

# **FINAL REPORT**

**Survey of Labour Market/Human Resource Needs  
in  
Modern Languages, Information and Communication Technology  
and  
Auto Repairs (Engineering/Skills Training)**

*Prepared by*

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# **TABLE OF CONTENTS**

<b>Content</b>	<b>Page Number</b>	
Section 1	Introduction	4
Section 2	Executive Summary	5
Section 3	Objectives and Scope of Work	9
Section 4	Methodology	12
Section 5	General Discussion	20
Section 6	Recommendations	29
Section 7	Findings and Implications for Programmes	33
Section 8	Country Reports	37
Table 1	Labour Market needs	
Table 2	Responses to Modern Languages questionnaires	
Table 3	Responses to ICT questionnaires	
Table 4	Responses to Auto Repairs questionnaires	
Table 5	Interviews and Focus Group discussions	
Table 6	Findings and Implications for Programmes	
<b><i>Attachment 1:</i></b>	References	
<b><i>Attachment 2:</i></b>	List of persons interviewed and in focus group discussions	

# **FINAL REPORT OF SURVEY OF LABOUR MARKET/HUMAN RESOURCE NEEDS IN MODERN LANGUAGES, INFORMATION AND COMMUNICATION TECHNOLOGY AND AUTO REPAIRS (ENGINEERING/SKILLS TRAINING)**

## **SECTION 1: INTRODUCTION**

The Association of Caribbean Tertiary Institutions (ACTI) with funding from the Caribbean Development Bank contracted three consultants to carry out a Labour Market/Human Resource (LM/HR) needs survey in three areas - Modern Languages, Information and Communication Technology (ICT) and Auto Repairs (Engineering/Skills Training). The Survey is part of a larger exercise for curriculum development and review in order to ensure harmonisation of Associate Degrees in the three areas identified and to ensure increased relevance of the tertiary level programmes in these areas to the demands of the labour market. The survey was also a follow-up to the work done by the Tertiary Level Institutions (TLI) Unit of the University of the West Indies (UWI) given in the reports 'Assessing the Human Resource Needs of CARICOM Countries; Planning the Tertiary Education Sector Response' (2006).

ACTI has recognised the need for harmonised curricula as critical especially in the context of the free movement of skilled persons within the Caribbean Community Single Market and the Economy (CSME). Harmonised curricula in the three areas for an Associate Degree would allow for ease of transfer of graduates within the CSME. The development of regional Associate Degree programmes in the three areas would also result in economies of scale and would enable the Colleges jointly to seek articulation arrangements with the University of the West Indies and other universities in the region and elsewhere.

This report prepared by the three consultants contains seven Sections. Section 1 is the Introduction; Section 2 provides an Executive Summary; Section 3 gives Objectives and the Scope of Work; Section 4 gives the Methodology and an analysis of CXC examinations data; Section 5 is a General Discussion of the three areas; Section 6 gives Recommendations; Section 7 gives details of the findings and the implications for programme review and development; and, Section 8 contains the Country Reports.

## **SECTION 2: EXECUTIVE SUMMARY**

Three consultants were contracted by ACTI to carry out a LM/HR needs survey in the areas of Modern Languages, ICT and Auto Repairs (Engineering/Skills Training). The survey funded by the CDB was done in nine countries: Antigua and Barbuda (all three areas), Barbados (Modern Languages and ICT), Dominica (all three areas), Grenada (Modern Languages), Jamaica (Modern Languages), St Kitts and Nevis (all three areas), St Lucia (ICT and Auto Repairs), St Vincent and the Grenadines (Auto Repairs) and Trinidad and Tobago (all three areas). The tenth country participating in the survey was the Netherlands Antilles (St Maarten – ICT and Modern Languages).

The consultants collected data using questionnaires and through interviews and focus group discussions. Five sets of questionnaires focusing on supply and demand were prepared for the three areas for secondary level students; tertiary level students; tertiary level lecturers; employers; and, the Public Service. The responses from students and lecturers were relatively small in most cases since the survey was being done in vacation time. The responses from employers were also small and a great deal of effort went into follow-up telephone calls and visits in order to collect completed questionnaires. For Modern Languages, 89 secondary level students, 51 tertiary level students, 18 tertiary level lecturers and 46 employers responded; for ICT, 66 secondary level students, 111 tertiary level students, 20 lecturers and 83 employers responded; and for Auto Repairs, 26 secondary level students, 66 tertiary level students, 15 tertiary level lecturers and 42 employers responded.

In-depth interviews and focus group discussions took place with lecturers (50) and persons from the public and private sectors (95) in the three areas to find out what the labour market needs were and issues and concerns about the supply of tertiary level graduates for employment. The responses obtained were collated and analysed and are given as country reports. The consultants were also able to review some documents that were relevant to the survey. A major concern was the short time for the survey and the visits to countries in order to collect data including national statistics.

With respect to Modern Languages, some of the Colleges offered CAPE French and Spanish; two Colleges integrated CAPE French and Spanish in their Modern Languages Associate Degree programmes; the other Colleges had developed their own Associate Degree in Modern Languages (usually French and Spanish). In addition, several of the Colleges offered shorter language courses for College students and for workers on demand. The flexibility of the Colleges is a strength that can be exploited in this area. Many employers noted the need for persons already employed at all levels and especially at the middle and senior management levels to be fluent in another language (Spanish was the language commonly identified). The Colleges are well placed to offer short courses and to go to workplaces and offer courses at times that are convenient for workers and employers. The Colleges also include Languages in many of their vocational courses, for example, in Hospitality and Tourism.

In almost all cases, the employers said that a second language is important but is not a requirement for the workplace. This can change as more persons present language as part of their

qualifications and with the increasing growth in business and trade with Spanish-speaking countries. The Associate Degree in Modern Languages is used mainly for teaching. However, this too can change as countries implement policy decisions to raise the entry qualifications for secondary level teaching to a Bachelor's Degree. Most graduates use the Associate Degree for further studies to get a Teacher's Diploma or to go on to University to get a Bachelor's Degree. The Colleges would need to take this into consideration in reviewing the content of the Modern Languages Associate Degree programme in order to ensure articulation with higher level programmes. However, given the growing need for competence in a second language in many occupations, the Associate Degree can also serve as a sound foundation for continuing studies in any other area.

Like Modern Languages, ICT is offered as an Associate Degree and is integrated into other programmes at the Colleges. The students, lecturers and employers have general agreement about the content/skill areas that are required in the workplace. Most of the employers noted that ICT is required in almost all positions in the workplace. For senior positions requiring ICT, the employers prefer to hire persons with a Bachelor's Degree. One lecturer explained that this is so because the employers are not aware of what the Associate Degree graduates are able to do. This also points to the need for the Colleges to have systemic linkages with the workplace in order to obtain inputs for programme review and development and to better meet the needs of the employers. The programme of Attachments is valued by the students. These can also be structured to obtain inputs not only about the performance of the students but also about content and skill requirements for the workplace. Very few of the employers who reported that their business provided attachments also said that they made inputs to the programmes at the Colleges.

There was, generally, congruence in an understanding of workplace needs identified by students and lecturers and those stated by employers. However, there is need for much closer ties with industry in order for the Colleges to be able to identify occupations in the industry and the corresponding job demands. Some of the ICT positions that are increasingly being established as businesses grow are Network Administrator; Systems Administrator; Management of Information Systems; and, Data Base Development and Management. Industries also need Business Analysts; persons skilled in Data Warehousing; and, persons who have vendor qualifications in addition to the qualifications from the tertiary institutions.

With respect to Auto Repairs, the Colleges and other institutions offering courses in this area have established partnership arrangements with relevant businesses and industry. The components of programmes that are most needed in the industry are Auto Electrics; Auto Maintenance; Computer Diagnostics on vehicles; transmission repairs and skills in dealing with small engines, diesel engines and marine engines.

There is opportunity for the Colleges to develop stronger links with the industry not only for attachments for students but also to be able to share responsibilities for training since the institutions can benefit from the expertise available in industry and from exposure of students and instructors to the equipment and tools used in a modern work environment. The main concerns for the delivery of programmes in Auto Repairs are the out-dated equipment in some of the institutions and the need for the instructors themselves to have the competencies required for the changing needs of the industry.

Competence in ICT in Auto repairs is also critical. One employer explained that many auto dealers are now putting their manuals on line. Workers are required to be able to read, understand and use information that is provided in print and electronically. A concern of employers was that many of the persons with qualifications in this area need to have improved generic skills of speaking, reading and writing.

The findings of the survey provided several general recommendations which are given in Section 6 of this report.

With respect to Modern Languages, the inclusion of Modern Languages in the para-professional and vocational programmes should continue since competence in a language would give the graduate an advantage when seeking employment. The Modern Languages Associate Degree by itself is used mainly as entry to the Teaching Service and for further studies to the Bachelor degree level. As mentioned before, the Colleges would need to take this into consideration when reviewing the programmes so that there is articulation of the Colleges' programmes with those of the UWI and other tertiary institutions. An Associate Degree with electives in Business, Hospitality and Tourism and other programmes (the opposite of what currently obtains) should also give students an advantage in seeking employment since many businesses would need to have employees who have more than just conversational skills in a second language. Given the anticipated needs for workers at all levels to have competence in a language, the Colleges can market the Modern Languages programme to university graduates who need to add a language qualification to their university qualifications in areas such as Business and Accounting. The Colleges can also strengthen their services in providing customised programmes for various groups either at the college itself or at workplaces.

With respect to ICT, the Colleges are already implementing a recommendation made by employers for ICT to be included in all programmes. The graduate of the Associate Degree programme mostly gets employment in support positions. Employers have asked that more attention should be given to programming, and the development of 'logic' and problem-solving skills. The involvement of key persons from the industry in the review of these programmes would be necessary in order to ensure that the graduates have employability skills. The Colleges would also need to market their programmes so that employers are aware of the knowledge and skills that an ICT Associate Degree graduate would bring to the workplace. Most employers said that they need people with Bachelor's Degrees. The review would also need to take this into consideration so that (as for Modern Languages), there is articulation with higher level tertiary programmes.

For Auto Repairs, the Colleges can consider aligning the programme with occupational standards approved by the CARICOM Council for Human and Social Development (COHSOD) for the award of the Caribbean Vocational Qualification. Employers recommended strongly the inclusion of Auto Electronics and ICT. They also noted the need for graduates in this area to have good literacy and numeracy skills and to have some knowledge of science (Physics, in particular). A recommendation made throughout the report is for the colleges to develop a system that would enable them to get 'just-in-time' Labour Market Information (LMI) that can inform programme development and review and would result in demand-driven programmes. The

Ministry of Labour, Statistical Departments and other bodies collect very useful LMI, but this is not always easily available to lecturers and by the time it is available it is out-of-date or not in a format that would help with programme development in specific areas.

A summary of the Labour Market needs for the three areas is given in Table 1 below.

**Table 1**

<b>Modern Languages</b>	<b>Information and Communication Technology</b>	<b>Auto Repairs (Engineering/Skills Training)</b>
<p>French and Spanish mainly together with relevant courses needed in Hotel and Tourist Industry but also growing need for Italian, German and Mandarin.</p> <p>Spanish mainly needed together with Business qualifications in companies.</p> <p>Short intense courses for senior and middle level managers (especially in Spanish).</p> <p>Associate Degree used for teaching in some countries.</p> <p>Bachelor Degree level qualifications required increasingly for teaching and other senior level positions in the public and private sectors.</p>	<p>Content areas needed include:</p> <ul style="list-style-type: none"> <li>- Programming skills</li> <li>- Networking</li> <li>- Systems Administration</li> <li>- Database Administration and Management</li> <li>- Data Warehousing</li> <li>- Graphic Design</li> <li>- Web Development and Maintenance</li> <li>- Desktop Publishing</li> <li>- Data Warehousing</li> <li>- Training for Business Analysts</li> <li>- Vendor Certification (for example ORACLE, MCSE, and CISCO)</li> <li>- Bachelor Degree level qualifications required for senior positions</li> <li>-</li> </ul>	<p>Skills needed for areas including:</p> <ul style="list-style-type: none"> <li>- Auto Repairs</li> <li>- Auto Maintenance</li> <li>- Servicing and overhaul</li> <li>- Air Conditioning</li> <li>- Auto Electrics</li> <li>- Auto Vehicle Engineering</li> <li>- Auto Transmission</li> <li>- Machining and Fabrication</li> <li>- Welding</li> <li>- Small engines</li> <li>- Diesel engines</li> <li>-Computer Diagnostics</li> </ul>

## **SECTION 3: OBJECTIVES AND SCOPE OF WORK**

### **3.1 Objectives of the Project**

The main purpose of the project is to enhance the relevance of regionally accredited training programmes developed by members of ACTI, thus ensuring greater synergy between the human resource development agenda adopted by TLIs and the economic competitiveness needs of Caribbean countries. Specifically, the intervention seeks to engender:

- (a) improved relevance of tertiary education and training by identifying the education and training needs of the Borrowing Member Countries to inform the programmes of study offered in institutions in the region;
- (b) improved regional accreditation of programmes through the development of harmonised core curricula for programmes of study; and
- (c) strengthened collaboration among members of ACTI in promoting a culture of lateral and vertical linkages for accreditation, equivalency and articulation in the region.

The Project comprises two phases. Phase 1 of the Project is concerned with the identification of specific education and training needs for greater relevance of human development through the conduct of the LM/HR Needs Survey,

### **3.2 The Objectives of Phase 1 are to:**

- (a) conduct research into the specific human resource needs of the English-speaking Caribbean countries so as to advance regional development through relevant tertiary education programmes; and
- (b) prepare a research report of the human resource needs of the English-speaking Caribbean countries to inform the development of appropriate Associate Degree programmes with harmonised curricula.

The findings of the Survey would be used to inform curricular restructuring of existing Associate Degree programmes and/or the development of new Associate Degree curricula in the three areas.

### **3.3 Consultancy Objectives**

The objective of the consultancy is increased relevance of tertiary education through the identification of specific education and training needs for the development/design of more appropriate Associate Degree programmes in Modern Languages, ICT and Auto Repairs, thus facilitating human resource development in the region.

### **3.4 Scope of Work**

The Scope of Work given to the Consultants was for the identification of specific education and training needs to be done through a LM/HR Needs survey in 13 countries. The key tasks given to the consultants are listed below.

- (a) Prepare a research plan to study the specific training needs of the three key job/skill areas.
- (b) Collate and assess any available research and documents concerning LM/HR market needs in the region.
- (c) Determine through surveys, focussed group discussions, interviews and document review, the specific training needs of the key job/skill areas as perceived by the stakeholders.
- (d) Analyse the specific training needs of the key job/skill areas as identified by the stakeholders with a view to suggesting critical needs to be addressed.
- (e) Prepare a report with recommendations for ACTI.

### **3.5 Parameters of the Survey**

- Modern Languages in the survey referred to French, Spanish, Italian and German. However, Colleges were asked to list any other Languages that are taught.
- Information and Communication Technology also included Computer Studies and Computer Science taught at the Community Colleges.
- Auto Repairs (Engineering/Skills Training) included Auto Mechanics, Auto Electrics, Auto Air Conditioning and any other areas related to Auto Repairs.
- The survey focused on LM/HR needs relevant to graduates of Certificate, Diploma, Associate Degree and Bachelor's Degrees from Technical Institutes and Community Colleges.

### **3.6 Limitations of the Survey**

- (i) The Survey was done during the vacation time so in many instances it was not possible to meet with lecturers and students.
- (ii) There were delays at local level in sending out the questionnaires, and the responses from employers were generally poor.
- (iii) The consultants had expected that the completed questionnaires would be used to inform the focus group discussions but this did not happen because of the very short time for sending out the questionnaires and receiving them.
- (iv) Some of the people interviewed pointed to documents that would have been valuable for the Survey. However, given the deadline and the limited time for the assignment, the consultants were unable to source these documents.
- (v) In very few cases, persons who said that they would send documents and data did so.
- (vi) Employers are not usually asked about projected growth and vacancies and this may account for the very small number who gave such information.
- (vii) The survey was being done at a time when many of the companies were restructuring and cutting costs given the financial situation of countries globally; and this could account for the lack of quantitative data on projected employment opportunities for tertiary level graduates.
- (viii) The plans for focus group discussions did not work out in all countries since it was difficult to get employers together even when the arrangement was made through the Employers' Confederation and the Chamber of Commerce.
- (ix) Even though 13 countries were identified, because of the budget constraints the consultants were unable to visit four of the countries (Bahamas, Belize, BVI and Guyana). However, questionnaires for the three areas were sent to three of the four countries.
- (ix) Some countries promised to send completed questionnaires that were not ready when the consultants visited; but at the time of writing the report most of these had not been received.
- (x) A survey of this type required much more time to collect and analyse relevant data from various sources.

## **SECTION 4: METHODOLOGY**

Three methods of collecting data on the LM/HR needs in the three areas identified were through questionnaires, interviews and focus group discussions.

### **4.1 Questionnaires**

Questionnaires were prepared for secondary level students, tertiary level students, tertiary level lecturers and employers for the three areas. Questionnaires were also prepared to obtain data from the Public service. The questionnaires were printed and sent to all the Local Coordinators with explanatory notes and suggestions as to which businesses the employers' questionnaires could be sent. The consultants were advised by the ACTI Secretariat to use this method since the Coordinators were best placed to send out the questionnaires based on their local knowledge. This was the most cost-effective way to carry out the survey given the constraints of time and resources. However, if such a process is to be repeated, the local support should be formalised for it to be more effective.

The questionnaires for the tertiary level students (and with some modification for the secondary level students) sought to elicit information on the choices for study at the College and other institutions; reasons for the choices; students' knowledge of where the opportunities for jobs are and the qualification requirements for the workplace; their choice of institution for any further studies and the reasons for their choice.

The questionnaires for the College lecturers collected data on the numbers of persons enrolled in the three areas at the institutions; the areas of emphasis in programmes in response to labour market needs; whether or not procedures are in place for tracking the placement of graduates in the job market and for using labour market information to develop and review programmes.

The questionnaires for employers, the interviews and the focus group discussions were geared to obtaining information from employers about the content, skills and personal attributes required of employees with qualifications in any of the three areas identified; any plans for growth and the human resource needs for growth; and, comments about the tertiary level programmes based on the performance of tertiary level graduates in the workplace.

The tables below give the number of person who responded to the questionnaires.

