating subsequently found related employment. However, this is expected to be a low number given the very narrow field of cake decoration. Broader training in food preparation and serving, such as the "General Culinary Skills and Catering" course in which 103 received training, is more likely to respond to a labor market need.

Other countries have successfully increased accountability, transparency, and impact by establishing a competitive training fund.

- The training programs are often uncoordinated nationally. For example, in St. Lucia with its 164,000 citizens, there were a total of six youth training programs running from 2002-2006. Many of these programs are funded by donors and, at times, driven by their specific training objectives: ICT, agriculture, tourism, youth, disability, and so forth. Although the OECS governments are making important efforts to coordinate donors, there are many and they continue to support different objectives. Youth programs have gained popular support among donors, but they are not linked or well coordinated. Lack of coherency may dilute government policy and effectiveness of the programs and public policies. Donors and international NGOs must support national initiatives and work with the national governments and policies to ensure value and sustainability, despite the additional time and occasional delays that this may entail. The Inter-American Development Bank examined the impact of seven youth training programs in Latin America and the Caribbean (IADB, 2007). The study found that in countries where a national training institution exists, it is important to consider the political economy of such institutions and develop inclusive modes of operation. The positive experience in the Dominican Republic, as well as the negative experience in countries where the national training institutions were not considered as a key actor in the program (e.g. Panama), suggest that consistency with the policies of the national training institution could help the execution of the project and the achievement of the desired outcomes. Therefore, if the government and donors were to establish a competitive fund with one set of rules and channel all public support for training through this fund, this would reduce the fragmentation of training programs.
- There is little regional collaboration among the training programs. There are three compelling reasons to increase regional collaboration in the OECS training programs: (i) *Common challenges.* High youth unemployment and lack of training opportunities are a common OECS challenge; (ii) *Common training standards.* The OECS countries have all endorsed the CARICOM occupational standards, as further explained in the next chapter. Hence training would meet common regional standards, which is crucial to increase labor mobility with the CSME; and (iii) *Common fixed costs.* There are many fixed costs that are necessary to run a training program, such as developing curricula, approving standards, procuring information systems, evaluating, and administering training programs. OECS collaboration would make these programs more efficient and effective and would save public funds. The World Bank's experience in the telecom sector in the OECS shows that high level political support and frequent inter-island communication is critical for collaboration to increase and bear fruit.

The *Joven* programs in Chile and Argentina are two highly relevant examples for the Eastern Caribbean. These programs are large scale, link strongly with labor demand, involve the private sector, lead to recognized diplomas, are competitive with formal accountability for public funds, and are in most cases consistent with national training policies (*see Box 10*). Another model to look for is the UK Train-to-Gain, which is further discussed in the next chapter.

Traineeships help to transition from school into the labor market. St. Lucia's Young Apprenticeship Program is one example. Unemployed youth worked for four months in a work place with a mentor, and employers paid part of the monthly stipend. More than half of the apprentices were subsequently employed by their company (NSDC, 2004). In St. Vincent and the Grenadines, 31 of a total of 60 trainees reported receiving a job in the month following a traineeship (*see Background Paper II*). This suggests a success rate of around 50 percent of traineeships. Business leaders in the Caribbean see internships as highly effective for career exploration and contextual learning experiences (CKLN, 2006). While traineeships are not, and should not be, a guarantee for a future job, they have proven to be a good proxy for identifying firms and sectors with future potential for employment opportunities and a relatively effective mechanism to transition from school into the

labor market. Further, trained youth should be followed in the labor market through tracer studies to examine the impact of the training on employment, salary, and further education.

Box 10 Impact of the Youth Training Programs in Argentina and Chile

The *Joven* programs offer comprehensive training to unemployed and economically disadvantaged youth from 16 to 29 years of age, aiming to improve their human and social capital and employability. The demand-driven model has been customized throughout Argentina, Chile, Colombia, the Dominican Republic, Panama, Paraguay, Peru, and the República Bolivariana de Venezuela. Technical training and internship experiences with employers are combined with basic life skills and other support services to ensure social integration and job readiness (see Table 3). Private and public institutions - contracted through public bidding mechanisms - provide the training and organize the internships. The programs target the poor; more than 60 percent of participants come from low income families. The highest education level completed by beneficiaries is secondary education, with significant participation by school dropouts (50 percent in *Chile Joven*). Other targeting criteria, such as employment, gender, and age, also apply. Most beneficiaries have precarious employment conditions before the program. In Argentina, 83 percent of participants, and in Chile, 57 percent were unemployed. Women are fairly equally represented in Chile, while Argentina has the lowest female participation (about 40 percent). Targeting focuses on 16 to 24-year olds, about 70 percent of all participants. The programs positively impacted both employment and earnings, as follows:

- **Employment.** The programs increased the probability of beneficiaries finding employment upon graduation, especially for women. In Argentina, the program increased the probability of employment for young adult women (21 years and older) by about 10 percentage points over a control group. In Chile, the program increased the probability of employment by 21 percentage points, with strongly significant results for youth ages 21 and younger.
- **Earnings.** In Argentina, the program increased monthly wages by about 10 percent over a control group, with more favorable results for young males and adult females. In Chile, one study showed a negative impact on wages of -8.8 percent, led by a reduction of wages in the formal sector. Subsequent analyses found a positive impact on earnings approaching 26 percent, strongly significant for youth ages 21 and younger. In absolute terms, the wage impact was higher for men, but in a comparison of pre- and post-program earnings, women had a slightly higher increase relative to men.

Costs and benefits. With the given underlying cost per trainee and the impact on employment and earnings, the net present value (NPV) of the program can be calculated (given a discount rate, usually assumed to be 5 percent). While costly, these programs in Argentina and Chile have positive NPVs, with a higher NPV in Chile compared to Argentina. It is important to note that this calculation does not take into account the externalities from the program such as better health outcomes and reductions in risky behavior among participants. In this sense, the estimates are likely to provide only a lower bound of the NPV. It is also important to note that, with the exception of forgone earnings, the party incurring the direct costs (public funds) is different from the party benefiting from the program (the participants). Hence, the tax-deadweight costs are not taken into account.

Table 3 Costs and impact of programs vary:

| | Argentina Proyecto Joven | Chile Joven |
|--|--------------------------|-------------|
| Coverage (people) | 116,000 | 165,000 |
| Cost per trainee (\$) | 2,000 | 730–930 |
| Impact on employment (percentage point increase) | 10 | 21 |
| Impact on earnings (percentage point increase) | 10 | 26 |

Sources: Aedo and Nuñez (2001); Aedo and Pizarro Valdivia (2004); de Moura Castro (1999); Elias et. al. (2004); IADB (2005); and Santiago Consultores Asociados (1999).