**Table 2-Modern Languages**

No	Country	Sec. Level Students	Tertiary Level Students	TLI Lecturers/ Tutors/ Instructors	Employers	TOTAL
1	Antigua & Barbuda	9	13	2	8	32
2	Barbados	0	0	3	11	14
3	Dominica	5	2	2	4	13
4	Grenada	9	2	3	0	14
5	Jamaica	20	6	0	1	27
6	St. Kitts and Nevis	0	0	0	8	8
7	St. Lucia					
8	St. Maarten	23	24	8	10	65
9	St. Vincent and the Grenadines					
10	Trinidad & Tobago	23	4	0	4	31
	<b>TOTALS</b>	<b>89</b>	<b>51</b>	<b>18</b>	<b>46</b>	<b>204</b>

**Table 3 - Information and Communication Technology**

No	Country	Sec. Level Students	Tertiary Level Students	TLI Lecturers/ Tutors/ Instructors	Employers	TOTAL
1	Antigua and Barbuda	8	28	7	11	54
2	Barbados	15	0	0	14	29
3	Dominica	3	17	3	12	35
4	Grenada					
5	Jamaica					
6	St. Kitts and Nevis	0	2	0	10	12
7	St. Lucia	38	33	7	16	94
8	St. Maarten	2	13	2	8	25
9	St. Vincent and the Grenadines					
10	Trinidad and Tobago	0	18	1	12	31
	<b>TOTALS</b>	<b>66</b>	<b>111</b>	<b>20</b>	<b>83</b>	<b>280</b>

**Table 4 - Auto Repairs**

No	Country	Sec. Level Students	Tertiary Level Students	TLI Lecturers/ Tutors/ Instructors	Employers	TOTAL
1	Antigua and Barbuda	0	4	1	5	10
2	Barbados					
3	Dominica	0	7	1	6	14
4	Grenada					
5	Jamaica					
6	St. Kitts and Nevis	0	0	2	9	11
7	St. Lucia	26	9	4	11	50
8	St. Maarten					
9	St. Vincent and the Grenadines	0	17	4	4	25
10	Trinidad and Tobago	0	29	3	7	39
	<b>TOTALS</b>	<b>26</b>	<b>66</b>	<b>15</b>	<b>42</b>	<b>149</b>

#### 4.2 Interviews and focus group discussions

The three consultants each had responsibility for three countries. Their responsibilities were to collect the questionnaires from the Local Coordinators, visit the countries for two days (three days in Trinidad and Tobago) and meet with relevant educators and employers. Interviews and focus group discussion took place with 145 persons: 48 lecturers; 29 persons from the Public Sector; and 68 persons from the Private Sector. The breakdown by country is given in Table 5 below.

**Table 5: Number of persons interviewed and in focus group discussions**

Country	Principals and Lecturers	Public Sector representatives	Private Sector representatives
Antigua and Barbuda	6	7	5
Barbados	3	-	6
Dominica	-	4	8
Grenada	3	3	-
Jamaica	6	3	7
St Kitts and Nevis	2	2	3
St Lucia	14	2	6
St Maarten	3	1	5
St Vincent and the Grenadines	4	2	13
Trinidad and Tobago	7	5	15

The data obtained through the interviews and the focus group discussions, especially with employers, compensated somewhat for the relatively low employer responses to the questionnaires.

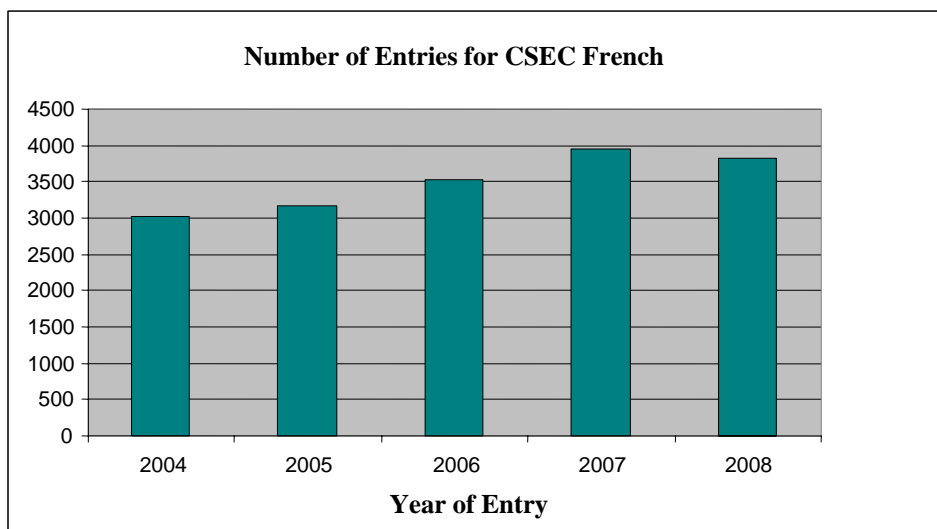
After collecting the data, each consultant collated and analysed the data for the three countries for which he/she was responsible. The three consultants then prepared reports for each country, identified common themes in the three areas and submitted a draft report to the ACTI Secretariat. This final report was prepared taking into account the comments received on the draft report

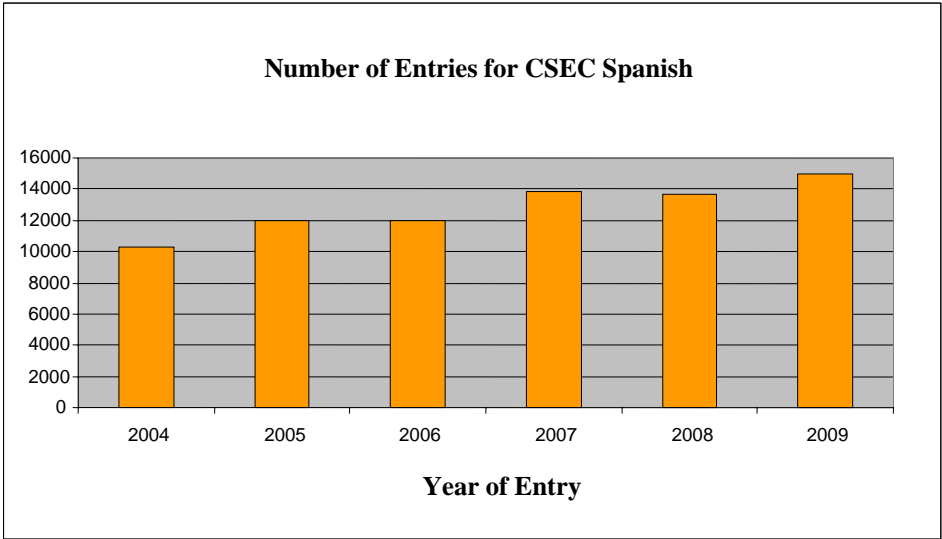
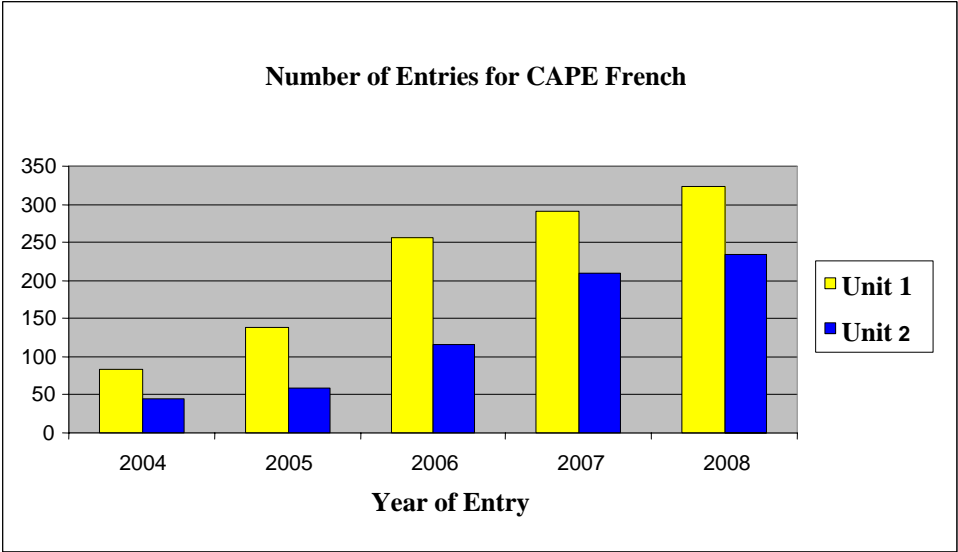
The consultants also collected, reviewed and analysed data that were available at country level and from the Caribbean Examinations Council (CXC).

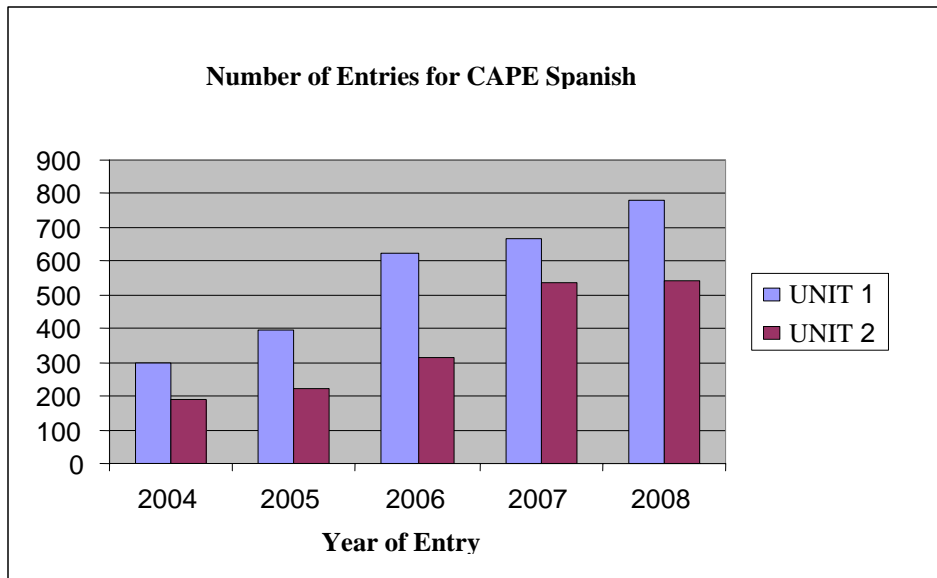
### 4.3 Collation and Analysis

#### Modern Languages

Data from the Caribbean Examinations Council were compiled and analysed. The intake at the Colleges in Modern Languages is mainly from the secondary schools.



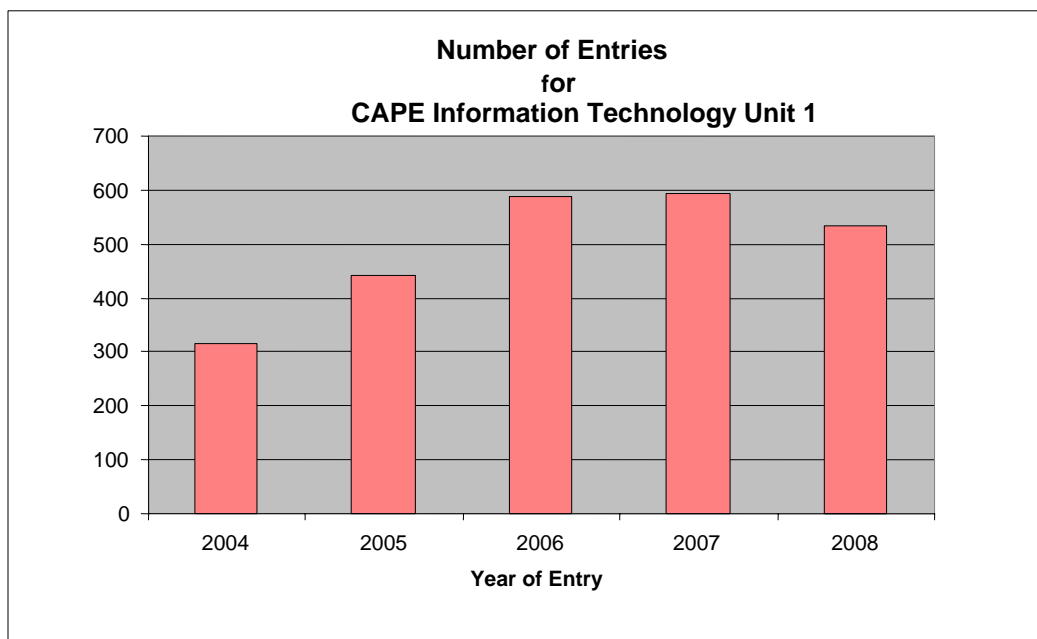
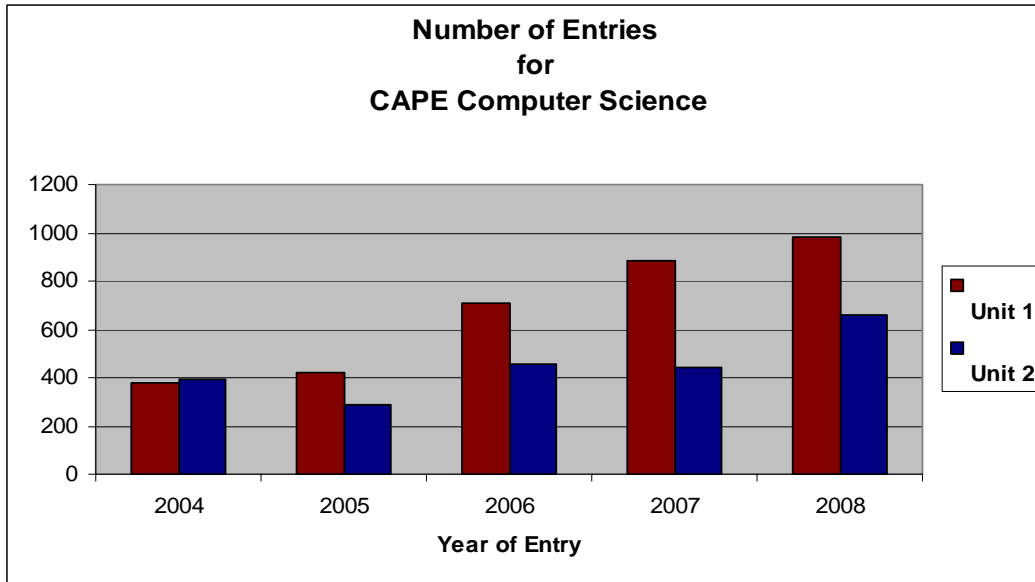


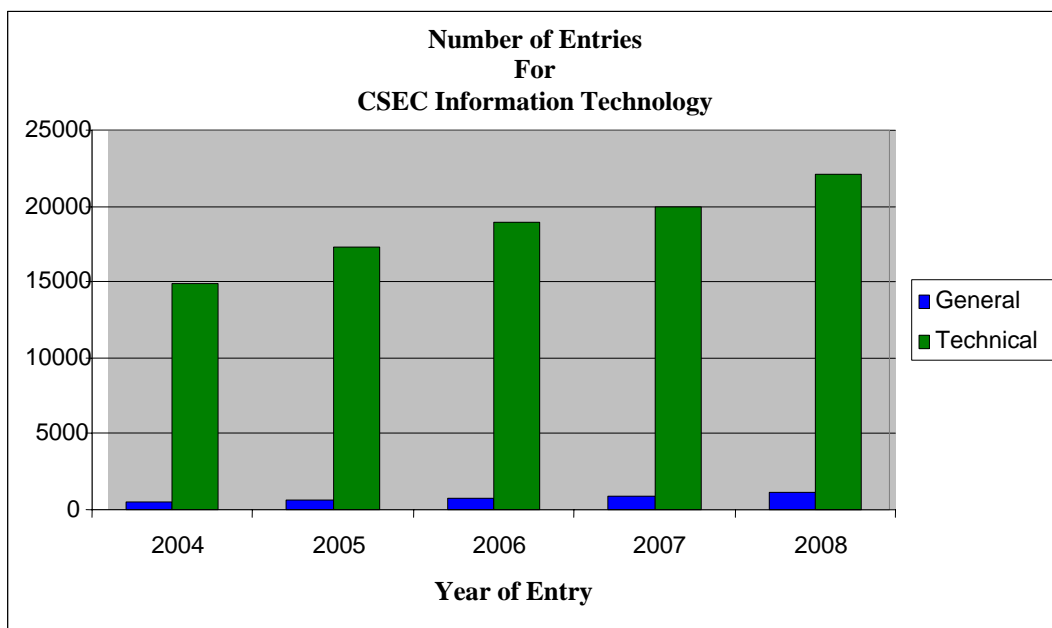


The CXC data show much smaller entries for CSEC French than for Spanish. The numbers are even smaller for CAPE. The supply of students for Modern Languages for the Community Colleges comes mainly from the secondary level graduates with CSEC qualifications. The population for languages is still relatively small. This should increase with the implementation of policies in many countries for the introduction of Spanish at the primary level. Students need to be motivated to do the languages. For this to happen, there need to be clear career pathways for continued education and more value placed on languages by employers, many of whom acknowledge that competence in a Modern Language is essential for employment but is not a requirement when hiring staff.

## Information and Communication Technology

Information Technology (IT) Technical is the fastest growing subject for CXC CSEC examinations. The entries for IT Technical rose by 33 percent from 2004 to 22 065 in 2008 as shown in the graphs below.





The IT Technical is more popular than the IT General. Two reasons that may account for this are: the General Proficiency has a bit more programming content; and, students see the Technical Proficiency as being more practical and oriented for the workplace. IT was until recently also offered as a single Unit course for CAPE. Recently CXC has restructured the CAPE IT to make it a two-Unit course. Computer Studies is offered as a two-Unit course.

The supply of IT students for the Colleges comes mainly from the CSEC graduates. The IT Technical and the IT General are, therefore, the foundation courses for studies in ICT at the Colleges. CXC offers an Associate Degree and there is need to include CXC in the discussions about the content of its subject offerings in relation to the College Associate Degree programmes so that there is coordinated effort to ensure quality, harmonisation, and articulation of programmes.

Details of the findings and the implications for programme review and development are given in Section 7.

## **SECTION 5: GENERAL DISCUSSION**

### **5.1 Modern Languages**

At the regional and national level, the importance of competency in at least one other language has been noted by policy makers and educators.

The 18<sup>th</sup> Summit of the CARICOM Heads of Government adopted the Vision of the Ideal Caribbean Citizen as a person who (inter alia) ‘demonstrates multiple literacies’. The ‘St Lucia Education Sector Development Plan 2000-2005 and beyond’ notes that all students should be ‘able to communicate in more than one language’. The Pillars for Partnership and Progress: The OECS Education Reform Strategy (2000) had set the following target:

*‘By the year 2010, all students at the secondary level should be fluent and proficient in the oral and written use of standard Caribbean English, at least ninety percent of secondary school leavers should be fluent in at least one foreign language spoken in the Caribbean and at least half should be fluent in two foreign languages spoken in the region’ (p 17)*

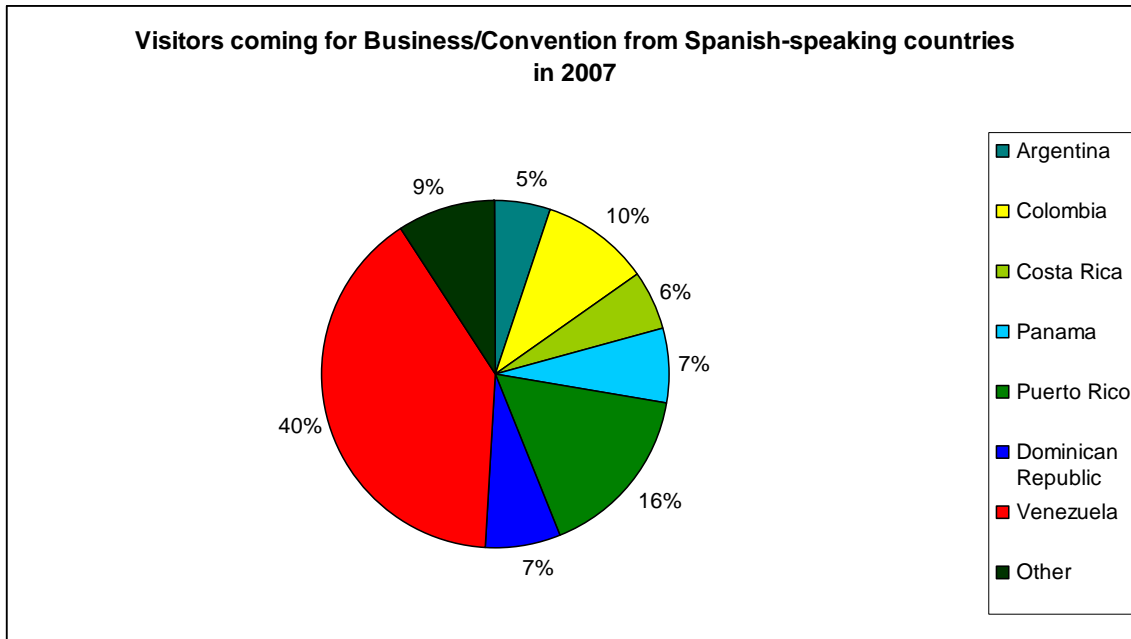
Further, the Report of the Jamaica Task Force on Educational Reform (2004) stated that one characteristic of the ‘educated Jamaican’ is a person who can ‘speak an additional language and have at least the minimum requirements for tertiary education’.