Second chance education programs leading to a recognized diploma could help the unemployed. A large percentage of unemployed youth have dropped out of school and seem to have deficiencies in basic skills, such as literacy and numeracy. Most of the OECS countries already offer literacy training on a large scale, and many countries have created an equivalent exam for general secondary education with an adult orientation. In Jamaica, the High School Equivalency Programme has been in operation since 2003. In the US, the impact of the General Educational

Development program (GED) has been studied extensively. The GED certification is not found to directly increase wages. GED certified workers earn more than high school dropouts, not because of the GED diploma, but because they have cognitive abilities that make them more productive. However, the GED may still have an economic impact since it allows certified workers to enter tertiary education, which raises salaries (*Heckman and LaFontaine, 2006*). Consequently, completion of second chance education programs could raise the employability and future productivity of these workers. For the Eastern Caribbean, it is important that the literacy programs or new certification programs end with a recognized exam, such as the CSEC exam or the new CCSLC exam, to provide the learners with further education options.

POLICY RECOMMENDATIONS TO IMPROVE THE TRANSITION FROM SCHOOL TO WORK

The top policy option to facilitate young people's transition from school to work is to improve the education system. Second chance programs remain a second-best option. Although second chance programs can mitigate the impact of incomplete schooling, they can never substitute.²³

The next most important steps are to scale up youth training programs, improve the link to local demand, and promote competition among providers. International experience shows that successful youth training programs are demand-oriented with private participation, where training providers compete for public financing based on outcomes.

Training should be organized and funded in a public-private partnership. This would increase relevance and spur private investment in training. A public-private partnership with competitive funding would be a first, gradual step to move the public sector to a more strategic position, where it could regulate, supervise, and finance service delivery but not necessarily have to deliver services. This would allow the public sector to focus more on improving services, building capacity in service management and saving public funds. The key to success would lie in developing a strong (but small) institution or unit to manage the competitive fund and implement the national framework. Capacity building of this unit would be crucial.

Regional collaboration would significantly save public money and train more youth. While any training program should remain flexible to respond to local needs and market conditions, as well as being accountable to the national government, regional collaboration would save public money through economies of scale and thereby be able to train more youth.

Any youth training should include traineeships in a workplace. This would ensure that the youth trainees would have an opportunity to gain relevant employer-driven skills as well as combine the classroom training with on-the-job experience.

Donors should support the national training policies. Donors should be adequately informed and willing to support the government's programs and policies. This is especially important in small states like the OECS, where donor programs play a larger role in funding. Donors should not support training programs that do not meet the regionally approved standards.

A youth training program is a first step in a longer-term plan that also includes alternative assistance to harder-to-reach youth, dissemination of more labor market information, second chance education programs and opportunities for entrepreneurial activities. The proposed

²³ This recommendation and the following build upon the analysis undertaken in this chapter. They are tailored to the specific situation, needs and capacity constraints of the Eastern Caribbean and are consistent with global best practices and evaluations as summarized by OECD, 2005a; IADB, forthcoming; and Gill and Dar, 2003.

first step, a training program, would improve the employability of youth facing difficulties transitioning into the labor market. However, two caveats are worth mentioning. First, there are a great number of youth who currently would benefit from such a training program, but in the medium term, it is important to reduce the number of youth facing difficulties obtaining their first job. This could be done by improving the overall level of preparedness of the school leaver, as discussed in Chapter 3, thus effectively preventing the problem in the future. Second, the recommended training program would not be a silver bullet. It probably would not reach all unemployed youth, remedy all basic skill gaps not learned in school, provide all labor market information, or directly facilitate self-employment. Thus, other additional actions are recommendable:

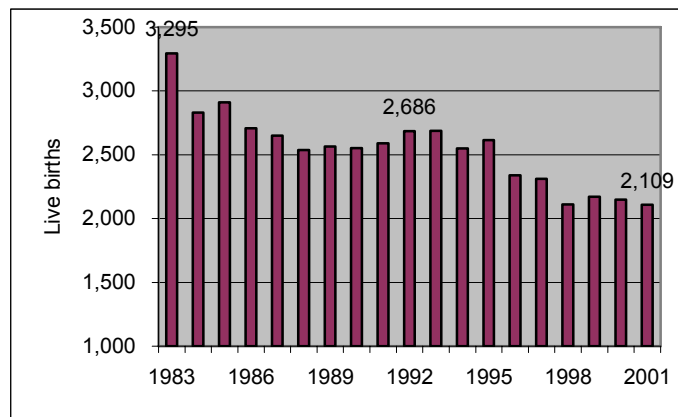
- Include hard-to-reach youth in social programs. Few gang members, drug addicts, and other hard-to-reach youth would be immediately motivated to enter a training program. In addition, few firms would be apt to offer them a trainee position. This group of young people is extremely difficult to re-integrate into society; they would need special counseling and community-based assistance before entering a training program.
- Link second-chance education programs to the formal system. The current literacy and numeracy programs aimed at unemployed youth and adults could be more formally linked to the education system. For example, they could culminate with a CSEC exam, the new CCSLC exam, or the creation of an equivalent exam with an adult orientation.
- Promote and update labor market policies. This would entail actively facilitating information to job-seekers about labor demand and meeting with hiring employers, improving job-search assistance, offering career guidance, and organizing job fairs. Further, the government has a role in generating and disseminating labor market information. Again, this is most efficiently carried out in collaboration among all the OECS nations.
- Provide opportunities for entrepreneurial activities. Skills training can lead the way to self-employment, starting up a new business or other entrepreneurial activities. However, most young people need additional assistance, such as seed capital and help to develop a business plan. Several initiatives in the OECS are underway in this area, such as the Junior Achievement Programme, coordinated by ECCB, and the Business Incubator Center sponsored by Infodev and the European Commission.

5 Training the Work Force

Although many young people go through a tumultuous period when transitioning from school to work, the majority eventually succeed in securing a job. Nonetheless, learning should not stop. This chapter examines skill enhancement and further education of the labor force. In particular, it explores how governments, firms, labor unions, and workers can combine efforts to enhance skills. This area deserves more attention given its importance for future productivity and wage growth. The population of the OECS is rapidly aging, and future improvements in education have to come increasingly from upgrading the skills of the labor force. However, there seem to be insufficient training and upgrading opportunities for people in the labor market. The incidence of further education and training in the OECS is lower than in most other Latin American and Caribbean countries. For instance, only 48 percent of companies in Grenada provide training compared to 75 percent of companies in Latin America. There is an unexploited potential for training in the OECS. The governments could better facilitate training through policies and financing. In particular, the governments should systematically implement the Caribbean Vocational Qualification framework, formally adopted by CARICOM countries, along with the regional occupational standards. Finally, financing should leverage private resources. The private sector associations and labor unions should join forces to enhance the skills of the labor force.