Data obtained at national and regional levels show that more concerted efforts are necessary to meet the above objectives set out by policy makers and educators.

In the ten countries participating in the Survey, there was recognition of the importance of languages for the development of the country and of the region. Competence in a language was required in almost all sectors and especially in trade, foreign relations and tourism. The potential of trade and development opportunities with the Spanish-speaking countries close to the Caribbean was noted by all the employers surveyed. One Human Resource Manager from a company with successful trade relations with countries in Central America noted that he was unable to see the development of the region without people having competence in another language and, in particular, the Spanish language. He observed that the senior and middle level managers of companies in the Spanish-speaking countries are often fluent in English. This gives them an advantage over their Caribbean counterparts who are unable to speak Spanish and so are unable to make the same inroads into the Spanish-speaking countries as their counterparts can in the English-speaking Caribbean.

The growth of business in Spanish is reflected in data obtained from the Ministry of Foreign Affairs in Trinidad and Tobago. In 2007, 20 542 persons from 18 Spanish-speaking countries visited Trinidad and Tobago for a variety of reasons including business; vacation and wedding/honeymoon, study and visiting relatives. Thirty-eight percent of the number visiting came for business and of those 40 percent came from Venezuela. Other countries from which

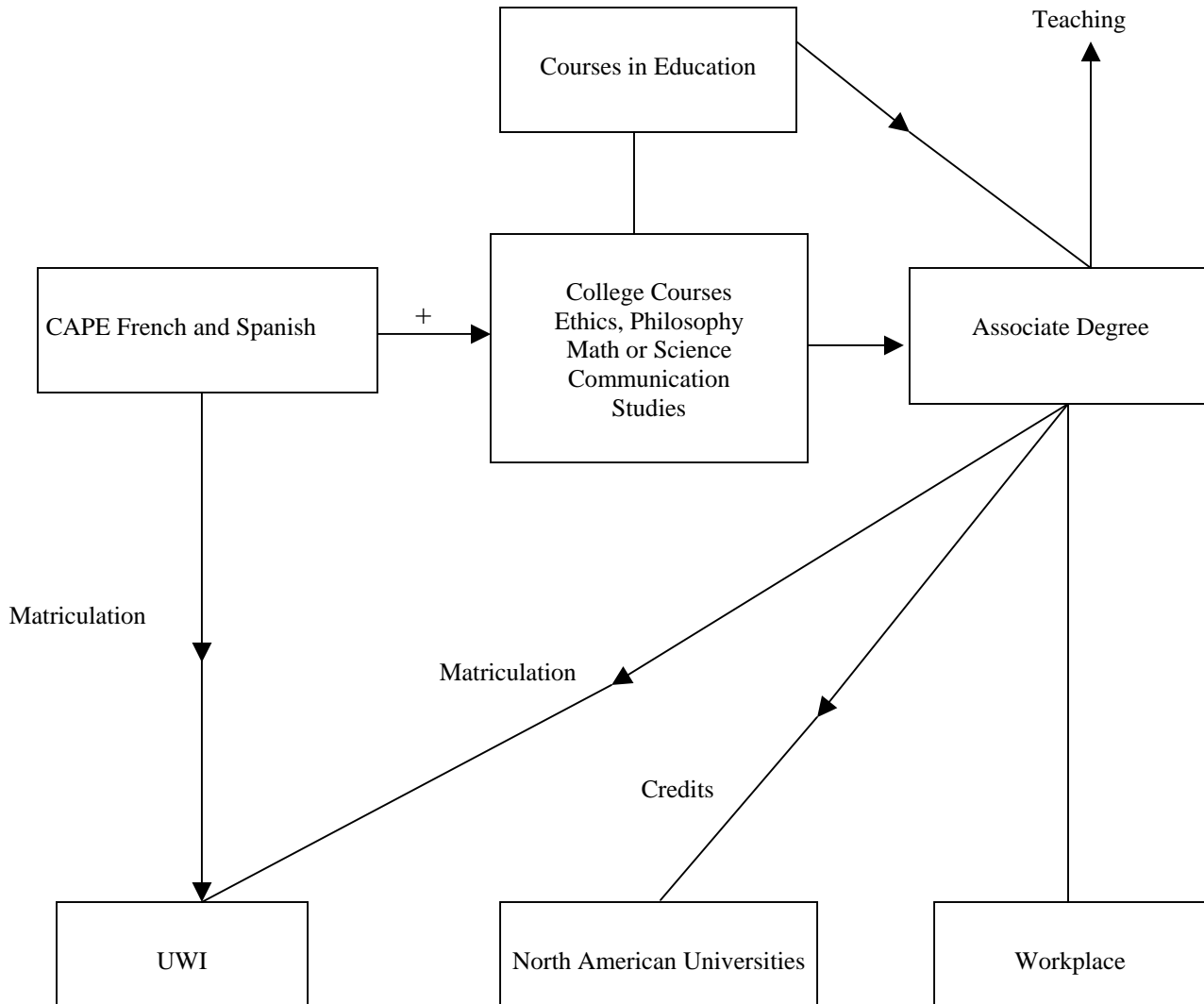
relatively large numbers came for business were Argentina, Colombia, Dominican Republic and Puerto Rico as shown in the diagram below.



Because of the development of trade relations with South and Central American countries, Spanish is given priority in schools and tertiary institutions. Most secondary schools in the region offer French and Spanish. Spanish is the more popular option as shown in data from the Caribbean Examinations Council (CXC) given above. The numbers for Spanish (even though they are larger than those for French) are still relatively low compared with entries in other areas, for example, Information Technology, English and Mathematics, taken for the CXC examinations for the CSEC and for CAPE. Educators and employers interviewed noted the need to begin the teaching of Spanish at the primary level and many of the countries have already begun to do so.

With respect to some of the Community Colleges in the countries in the Survey, most of the Colleges offer Spanish and French as part of the Tourism and Hospitality programme. A few Colleges offer German, Italian and Mandarin. The graduates of these programmes find employment in hotels and in other workplaces associated with the tourist industry. Some of the Colleges also offer an Associate Degree in Modern Languages by itself and developed by the College.

The T. A. Marryshow Community College has integrated CAPE French and Spanish in its Associate Degree. By doing this, students get the Associate Degree from the College and they also get CXC certification. The structure of the programme is schematised in the diagram below.



The graduates of Modern Languages Associate Degree programmes go into teaching mainly or continue their education to get a Bachelor's Degree. Many of the countries that now accept an Associate Degree for teaching are putting in place plans for raising the entry requirements to the Bachelor's Degree for teaching at the secondary level. Also, since the Associate Degree in Modern Languages is used for matriculation only at the University of the West Indies (UWI) and students have been getting exemptions for the Associate Degree in North American universities, many of the students leave the region for further study or switch to other areas of study within the region. The Associate Degree in Modern Languages is used mainly as a stepping stone to higher education. Therefore, the Colleges and the UWI and other universities in the region would need to work more closely together in the development and review of programmes in order to ensure a smooth transition from the College level to higher levels. This is a recommendation that has been made at various times. As early as 2000, it was articulated in the OECS Reform Strategy #48 which states:

*'Articulate programmes at tertiary level with those at the UWI and other universities within the Caribbean region. This would ensure that course designs, their scope and mode would be in keeping with acceptable university standards and facilitate accreditation when students opted to pursue further studies beyond the scope of the tertiary level'* (p 39)

Although there was general agreement among all the persons surveyed that Modern Languages were essential in the tourist industry, many of the Human Resource Managers from hotels said that Spanish or any other language is an asset and not a requirement for the workplace. When recruiting, a person with the required qualifications in the particular hospitality and tourism area and with competence in a second language would be selected over a person with the required qualifications only. Many of the hotels (except the Spanish hotels in Jamaica) will have a few people with competence in a second language and these persons are called on to assist with guests who do not speak English. One staff member from a relatively large hotel informed one of the consultants that the chef in one of the hotels in the chain spoke German and if at any of the hotels in that chain, there were German tourists who needed assistance, the chef was called to assist. Some of the large hotels (for example Sandals and the Super Clubs) have training sessions in Spanish for their staff. In the case of the tour operators, some of them have on staff, persons who speak Spanish. There is also a pool of people on whom they can call if they have on tour persons who speak any language other than English. One tour operator explained that even though visitors may be able to speak English, they feel more comfortable if the tour guide can also speak their language. In the large Spanish hotels in Jamaica, most of the senior and middle level staff are non nationals. In these hotel chains vacancies are filled by moving people from a hotel in one country to a hotel in another country. Local staff who gain employment and can speak Spanish are sometimes given an opportunity to move to a hotel in a Spanish-speaking country but this is not a widespread practice.

A concern raised by some tour operators and human resource officers from hotels is that the Spanish that is integrated into the Hospitality and Tourism programmes is mainly conversation at a superficial level. They recommended that the graduates of these programmes should be able to talk about the history and culture of the country in the second language that they studied. The

first draft of the Tourism Sector Plan for the Vision 2030 Jamaica National Development Plan noted the need for ‘...programmes to be developed and redesigned to include cultural awareness and foreign language skills for dealing with emerging Spanish and Chinese markets.’ In preparing the Draft Tourism Sector Plan, the Task Force reported in its analysis, weaknesses in the sector that included poor oral communication skills of staff and inadequate foreign language skills. There was also need for students to have more practice in the language in order for them to become fluent. A recommendation was for the Language programmes to have an attachment for students similar to what obtains in the practical offerings at the Colleges.

Businesses other than those in hospitality and tourism also require persons with language skills. The emphasis, however, is on the skills set required in the particular business. This points to the need in the very near future for a second language to be ubiquitous and, therefore, it would be taken for granted that a person employed in any business/ industry will have some level of competence in a second language. In Trinidad and Tobago, as in most of the other Caribbean countries, that second language is Spanish. Many of the Colleges have responded to the need for all students to be bi-lingual and are incorporating Spanish in business programmes and offering Spanish as an elective in all programmes. The increase in trade and foreign relations requires persons to be able to do translations and interpretations at seminars and conferences. The qualification requirement for these specialised skills is usually a first degree and experience in the use of the language. The businesses and government ministries requiring these specialised services are usually able to access these services from a pool of resource persons. The work with businesses in these specialised areas is sporadic and for many of the university graduates, their regular employment is in the Teaching Service.

The focus in most of the discussions was on Spanish. However, one Principal pointed out that she had had some difficulty getting a French teacher. Some employers pointed to the need for French with the Economic Partnership Agreement. Mandarin is also becoming important with the emerging Chinese market.

## **5.2 Information and Communication Technology**

Trends in the region and globally indicate a shift from agriculture-based industries to service and knowledge- based industries. This shift requires a swift adaptation of ICTs which according to the CDB (2007)

*‘.....are a critical part of the economic infrastructure that supports production; trade; investment; and capital flows and as such are means by which individuals; institutions; governments; and organisations network, undertake activities and participate in the development process at local; national; regional; and global levels. The key to the revitalisation of regional economies using ICTs will be in creating capacity and the means to implement and optimally deploy a nucleus of skilled human resources’ (p 15).*

Across the region, it is acknowledged that ICT is important for all occupations; and, the Colleges have heeded the recommendation given in the TLI Unit study that “ICT should be infused in all

studies as information literacy and fluency were seen as critical skills for the development of an Information Society'. (Barbados Summary Report, p 11)

At the secondary level, Information Technology at Technical Proficiency is a very popular subject taken for CXC examinations for CSEC. The entries for CSEC IT at the General Proficiency are much lower. One lecturer explained that the Technical Proficiency does not have much programming. Although the programming component at General Proficiency is very basic, many teachers themselves are not comfortable teaching the programming component of the syllabus.

Most of the Colleges offer an Associate Degree in ICT and also include ICT in other courses. This is in keeping with the need for all persons to have 'digital literacy' as explained in the draft Barbadian National ICT Strategic Plan (2205). The Plan states:

*'The concept of digital literacy encompasses the notion that a majority of any population in a knowledge-based or information society must have some basic ability to use the new technologies and frameworks in ways that add value to daily activities. What is more, having achieved a reasonable level of comfort in using new technologies/frameworks digital literacy suggests that people are then able to apply what they know in innovative ways that reap socio-economic and/or developmental gains'* (p 25).

The graduates of the Associate Degree programme generally get employment in a variety of businesses. However, the IT-specific occupations that are available for the Associate Degree graduates are at a relatively low level. One IT company said that even at a junior level some of the employees with Associate Degree qualifications were 'struggling'. On the other hand, one College lecturer noted that businesses are often not aware of the skills set of the Associate Degree graduates and they assume that the College graduates are unable to function at levels reserved for university graduates.

Many of the businesses surveyed indicated that they took students on attachment. However, in almost all cases surveyed there is no systematic process for obtaining inputs from businesses to inform the development and review of programmes. One lecturer explained that the programmes for attachments do provide some information on the needs of the workplace. Also lacking is any systematic way of finding out where the College graduates get employment; although some lecturers said that through informal contacts and in assisting graduates in some instances to get employment the College does have some idea of where the graduates are placed. The links between the Colleges and the businesses will need to be formalised in order to ensure that the College programmes are preparing students for the workplace. For example, one employer from an ICT company noted that the Colleges need to emphasise logic and reasoning which are essential in programming. He claimed that these areas should not be sacrificed for other skills that the students can acquire once they have a very good foundation in programming. Since many of the IT positions require a Bachelor's Degree, as in the case of Modern Languages, the colleges and the UWI and other universities will have to work on the content of programmes for articulation.

Graduates from the Colleges find employment in various places- banks, manufacturing, hotels, ICT companies, in government ministries and in the Teaching Service.

The tertiary level graduates who go to teach need to be able to teach programming since the teaching of programming has been noted as a concern by CXC examiners. One of the resource persons interviewed explained some of the advantages, as given below, of students having a working knowledge of programming, other than being able to write programmes.

1. **Students are able to develop problem-solving skills** because they learn to think in a logical step by step manner. In addition, there is a deeper understanding of the error messages that occur when using the computer. As a result students can more effectively engage in troubleshooting both hardware and software problems. The problem-solving skills that are learnt will be used in ‘every day’ situations.
2. **Students are more confident when using the computer and other related devices because there is more than a superficial understanding of the tools with which they are interacting.**
3. **Students can choose the most appropriate features of application software when creating and managing documents, and use them correctly and optimally.** A simple example is a spreadsheet in which the student is required to use one value in one situation and another value in another situation. The student who is knowledgeable in programming principles uses a selection function to achieve this, rather than hand-coding numbers on the spreadsheet which can result in a more complex and less robust document.
4. **Students can customize tasks to improve functionality** by writing macros (a series of program instructions held in a file). Macros create a more professional product, improve efficiency and reduce the risk of compromising the integrity of the data.

The positions identified for graduates in the workplace require some level of competence in programming since workers are sometimes required to customise and upgrade software. All businesses surveyed also need their employees at almost all levels to have competence in word processing and spread sheets.

Some of the businesses noted the need for the ICT to be combined with areas such as accounting; economics and banking since with the growth of ICT companies, auditing firms need to have on board, staff with expertise in ICT. The Colleges can position themselves to provide specialised ICT skills training for university graduates in various areas. It is not uncommon, for example, in Canada, for university graduates to go to the Community Colleges to acquire skills in practical areas in order to enhance their chances for employment.

### **5.3 Auto Repairs (Engineering/Skills training)**

This area of study is done mainly in the Community and Technical Colleges. The students surveyed noted that there was need for more practical experience. Unlike the situation in Modern Languages and ICT, the lecturers in Auto Repairs have a very good idea of where the graduates get employment. Like the other two areas surveyed, however, there is no systematic arrangement in place for tracking students after graduation. There is also need for a system to be put in place for labour market information that would inform the content of the programmes offered.

Some very good examples of institution - industry collaboration were seen in St Vincent and the Grenadines and in Trinidad and Tobago. Some of the students who graduated from the Auto Repairs programme at the Trinidad and Tobago National Energy Skills Centre were then taken on at Neal and Massy for further training. At the workplace they received vendor certification and continued working with the company or used their added qualifications to find work with other auto repair shops. Some also open their own garages. One employer noted that programmes in this area should include components for students to acquire computer skills so that they would be able to use the computer in doing their work. They need to be able to comprehend and use information electronically since most of the manuals for vehicle maintenance are now available on line and also updated on line. The students also need to have critical employability skills which the Trinidad and Tobago National Training Agency has identified as follows:

- collect, analyse and organise information;
- communicate ideas and information;
- plan and organise activities;
- work with others and in teams;
- use mathematical ideas and techniques;
- solve problems;
- use technology.

Programmes in Auto Repairs have a job attachment. Students benefit a great deal from these attachments since in many cases the institutions are unable to keep up with the changing technologies and provide up-to-date vehicles for the students to practise on. When the students go on attachment, they are exposed to new technologies and practices in the workplace. A concern that was expressed is the need for the College lecturers to also have industry experience in order to improve the instruction provided at the institutions. The Colleges would, therefore, benefit from alliances with the auto industry for resources and for the training of students and lecturers.

In addition to getting a College qualification, this area provides an opportunity for the Colleges to work with the National Training Agencies (NTAs) for the award of the Caribbean Vocational Qualification (CVQ). In 2007, the CARICOM Council for Human and Social Development (COHSOD) took the decision that CXC and the NTAs should work together for the award of the CVQ. CXC focuses on CVQs at Levels 1 and 2 mainly in secondary schools and the NTAs deal with higher levels and with certification in the work place.