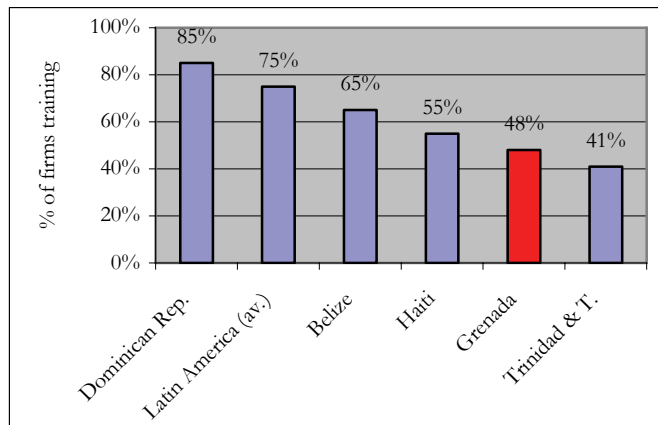
A declining population in the OECS and accelerating productivity growth raise the importance of training the work force. The populations of the OECS countries are rapidly aging due to declining birth rates. For example, in St. Vincent and the Grenadines, the number of new births decreased by 36 percent since 1983 (see Figure 16). This implies that future improvements to the stock of human capital will increasingly have to come from skill enhancement of the labor force rather than from entry into the labor force of new generations with higher levels of education. Another reason for the growing importance of further education and training is the impact on productivity and innovation. If workers are to meet rapidly changing needs, such as technology adoption, they will need to continuously update and adapt their skills and knowledge. From this perspective, opportunities for training, in particular for the low- and medium-skilled workers, are becoming increasingly critical for countries' competitiveness and social cohesion.

Figure 16 A 36% decline in births in SVG over 20 years increases the importance of upgrading skills in labor force



Source: St. Vincent School Mapping Exercise, GoSVG(2004)

Figure 17 Firm training in Grenada can be enhanced



Source: Marquez (2002) for Latin America and World Bank (2004) for Caribbean countries

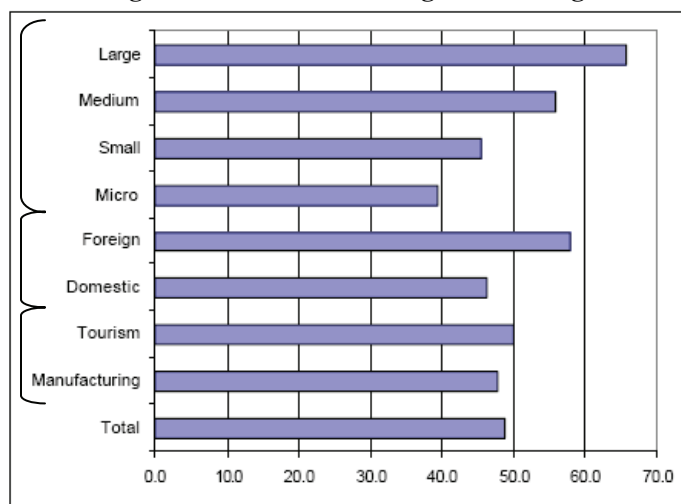
Eastern Caribbean firms offer less training for their workers than firms in Latin America. Scant evidence of labor market training exists in the OECS. The World Bank investment climate report for Grenada is one of the few sources of information on training within firms in the OECS. The report shows that 48 percent of firms train employees (see Figure 17). The numbers suggest that the incidence of company training in the OECS is below most countries in Latin America and the Caribbean.

Several reasons explain the shortfall of training in the OECS: We find the following associated with training in Grenada:

- Size of the training market. There are a number of individual trainers on each island, but there are no firms specializing in training for the private sector, in contrast to larger economies. Demand in each of the OECS countries seems to be insufficient to build specialized training firms.
- Existing skill level. Skilled workers receive more training because they tend to have changing jobs, work with new technology, and are accustomed to learning new things on an ongoing basis. In Grenada, eight of every ten firms provide training to skilled workers, while only three of every ten firms offer training to unskilled workers. A training policy might be required to ensure that workers at all levels receive professional development opportunities.

- Economic sector. In Grenada, there was little difference in training between the tourism and manufacturing sectors (see Figure 18). According to the survey of CXC graduates from St. Vincent, the financial, communication and air transportation sectors are more likely to offer training. Hotels and restaurants provided very low levels of training (approximately one day per year), while sectors like manufacturing and construction did not provide any training at all to the CXC graduates.

Figure 18 Factors influencing firm training in Grenada



Source: Grenada Investment Climate Assessment (FIAS, 2004b)

- Firm size. About 65 percent of large firms in Grenada provide training compared to 39 percent of micro firms (see Figure 18). Micro (and small) firms have problems identifying training needs, locating training providers, finding the time or replacements, and undertaking the paperwork

to receive public subsidies. Given that almost all firms in the OECS are relatively small, overcoming these obstacles is important.

- Ownership of firms. Approximately 57 percent of foreign-owned firms offer training compared to less than 50 percent of domestic firms. This could be explained by the fact that foreign-owned companies typically are larger, but it is a general finding in the literature that foreign companies train more.
- Formal recognition of training and its applicability. To a large extent, the value of training, in terms of salary increase to an employee, depends upon whether the learned skills are employable in other firms. Training therefore needs to be recognized broadly to be valued. If there are uncertainties of the skill level, for instance lack of formal recognition, training will only be weakly linked to the pay scale. In the OECS, almost all training is informal and is not formally recognized by the education system. This appears to seriously hinder the demand for training.
- The extent of a market failure. A market failure occurs when the market does not reach a socially optimal outcome. Should a worker leave a company, the value of the training is lost to the firm. Firms, therefore, take a risk when they invest in training. There is no known data on job turnover in the OECS to estimate the probability of losing a worker. Nevertheless, some poaching of skilled workers seems to be taking place, and migration abroad is frequent. Hence, without public intervention, firms are less likely to invest in training since they would not necessarily reap the benefits under the current conditions.

These factors which inhibit firms and workers from training in the OECS are similar to factors in larger countries (Dar and Gill, 2006 and Blom and Acevedo-Lopez, 2005).²⁴ Nevertheless, the combined effect in an economy with the characteristics of the OECS - small size, small companies, and no formal recognition of training - imply a relatively lower incidence of training in the OECS than elsewhere.

Employers, labor unions and the government must start addressing these obstacles for business firm training if they wish to upgrade the skills of the workforce. From the above list of obstacles, it is clear that there is no silver bullet to spur a high level of training and a culture of lifelong learning. Yet positive steps to alleviate any of the above factors would contribute to more training. Although some of the factors relate to policies other than training - firm size, ownership of firms, technology adaptation, and education - the government, in collaboration with labor market partners, could take specific steps to increase training. One example of a program under development is the Caribbean Vocational Qualification Framework.

The Caribbean Vocational Qualification (CVQ) Framework formally recognizes job training. Employers and educators have little possibility of measuring the value of the training received unless the diploma and level are well known and quality assured. This is the case for the standard exams in the education system, such as the CXC exam and tertiary education diplomas, but it is not true for training. The formal introduction of the CVQ framework will create such a standard, when implemented in conjunction with employers.