The need for systemic links between institutions and businesses is emphasised throughout this report. This recommendation has been made before. Strategy 43 of the OECS Reform Strategy states;

*‘Mandate tertiary institutions to establish more intensive and extensive working relationships with the sectors, occupations and individuals they serve. Establish arrangements to ensure occupational standards are included in the curriculum’ (p 38)*

There are many advantages of using Labour Market Information to inform skills training. This is explained in the Caribbean Development Bank (CDB) in its Annual Economic Review 2007 as follows:

*‘Skills enhancement of the labour force is an important challenge which the region will have to address urgently, given the fact that current workers are on the front line of global economic competition. It should be emphasised, however, that the increased training, in order to be truly effective, cannot take place in an economic vacuum, but rather must be informed by the demands of the market. This can help to reduce the significant leakages to other countries. In addition, the insertion of a greater quantity of skills will impact economic growth and in so doing, in turn impact on the level of demand for skills’ (p 13).*

The efforts that are being made by the Colleges for working relationships with the particular businesses and industry are welcome and must be strengthened. With cooperation among ACTI members, ‘just-in-time’ Labour Market Information for programme development can be shared among institutions. This would facilitate skills development regionally and would be to the advantage of persons being trained within the CSME.

A summary of the findings in the various countries and the implications for programme development are given in Section 7.

## **SECTION 6: RECOMMENDATIONS**

### **General**

1. The Community Colleges and other tertiary level institutions need to position themselves to make inputs to policy decisions about national and regional development in order to develop and implement programmes that are aligned to developmental goals and objectives. One example of where the Colleges are responding to a national mandate is in Trinidad and Tobago with the expansion of tertiary level programmes in Spanish based on a national mandate for Spanish to be the foreign language given priority.
2. There is need for the Colleges to review their mission and short and long term goals (strategic plans) in view of the changing demands of the workplace, the composition and needs of the population that wish to pursue tertiary education and the comparative advantage of the Colleges in training persons at the para-professional level.
3. The purpose of programmes needs to be clearly defined since the focus would need to be different depending on the expected destination of the graduates.
4. Programmes that are preparing persons for the workplace need to be demand-driven and developed in collaboration with the particular industries. More use should be made of advisory committees that include people from business and industry. This recommendation was also made in the TLI Unit Study for St Vincent and the Grenadines (p 8).
5. There is need for the establishment of a simple system for Colleges to obtain 'just-in-time' Labour Market Information (LMI) in order to use the information to develop and review programmes.
6. The Colleges offer career guidance and this should be based on the knowledge, skills and attitudes expected of persons in particular areas in the workplace.
7. The Colleges have some idea of where their graduates are placed. However, the Colleges need to acquire a system for tracking students since this would help the Colleges to identify where the jobs are and also the skill and content areas needed for specific jobs.
8. The Colleges are well placed to be flexible and should review their programmes periodically to drop courses that may be out-dated and to include new courses that are required in the workplace and are demand-driven.
9. Many employers are requiring qualifications at the Bachelor Degree level (see also the TLI Unit study for Grenada, p 4). Programmes at the Colleges that are geared for persons who are continuing their education to university level should be developed with inputs

from the UWI and other universities in the region in order to ensure articulation of programmes.

10. All programmes should contain components for systematic instruction for students to acquire higher-order skills of problem solving, critical thinking and decision making.

### **Modern Languages**

11. The purpose of programmes needs to be clearly articulated, for example, whether it is as a foundation for further education or to prepare students for the workplace since programmes would need to be structured differently depending on the purpose.
12. The Colleges and the UWI need to work together on content and other programme requirements to enable better articulation of programmes in Modern Languages. The Associate Degree in Modern Languages by itself has some value but most employers (including Government for teaching and other occupations) are increasingly requiring persons with qualifications at the Bachelor's Degree level.
13. The Colleges need to establish a system to share best practice for programme enhancement. Two examples of best practice are the inclusion of 'themes' in the Modern Languages Associate Degree in Barbados which provides opportunity for students to use literature in the particular language; and, the proposed inclusion of an 'immersion' component in programmes offered by the College of Science, Technology and Applied Arts of Trinidad and Tobago (COSTATT).
14. The Colleges need to market competency in a second language as part of its programmes for the various occupations especially in Tourism and Hospitality (many employers in this area said that they did not require a second language but that it is considered an asset).
15. Colleges can strengthen their entrepreneurship activities by customising and delivering language programmes on site, if necessary, to middle and senior level managers in businesses that are expanding operations in non English-speaking countries.
16. Facilities for language learning in some of the Colleges need to be upgraded. (Excellent facilities are available in Barbados, Grenada and St Maarten).
17. Through partnership arrangements with businesses and industry, occupations that require qualifications in Modern Languages should be identified and career guidance provided based on up-to-date information about occupations and the skill requirements.
18. Modern Languages programmes should include, in a systematic way, components that provide opportunities for students to practice speaking the language.

## **Information and Communication Technology**

19. The Colleges need to strengthen its ICT components in all programme offerings since ICT is now used in all occupations and is essential for study at all levels.
20. There needs to be collaboration among the Colleges to ensure common understandings about standards, content and competencies in programmes that are for Certificate, Diploma, Associate Degree and Bachelor's Degree.
21. The Associate Degree programmes should contain options for those going on to further education and for those who would be going to the workplace.
22. The Colleges and business partners need to work together to ensure that the content of programmes is relevant to the needs of the workplace and to get clarification of the job requirements for various ICT positions in the workplace.
23. The system of placing students on attachments should also be used to collect information about workplace requirements and job availability for graduates.
24. Programming should be emphasised in ICT courses since even if students may not be planning on being programmers, the programming component enables them to develop logic, reasoning and problem-solving skills.
25. Programmes that are preparing students for the workplace should take into consideration the workplace needs for areas such as Networking; Systems Administration; Data Base Administration and Management; Management of Information Systems; Programming; and, Hardware Maintenance.

## **Auto Repairs**

26. Colleges need to ensure that the facilities being used are up to date and/or there are arrangements for simulation exercises or to share facilities at the workplaces for training.
27. Colleges need to provide opportunities for staff to gain exposure and experience in the use of new tools and equipment used in the workplace.
28. Colleges need to include elements of entrepreneurship in Auto related programmes since some graduates go on to open their own business.
29. The pre-requisites for the programme need to be upgraded in some cases, or courses incorporated within the Auto related programme to ensure that students have literacy, numeracy and ICT skills. They also need to have Physics content. An example of best

practice is the programme at Campden Park used as a foundation for programmes at the Community College in St Vincent and the Grenadines.

30. The length of attachments and the number of attachments need to be reviewed so that students get maximum benefit from industry experience.
31. The programmes currently being offered can be aligned with the occupational standards approved by the CARICOM Council for Human and Social Development (COHSOD) for the award of the Caribbean Vocational Qualifications by the CXC and the National Training Agency.
32. Colleges need to continue to offer courses for Auto maintenance and repair. However, there is need to include Auto Electronics since this component is critical for the modern workplace.
33. Colleges can make use of opportunities to offer evening and/or on-site programmes to persons in the workplace who need to get certification in this skill area.

## **SECTION 7: FINDINGS AND IMPLICATIONS FOR PROGRAMMES**

The findings and the implications for programme development and review are given in Table 6 below. Many of the actions recommended are already being taken by the Colleges. In some cases these actions need be more systematic, better structured and strengthened.

**Table 6**

<b>Findings of the survey</b>	<b>Implications for programme development and review</b>
<p><b>General</b></p> <p>1. Labour Market Information should be accessed and used in order to ensure that programmes are demand-driven.</p> <p>2. Some businesses and industries are unaware of the knowledge, skills and competencies of Associate Degree graduates in the three areas identified.</p> <p>3. Students need to improve their skills in communication, working individually and in a team, taking initiative, decision-making and problem-solving.</p>	<p>Colleges need to put in place systematic procedures for strengthening inputs from Advisory Committees and establishing links with businesses and industry in order to align programmes with the needs of the labour market.</p> <p>Colleges need to meet with employers to provide information on the content of the Associate Degrees and market these programmes so that all stakeholders are aware of the value of the College programmes.</p> <p>Colleges need to provide systematic instruction for students to develop the skills identified.</p>
<p><b>Modern Languages</b></p> <p>4. In most countries the Associate Degree is used mainly for teaching.</p> <p>5. However, in most countries, there are plans to raise the qualifications requirement for teaching to the Bachelor's Degree. Also, many employers of persons with qualifications specifically in Modern Languages said that the Bachelor's Degree is the preferred qualification.</p>	<p>Collaborate with the Ministry of Education to determine the content of the programme and the level in the Teaching Service for someone with an Associate Degree.</p> <p>Also, work with the UWI and other Universities to ensure that the Associate Degree programme articulates with the higher level programmes.</p>

<p>6. Students need more practice in speaking the language.</p> <p>7. Include a Modern Language component in all programmes including business programmes.</p> <p>8. Graduates in Hospitality and Tourism need to have more than basic conversation skills in the Modern Language.</p> <p>9. Senior and middle level managers need to be able to function in a Modern Language (Spanish mainly).</p>	<p>Include within the Associate Degree programme, opportunities such as travel to a country where the Modern Language is a first language, interaction with native speakers at the College and attachments to relevant workplaces (for example, embassies, language associations, if possible).</p> <p>Colleges are already doing this and should continue the practice and encourage more students to use the opportunities provided to learn another language.</p> <p>Widen the vocabulary and content of the Modern Languages component of the Hospitality and Tourism programmes to include areas like the culture and geography of the particular country.</p> <p>Develop strategies for providing appropriate training and certification at convenient times and possibly at the worksite.</p>
<p><b>Information and Communication Technology</b></p> <p>10. The Labour Market needs persons for a range of posts such as Networking, Systems Administration, Database Administration and Management, Management of Information Systems, Programming, Hardware Maintenance, Data Warehousing, Graphic Design, Web Development and Maintenance, Desktop Publishing and as Business Analysts.</p> <p>11. The Associate Degree is accepted for some of these posts and for others (especially in the ICT specialised businesses) employees must have at least a Bachelor's Degree.</p>	<p>In order to ensure that the ICT Associate Degree is aligned to the workplace needs, it would be necessary to include, in the programme development and review processes, persons from ICT businesses and industry. They will be able to make inputs to the curriculum and also clarify the levels in the industry and where the Associate Degree graduate can fit.</p> <p>The Colleges would need to include personnel from the UWI and other universities in order to ensure articulation of the Associate Degree programme with the higher level programmes.</p>

<p>12. ICT graduates need to have skills in programming, logic, reasoning and problem-solving.</p> <p>13. Vendor certification would enhance graduates' chances for employment.</p> <p>14. Students need to have knowledge of ICT security issues.</p> <p>15. Students need more hands-on experience.</p> <p>16. ICT, word processing and spreadsheets, in particular, are required in most areas of the workplace.</p> <p>17. Lecturers need to have some industry experience.</p>	<p>Colleges can provide more opportunity for students to acquire skills in these areas.</p> <p>Colleges will need to examine the feasibility of offering vendor certification and establish the required arrangements with vendors in order to offer certification in areas such as MCSE, CISCO and ORACLE.</p> <p>College can consider including ICT security as a component of the Associate Degree programme.</p> <p>Provide, wherever possible, more opportunity for students to use computers and to obtain attachments in workplaces where they will be able to get hands-on experience.</p> <p>Strengthen IT offerings in all College programmes and include word processing and spreadsheets at appropriate levels in the various programmes.</p> <p>Establish procedures for ICT lecturers who have not had any industry experience to gain such experience, for example, through attachments and partnership arrangements with ICT businesses and industry.</p>
<p><b>Auto Repairs</b></p> <p>18. Areas that are needed in the workplace include- auto repairs, auto body work, auto body spray painting, auto electricals, auto maintenance and service overhaul, auto air conditioning, auto vehicle engineering, auto transmission, welding, machining and fabrication, small engines and diesel engines.</p>	<p>Colleges will need to continue, in a systematic way, the practice of including persons in the auto industry in the development and review of programmes in this area in order to structure programmes to include the areas mentioned.</p>

<p>19. There is need for students to have knowledge and skills in communication, mathematics, ICT and they also need to have some Physics.</p>	<p>These components will be needed either as entry-level qualifications or as part of the College programme.</p>
<p>20. Many graduates become self-employed.</p>	<p>Students will need systematic instruction in order to develop entrepreneurial and customer service skills.</p>
<p>21. Programmes should take account of issues related to the environment, energy efficiency and safety in the workplace.</p>	<p>Include in the College programmes opportunity for students to discuss these issues and to obtain the required knowledge and skills in order to take account of these issues in their work.</p>
<p>22. Students need more practical work.</p>	<p>In the development and review of the programmes, there would be need to determine how students can get more hands-on experience both at the Colleges and at the workplace through structured partnerships with the industry.</p>
<p>23. Lecturers need to have exposure to industrial practices.</p>	<p>Provide opportunity for the lecturers to get industrial experience.</p>
<p>24. Upgrade workshop facilities.</p>	<p>As part of the review and development of programmes, there could be a determination of the minimum requirements for modern workshop facilities.</p>
<p>25. Examine the Occupational Standards for this area to determine any alignment with the CVQ.</p>	<p>The College programmes could be aligned with the competencies for the Occupational Standards in this area so that students can also get the CVQ.</p>

## **SECTION 8: COUNTRY REPORTS**

There was a great deal of commonality in the responses from students, lecturers and employers for all three areas in the ten countries. The common areas are summarised below.

Points from all three areas that are common to all countries surveyed.

### **1 Secondary level students**

- 1.1 The reasons given for their programme of study were for personal development; for further studies; to meet scholarship requirements; and, for employment.
- 1.2 Those who wanted to continue their studies said they expect to go to the Community College or the UWI because the cost is affordable; the institution is close to home; and, the qualifications would improve their chances for employment.
- 1.3 They noted that difficulty in finding employment would be due to employers needing higher qualifications and not many jobs available.

### **2 Tertiary level students**

- 2.1 The students were enrolled in several programmes for CXC CAPE, Certificate, Diploma and Associate Degree programmes.
- 2.2 Their main reasons for doing programmes at the institutions were for employment and further studies.
- 2.3 Those who wanted to continue their studies expect to do so at the UWI or at an overseas university.
- 2.4 They said that qualifications from the UWI or other university would improve their chances for employment.

### **3 Tertiary level lecturers**

- 3.1 The lecturers agreed with the reasons students gave for studying the subject.
- 3.2 They had no formal system in place for tracking students to find out where they are placed after they graduate. However, with very small classes and small populations, the lecturers do get information about some of their graduates.
- 3.3 In all cases the lecturers did not use LMI to inform programme review and development. In some cases there were advisory committees.
- 3.4 Qualifications in the three areas were used for matriculation to the UWI. In some cases lecturers mentioned that there were agreements with North American universities for students to get credits in the universities' programmes.

## **4 Employers**

- 4.1 Employers accepted a range of qualifications.
- 4.2 They were, generally, satisfied with the technical knowledge of graduates but they commented on the need for improvement in communication, interpersonal, decision-making and problem-solving skills.
- 4.3 Many of them provided attachments.
- 4.4 Most of them said that they were never consulted by the Colleges with respect to programme development and review and would be willing to contribute to these processes if required.

Common points in all countries in subject-specific areas

### **Modern Languages**

- (a) The secondary students who responded were doing CSEC Spanish mainly. Few were doing French. The relatively low numbers for French are reflected in the CXC regional data given above.
- (b) The tertiary level students who responded were enrolled in programmes for CAPE, or the College qualifications - Certificate, Diploma or Associate Degree.
- (c) Both secondary and tertiary level students noted that employers would want graduates to have good communication skills – speaking and writing the language.
- (d) Both secondary and tertiary level students said that they needed opportunity within their study programme to practise speaking the language. (One teacher explained that the large classes for languages are responsible for the little time given to practising speaking in class).
- (e) The tertiary level lecturers and the students noted that possible places for employment of Modern Language graduates are in the hotel and tourist industry and in the Teaching Service.
- (f) They also noted (and this was confirmed by employers) that there were not too many places employing persons specifically with Modern Languages qualifications.
- (g) Most employers said that the language qualification is an asset when looking for employment especially in the tourist industry.
- (h) Some employers need specialist skills (for example, translating documents) from time to time and they call on people who have these skills for particular tasks rather than have someone on staff for tasks that are needed only periodically.
- (i) Most of the Modern Language Associate Degree graduates go into teaching. However, they would soon need additional or higher level qualifications as most countries raise the entry requirements for teaching at the secondary level to a Bachelor's Degree.

## **Information and Communication Technology**

- (j) Most of the secondary school students who responded were enrolled in the CSEC IT Technical Proficiency programme. Very few were doing the General Proficiency. This is reflected in the CXC regional data given above.
- (k) The tertiary level students who responded were mainly doing CAPE IT or CAPE Computer Science or the Associate Degree programme.
- (l) Students noted that employers would need people with skills in Word Processing and Spreadsheet.
- (m) Many employers noted that many ICT positions require a Bachelor's Degree.
- (n) Content areas considered important for the workplace are - Network Administration; Systems Administration; Management of Information Systems; Database Administration; Hardware Maintenance; Programming; and Web Design and Development.

## **Auto Repairs**

- (o) The responses were mainly from tertiary level students who were enrolled in Certificate programmes. In one case, the students were enrolled in an Associate Degree programme.
- (p) The students said that they needed more practical activities.
- (q) In many cases the workshops needed to be upgraded.
- (r) In most cases, students went on attachments. The need was expressed for the instructors to have industry experience also.
- (s) Students in this area need to improve literacy and numeracy skills and must also have some knowledge of Physics.
- (t) The areas that are needed in the workplace are for auto electricians; auto repair; auto body work; auto mechanics; servicing and overhaul; small engines; diesel engines; fabricating, machining; and welding.

## **ANTIGUA AND BARBUDA**

### **MODERN LANGUAGES**

#### **Responses from secondary school students**

Nine secondary students responded to the questionnaires. They were all enrolled in CXC CSEC Spanish programmes. They said that they were doing the subject to obtain skills for personal development, to meet scholarship requirements and to continue studies in Spanish. They noted that 'speaking and writing' were essential for employment mainly in the hotel and tourism industry. They recognized that workplaces needed qualifications higher than those obtained at secondary level.

The institutions where they wish to continue their studies are; (given in order of priority) - a university outside the region; the Community College; and, the University of the West Indies. The reasons for these choices are qualifications would improve employment chances and cost is affordable. They noted that the Spanish courses should have more opportunities for them to practice the language.

#### **Responses from tertiary level students**

The College students indicated that they were in programmes for CAPE. Other programmes available at the tertiary level are for Certificate, Diploma and Associate Degree.

The reasons that students gave for doing the Modern Languages programme were to gain employment; for further studies in the languages; and, for personal development.

The skill areas, in terms of level of importance, to prepare the students for employment were; speaking the language, translating, preparing papers and technical documents and writing letters and short reports.

The students said that they are likely to obtain employment in the Hotel and Tourist Industry, in Government Ministries and in the Teaching Service.

The students rated the knowledge and skills of the programme as being excellent or very good for them to be employed.

The students indicated that they needed to have more interaction with Spanish speakers and better career guidance.

They were confident in finding employment with their qualifications because the language qualification would give them an advantage when they seek employment.

The students identified reasons for having difficulty in finding employment with tertiary level qualification in Modern Languages as: insufficient businesses employing persons with these qualifications; and, insufficient number of positions in work places for person with qualifications in Modern Languages.