²⁴ A general finding in the training literature is that firms that adopt technology or innovate frequently tend to train employees more. A recent study (World Bank, 2005b) finds that there is very little rigorously collected firm-level data on technology intensity in the OECS. It is therefore not possible to say whether the level of technology intensity explains the shortfall of training in the OECS.

Box 11 describes the CVQ Framework, which was primarily developed by HEART, Jamaica, and was formally adopted by the CARICOM countries in 2002. The CVQ adopted a series of regionally recognized occupational standards, and the Caribbean training agencies are jointly promoting these standards through the Caribbean Association of National Training Agencies (CANTA), who CARICOM endorsed as the coordinating body for TVET in the Caribbean. This agreement and preparatory work is of high importance to the OECS, since standard development is very expensive, and fostering a regional agreement is highly time-consuming. Most OECS governments - Grenada, St. Kitts and Nevis, St. Lucia, and St. Vincent and the Grenadines - have already taken some steps to implement the framework, but efforts remain sporadic and a more coordinated approach is warranted. This approach would equally lead to cost savings through common procurement, workshops and training events.²⁵ The CXC will award the first CVQ certificates in 2007 in two pilot countries, St. Kitts and Nevis and Trinidad and Tobago. It is hopeful that CXC's recognition of the CVQ will assist in wider adoption of the framework. The CVQ framework has the following incentives that increase the value of lifelong learning, including training by firms:

- (i) Allows for regional recognition of skills across the CARICOM Single Market and Economy (CSME). Since the CVQ has been formally adopted by CARICOM countries, the qualifications are officially recognized across the region. This increases the value of skills, facilitates movement of labor within the CSME, and increases economic integration in the Caribbean.
- (ii) Develops progressive learning. The CVQ framework consists of levels of 300 to 600 learning hours, broken into modules. This modular approach allows learners to gradually build a learning portfolio in accordance with individual learning speeds and available time. Further, the modular form of CVQ will guide individuals in their choice of training, since it informs the competencies required to move to the next level of proficiency.
- (iii) Makes certification of prior learning possible. The CVQ is awarded based on demonstrated competencies in a work environment. These competencies can be assessed independently, regardless of whether there was a formally organized learning event. Hence, self-taught or informally learned competencies can be assessed, certified and recognized by the system. The CVQ provides an incentive to employees because learning in all instances is rewarded.

²⁵ For example, most OECS countries have independently partnered with the same Jamaican institute to provide introduction to competency-based training and assessor training. Collaboration across the OECS in organizing training, in this case, most likely could have resulted in significant cost savings.

Box 11 The Caribbean Vocational Qualification Framework (CVQ)

What is a qualification framework? A qualification framework classifies and registers earned qualifications, such as secondary school diplomas. These qualifications are awarded on the basis of obtaining competencies (or expected learning outcomes) stipulated by certain standards. A qualification framework encompasses the combination of all qualifications available in the country, and the institutions, processes and mechanisms which support the provision of qualifications. Further, it indicates how different qualifications relate to each other and indicates who can develop, organize, and provide qualifications and how this happens.

What is the CVQ? The CVQ is a five-tiered system of qualifications at different levels of skill, autonomy and responsibility that correspond to levels of employment in the labor market. It begins with Level 1, which describes the entry-level worker, through to Level 5, which describes the professional worker. The CVQ certificate is awarded upon completion of assessments measured against regional occupational standards. The CVQ recognizes and describes the competencies required to do a job at various levels outlined below.

Table 4 An Overview of the Caribbean Vocational Qualification Framework

| Level of program | Occupational competency | Entry-requirements | Location of learning | | | |
|---|----------------------------|--------------------------------|----------------------|---------------------|---------------------|-----------------------|
| | | | Secondary schools | On-the-job training | Post-secondary TVET | Tertiary institutions |
| Level 5 Post Graduate | Executive/ Professional | Level 4 certificate | | | | |
| Level 4 Bachelor's degree | Manager/ Technician | 5 CXC's or level 3 certificate | | | | |
| Level 3 Diploma and associate degree | Supervisor | 4 CXC's or level 2 certificate | | | | |
| Level 2 Certificate | Independent Worker | Grade 11 or equivalent | | | | |
| Level 1 Certificate | Entry Level Worker | None / locally determined | | | | |

Source: CANTA, 2005 and McArdle, 2006

The CVQ framework brings more order to a fragmented system of skills training in the OECS. Similar skills training takes place in various ways: through secondary schools, community colleges, NGO-run training centers, informal learning, and business firm training. These programs often overlap in training areas, and some learners have attended several programs. The programs are frequently developed from different bases and are not linked, leading to duplication of training and wasted resources. Further, there is no common framework or quality assurance of these programs. Application of the CVQ will allow governments to establish a system that links skills training taking place in the different settings, thus allowing a worker to formally improve his/her credentials at the workplace by building upon credentials from school. For instance, modules learned in secondary schools could be combined with modules acquired through training at NGO-centers or business firm training. This combination would allow an electrician to become certified at Level 2 or earn an associate degree (Level 3). Further, the CVQ sets a standard to which training providers would have to train in order to award the CVQ, thereby bringing order to a currently fragmented system. While there are many perceived benefits, the impact of the CVQ has yet to be empirically rigorously evaluated.

Overcoming the market failure for training justifies a public intervention. However, it does not necessarily imply a government subsidy. Currently, there are no public interventions in the OECS to increase training of workers other than literacy programs and courses at the community colleges. There are various ways a government can intervene to increase financing for training in a sustainable way. However they are designed, funds would have to come from one (or a combination) of the three following sources:

- **Government.** This could include budget from recurrent expenditures as in the UK and Northern Europe, but also from learning tax credits as implemented in Germany and the

US, or tax incentives as implemented in France and Chile. Another option is one-time funds, as in the case of Jamaica, where the proceeds from sales of cellular licenses are invested in ICT training.

- Companies. The most traditional is a training levy, which is currently used in most of Latin America and the Caribbean. For example, Jamaican companies pay 3 percent of their wage-payments to the HEART trust fund, which finances training. This is a record high level worldwide. In Malaysia, the government has implemented another common solution. It stipulates co-financing from the company before subsidizing training.
- Workers. In South Africa, for example, training can be financed with loans guaranteed and collected by the employers. In Canada, workers are allowed to draw upon their individual pension savings to invest in further education and training. Other countries require an in-cash co-payment from the worker.

Training should lead to higher productivity for the company and to higher salaries for the worker. Hence, both parties should contribute to the financing to ensure they will both gain from the training. A good example is the financing scheme in neighboring Barbados (*see Box 12*). International experience all points to the need for efficient and simple management of the funds to ensure that the small and medium enterprises will take advantage of the fund. Tri-party agreement - labor union, firm and government - is important to ensure that an endorsement of any financing source is sustainable and necessary for training and productivity. Any public intervention should not be perceived as an additional tax. Alternatively, donor funds could initially finance training, but studies and public debate for sustainable funding of training should be part of such donor funding.

Box 12 The Barbados TVET Council Employment and Training Fund (ETF)

The ETF in Barbados is based on a one percent payroll levy falling equally on employers and workers. The Fund is administered by the Barbados TVET Council and serves individual businesses, business associations, training institutions and non-profit organizations. The ETF funds are directed toward training workers, supervisors, managers and owners, and also serve unemployed persons and retrenched workers.

The applicant must provide at least 25 percent of the total program cost. The applicant needs to demonstrate the need and relevance of the training within a set of national priorities. Some of the training programs conducted to date include skills training in the construction industry for artisans; general management training for small farmers in agriculture; upgrading the mechanical maintenance skills of sugar factory workers; computer application courses for small business managers; and customer relations training for workers in the retail and hospitality industries.

The private sector in the OECS could increase its support to job training. The national and regional private sector associations have organized some training programs. For example in the tourism industry, the Caribbean Hotel Association runs a training and certification program, the Caribcerf program (CHA, 2004). The Caribbean Tourism Organization and national tourism associations, such as the St. Lucia Hotel and Tourism Association, regularly organize training workshops. These programs increase training in the OECS. Nevertheless, their impact could be improved by coordinating with government policy. Many international high-level schools and training programs were started by private sector associations in collaboration with the public sector. For example, in 1947 the New Haven Restaurant Association sponsored what has become the \$100 million not-for-profit Culinary Institute of America that currently educates more than 2,700 people in culinary arts. This institute is a recognized education institution, where students qualify for public financial aid. In Cancun, Mexico, lack of qualified workers led the hoteliers, restaurant owners and tour operators to enter into a public-private partnership with the government to build and operate the *Universidad del Caribe* which educates skilled workers and specialized professionals for its booming tourism sector.

To encourage the involvement of the private sector, a job training program should be highly demand-driven. This improves employee/plant productivity. Training is often incremental and establishes a specific learning objective to be acquired in a relatively short time period. The decisions regarding training - work routines, skills to be taught, length, and training provider - should take place at the firm level to ensure relevance and impact of training. International evaluations (Gill and Dar, 2000) confirm this logic by empirically demonstrating the marked difference in outcomes between privately-financed training and publicly-decided courses, even when controlling for other factors. The Jamaica Chef program provides an example of an on-the-job training program that is highly pertinent to the Eastern Caribbean, because it has demonstrated that it can work in the Caribbean, is highly demand-driven, relates to the growing tourism sector, collaborates with foreign prestige institution, and is supported by the public training institution (*see Box 13*).

Box 13 Demand-driven Work-based Training: The Chef Program in Jamaica

A national training agency can provide financial and technical assistance to on-the-job training in a variety of ways including apprenticeships, traineeships and workforce development initiatives. In 1993, Jamaica's HEART Trust partnered with eight major hotels on its north coast to establish a Level 2 *Commis Chef* program, at the time considered to be the first rung on the food preparation ladder in the hotels. In the program, each hotel provides hands-on training in an area in which it has strengths, while HEART supplies a classroom venue and coordination point, and access to learning materials. The "learners," employed to the hotels, participate for nine months, having completed an earlier Level 1 food preparation course. After its initial success, the program expanded and now includes five regions, including the two north coast programs, Negril, the South Coast and Kingston tourism areas, with participation from a total of 21 hotels and 350 learners. The HEART Trust also partnered with the Jamaica Hotel & Tourist Association and Johnson & Wales University to upgrade culinary personnel working in hotels, and now has partnered with the Culinary Institute of America to establish Chef and Executive Chef programmes.

Source: McArdle (2006)

The impact of an intervention increases if it is output-oriented. Recent evaluations of public-private partnerships for job training in the UK found that programs where funding were competitive and based on learning outcomes had a higher impact. As a consequence, the new national program, *Train-to-Gain*, was designed with these characteristics. First, all providers - public, private and NGO trainers - that meet the minimum criteria are invited to participate. Second, training providers are only fully paid if the worker receives the required skill certification. For example, if the worker did not learn sufficient skills to become a Level 1 plumber, the trainer would not receive full compensation for the training. This aligns the incentives of the trainer with the desired outcome of the training: certified skill enhancement of the worker. Hence, this training program rewards outputs, not inputs. What is important is not who owns and manages training institutions, but that workers receive quality and relevant training and, as a result, that their salary, job security and productivity increase (LSC, 2004 and LSC, 2006a).

The small size of the OECS inhibits training. OECS companies need top-rated workers to compete globally. More competitive companies would be able to pay top salaries. To reach this level of professionalism, first-class training is required. However, given the size of each of the OECS countries, it is too expensive for a training provider to develop and maintain highly specialized training programs because they would only be used to train one or two classes a year. Therefore, the establishment of a regional market for training providers would increase efficiency through economies of scale, such as fewer purchases of training equipment. Most OECS countries have established or will soon establish a national body and an accreditation act regulating training. To overcome the small market size, it is important that these regulations be harmonized across the islands. This would allow quality providers to easily set up training programs. This could be achieved in one of two ways: (i) establish an OECS-wide body for training and a common set of regulations. One OECS body, rather than six independent bodies, would represent significant costs savings; or (ii) Set up closely coordinated training programs with harmonized rules that are sufficiently general to cater to each country's particular training needs. A key aspect for efficient coordination is mutual

recognition of accreditation from other OECS islands. This could be expanded over time to the whole Caribbean region within a CSME context, thus improving the value of training to the Caribbean workers and firms. Such a market would allow training providers to compete for training of workers, financed by public and private resources.

POLICY RECOMMENDATIONS TO INCREASE TRAINING IN THE LABOR FORCE:

Formally recognize business firm training and provide more cohesiveness to the training system by systematically implementing the Caribbean Vocational Qualification Framework. This will establish standards by which training can be valued and will provide incentives to employees to pursue different training avenues. Systematic implementation would include the following key steps, which could all be efficiently undertaken if done collaboratively in the OECS:

- Organize an information campaign and workshops to inform labor unions, employers and trainers of the occupational standards and the CVQ framework. Information campaigns could widely disseminate information about the standards, and firm training would be formally recognized and contribute to higher wages;
- Train assessors in the standards to be used to assess the learners;
- Ensure that all publicly funded training is based upon the standards; and
- Rigorously evaluate the impact of certification on employment, salary and further education.

Develop a national framework to finance and regulate training and improve quality and value for public money. All public funding for training should be channeled through a competitive fund, where trainers can transparently compete based on successful outcomes of training. This would allow the governments to build upon the existing programs and scale up the best ones.

Garner more attention and concerted effort from the private sector and labor unions to overcome the training shortfalls. They should not rely completely on governments to provide top-notch workers. Further, the chambers of commerce in the OECS should advocate and invest resources in education and training.

Establish a sound and sustainable financing scheme for job training. Donor funds can help initiate job training. However, the government, companies and workers are ultimately the only sustainable source of funding. They should therefore be convinced to invest in job training.