The students agreed that they are likely to continue their studies in Modern Languages because businesses require higher qualifications.

Their choices of institutions to study are either the University of the West Indies (UWI) or overseas universities. The reasons given for choosing a university are; qualifications from the institution will improve employability chances; and, content of the institution's programme is appropriate for personal development.

Students were of the view that additional courses especially in the Business areas can enhance their chances for employment.

### **Responses from tertiary level lecturers**

The Antigua State College offers CAPE French and Spanish. There is no system to track students. However, graduates are most likely to obtain employment in the Teaching Service, Government Ministries, the hotel industry, and the airline industry.

The lecturers agreed with the students that barriers that affect students from finding employment are insufficient businesses employing persons in these areas; and, insufficient number of positions in workplace for persons with qualifications in Modern Languages.

Modern Languages are taught in combination with several other subjects that include the Sciences or other Arts subjects. No input is obtained from the public or private sector to inform the development or review of the Modern Languages programmes.

The CAPE qualifications are used mainly as entry requirements for the Bachelor's Degree at the University of the West Indies.

### **Responses from Employers**

Eight employers including the Ministry of Foreign Affairs responded. The qualifications accepted in the workplace were Certificate, the Associate Degree and the Bachelor's Degree. The languages most frequently needed are Spanish and French. Occasionally there is need for German, Italian and Mandarin. The skills needed in the workplace are communication (speaking and writing) and translating.

Employers noted that where there were few vacancies, these positions may not be filled because of slow growth in business or difficulty in finding persons with the required qualifications. Employers noted that graduates have the technical knowledge required in the workplace but need

to improve skills in problem-solving, decision-making and their ability to use initiative. Few employers noted that there would be increasing need for persons with competence in languages such as German, Italian and Mandarin. The businesses surveyed indicated that they were not consulted about programme review and development and they were willing to contribute to these processes and to provide attachment for students, if necessary.

### **Ministry of Foreign Affairs**

The Ministry employs between 1 to 10 persons with qualifications in Modern Languages. The qualifications required for posts that specifically require Modern Languages are Bachelor Degrees. The language most frequently needed is Spanish. French and German are needed occasionally. The content/skill areas that are frequently needed are everyday communication (speaking and writing); writing briefs, technical papers and other documents. Skills that are needed occasionally are for translating.

There are no current vacancies. The Ministry is satisfied with the technical knowledge of the graduates. The Ministry is expected to require between 1 and 10 persons with Spanish qualifications in the next three years. The Ministry also provides attachments for students.

## **INFORMATION AND COMMUNICATION TECHNOLOGY**

### **Responses from the tertiary level students**

There were 16 responses from the Antigua and Barbuda International Institute of Technology and 12 from the Antigua State College. The institutions offer a range of programmes for CXC CAPE Certification, Computer Science/IT Certificate, Computer Science/IT Diploma and Computer Science/IT Associate Degree.

The students rated the following as very important reasons for doing IT/Computer Science: for personal development; for further studies; and, for employment.

The skill areas identified by the students as very important in preparing them for employment, other than using Office Productivity tools are: Network Administration; Hardware Maintenance; Systems Administration; Management of Information Systems and Database Administration and Management.

The students indicated that they were most likely to find employment in the following places: financial institutions; the Teaching Service; the Tourist Industry; IT specialized firms; and, the government service. The students rated the programme as either excellent or very good. One student said that the programme is –

***“... up-to-date with the latest development in technology”***

Some of the challenges the students identified in their programmes are -

*“..... the resources are frequently in use making it difficult to access the computers on a needs basis”*

*“more practical work needs to be done”*

Many of the students said that they were confident that they would find employment after they graduate.

Any difficulty in finding employment would be because - insufficient businesses employing persons with ICT qualifications; insufficient number of positions in businesses employing persons with qualifications in these areas; and, the workplaces need qualifications higher than those offered at the institution.

Most students said that they were very likely to continue their studies in ICT. The reasons which they gave included – IT is used in every profession, the subject area is always changing and there is need to be up to date with the improvements in technology.

Those who expressed interest in continuing their studies said that they expected to do so at a Technical Institute or overseas university. Some of the universities that were named were DeVry Institute, ITT Technical Institute (USA), Berkeley, St. Leo’s University. A small number of students wanted to do a Degree programme on-line.

The importance for the choice of institution is as follows: qualifications from the institution will improve employment chances; cost is affordable; and, the content of the institution’s programme is appropriate for personal development.

The students identified business-related and science-related courses for inclusion in their ICT programmes in order to improve their chances for employment.

What students liked best about their programme included – Graphic Design and Programming in C. Their areas of concern were that they did not get enough practical work and that they needed to use more up-to-date equipment in their programmes.

### **Responses from tertiary level institution lecturers**

There were three responses from the Antigua State College and four from the Antigua and Barbuda International Institute of Technology. The programmes at the College were for Diploma, Certificate, and Associate Degree and CXC CAPE certification. Antigua and Barbuda Institute of Technology offers Associate Degree and Certificate programmes.

On an annual basis the enrolment is estimated at 780 – 815 students in various programmes. The lecturers agreed with the reasons given by students for taking programmes of study; for further studies in this area; to obtain employment; and, for personal development. There was no formal system for tracking students after they leave the institution. Also, Labour Market Information was not used at the institutions to inform programmes.

The lecturers said that the students are likely to obtain or seek employment at financial institutions; insurance companies, teaching, Government Ministries, IT specialised companies, hotel and airline industries.

The lecturers identified the following barriers that affect the ability of the graduates to find employment, as follows: insufficient businesses employing persons with qualifications in this area; and, some workplaces need qualifications higher than those offered at the institution.

Graduates should be able to obtain employment in areas such as Hardware Maintenance, Network Administration, System Administration, ICT/Computer Science Teaching, Web Administration, Programming, and as Systems Analysts.

The lecturers noted that additional courses especially in the areas of Business can enhance the students' chances for employment.

### **Response from the Employers**

Eleven employers responded to the questionnaires. There were two from Government, one from an IT Company, one from the Telecommunication company, two from Automotive companies, two from quasi- government institutions, two from financial institutions and one from the Tourism sector.

The employers said that the qualifications in ICT that are most often required for posts in the workplace (in order of priority) are the Bachelor's Degree, CAPE/ A-Level, CXC-CSEC/O Level, followed by Associate Degree. It must be noted that two employers indicated that preference is also be given to persons with vendor certification.

The employers further listed the content/skill areas that are frequently needed in the workplace as Word Processing, Spreadsheets, Desktop publishing, Hardware Maintenance, Network Administration, System Administration, Database Administration, Programming/Software Development and Management of Information Systems.

The employers are generally satisfied with the technical skills and knowledge that the tertiary level graduates in ICT possess.

The employers are reluctant to invest in additional staffing during the current global crisis; therefore, in almost all cases, employers said that company's current capacity will be able to meet anticipated needs.

With reference to job opportunities, the majority of the employers indicated that there are no job opportunities available even though some of them indicated that there were vacancies. Six of the employers indicated that there is a projected level of growth. Some of the areas that would be available are for: Help Desk Assistant, Software Developer/ Engineer, Web Developer, Network Engineer, and Technician.

Problem-solving skills, decision making skills, communication skills, interpersonal skills, the ability to work in a team and to work individually, and the ability to take initiative were all identified by the employers as areas for improvement.

The employers noted that they are seldom consulted by the institutions but if there is a need they would be willing to participate in the curriculum development and review processes at the tertiary level. The employers are also willing to provide job training through attachments.

Some of the positions in the labour market and the qualifications required are given in the table below.

<b>ICT Positions</b>	<b>Level of Qualifications most suited</b>
Software Development	Associate Degree/ Bachelor Degree in IT/ Computer Science
Web Developer	Associate Degree/ Bachelor Degree. IT Professional certification – Certified Internet webmaster
Data Administration & Management	Associate Degree/ Bachelor Degree in IT/Computer Science Professional IT Certification like MCDBA
Technician	A level/ Diploma/ Associate Degree in IT/ Computer Science
Network Engineer	Bachelor Degree/ Masters Level in an IT- related field
Network Administrator	Associate Degree in Computer Science/ Professional IT Certification like MCSE, CCNA
Application Administrator	Professional IT Certification
System Administrator	Professional IT Certification
Database Analyst	Professional IT Certification
IT Manager/ Assistant IT Manager	Bachelor Degree/ Masters Degree in IT/ Computer Science with Managerial and Project Management Skills

## **AUTO REPAIRS (ENGINEERING/SKILLS)**

There were ten responses to the questionnaires for Auto Repairs (Engineering/Skills) for Antigua and Barbuda. Responses were received from five employers, four tertiary level students, and one tertiary level lecturer.

### **Response from tertiary level students**

The programme offered at the Antigua State College includes: Motor Vehicle Engineering, Auto Repairs (general), Auto Body Works, Spray Painting, Auto Electricals, Auto Maintenance Servicing and Overhaul, Welding, and Auto Air conditioning. The institution offers programmes for a Diploma.

The reasons students identified for doing the programme were for employment; to obtain knowledge and skills for personal development; for further studies; and, for self-employment.

The students are confident that they will obtain employment with the qualifications from the College.

Students indicated that they would most likely obtain employment with - Auto Mechanic shops; Auto Dealers; Government Ministries; and the Airline industry. Some said that they plan to be self-employed.

The students rated the programmes of study in relation to equipping them with the knowledge and skills required in the workplace as very good or excellent. The students called for the need to increase the practical training; and, improve the theory component.

The students who indicated that they are likely to continue their studies want to do so at the UWI or at a Technical Institute overseas. The reasons given for their choice is that the qualifications from the institution will improve their employment chances.

The students liked hands-on activities and would welcome more practical experience especially during the first year.

### **Response from tertiary level lecturer**

The lecturer is in agreement with the reasons that the students gave for doing Auto Repairs: for employment and for further studies. The lecturer said that an informal system is in use to track students and to place students for attachments in their workplace.

The lecturer noted that Auto Maintenance, Servicing and Overhaul and Motor Vehicle Engineering were important course components for employment.

The lecturer also identified courses in Mechanical Theory, Mathematics, Physics, Communications, Auto Body and Welding as related areas for the Auto Repairs programme.

There is no Labour Market Information that is easily available to inform programmes in this area. The Certificate programme is linked to City and Guilds certification.

### **Response from Employers**

Five employers responded to this questionnaire.

They all identified the following content skills/areas that are most needed as follows:

- Auto Repair;
- Auto Body Work;
- Auto Mechanics;
- Auto Electricals;
- Auto Air-conditioning;
- Auto Maintenance, Servicing and Overhaul;
- Spray painting.

All employers indicated that the reason for not having any current vacancies is due to slow growth in the business sector.

Graduates' skills in problem-solving, decision-making, communication, interpersonal relations, ability to work in a team or to work individually, and the ability to take initiative were identified by the employers as areas for improvement.

## **INTERVIEWS AND FOCUS GROUP DISCUSSIONS**

### **Modern Languages**

The College offers CAPE French and Spanish and would like to include, in the language programmes, courses in occupational areas, but is constrained by the time needed for CAPE Units 1 and 2 in the two year period. Employers who were interviewed noted that competency in a language, Spanish in particular, is an asset and not a requirement for the workplace. There is need for everyday communication in Spanish by many workers, for example, in the Public Service especially, since a part of the population of Antigua and Barbuda speaks Spanish as a first language.

## **Information and Communication Technology**

Three institutions: the Antigua State College; the Antigua and Barbuda Institute of Continuing Education (ABICE); and the Antigua and Barbuda International Institute of Technology (ABIIT) offer programmes in ICT. As for French and Spanish, the College lecturers find little space to include any other courses in the ICT programmes. However, all programmes have an ICT component for students to acquire some basic skills that are needed in all subject areas and for entry-level employment in most cases.

Employers were satisfied with the technical knowledge of students. However, they recommended the inclusion of programmes for vendor certification at institutions. Positions for ICT qualifications that are usually needed in the workplace are Network Administrator; Data Base Development and Management; and Web Design and Development. In addition to the technical knowledge, employers asked that attention be paid to the development of communication, problem-solving and decision-making skills.

## **Auto Repairs**

The Antigua State College offers an Associate Degree in this area. The programme components include Auto CAD; Chassis Systems and Engine Systems. In order to improve the students' chances for employment, the students also need to have skills for tasks requiring diagnostic work and trouble-shooting. Occupational areas in this field are for Transmission Repairs; Auto Electricals; Auto Air Conditioning; and Auto Repairs and Maintenance of Out - Board and In-Board motors and Machining and Fabricating. Employers stressed that courses should include safety in the workplace.

## **BARBADOS**

The areas selected for the survey in Barbados were Modern Languages and ICT.

### **MODERN LANGUAGES**

There were no responses from secondary level and tertiary level students. Two Community College lecturers responded to the questionnaire and one gave information during a telephone interview. Eleven employers responded to the questionnaire.

#### **Responses from the college lecturers**

The Community College has a Language Learning Centre which has been in existence since 1981. The College acquired a new Language Learning Centre which was opened officially in March 2009 and is expected to be fully functional by 2010. The College offers French, German, Italian, Mandarin and Spanish for Certificate and for the Associate Degree. The data for 2008 show approximately 40 students for each of the Certificate and the Associate Degree programmes in French and Spanish; four Certificate students and approximately 35 students for the Associate Degree in Italian; and, five Certificate students and approximately 25 students for the Associate Degree in German. Most of the students do the language for employment. The language courses are linked to areas of employment such as Business and Tourism and Hospitality. There are Language programmes in Spanish and French with 'themes' which allow the students to study the language in more depth; the graduates from this programme usually go on to further education for a Bachelor's Degree. There is no system in place to find out where the students get employment. However, informal sources indicate that they are most likely to get employment in the teaching profession and in the hotel and tourist industry. There is also no formal system in place to obtain and use labour market information in programme development. However, there are Advisory Committees for several subject areas. The membership of these Committees includes persons from business and industry and they make inputs to curricula in order to ensure that the programmes are aligned to the needs of the labour market.

The factors that can affect the ability of graduates to find employment were rated as follows:

- 1 other skills/subject areas are required with Modern Languages in the workplace;
- 2 insufficient number of positions in the workplace for persons with qualifications in Modern Languages;
- 3 insufficient businesses employing persons in these areas;
- 4 workplaces need qualifications higher than those offered by the College.

The Associate Degree is used for matriculation only to the University of the West Indies. However, graduates have been able to get exemptions and credits in higher level programmes at North American universities.

### **Responses from Employers**

Eleven employers (three from the Diplomatic Service, including Foreign Affairs; three from the Tourism sector; four from financial institutions and business; and, one from a language training centre) completed the questionnaires.

The qualification most frequently needed in the workplace in Modern Languages is the Bachelor's Degree followed by the Associate Degree; and the language that is most frequently needed is Spanish, with communication – writing and speaking, rated as the most highly valued skills.

The number of vacancies listed and the number of persons that would be required in the near future were given as less than ten. The main reason given was slow growth in the business sector. However, the employers pointed to jobs that require (or would require) competence in a Modern Language. These jobs include: Business Development Manager; Customer Service Adviser; Business Development and Research Officer; Guest Service Agent; Sales Manager; Guest Services Manager; Restaurant Hostess and Restaurant Team members.

Employers were satisfied with the 'soft skills' of the tertiary level graduates. The areas for improvement were in communication, interpersonal, decision-making and problem-solving skills.

Four employers reported growth but the number of persons that would be needed was small. For growth in business, the employers noted that persons with qualifications in French, German and Spanish would be required.

Six employers said that they were never consulted in order to make inputs to tertiary level programmes. They have indicated a willingness to do so if asked. Five provided attachments for students.

Most of the employers reported that qualifications in Modern Languages are an asset when a graduate is looking for employment. Further, persons with qualifications in Modern Languages should also have done courses in areas such as Geography, History and Politics.

## **SUMMARY OF DISCUSSIONS FROM INTERVIEWS**

The growth of any modern business would require workers to be competent in a foreign language and especially in Spanish. Businesses are looking to Central and South America for business and trade. According to one employer, South America is a “sleeping giant” and the region has only just scratched the surface in terms of business with the Spanish-speaking countries (Portuguese in the case of Brazil). Most of the people from Spanish-speaking countries also talk English and contract documents coming from these countries are in English. Also, the Spanish speakers come to the Caribbean and can fit easily into work and business in the region. It is not so easy for senior and middle level managers to do the same in the Spanish-speaking countries because of their inability to speak Spanish fluently.

The acquisition of the Modern Language Learning Centre and the work being done by the College in its language programmes were welcomed. However, there is a need for students to go on to higher level qualifications than those offered by the College. The College was also seen as a centre of excellence for short intense courses that could be offered at the College or at the workplace for middle and senior level managers. The College already responds to some of these needs and may be called on to do more, as senior persons in business with qualifications in various areas are finding that they need to have competence in Spanish or another language for their business operations.

## **INFORMATION AND COMMUNICATION TECHNOLOGY**

Responses were obtained from secondary level students from one secondary school and from employers. No responses were obtained from tertiary level students and lecturers since they were on vacation.

### **Responses from secondary level students**

Fifteen secondary level students from one school doing Information Technology (IT) Technical for the CXC CSEC examinations responded. They stated that they were doing IT Technical mainly for personal development; to continue studies in IT; and, to obtain employment. The content areas that they considered most needed for employment are Word Processing and Spread Sheets. They identified banks and tourist - related industries as places where they can get entry-level employment. They also noted that most businesses required higher level qualifications.

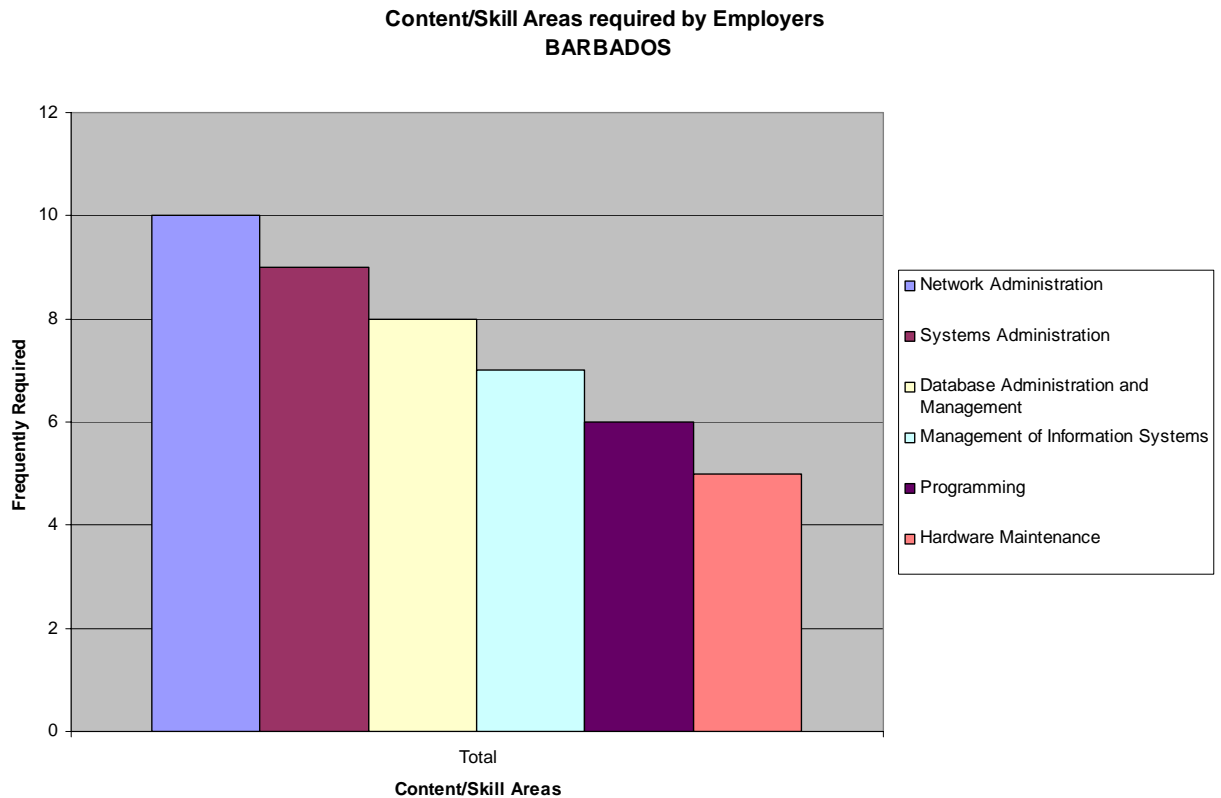
Most of the students from this school indicated that they would like to continue their education at the Community College. The reasons that they gave were because the qualifications from the College would improve their chances for employment, the cost is affordable and the institution is close to home.