Overcome the small size of the training market through regional collaboration to create professional, world-class training providers. The creation of this regional collaboration through a market-driven model requires harmonization, such as use of identical training standards, mutual recognition of training accreditation, and the same procedures and rules for financing of training. The more the processes are harmonized, the easier cross-island training would be and the more professional and specialized training would become.

6 Improving the Link between School and Work: What are the Next Steps?

Chapter 5 talked about creating and expanding training opportunities, focusing more on private providers and private-public partnerships. This chapter presents an action plan.

Strategic actions to improve the link between school and work are warranted. Many actions could be undertaken to improve the contribution of education and training to the development of the OECS. Policymakers could prioritize a few strategic actions based on the following three criteria:

- Sufficient implementation capacity. Lack of available manpower and capacity to implement new initiatives often hinders progress in education reform, even when stakeholders are interested and have the necessary knowledge and tools. Such constraints could be overcome through effective regional collaboration.
- Acceptable fiscal implications. The OECS countries already invest a high share of their GDP in education and training. Additional investments would not necessarily lead to improved outcomes if shortcomings are due to lack of information and communication. Therefore, the report concentrates on low-cost recommendations that would improve the outcome of the existing investments in terms of higher relevance and efficiency of the skills imparted. The recommendations emphasize options to increase private sector investments. Nevertheless, more public investment or reallocations from other education budget items are suggested in a few appropriate cases.²⁶
- High developmental impact for the particular situation of the Eastern Caribbean. Based upon the analysis within each chapter, the report builds on a small set of international best practices in education policy selected from a larger set of potentially relevant global experiences. The proposed recommendations are tailored to the Eastern Caribbean and would lead to fundamental long term improvements in the Eastern Caribbean education systems.

The following three sections summarize the top priority policy suggestions and actions for each of the three areas analyzed in this report.

POLICY SUGGESTIONS TO IMPROVE RELEVANCE OF FORMAL EDUCATION:

Improve the governance of the education institutions in the Eastern Caribbean. These institutions should incorporate broader societal representation on their governing boards. In particular, the private sector should play a more vocal role. This could apply to the CXC, the post-secondary education institutions, training institutions, and school boards. Further, these boards should be sufficiently empowered to set strategic directions.

Enhance accountability. The goals of education institutions should be limited in number, specific and measurable. The OECS Ministries of Education could negotiate performance contracts with their training and post-secondary education institutions. Further, more information on learning outcomes, such as graduation rates, CXC results, and employment rates, could be made available to families, school boards, and parent-teacher associations to evaluate the performance of the education

²⁶ A series of recent World Bank public expenditure reports examined how well the region's education systems translate public investments into educational outcomes within the larger context of public expenditure management. These reports focus explicitly and in detail on how to increase efficiency and equity of education policies in the Caribbean. Among other data, the reports find that the OECS countries on average invest 7.1 percent of GDP in education compared to 6.3 percent for the average Caribbean nation, 4.1 percent for the average Latin American country, and 4.6 percent for the OECD. Annex 1 to this report presents a brief summary of these reports.

system and each school. OECS governments would need to take actions to make such information available.

Nurture behavioral life skills and strengthen literacy and numeracy skills of students. Team skills, problem-solving, and pro-activeness can be nurtured in the schools. However, such change might require fundamental pedagogical changes in the OECS. This could signal the need for further in-service training of teachers, curriculum improvements, and more autonomy in teaching at all levels. Teachers also need training on teaching of core literacy and numeracy skills, especially at the primary level, to ensure that students master the basic skills necessary to learn.

Improve the relevance of the formal education system. In particular, the following options are recommended:

- Participate collectively in a global learning assessment. This is essential to better gauge how well the OECS education and training systems are preparing students against international standards. Only then can appropriate reforms be developed to assist the OECS to participate more fully in the global economy.
- Accelerate achievement of universal secondary education. This will have important pay-offs. In addition, as more low-performing students access secondary education, more attention should be paid to learning outcomes and ways to support low performing students.
- Improve labor market information, for example through regular reporting of vacancies and skills in high demand. This might best be done regionally.
- Increase dialogue between employers and the education institutions, for example through the constitution of a skills council within key economic sectors.
- Enhance collaboration between post-secondary education institutions in the Caribbean, in particular, through an acceleration of the Caribbean Knowledge and Learning Network.

The above actions would reduce, in the medium to long run, the staggering high share of unemployed youth by better preparing them to enter the labor market. However, there probably would always be a need for employment assistance programs, which leads to the next set of policy suggestions.

POLICY SUGGESTIONS TO ASSIST YOUTH IN THE TRANSITION FROM SCHOOL TO THE LABOR MARKET:

Scale up youth training programs. The expansion of good existing programs could be combined with policies to increase the relevance of training. In particular, international experience emphasizes private-sector driven training with co-financing from employers, a combination of life skills and technical skills training, and inclusion of traineeships to provide on-the-job training. There are important scopes for regional collaboration in such programs.

Increase labor market intermediation, for example through more dissemination of labor market information. This could occur on various fronts, through school counselors, community-based organizations, government offices, and so forth.

Establish second chance education programs, such as secondary education equivalency programs. The key to their success would be to ensure that regionally recognized certificates were awarded to participants who successfully completed the program.

Increase opportunities for entrepreneurial activities. There will be an increasing need for new initiatives to bolster the economy. The Eastern Caribbean governments could develop policies and resources to assist individuals or groups to start small businesses.

POLICY SUGGESTIONS TO INCREASE JOB TRAINING OF THE WORK FORCE:

Foster a regional market for training. This could be gradually achieved by using harmonized rules of application, accreditation and financing of training in the Eastern Caribbean. This would stimulate the development of specialized training providers, adding more value to training and reducing costs. The OECS could consider establishing one OECS agency for training instead of small national bodies.

Channel all public funding for training through a single transparent and competitive fund. A fund where trainers can transparently compete, based on their ability to produce workers who garner increased salaries and show higher productivity, would increase value for money. Further, public funding and/or regulation could seek a tri-lateral agreement to leverage private investment in training in order to secure a more sustainable source of funding. More up-front involvement of the private sector, such as a mandatory co-payment, ensures that training is relevant.

Encourage firms and labor unions to devote more attention to training of workers. Training could become a key element in future labor negotiations. Firm executives should invest resources in training and allocate time to communicate the labor needs of their companies via participation in skills councils and on the governing boards of education institutions.

In addition, two on-going efforts need greater support and rigor in their implementation:

Systematically implement the Caribbean Vocational Qualification (CVQ) framework. This could be done in several ways, but in all instances it requires information campaigns, workshops, and training regarding the standards. Public funding should only go to training using the agreed standards. **Further, the implementation would be most economical if implemented across the OECS in a coordinated manner.**

Integrate vocational training across education levels. The governments could ensure that technical training in schools at the secondary and post-secondary levels follow the same standards and award CVQ certification.