## Responses from employers

Fourteen employers (two from the Tourist industry; five from financial institutions and seven from ICT companies) responded. Ten of these companies have been in business for over 20 years and two were established within the last ten years. Five of them employed less than 50 people and two over 100 people.

The qualification most needed is the Bachelor's Degree followed by the Associate Degree. For some entry level occupations the companies would accept CXC qualifications (CSEC and CAPE). The positions that required a Bachelor's Degree are IT Managers and Administrators (e-Business, IT Solutions, Application Support, Networking, Systems Support and Marketing). Bachelor's Degrees were also required for posts as IT Infrastructure Specialists, Systems Architect, Test Managers, Security Consultants, Technical Analysts and Systems Developers. Positions for which the Associate Degree was accepted included Administrative Assistant, Technical Support, Accounts Clerk, Systems Engineer and Systems Support Officer, Data Base Administrator and Systems Operator. The number of vacancies was insignificant although one employer reported that it was difficult to get persons with the required skills and experience.

The content/skill areas that are most needed are given below.



Employers are generally satisfied with the ‘soft skills’ of persons employed. Areas of improvement are the following: problem-solving skills, decision-making skills, ability to take initiative, interpersonal skills and communication skills. The latter two are most lacking among the young men, according to one employer.

Employers were satisfied with the technical competence of the persons employed. However, some of the comments pointed to the need for much closer links between what is taught and the tools and practices of the workplace.

***“The technical skills are not as up-to-date as the systems/processes used in the job environment”.***

***“Graduates need more exposure to industry standard tools used in practical real world situations”.***

One employer reported that graduates were coming to the workplace with inadequate skills in programming. He advised that the tertiary institutions should:

***“go back to teaching computer programming since too many graduates with ICT qualifications cannot reason, have poor logic skills and so the learning curve at the work place is much too long”.***

Another employer recommended that programmes should include a component on IT security.

Of the 14 employers who responded, six of them indicated growth in the business over the next three years but the numbers that would be required remained very small since current staff can be deployed; and in one company that is international, the employer explained that staff from other locations are brought in to fill new posts before a vacancy is advertised. Areas for which ICT qualifications would be needed include the following:

- ICT for Research;
- ICT for Development;
- Systems Support;
- Software Development;
- Product Support;
- Project Management;
- Business Analysts;
- IT Analysts;
- IT Assistants.

Ten of the employers reported that they already accept students on attachment. However, only two of them said that they were consulted sometimes for inputs to tertiary level programmes. All except one expressed a willingness to make inputs in order to ensure that programmes offered at the tertiary level are linked to labour market needs.

## **SUMMARY OF DISCUSSIONS DURING INTERVIEWS**

ICT is essential at all levels for business and industry. The growth of tourism and the financial sector in Barbados is dependent on the use of modern technologies. This growth in the use of electronic technologies to do business and to generate business means that persons with IT qualifications are needed.

The employers who were interviewed confirmed information obtained through the questionnaires. Companies and in particular the IT companies require a Bachelor's Degree for most of the occupations. Persons with Associate Degrees get employment, but in lower level positions. When questioned about this, one employer responded, that based on his observations, he was of the view that the College did not understand the labour market since generally the graduates that applied for positions did not have the required skills for the posts that they wanted, for example, as Network Administrators. There was need for the College to be knowledgeable about career options. The workplace needed persons with good technical and programming skills. There are concerns as well about communication skills to the extent that in one company, candidates are given a proficiency test when they apply for work. The need for information about career options is also linked to a need for clarity in the workplace about the job requirements for certain positions. The work demands for a position in one company are sometimes different in another company so within the sector itself there is need for greater clarity and coordination of job titles and job descriptions. This lack of uniformity confuses job applicants since the name of a position in one company carries a different skills set for a position with the same name in another company. An example of this is the post of 'Technician'.

In addition to the growth areas identified in the responses to the questionnaire, the employers interviewed noted that there was need to link IT with Marketing and Research since IT managers need to be more involved in business decisions. Other areas of growth for which ICT would be needed are Systems Integration and Data Warehousing. ICT with Accounting and Auditing was now needed since with the growth of the ICT sector many Accounting firms require people with ICT qualifications to carry out audits. Employers also noted that tertiary level programmes should include some elements of ICT security.

With respect to the technical knowledge and soft skills that graduates bring to the workplace, one employer noted that programming skills were not being taught (or not taught properly and to a desirable depth). He explained that programming was needed in the workplace since, even if a company uses an off-the-shelf product, employees need to know how to customise and upgrade the product. Also, at the ICT workplaces, employees would be required to write a routine to calculate and perform functions and draw flow charts. This requires some programming skills. Teaching programming would also address concerns about the poor reasoning and logic skills of some graduates. Another concern was that many graduates are not taking time to solve problems and this too can be addressed at the College in the practice sessions in ICT classes. The employers noted the value of student attachments. Further, one company has an education and training department that deals with attachments and in-house training. Students on attachment get exposure to IT tools used in the workplace. However, one employer recommended that the IT lecturers should also get industry experience so that they too are knowledgeable about the requirements of the workplace.

## **DOMINICA**

The areas selected for Dominica were Modern Languages, ICT and Auto Repairs. The Dominica State College awards Associate Degrees. The College is made up of four faculties, Faculty of Arts and Science, Faculty of Education, Faculty of Health Sciences and Faculty of Applied Arts and Technology.

### **MODERN LANGUAGES**

Five responses were received from secondary level students; two from tertiary level students; two from tertiary level lecturers.

#### **Response from secondary school students**

The secondary school students were in the CXC CSEC Spanish programme. The majority of the students indicated their interest in continuing language studies at the tertiary level. They wish to do so at the University of the West Indies as a first choice and an overseas university as a second choice.

#### **Responses from tertiary level students**

The reasons that the students identified for doing Modern Languages were - to further their studies; for employment; and, for personal development.

Students identified the following skill areas as most important for employment - speaking; writing letters and short reports; preparing papers and technical documents; and, translating.

The areas where students considered to be the most likely places for employment are - the Teaching Service, hotel and tourism industry and the Government service.

The students indicated that their preference for further studies was at an overseas university. The students also noted the following barriers to finding jobs with qualifications in Modern Languages - insufficient number of positions in workplaces for persons with qualifications in Modern Languages; and, other skills required with Modern Languages in the work place.

The reasons indicated for their choice of institutions for further study are - the qualifications from the institution will improve employability chances; the cost is affordable; and, the content of the institution's programme is appropriate for personal development. What the students liked about the courses is the ability to express themselves in another language.

Students suggested that the programme should have an oral component and that they should be able to choose between A-level and the Associate Degree programme.

## Responses from tertiary level lecturers

There were two responses from the tertiary lectures - one from the Spanish department and the other from the French department. The teachers gave the average enrolment of students as shown below.

### Languages: Majors Only

The enrolment of students for 2008/2009 is as follows:

<b>Enrolment by Year</b>	<b>Year 1</b>	<b>Year 2</b>
Associate Degree in Spanish	25	23
Associate Degree in French	20	15

### Languages: General Student Body

The average enrolment of students for 2008/2009 is as follows:

<b>Enrolment by Year</b>	<b>Year 1</b>	<b>Year 2</b>
Elective in Spanish	250	225
Elective in French	150	150

Students must complete at least one language course in order to be awarded an Associate Degree in any field of study. The numbers given above show that Spanish is the more popular option.

The lecturers indicated that there is no formal system to keep track of the students after they graduate. However, they estimated that approximately 75 percent of the students in the Spanish or French programmes are able to find employment within six months of graduation. The students usually find employment in financial institutions, small businesses and in the tourist industry.

The lecturers identified the following reasons as those given by students for selecting the languages programmes – to further studies in the language, to meet scholarship requirements and for employment.

The lecturers assist the graduates in finding employment. In the Associate Degree programme there is a course called Spanish for Tourism which contains an internship component.

The following skill areas were identified by the lecturers as important for employment- speaking, writing, translating, sight translation and preparing papers and technical documents. All the students are able to combine the Modern Languages with a variety of subject areas to improve their chances of obtaining employment. Some of the programme areas that students who do language courses are likely to be majoring in are Business Administration, Economics, Accounting, Computer Science and Tourism. The teacher training programmes also contain courses in French. Currently, the College is in dialogue with other universities such as

Midwestern State University, Monroe College and the UWI for articulation agreements (some agreements are already in place).

### **Response from Government – Ministry of Education**

Currently in the Teaching Service there are approximately 30 persons employed with A Level qualifications in French or Spanish and seven persons with an Associate Degree. There are 11 persons with a Bachelor's Degree in one or both of the Languages.

## **INFORMATION AND COMMUNICATION TECHNOLOGY**

There were 17 responses from tertiary level students, three tertiary level lecturers and twelve employers.

### **Responses from tertiary level students**

Thirteen (13) of the students who responded are in the Associate Degree (IT) and four in the Associate Degree (Computer Science) programme.

The reasons that the students gave for studying ICT were to further their studies; to seek employment; for self employment; and, for personal development. The students indicated that the most important content/skill areas for finding a job are Hardware Maintenance, Web Design and Development, Network Administration, Systems Administration and Management of Information Systems. One student expressed interest in game development.

The students identified the areas where they would most likely find employment with their qualifications are - IT specialized companies, financial institutions and the Teaching Service.

The students assessed their programme of study as very good in preparing them for employment.

One student said that: ***“It provides an opportunity to learn on our own”***

Many of the students stated that they were confident that they would find employment. The main reason given for this was because the ICT field is always growing and there would be increasing need for people with ICT qualifications. Few students indicated that they were not confident about finding employment because many businesses are still operating with little use of technology.

The students indicated that they were very likely to continue their studies in an ICT related field. When asked which institution they were interested in studying at, some of them said, an overseas university (such as Seneca, DeVry Institute, Old Dominion University, Mid Western State, St. Georges), others indicated University of the West Indies or a Technical Institute. The selection of the institution of choice is based on the following choices – qualifications from the institution

will improve employment chances, cost is affordable and the content of the institution's programme is appropriate for personal development.

The courses the students identified that would enhance their degree are in Business and Science.

The areas students liked best were Web Design, Graphics and Hardware Maintenance.

### **Responses from tertiary level lecturers**

Three lecturers from the Dominica State College responded.

On an annual basis the enrolment is estimated at 45 - 55 students in the Associate Degree in Computer Science or the Associate Degree in Information Technology. The lecturers agreed with the students on the reasons for doing IT: for further studies in this area; to seek employment; and, for personal development.

The lecturers use an informal system of tracking students after they graduate. Labour Market Information is not usually available for use in programme development and review.

The lecturers said that the students are more likely to obtain employment in financial institutions; insurance companies, teaching, government ministries and in IT specialised companies. The barriers that affect the ability of the graduates to find employment were - insufficient businesses employing persons with qualifications in this area; some workplaces need qualifications higher than those offered at the institution; and, the skill level of graduates is perceived to be inadequate.

There is the likelihood that graduates may obtain employment in occupations such as, ICT/Computer Science Teaching; Hardware Maintenance; Network Administration; Systems Administration; Web Administration; Programming; Database Administration and Management and Web Design and Development.

The lecturers noted that additional courses especially in the areas of Business would enhance the students' chances for employment.

## Responses from Employers

Twelve employers responded; two from government departments; two from an IT specialized Company; two from automotive companies; three from quasi-government institutions; one from a financial institution; one from a utility company; and, one from the tourism sector.

The employers indicated that the qualifications in ICT that are most often required in the workplace are the Bachelor's Degree followed by Associate Degree. One employer said vendor certification was required.

The employers listed the content/skill areas that are frequently needed in the workplace as Word Processing, Spreadsheets, Desktop Publishing, Hardware Maintenance, Network Administration, System Administration, Database Administration, Programming/Software Development and Management of Information Systems.

The content/skill areas identified as important by students and employers are similar as shown below.

Content/ skill areas identified by students	Content/skill areas identified by employers
Network Administration	Database Administration & Management
Hardware Maintenance	Systems Administrator
Web Design and Development	Hardware maintenance
Management of Information Systems	Web Design and Development
	Network Administration
	Programming/Software Development
	Word Processing, Spreadsheets, Desktop Publishing

Problem-solving skills, decision-making skills, communication skills, interpersonal skills, the ability to work in a team or to work individually, and the ability to take initiative were all identified as areas for improvement.

Employers indicated that there were no vacancies for persons with ICT qualifications. However, they indicated that growth is expected and jobs that would become available are for; Help Desk Assistant, Software Developer/ Engineer, Web Developer, Network Engineer, and Technician. One employer noted that the vendor certification would provide opportunity for persons to work with vendor-specific products in the industry,

The employers noted that they were seldom consulted by the institutions but they would be willing to participate in curriculum development and review processes and to provide attachments.

## **AUTO REPAIRS (ENGINEERING/SKILLS)**

There were 14 responses: seven from tertiary level students; one from a tertiary level lecturer; and, six from employers.

### **Response from tertiary level students**

The students said that the areas of study for the Associate Degree at the Dominica State College are: Motor Vehicle Engineering, Auto Repairs (general), Auto Body Works, Spray Painting, Auto Electrical and Auto Maintenance and Servicing.

The reasons students identified for doing the programme were to obtain employment; to obtain knowledge and skills for personal development; for further studies; and, for self-employment.

Students indicated that they would most likely obtain employment in workplaces such as: auto mechanic shops, auto dealerships; utility companies; private enterprises; and, with vehicle rental dealers.

The students rated the programmes of study in relation to the knowledge and skills required in the workplace as very good or excellent. However, they said that they needed more practice using tools and that the workshop facilities need to be upgraded.

The students were confident that they will obtain employment with the College qualifications. They noted that many places asked for a high level of technical competence.

### **Response from tertiary level lecturer**

The tertiary level lecturer who responded agreed with the students' responses about the courses taught and the reasons why the students were doing Auto Repairs. Currently 13 students are enrolled in the Associate Degree programme.

The lecturer noted that any difficulties that graduates experience in finding employment could be due to:

- (a) insufficient number of positions in businesses employing persons with qualifications in these areas;
- (b) insufficient businesses employing persons in this area; and
- (c) other skill/subject area required with qualifications in the workplace.

## **Response from Employers**

Six employers responded to this questionnaire.

They indicated that the content skills that are most needed are for:

- Auto Repairs;
- Auto Body Work;
- Auto Mechanics;
- Auto Electricals;
- Servicing and Overhaul;
- Welding – aluminium and steel; and.
- Radiator Repairs.

To work within this field, the employers require persons with an Associate Degree or at least CSEC qualifications. Some of the posts requiring qualified technicians include Auto Electricals, Auto Air Conditioning, Auto Spray Painter and Mechanic.

All employers indicated that the reasons for not having any current vacancies is due to slow growth in the business sector and that persons interested in employment do not have the required qualifications.

The employers said that some graduates lacked skills in problem-solving, decision-making, communication, interpersonal relations, and the ability to work in a team or to work individually and to take initiative.

One top auto dealer also stated that:

***“The graduates lack specific technical skills in the areas of electrical/electronic diagnosis and troubleshooting, air condition diagnosis; head & block resurfacing and radiator repairs”.***

The employers noted that they are seldom consulted by the institutions but if there is a need they would be willing to participate in curriculum development and review processes and to provide attachments.

## **GRENADA**

The area selected for the survey in Grenada was Modern Languages.

Nine secondary level students responded to the questionnaire. Two tertiary level students and three tertiary level lecturers responded (the low numbers are due to the fact that lecturers and students were on vacation). There were no responses from employers.

### **Responses from secondary level students**

Nine students – seven (Spanish), one (French and Spanish) and one (French) – responded to the questionnaire. There was no opportunity to meet the students. However, one of the lecturers interviewed at the College is an Examiner for CXC CSEC examinations and was able to provide information about the CSEC programme at the secondary level.

The reasons given by students for doing Modern Languages were:

1. to continue studies in Modern Languages;
2. to meet scholarship requirements; and
3. for employment.

Their choice of institution for continuing their studies was the Community College. This was expected since the College is the only institution offering CAPE which is part of the Modern Languages Associate Degree programme.

The areas that they considered most important for employment are speaking and writing. They generally enjoyed the subject but commented that there was not enough time for practising the language.

### **Responses from tertiary level students**

Two students completed the questionnaire. They indicated that the speaking and writing components were most important for finding employment. Their choice of employment was teaching. They noted the following reason for difficulty in finding employment: not many businesses employ persons specifically with qualifications in Modern Languages.

They both wish to continue their education in a university outside the region. The main reason for doing so is to improve their chances for obtaining employment.

One of them recommended that a travel component be added to the programme for them to be able to go to places where they can practise speaking the language.

### **Responses from tertiary level lecturers**

Three lecturers from the T. A. Marryshow Community College responded to the questionnaire. The College offers French and Spanish for CAPE and also Mandarin and German. The total number of CAPE students is 25 for French and 26 for Spanish. The College is the only institution in Grenada offering CAPE. The main reasons for students studying Modern Languages are for personal development and for employment.

There is no system to track students after they leave the College but since the College is dealing with such relatively small numbers, the lecturers usually know where they get employment and whether or not they go on to further education. Most of the graduates go into teaching which they use as a stepping stone for other careers or for further education for a Bachelor's Degree.

There is also no system for collecting Labour Market Information and for obtaining inputs to inform programmes. Lecturers depend on 'personal knowledge and research' to determine labour market needs that can inform the programmes offered. The skills most valued in the workplace are communication - speaking and writing. Two main reasons why Modern Languages graduates may have difficulty in finding employment with qualifications in Languages are: insufficient businesses employing persons in these areas; insufficient numbers of positions in the workplace for persons with qualifications in Modern Languages. One lecturer noted that although businesses need people with qualifications in Modern Languages, they still consider the language qualification as an asset and so do not want to pay for the added competence that a language graduate would bring to the workplace.

### **Meeting with the Principal and the lecturers of the Community College**

A meeting was held with the Principal of the College and then with the Chair of Modern Languages and the Modern Languages Specialist (Spanish) in the Department of Teacher Education. The College offers an Associate Degree in Modern Languages. There is also a language component in the hospitality-related areas. For these programmes, one foreign language is compulsory. An internship is also compulsory. Through the internship and the inclusion of one person from the sector on the College Council, the College gets inputs from the industry for its program development and review. In Hospitality and related occupations, competence in a Modern Language is not a requirement. Since it is considered an asset, the College encourages all students to do one Modern Language. The College has also included a language component in its technical offerings. In addition to French and Spanish, the College offers German and Mandarin which are taught by native speakers. There is also a Grenadian lecturer who teaches German. The lecturer for Mandarin is full time. The College pays her rental accommodation and the Chinese Government pays her salary and other expenses.

While the business sector does not require a Modern Language, there are times when specialised technical assistance is required, for example, for translating documents and interpreting. On island there is a pool of persons on whom the businesses can call. Since these services are

required intermittently, no staff are employed on a permanent basis in order to carry out these functions.

The Modern Languages Associate Degree programme for French and Spanish uses the CAPE French and Spanish Units as the core course components. Students also have to complete successfully the General Education requirements in order to be awarded the Associate Degree. The General Education component comprises: two courses of Communication Studies (CAPE Communications Studies - Modules 1 and 3; CAPE Caribbean Studies (Caribbean Society and Culture); Mathematics/Science or an ICT-related component; Philosophy/Ethics/Religion component; Social Science component (Introduction to Psychology/Sociology, Law/Political Science) and 30 hours of community service. Students are also encouraged to take one or two of the following courses: Applied Arts; Music Appreciation; Drama or Women in Caribbean History. Graduates who go on to North American universities such as Mid Western, FSU and Howard have been able to transfer between 54 and 60 credits to these institutions. Several graduates also go the University of Havana, Cuba. A concern is how to attract those who go to the United States of America back to Grenada since many of the graduates stay to teach in the USA secondary school system,

Students who wish to teach on graduation can take, as part of their programme, four courses in education (Classroom Management, Instruction and Planning, Adolescent Psychology and Methodology of Teaching Modern Languages). These students graduate with an Associate Degree in Modern Languages with Education.

Some graduates from the Modern Languages Associate Degree programme go into teaching. For many of them this is a stepping stone to other occupations and to further studies. Some of them switch from languages and do a degree in Management and Supervision since this is a UWI degree offered on the island.

The opportunity to practise the language is a concern. The College encourages the students to serve as tour guides when opportunities arise. The students get a stipend and are able to practise the language. A long-standing recommendation is for partnerships to be established with institutions, for example, in Venezuela for student exchanges. It was noted that the teachers also needed more exposure to the language and they too can benefit from links with these institutions.

Another major concern was the perceived low value placed on Modern Languages, generally, and the lack of recognition given to people with Modern Language qualifications.

## **JAMAICA**

The survey was done in the Montego Bay area only.

### **Responses to questionnaires**

Twenty secondary level students and six tertiary level students responded to the questionnaire. There were no responses from tertiary level lecturers and only one from an employer.

### **Responses from secondary level students**

The 20 students who responded were doing Spanish for CSEC. Their reasons for doing this language were mainly for personal development; to obtain employment; and, to continue their studies in Spanish. They noted that speaking and writing were essential skills for employment and their most likely places for employment were in the tourism sector. They also noted that some of the reasons for difficulty of persons with language qualifications in finding jobs were insufficient number of positions in businesses requiring persons with language qualifications; and, insufficient businesses requiring language qualifications.

Their choices of institution for further studies were the Community College, the University of the West Indies and the Northern Caribbean University. The two main reasons for choosing the Community College as the first choice were cost is affordable and the content of programme is appropriate for personal development. They listed as a concern, the insufficient time at school for practise in the language but they reported that they enjoyed the Spanish at school.

### **Responses from tertiary level students**

The six students who responded were doing Spanish for CAPE. They listed as reasons for doing the subject: to obtain basic skills for personal development; to obtain employment; and, to continue their studies in the language. This is in keeping with the findings of the TLI Unit Jamaica study (2005) which listed the following reasons that students gave for pursuing tertiary education as follows:

- (1) did not want to live in poverty;
- (2) to advance personal development and skills;
- (3) to acquire the necessary qualifications to get a job or profession;
- (4) to further studies in areas of interest;
- (5) to assist with the development of the country (p 4).

The students in this survey noted that with respect to Modern Languages, they considered the skills of speaking, comprehension and writing as essential for employment and their choices of most likely places for employment were in the hotel and tourist industry.

They noted two main reasons for difficulty in getting employment with language qualifications were insufficient businesses employing persons with qualifications in foreign languages; and, an insufficient number of positions in businesses for language graduates. The choice of institution for those who plan to continue their studies was the University of the West Indies. Their main reasons for this choice were: the content of the UWI programme is appropriate for personal development; and, qualifications from the UWI would improve their employment chances.

They enjoyed the programme at the College. One student said that it has made her love books and novels in a foreign language. The main concern is time to speak and practise the language.

## **SUMMARY OF DISCUSSIONS IN INTERVIEWS AND FOCUS GROUP DISCUSSIONS**

### **Modern Languages programmes**

The Montego Bay High School offers French and Spanish for CSEC. Students who want to continue with Modern Languages go to the Montego Bay Community College and do subjects for CAPE. The College also offers Spanish as a core component of its Hospitality programmes. In addition, the College offers special language programmes on demand from the Tourist industry.

The Training Division of TPDCo offers specialised skills training and Team Jamaica for the tourism sector and support services. TPDCo collaborates with the HEART Trust/NTA in the training programmes which include courses in foreign languages.

In addition, some of the big hotels (Sandals, Super Clubs) and Tour Operators (Caribic Vacations Ltd) offer training to their staff in languages (mainly Spanish).

Growth in the tourism sector, especially with the opening of the Spanish hotels, means that more persons with Modern Languages skills would be required in the sector. Spanish is the language most commonly required. However, there is need for persons competent in other languages, for example, French and German. The Jamaica Draft Tourism Sector Plan (2007) noted that the tourism sector has grown rapidly. In 1987, visitor arrival had reached the one million mark and by 1999, that figure had exceeded two million and by 2006, the total arrivals had passed the three million mark. The Draft Plan also noted that the Tourism Industry contributes “an estimated 8% of total GDP, directly employing approximately 80,000 persons and accounting for some 47% of total foreign exchange earnings from productive sectors since 2006” (p 3). The employers who were interviewed in this survey estimate a much larger number employed in one way or the other in the Tourism sector noting that the sector may account for as much as 60% of employment.

The employers noted that persons with skills for the sector including competence in a second language are needed for all levels of employment. The Draft Sector plan noted that there was

need for programmes to raise the skill levels of the current employees functioning at low literacy levels. The programmes to be developed would include cultural awareness and foreign language skills for dealing with the emerging Spanish and Chinese markets. The plan recommends a coordinated effort “to ensure that the human resource development needs of the tourism sector are met by providing training that is relevant to the changing needs of the market.”

The practice of most of the hotels is to employ persons with the required skills in Tourism and Hospitality. The language requirement when recruiting staff is seen as an asset although the hotels claim that they do give preference to persons who are competent in a second language. The College and the HEART Trust/NTA include a foreign language in their programmes geared for the Tourism sector. The College is considering offering an Associate Degree in Languages and to include in it areas of Hospitality and Tourism and Business as electives (the opposite to what currently obtains). The rationale is that persons in the Tourism Industry may find it easier to acquire the Tourism and Hospitality skills rather than the language skills on the job. Also, a higher level of competence in a second language should help the employees to progress in the sector since currently many of the middle level and senior staff in some of the hotels are native speakers from non English-speaking countries. In the big hotel chains staff are moved around from one country to another. The Jamaican staff employed are usually not at the level at which such rotation takes place.

This proposal from the College for an Associate Degree in Modern Languages was put to the few employers who were interviewed. The responses indicated that the graduates should be able to gain employment. However, given the entrenched practices of using language qualifications as an asset for employment in the Tourism sector, the College would need to consult key employers in the development of the programme and also get their assistance in marketing the programme not only to employers but also to students. The programme would need to be demand-driven and crafted in such a way that students are able to obtain employment and/or continue with higher education.

## **ST. KITTS AND NEVIS**

The areas selected for the survey were Modern Languages, ICT and Auto Repairs.

### **Responses to questionnaires**

Responses to questionnaires were received for Modern Languages from eight businesses; for ICT from ten businesses; and, for Auto Repairs from seven businesses. One response was obtained from a tertiary level lecturer in Auto Repairs and two responses were obtained from ICT tertiary level students.

### **Modern Languages**

There was no response from secondary and tertiary level students and lecturers for Modern Languages. The TLI Unit study (2006) indicated that students identified Hospitality and Tourism as critical for national development. Both of these areas require workers with competence in a second language. The Community College offers French and Spanish for CAPE. In 2007, 11 students did CAPE French Unit 1 and nine did Unit 2: five did Spanish Unit 1 and nine did Unit 2.

### **Response from Employers**

The eight employers who responded were from businesses in the Tourism sector. Three of them indicated that there is a need for persons with competence in at least one Modern Language. Their current needs are for at least French or Spanish at a conversational level. Though the current demand for competence in other languages is small, this will increase with the growth in travel and trade between the English-speaking Caribbean and Latin America and French territories. The level of qualifications required in the tourism sector is usually CAPE or Advanced Level or Associate Degree in French or Spanish and work-related conversational French or Spanish. Two employers indicated that they have no need for persons with Modern Language qualifications. The reasons that they gave were that most visitors spoke English and that there was relatively slow growth in the Tourism sector.

Graduates with qualifications in Modern Languages are also required in the Public Sector. Apart from teaching there are very few persons (less than ten) employed in Government service with qualifications in Modern Languages. However, the number required is expected to increase as links are established at the government level with non English-speaking countries. Graduates are also employed in the Teaching Service. The implementation of a policy to introduce a Modern Language (Spanish) at the primary level would mean that more persons with qualifications in Modern Languages would be required as teachers.

## **INFORMATION AND COMMUNICATION TECHNOLOGY**

### **Responses from tertiary level students**

Two responses were received from the tertiary level students enrolled in CAPE Computer Studies at the Clarence Fitzroy Bryant College.

The students' reasons for doing Computer Studies were for further studies; for employment; and, for personal development. The areas that students considered important for employment were:

- Programming/Software Development;
- Graphics Design;
- Web Design and Development;
- Management of Information Systems; and
- Software Engineering.

For further studies, the students' choices were for an overseas university and the University of West Indies. The reasons given for the choices were that the qualifications from the institution would improve employment chances; and, that the content of the institution's programme is appropriate for their personal development.

### **Responses from Employers**

Ten employers responded to the questionnaire: six from financial institutions; one from a private consultancy/education business: two from the Tourism sector and one from Government service. Four employers indicated that they require persons with IT qualifications. The other six employers noted that they purchase services when needed. In addition to Word Processing and Spread Sheets, the skill/content areas identified as needed in the workplace are for:

- Management of Information Systems;
- Database Administration & Management;
- Systems Administrator;
- Hardware Maintenance; and
- Web Design and Development.

One employer also added Programming/Software development, Software Engineering and Graphic Design.

Most of the positions in the workplace requiring ICT qualifications need persons with qualifications at the Bachelor's Degree level. Employers also noted the need for persons with certification in areas such as Oracle, SQL and Programming.

Growth in businesses would require persons for the following positions:

- Network Administrator;
- Web Developer;
- Software Developer;
- Database Administrator;
- ICT Policy Advisor; and
- Network Coordinator.

A Bachelor's Degree was required for almost all the positions named (the exceptions were Software Engineering and Technician).

With respect to the 'soft skills' the employers noted that there was need for improvement in problem-solving and the ability to take initiative.

Within the Government service, persons are employed with ICT qualifications. There is a national ICT policy. The number of persons employed is expected to increase with the implementation of the National ICT Policy and the introduction of IT in all primary schools.

## **AUTO REPAIRS**

Two lecturers from the Community College responded to the questionnaire. The Auto Repairs programme included Auto Maintenance and Overhaul and Auto Air Conditioning. Twelve students were enrolled in the first year and ten students in the second year.

The reasons that the lecturer gave for students for doing Auto Repairs are for further studies in this area and for employment mainly with auto dealers and in auto mechanic shops.

Nine employers responded to the questionnaire from Auto Body Repair and Auto Dealership companies. One employer was from an Auto Repair business that offers certification and training to a small number of trainees.

The employers indicated that the content/skills that are most needed are:

- Auto Repair;
- Auto Body Work;
- Auto Mechanics;
- Auto Electricals;
- Servicing and Overhaul.

## **INTERVIEWS AND FOCUS GROUP DISCUSSIONS**

### **Information and Communication Technology**

All businesses use ICT to some level but many employers said that they did not necessarily need ICT graduates to carry out the ICT operations. An employer explained that he had employed someone with IT at Advanced level for the company's IT operations and to generate reports. If specialized skills are needed, he purchases the services rather than employ someone full time for tasks that are needed only periodically.

At the Government level, there is a *National Information and Communication Technology Strategic Plan* and also a National Information and Communication Technology (ICT) Centre. This Centre was established to implement the National ICT Strategic Plan which has six major components as follows:

- building the information infrastructure;
- enabling the policy and legal environment;
- developing ICT human resources and building capacity (information society);
- modernizing government and delivering citizen services electronically;
- leveraging ICT for economic and social development through public-private sector partnerships; and
- establishing partnership arrangements.

The National Information and Communication Technology (ICT) Centre is becoming one of the larger employers of ICT skilled personnel to provide training for Pearson Vue Certification; services for development and maintenance of software and hardware; and, hosting data for various businesses including government enterprises.

The employers who were interviewed noted that the tertiary level programmes should also be geared to providing professional certifications for its students – as in A+, INET+, Network +, Security, MCSE, and CISCO. They also recommended that ethics and problem-solving should be included in ICT programmes.

### **Modern Languages**

In general, employers indicated that there is a need for persons to be multilingual for personal development and for simple business communications. In St. Kitts and Nevis there is an increasing need especially for Spanish, as there is a growing Spanish community due to migration and travel to and from the Latin American countries. The Government of St. Kitts and Nevis is also seeking to establish links with Cuba, Taiwan, Venezuela and Mexico. There would, therefore, be an increasing need for persons who can speak at least one foreign language. The persons interviewed noted that the current programmes at the College should continue but that a language option should be available for students in the various occupational areas.

## **Auto Repairs (Engineering/ Skills Training)**

In the past the College offered City and Guilds certification programmes. The College is currently developing an Associate Degree programme which includes areas such as Engine Systems, Chassis, Electricals, Diagnostics, and Auto Repair Service and Maintenance.

Many employers noted that the College programme should include Diagnostics, Auto Electronics and Trouble Shooting.

AVEC accepts students who are over 16 years of age and have a school leaving certificate for a two-year training programme. The student can then transfer to the College for further training for the Associate Degree.

The College is in need of adequate workshop space and up-to-date tools and equipment. Students get exposure to modern day equipment and vehicles when they go on attachment but these attachments are for very short periods.

The employers also indicated that there is a need for the following content/skills:

- Computer Diagnostics on vehicles;
- Transmission Repairs;
- Auto Electricals;
- Air-conditioning;
- Small engines;
- Outboard and Inboard motors (marine engines);
- Machining – the moulding and development of car parts at the workshop;
- Training in safety standards.

Some employers suggested that Auto Repairs should be re-introduced at the secondary level; that there should be standardization of facilities and programmes in the institutions; and, that persons trained should be given certification that would enable them to work elsewhere in the region.

# ST LUCIA

## INFORMATION AND COMMUNICATION TECHNOLOGY

Ninety-seven persons responded to questionnaires: 38 were secondary level students from five secondary schools; 33 tertiary level students; 7 lecturers from the Community College; and, 19 from businesses.

### Responses from students

The secondary students were enrolled in CSEC IT General or Technical programmes. The reasons that they gave for doing IT were (in order of importance):

- for personal development;
- to obtain employment;
- to meet scholarship requirements; and
- for further studies.

The areas that they considered important for employment were:

- Information Processing;
- Software Programming;
- Word Processing;
- Database Management;
- Implementing Software packages; and
- Spreadsheets

The places that they listed as most likely for them to find employment were in the tourism sector and in the financial sector.

Over 70 percent said that they were confident that they would find employment on leaving school. However, they also noted that some of the difficulties in finding employment would be due to insufficient businesses employing persons; and workplaces need higher level qualifications.

Seventy-one percent said that they would like to continue their education at the University of the West Indies since they considered that qualifications from the UWI would improve their chance for employment.

About what they liked best about IT programmes, these are some of the comments:

***“I like to be on the computer”;***

***“We have fun surfing the net and researching for educational and entertaining stuff”;***

***“I like best Practicals, Spreadsheet and Word Processing”.***

### Responses from tertiary level students

Sixty-nine percent of students who responded were enrolled in the Associate Degree programme and 21 percent in the UWI Certificate programme. The reasons that they gave for doing ICT were: for employment; personal development; and, for further studies. The areas (listed in order of importance) that they considered important for employment were:

- Network Administration;
- Management of Information Systems;
- Systems Administration;
- Hardware Maintenance;
- Database Administration and Maintenance; and
- Software Engineering.

Like the secondary school students, they said that the places where they would most likely get employment are in the Tourist Industry and in finance. They considered their programme of study as beneficial for finding employment. However, they recognised the need for further education and almost all (90%) said that they would like to continue their studies. Sixty percent said that they would wish to continue their studies at the University of the West Indies since the Bachelor's Degree would make them more marketable.

The areas that they liked best were: Practicals; creating Networks and Networking; Computer repairs; and Web design. They expressed the need for more hands-on experiences; more science courses; and more courses in areas such as Power Point and Excel.

### Responses from ICT lecturers

The lecturers provided information about programmes offered and the number of students enrolled as given in the table below.

Qualification	Number enrolled
UWI Certificate	18
Diploma	20
Associate Degree	160
Degree	13 to 26

The lecturers agreed with the students that they did the ICT courses for employment and for further studies.

There is no formal system in place to find out where students get employment. There is also no formal arrangement for the students to get advanced standing at universities. However, lecturers reported that some students get credits with the College programmes in North American Universities.

### Responses from employers and comparison of data

The table below gives the areas (in addition to Word Processing and Spread Sheet) that the tertiary level students, the lecturers and the employers considered important (in order of priority) for the workplace.

Students	Lecturers	Employers
Hardware and software maintenance	Hardware maintenance	Network Development
Information System Management and Administration	Network Development	Hardware and software maintenance
Network Development	Systems administration	Information and Technology systems
Graphic Design	Web design and Development	Information System Management and Administration
Desktop Publishing	Information System Management and Administration	Desktop publishing

The three groups agreed on some of the areas. Although there were only few disparities, there is still need for closer ties between the institution and the workplace so that programmes are aligned to the needs of the workplace.

Employers also noted that for most of the positions requiring ICT, the qualification needed is the Bachelor's Degree.

The Bachelor's Degree was needed for positions such as Database Administrator; Network Administrator; Systems Analyst; Web Administrator and Designer; Programmer; ICT Manager and ICT tutor. The Associate Degree was accepted for positions such as: Technician; Help Desk Operator; Computer Operator; and Technical Specialist. There is, however, much variance within the industry about the demands of posts that carry the same name in different businesses. The post of 'Technician' is an example.

The employers said that they were satisfied generally with the technical knowledge of the graduates. However, they advised that graduates needed to come to them with better decision-making and problem-solving skills and an improved ability to take initiative.

## **AUTO REPAIRS (ENGINEERING AND SKILLS/TRAINING)**

### **Responses to questionnaires**

Fifty questionnaires for Auto Repairs and Engineering were received from secondary level students (26), tertiary level students (9), lecturers (4) and employers (11) in St Lucia.

### **Responses from secondary level students**

The Auto Repair and Engineering students at the secondary level take the School Certificate and the National Vocational Qualification Exams (Level 1 from the HEART/NTA).

Students' reasons for doing the programme were to:

- continue studies in Auto Repair and Engineering;
- obtain basic skills for personal development; and
- obtain employment.

Students regard as useful for employment the following components of the programme (listed in order of priority):

- Auto Mechanics;
- Auto Electronics;
- Auto Body Repairs;
- Auto Maintenance; and
- Auto Engineering.

The places that students indicated that they are most likely or likely to obtain jobs were in:

- Auto Mechanic Shops;
- Auto Body Works;
- Auto Electrical; and
- Auto Air Conditioning.

Most students (64%) said that they are not confident, 15% said confident and 19% said they were very confident about finding employment.

Reasons given for difficulties they expect in finding employment were:

- insufficient number of job/positions available;
- insufficient number of businesses in operation; and
- workplaces require higher qualifications.

Their preferences for further studies were:

- Universities and colleges outside the region;
- The University of the West Indies;
- The Sir Arthur Lewis Community College.

Reasons given for choosing those institutions were:

- the value of the qualifications for the workplace; and
- the content of the programme.

The related subjects beneficial to students in Auto Repairs were identified as Mathematics, English, and Mechanical Engineering.

Students commented that there was need for modern equipment and tools and more practicals in programmes.

### **Responses from tertiary level students**

The students from Sir Arthur Lewis Community College were in the Certificate, Diploma or Associate Degree programmes for Auto Repair and Engineering.

The main areas of study that students rated as important were:

- Auto Repairs (General);
- Motor Vehicle Engineering;
- Auto Maintenance and Servicing;
- Auto Body Work;
- Auto Electricals.

Students' reasons for doing Auto Repairs were:

- to obtain employment;
- to obtain knowledge and skills for personal development;
- to continue studies in the area; and
- for self- employment.

Places where students are most likely or likely to obtain employment are as follows:

- Auto Dealerships;
- Government Department;
- Auto Mechanic Shops.

The students generally reported that facilities for doing Auto Repairs were inadequate and that more practical and on-the-job experiences are required.

***'The theory is good but the lack of facilities is hindering the much needed practical experience'***

The questionnaire did not ask for gender-disaggregated data. Auto Repairs is a mainly male-dominated area. One respondent pointed to this and gave this reason for her “confidence” in finding employment.

*‘As the only female in the programme I am confident that some workplace will hire me because they may be impressed by my accomplishment’.*

The main reasons given for difficulties expected in finding employment were:

- insufficient businesses employing persons with qualifications in this area;
- insufficient number of positions in businesses employing persons with qualifications in this area.

Respondents recognized the need for higher level certification and/or training in other areas. One respondent explained his/her reason for wanting to continue studies is because the ‘Automotive industry is evolving and interesting all the time’.

The institutions chosen to continue their studies were overseas Universities and Technical Institutions (for example, UTECH in Jamaica).

The reasons for the students’ choices were:

- qualifications from the institution will improve employment chances; and
- content of the institution’s programme is appropriate for personal development.

Other programmes that would enhance students’ employability skills were: computer business operations, small business courses, basic building courses, on-line interactive programmes and automotive air-conditioning.

### **Responses from Lecturers**

The courses offered at the College are:

- Auto Repairs (general);
- Auto Body Work;
- Auto Body Spray Painting;
- Auto Electricals;
- Auto Maintenance and Servicing Overhaul;

- Auto Air Conditioning;
- Motor Vehicle Engineering.

On an annual basis about 100 students are enrolled in the two programmes.

The lecturers are in agreement with the students in terms of the reason for doing the programmes and the places where they are likely or most likely to obtain employment.

Two of the four lecturers said that there was no formal system for tracking students to find out where they found employment. However, through informal contacts, lecturers were able to say that between 50 to 75% of graduates obtained employment within six months of graduation.

Lecturers usually assisted graduates in finding jobs. They do so by contacting the various industries and auto dealers, establishing on-going relationships with firms, through the internship programmes and in response to requests from companies.

Lecturers said that the programmes had a job training/internship component during vacation time. This is a formal part of the programme and students are assessed on a particular project. The job experience also enables the students to acquire practical knowledge and experience in work environment.

The reasons given why students have difficulty in obtaining employment are: insufficient businesses employing persons in this area; insufficient number of positions in workplace for person with qualifications in this area; and, entry-level requirements are lower than those obtained at college.

The lecturers noted that Labour Market Information would be helpful in identifying market needs and matching programmes to meet needs.

Two lecturers said that there was a system of an Advisory Board/Council which provided inputs to programmes

There are articulation agreements within Sir Arthur Lewis Community College (in one case) and with the Nova Scotia Community College in another case.

Two comments of note were:

- ***“The link between school and work leaves a lot to be desired. We need to establish firm partnerships so as to be better able to deliver a better product.***
- ***“The private sector should contribute to the physical resources in the delivering of such programmes (for example, with tools, equipment and training)”***

## **Responses from employers**

The employers who responded were engaged in the Auto Repairs and Engineering business.

The qualifications that they identified as being most often required in the workplace included: CXC Certificate, Community College Certificate and Community College Associate Degree.

The content skill areas identified as needed in the workplace included:

- Auto Maintenance and Servicing;
- Auto Mechanics;
- Auto Body Works and Spray Painting;
- Auto Electricals.

The employers are of the view that graduates have the technical knowledge but often lack the ability to use initiative and solve problems.

There were few vacancies and the one reason given for experiencing difficulties in filling vacant positions is slow growth in the economy.

The employers were unanimous in their willingness to provide attachments and/or apprenticeship programmes for both students and teachers. They saw the opportunity to serve as part-time lecturers, on Advisory Committees, and to be involved in determining the relevant skills and competencies that should be incorporated in the training programmes.

## **ST LUCIA GROUP DISCUSSIONS & INTERVIEWS**

Information and Communication Technology (ICT) and Auto Repairs (Engineering / Skills Training) were the two areas selected by St. Lucia for the survey. Group discussions were conducted with the lecturers and interviews were held with private and public sector representatives.

While the lecturers of the identified programme areas provided information already documented in their responses to the tertiary level questionnaires, the focus group discussions and interviews arranged by the Local Coordinator helped to obtain additional data.

Both groups of lecturers noted that with the free movement of skilled persons within the CSME, there was need for the harmonisation of tertiary level programmes across the region.

The lecturers identified challenges that exist for both programmes at the local and regional levels. These included the need for a cadre of appropriately trained personnel; upgrading of physical infrastructure at institutions; establishment of formal mechanisms and systems for accessing Labour Market Information and for tracking graduates; and supporting policies and programmes to attract students with the required entry level qualifications.

They suggested that the programme offerings should prepare graduates for further studies and for employment.

They confirmed the need to establish formal relationships with the private sector and for the lecturers themselves to participate in programmes to upgrade their skills. The IT lecturers identified the need for:

- (a) harmonisation of IT courses taught at SALCC itself, to remove duplication of the same level course content being taught in a variety of courses, residing in different Divisions and identified by different course codes;
- (b) articulation with the UWI programmes to facilitate Associate Degree graduates who wish to continue their tertiary education.

The Auto Repairs (Engineering/Skills Training) Lecturers noted that several graduates from the Auto Repairs programme find employment in other areas because of the relatively low salaries in the areas for which they were trained. The lecturers were concerned that regional education bodies do not generally encourage and cater for formal studies in this field. CXC provided no CSEC examination in Motor Vehicle Mechanics; and the UWI does not have a Bachelor's Degree in the Motor Vehicle Engineering field. There is also no articulation in place for Mechanical Engineering and/or Automotive Engineering Associate Degree Graduates who may wish to pursue a Bachelor's Degree at the UWI which offers no avenue for further studies in this field.

The employers interviewed agreed that well trained graduates will contribute to the financial success of their business. One Auto employer said: "We no longer want our workers to use

overalls, because the owners of expensive cars do not appreciate the services of workers in dirty clothes”.

The employers expressed their full support for collaboration with the Sir Arthur Lewis Community College and to contribute to a viable training system that is geared towards providing students not only with technical knowledge but also with interpersonal skills and attitudes required for the workplace.

The Employers’ Federation representative noted that in addition to the skills mentioned in the questionnaire, the Employers’ Federation Training Needs Assessment Survey Report of 2008 found that employees also lacked knowledge about jobs, time management skills and customer services skills. The representative also identified the need for workers to have skills in conflict resolution.

Employers make contributions to tertiary programmes in several ways as given below.

- Providing attachment/ apprentice systems for trainees and teachers.
- Membership on advisory boards and programme/course panels and serving as part-time tutors.
- Provision of technology tools and equipment.

The employers unanimously indicated their willingness to participate in processes that will contribute to the development of human resources in the areas targeted for the survey.

## **ST MAARTEN**

### **MODERN LANGUAGES**

There were 65 responses to the questionnaires for Modern Languages in St Maarten. These responses were from 23 secondary level students, 24 tertiary level students, 8 lecturers and 10 employers.

#### **Responses from secondary level students**

The response from the secondary level students came from Hilton Peters College, Virje University, St Maarten's Academy and St. Dominic High School. Their programme of studies includes both French and Spanish. The examinations taken are from CXC and HAVO (a Dutch Examination equivalent to CXC).

The students take these subjects as foundation for continuing studies in French and Spanish; for personal development; scholarship requirements; and, employment.

Most of the students agreed that the various components of French and Spanish including speaking, writing, comprehension, dictation and translation are useful in preparing them for entry-level employment. The places they identified to obtain entry level employment (in order of priority) are; Hotels, Airlines, Travel Agents and Teaching.

Seventy-four percent of the students indicated that they were confident that their CXC and HAVO qualifications in French and Spanish would assist them to obtain employment. The reasons the students gave for possible difficulties in gaining employment were; work places need higher qualifications, there were insufficient number of positions in businesses employing persons with Modern Language qualifications; and, there were many persons with secondary level qualifications.

Students sourced information about job opportunities from the media - newspapers, television and radio; directly from companies; and from the school – principal, teachers, and career counsellors. The students chose in (order of priority) universities and colleges outside the region, the University of St Martin and the University of the West Indies as places to further their studies in French and Spanish. The reasons they gave for their top choice of institutions were qualifications from the institution will improve employment chances and the content of the institution's programmes is appropriate for personal development.

## **Responses from tertiary level students**

The students who responded were from the University of St Martin.

The programmes in Modern Languages (French, Spanish, and Dutch) were for: the Associate Degree, CAPE and the Bachelor's Degree.

The reasons given as important for doing the Modern Language programme were: for further studies; employment; and, personal development.

In order to prepare them for employment the students identified as important the following: preparing papers and technical documents, speaking and translating.

The places they were likely or very likely to find employment were in the Tourist industry.

Sixty percent of the students rated the programme in relation to equipping them with skills and knowledge required for employment as being 'excellent or "very good"' while 40 percent said the program was "good" or "fair"

The reasons that can present difficulties for finding employment with tertiary level qualifications in Modern Languages were as follows: insufficient businesses employing persons in this area; insufficient numbers of positions in workplaces for persons with qualifications in Modern Languages; and, other skills/subject areas required with Modern Languages in the workplace.

The few students who indicated that they would want to continue their studies in Modern Languages said that they would most likely do so at the University of the West Indies.

The reasons given for their choice were: qualifications from the institutions will improve employment chances; and, content of the institutions program is appropriate for personal development.

## **Responses from Lecturers**

The lecturers who responded from the University of St Martin indicated that Modern Languages (French, Dutch and Spanish) are offered at the Associate and Bachelor's Degree levels.

The students take the courses as part of their general Liberal Arts studies or as enrichment courses.

The reasons for taking the Modern Language option are to meet scholarship requirements and to seek employment.

There is no system in place to track the students or to assist them in finding employment after they graduate. There is also no system in place to obtain inputs from various workplaces to inform the development and review of the Modern Languages programme.

The graduates are most likely to obtain employment in the Teaching Service and Tourist industry. Labour Market Information is not available to the lecturers for the development and review of programmes.

The skill areas identified as most important by lecturers that will improve the chances of the graduates finding employment are: speaking and translation.

Also identified as important are; writing; preparing papers and technical documents; and, translating documents.

Barriers that affect the ability of Modern Language graduates to find employment are: insufficient businesses employing persons in these areas; and, insufficient number of positions in workplaces for persons with qualifications in Modern Language.

The students combined Modern Languages with other subjects to improve their chances of obtaining employment. A popular combination is with Business Management and Tourism.

### **Responses from Employers**

The employers who responded were from the Diplomatic Service, Travel Agencies, Trade and Foreign Affairs, Hotel and Tour Operations, Banking and Accounting Services.

The businesses accept graduates with varying qualifications in Modern Languages in accordance with the level of responsibility in the workplace.

Most of the employers indicated that French and Spanish are frequently needed in the workplace. The content/skill areas required are for everyday communication (speaking and writing); writing briefs, technical papers and other documents; and doing spontaneous verbal translations.

Employers have identified a number of skills and attitudes that are lacking in persons with tertiary qualifications in Modern Languages in the workplace. These include problem-solving and decision-making skills, communication skills, use of initiative and willingness to learn.

The main reason given for vacancies that exist is the difficulty experienced in recruiting persons with the required qualifications.

Fifty percent of the employers indicated that the graduates do not have the technical knowledge and skills required for the workplace. They are of the view that Modern Languages will be required for the growth of their businesses in the next three years.

The employers indicated that they were sometimes or never consulted about the development or review of programmes in Modern Languages. However, they are willing to participate in these processes, if required. They would also be willing to provide attachments.

The employers commented that the students need overall instruction in how to conduct themselves in a professional manner; and, that the institutions should prepare the graduates for the workplace in terms of attitude and dress code. Also while many graduates may be able to speak more than one language, they need to improve their skills in writing.

## **INFORMATION AND COMMUNICATION TECHNOLOGY**

There were 25 responses to the questionnaires in St Maarten; 2 secondary level students, 13 tertiary level students, 2 tertiary level teachers and 8 employers.

### **Responses from secondary level students**

ICT is offered at all secondary and vocational schools in St Maarten. The students do the CXC (General and Technical) and HAVO examinations. These examinations serve as a foundation for further studies at the University of St Martin and colleges overseas. Some students use the qualifications for entry-level employment.

Word Processing, Database Operations and Spreadsheets form the core of the ICT programme. In addition, students take the other components of the CXC and HAVO IT programmes. Students are of the view that they can be employed in the Hotel and Hospitality Industry.

### **Responses from tertiary level students**

The tertiary level students at the University of St Martin and other post - secondary institutions do the ICT programme for several reasons. These include further studies; personal development; as a related component for other courses, and, for employment.

The content includes Network Administration, Management of Information Systems, Database Administration and Management, Graphics and Web Design. Most programmes are geared towards addressing the specific needs of the students.

Those who opted for opportunities to further their education believe that higher education will enhance their chances to be employed. Their choices include UWI and North American Universities, and are based on the quality and content of the programmes and the higher level qualifications they expect to get.

They were of the view that their programme of study should provide greater opportunities for practical work and attachments in the workplace. Other courses they identified to improve their employment chances were Accounts, English, Business Studies, Marketing and Modern Languages.

The students' responses indicated a high to very high level of confidence that after graduation they are very likely to obtain employment or to continue their education.

The students expect to find jobs in the Tourism and Hospitality Industry, Financial Institutions, Government Service, and as Teachers. They consider that ICT qualifications would make them marketable.

However, they cited barriers which may hinder their employment chances as: insufficient number of vacancies; and, the present downturn in business generally.

### **Responses from tertiary lecturers**

The lecturers who responded agreed with the responses of the tertiary level graduates in terms of the various options available for ICT, the job opportunities that they can access upon graduation and the barriers that exist in obtaining employment.

The lecturers indicated that there is no system in place to track the graduates in terms of their employment or further studies. They confirmed that they collaborated with the employers of graduates occasionally.

### **Responses of Employers**

The employers indicated that the present trend is to employ graduates with higher level qualifications - Associate Degree and Bachelor's Degree. They are of the view that initiative, decision making, experience and creativity play a major role in the productive capacity of the graduates.

They identified Programming, Networking, Graphics and Web Design as critical skill/content areas for the modern workplace. They cited that graduates have the technical knowledge but are lacking problem-solving and communication skills.

The employers are prepared to accept graduates on attachment, collaborate with the institutions to serve as part-time tutors, contribute to the development of programmes, and facilitate the provision of hardware and software.

## **MODERN LANGUAGES AND ICT GROUP DISCUSSION**

The cultural and social mix of St Maarten makes it unique within the Caribbean. The University of St Martin recognises its responsibility in contributing to human development by providing appropriate programmes in key areas.

The lecturers expressed the need to provide graduates of Modern Languages and ICT with the essential programme components to be employed and for further studies. Properly equipped laboratories for languages and ICT are in place. The lecturers and management staff noted a challenge in attracting students with the requisite entry qualifications. Other options for further study include a local American university and the University of the Virgin Islands.

The Strategic Plan of the University of St Martin identified the need to introduce the Associate Degree to prepare persons for the workplace and also for further studies at the degree level.

The two public sector personnel from the Ministry of Education interviewed confirmed that the required policy for the Associate Degree has been finalized and is now with the authorities in Curacao for approval.

Private enterprise personnel who were interviewed expressed a very high level of commitment to human development and suggested that the University should have an ICT Associate Degree.

The director of a five year old ICT business promised “I will facilitate the provision of modern computers and accessories on a continuous basis to the University. The ICT Associate Degree Programme has to be a top model for the region”.

The private sector representatives commented on their non-involvement in the operations of the institution except for one individual who both lectures and accepts ICT students on attachments on a regular basis. The representatives gave their commitment to be fully involved as representative on committees, as part time tutors: to contribute resources and to make inputs to the development of the programmes if required.

# **ST. VINCENT AND THE GRENADINES**

## **AUTO REPAIRS AND ENGINEERING**

### **Responses to questionnaires**

Seventeen tertiary level students, four lecturers and four employers responded to the questionnaires.

The students and teachers agreed with the employers that the main programme areas that are important for the work place are –

- Auto Maintenance and