All citizens of the OECS deserve better preparation for work and opportunities for enhanced training and further learning while employed. This requires efforts at several levels. Teachers, principals, and policymakers should strive to better prepare their students for the new global economy. Similarly, employers, labor unions and trainers should do their utmost to provide more training for the labor force. Eastern Caribbean countries share this common challenge and should address it collectively. This requires debate, consensus and prompt action by students, teachers, principals, colleges, Ministries of Education, labor unions, employers, regional institutions, and donors.

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Annex 1

Executive Summary

Monitoring Educational Performance in the Caribbean²⁸ Published in 2003

Section I: Introduction

Caribbean countries share special development challenges because of their small size, high vulnerability to external events and limited natural resources. Most countries have made significant public investment in education over the last decades, averaging 4 to 5 percent of GDP, and considerable progress has been made in making access to primary education universal. However, despite this progress, there are still several deficiencies that need to be addressed related to insufficient coverage and inequitable access in secondary and post-secondary education as well as the overall low quality and internal efficiency of the education system. To be capable of effectively undertaking this global effort and to take specific policy actions, it is imperative to have precise knowledge of the deficiencies in question. Despite recent efforts and initiatives, the region's foremost shortfall remains the availability of comparable indicators that can be effectively used for policy-relevant diagnostics of the education sectors.

The main objectives of this study are: (a) to define a set of operationally relevant education indicators to be used by countries in the Caribbean region; (b) to provide a database of comparable education indicators in Caribbean countries where data is available, namely Belize, Dominica, Dominican Republic, Grenada, Guyana, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, and Trinidad and Tobago; and (c) to propose methods on how the common set of indicators can be used for analyses of the education sectors.

Section II: Defining Operationally Relevant Education Indicators

The first step in undertaking operational diagnostics of the education sectors is to determine a set of operationally relevant outcomes that can be observed and monitored. Once these outcomes have been determined, it will then be possible to relate them to underlying causes to identify the policy related factors that can be modified. Such a benchmarking of education outcomes needs to be done in at least three main areas: **coverage, efficiency and quality**, in order to provide a comprehensive picture of the performance of the education systems. This information is essential for designing any intervention in the education sector, including the recent EFA initiatives.

In the coverage and efficiency area, traditional aggregated enrolment ratios (such as the Gross Enrolment and the Net Enrolment Rate) should be complemented with **grade specific indicators** calculated on the basis of transversal and longitudinal data. **Completion and survival rates** appear to be particularly relevant in exploring the causes behind the enrolment figures. A system with low coverage associated with low access to primary and/or secondary will not require the same type of policy intervention as a system with low coverage associated with high drop-outs of the entering cohort during the schooling cycle: survival rates, derived from a cohort analysis, are particularly useful in casting light on this issue as well as on the evolution of the coverage and internal efficiency of the education system when combined with the current intake rate.

²⁸ Full report is available at: www.worldbank.org/laceducation and http://imagebank.worldbank.org/servlet/WDS_IBank_Servlet?pcont=details&menuPK=64154159&searchMenuPK=64170222&theSitePK=501889&eid=000094946_03052904030960&siteName=IMAGEBANK

The efficiency analysis should be complemented with a **cost-effectiveness** analysis in order to determine the cost of outcomes and thus establish alternative options for reaching them. Finally, in the quality area, a **variety of standardized tests**, both nationally and non-nationally determined, should be used to provide some objective measurement of educational achievement. These outcome measures should be complemented by an analysis of the education systems' characteristics, i.e. **intermediate quality measures**. Pertinent intermediate quality indicators were identified. Monitoring them would make it possible to design and implement prompt and effective quality-enhancing interventions.

Section III: Monitoring Education Indicators in the Caribbean Region

III.1 Current Availability of Indicators for Education Diagnostics in the Caribbean

While the availability of education statistics and indicators has been traditionally limited in the Caribbean, there has recently been substantial effort, both at the national and regional level, to improve the collection and use of education statistics which are necessary for making policy relevant decisions in the education sector.

Many Caribbean countries are in the process of strengthening their education statistics collection and processing capacity, some through the establishment of comprehensive Education Management Systems (EMIS). On quality outcomes, most of the countries have by now developed national systems for measuring, monitoring and assessing learning outcomes. These systems are centered on the application of standardized tests to provide inputs for policy and decision-making.

At the regional level, the major efforts in promoting the collection of education statistics and the construction of indicators have been led by UNESCO under the Education For All (EFA) initiative and the activities of the recently strengthened UNESCO Institute for Statistics (UIS). On quality outcomes, the activities of the Caribbean Examination Council (CXC) gave rise to a Secondary School Certificate which provides regionally comparable information on student's performance. In the broader Latin American framework, there is also the PRIE (Regional Education Indicators Project) initiative, led by UNESCO/OREALC (Santiago).

Despite the ongoing effort, the quantity and quality of the indicators available still differs markedly across countries and, while there is good coverage of some indicators, some others are generally not provided. Fewer indicators are generally available at the secondary than at the primary level. Additionally, poor coverage is particularly noticeable in the areas of quality and, to a lesser extent, efficiency. Finally, grade-specific indicators such as the completion and survival rates are generally not provided.

III.2 The New Indicator Database on Ten Caribbean Countries: Description and Analysis

A common set of indicators, measuring coverage, efficiency and quality, was constructed for ten Caribbean countries currently covered by ongoing World Bank operations. In putting together this set of indicators, we had two main priorities: (a) create a set of updated indicators useful for establishing thorough and balanced diagnostics of the education sectors, relevant to policy decisions; and (b) ensure comparability by applying the same set of indicators to all countries, using the same methodology. More traditional indicators of coverage and efficiency were complemented with indicators that are not generally provided at the national or regional level in the Caribbean and specially designed templates were used to produce coverage and efficiency indicators comparable across countries.

Two main outputs were produced: (a) country syntheses along the three main areas of coverage, efficiency and quality, and (b) cross-country comparisons of each of the indicators.

Country Syntheses: Taking the country of St Lucia as an example, the report shows how the indicators reported in the country profiles (which include, among others, indicators on expenditure, enrolment and completion rates, survival rates and test scores) can be combined and analyzed to provide a useful and operationally relevant synthesis of the education sectors.

Cross-Country Comparison: The report also shows how the comparative database can be used to highlight common characteristics and issues of the ten Caribbean countries involved, after discussing some comparability limitations which arise from differences in the education systems (both in terms of the length of the normal schooling cycles and in terms of the educational options after the end of the normal primary cycle) and the different coverage of some of the received information.

The comparison of the ten Caribbean countries revealed several significant and useful points on the state of education in the region, as summarized below:

Primary level Coverage: Coverage at the primary level does not seem to be an issue any more and completion is not generally a problem either, with the exception of three countries.

Secondary Level Coverage: In contrast to the primary level, coverage and completion are an issue in the secondary sub-cycle for most of the Caribbean countries included in the report, to various degrees. For some it is a question of access, for others the number of drop-outs during the secondary cycle is the most serious problem. There is still a significant proportion of secondary school age children out of school in half of the ten countries under analysis.

Internal Efficiency: For most countries, the internal efficiency is low as illustrated by the low survival rates to the last grade of the secondary cycle and relatively high repetition rates at the secondary level. On average, less than one child out of two entering first grade of primary education today is expected to make it through to the last grade of secondary.

Cost-Effectiveness: Almost all countries spend substantially on education, as indicated by a public education expenditure-GDP ratio of 6 percent or more. The relationship between educational outcomes and public expenditure in education, while generally positive, is by no means tight. Wide variations exist in spending efficiency across countries, as shown by the fact that similar levels of spending are associated with a wide range of educational outcomes.

Educational Achievement: Performance on the CXC, which is used as the secondary cycle final exam in nine out of the ten countries included in the report, varies significantly across countries, with passing rates consistently lower in math than in English. The results are worse for the proportion of students passing at least 5 CXC exams, including English and math, the minimum requirement for access to tertiary education.

Section IV: Conclusions and Policy Recommendations

Several recommendations as to how to further build on the existing work of Ministries of Education and international organizations in the collection of information and the construction and use of indicators for education diagnostics in the Caribbean can be made and are summarized below:

- **Caribbean countries should measure the coverage and efficiency of the entire education cycle (primary plus secondary).** The current quantification effort is stronger at the primary level than at the secondary level, while the main education issues reside in the coverage of the secondary level and the efficiency of the overall education cycle.
- **Caribbean countries should start producing and using grade-specific indicators such as the completion and survival rates.** The report has shown the usefulness of these indicators in a coverage/efficiency diagnostic of the Caribbean education systems.

- **Harmonization of education statistics and indicators should continue.** The variation in the quality and quantity of indicators available per country makes it difficult to undertake thorough cross-country comparisons of the coverage/efficiency of the education systems.
- **Caribbean countries should improve the collection and use of expenditure data** by systematically reporting and monitoring unit costs per education level and expenditure allocation ratios. The lack of reliable expenditure data prevents thorough cost-effectiveness analyses, while the existence of wide variations in spending efficiency across the countries makes these analyses essential.
- **On the quality side, Caribbean countries should participate in international exams (such as the TIMSS, the PISA and the LLECE).** The lack of directly comparable exams at the primary level makes it difficult to make any meaningful comparison of learning outcomes at that level across countries and to provide some objective benchmarking on the quality of primary education of each country. At the secondary level, even if the existence of the CXC provides regional comparison of outcomes, participating in other international exams would still provide some international benchmarking of the regional performance.
- **The proportion of students passing at least 5 CXC exams, including English and math, should start to be measured and monitored** since this is the minimum requirement for access to tertiary education, and performance is particularly unsatisfactory when measured using this indicator.
- **Finally, Caribbean countries should start producing and monitoring qualitative indicators** such as school level measures of adequacy of financial, human and physical resources and classroom level measures of quality of instructional methods and techniques. Little information is available on possible determinants of the educational achievement performance in the region, hampering the design and implementation of quality-enhancing interventions which would be essential given the generally low educational achievement performance of the region.

Education Spending in the Caribbean is not Commensurate with Outcomes

How well do the region's education systems translate investments into outcomes? In response to governments' request and the worsening budgetary crisis in many Caribbean countries, the World Bank produced from 2003 to 2005 public expenditure reports for the Dominican Republic, Jamaica, Dominica, St. Kitts and Nevis, Grenada, St. Lucia, and St. Vincent and the Grenadines. These reports examined this question within the larger context of public expenditure management. The following paragraphs are a summary of the analysis undertaken within the education sector.

The Caribbean governments spend a record high share of GDP on education, 6.5 percent. Especially Barbados (8.3 percent) and the OECS countries (7.1 percent) exceed the Latin American and OECD averages of 4.1 percent and 4.6 percent, respectively (see Figure 1A).

Only Dominican Republic spends less (2.8 percent). However, it should be noted that private investment in education is significant in the OECD countries (1.3 percent), and non-significant in the majority of the Caribbean nations. The high level of expenditures attests to the governments' commitment to education. Without a high level of investment into education, the region will not be able to catch up with the world leading economies in education. However, the investment needs to be efficiently managed.

The public expenditure reports show that high spending is incommensurate with educational outcomes. In essence, the region's education systems fail to translate the record high spending into outcomes that will significantly narrow the education gap between the Caribbean and the OECD countries, as illustrated by the 120 years that it currently will take Jamaica to reach the education level of USA in 2000. Besides the previously described challenges to improve accountability, the reports recommend that efficiency is increased through:

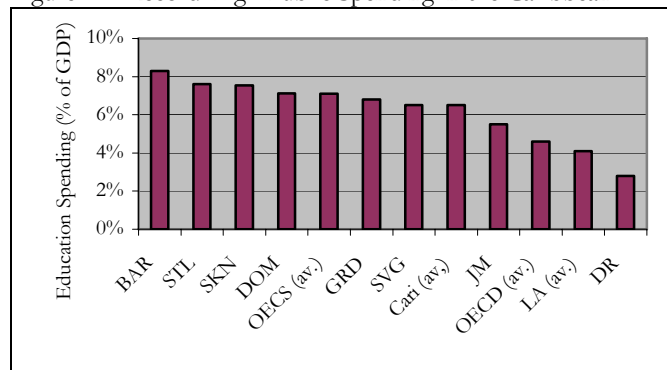
Increasing private investments to increase coverage at the pre-primary and tertiary education level. To increase coverage, the reports recommend a carefully implemented combination of increasing household contribution and targeted state support.

Realizing sizable savings through the opportunity presented by the reduction in primary education enrolment. The English-speaking Caribbean is experiencing a decline in birthrates which is decreasing the size of the school attending cohorts. It is therefore necessary to reduce the teacher force and close small, expensive and underperforming schools in order to maintain cost-effectiveness.

Increasing funding for didactic materials. In Dominica, St. Lucia, St. Kitts and Nevis, and Jamaica, 94 percent or more in recurrent expenditures at the primary education level are devoted to salaries. This leaves very few resources for learning material - textbooks, materials for technical labs, and chemicals for science classes and the like - that is essential for learning. An increment in their availability—through a reduction in the share allocated to salaries—would increase the efficiency of the education budget.

Reducing administration costs through deeper cooperation at the regional level. This would reduce duplication and lead to more innovative education policies. Possibilities for cooperation abound with the most obvious being: (i) provision of job training; (ii) tertiary education; (iii) curriculum reform; (iv) continuous and increased collaboration in examinations, building upon the CXC experiences; and (v) setting of standards and certification of pre-primary education.

Figure 1A. Record High Public Spending in the Caribbean



Sources: World Bank (2004a-f), World Development indicators and OECD. Note: year of reference: 2003: BAR, 2002: DOM, GRD, SKN, STL, and SVG. 2001: DR. 2000: LA and OECD.

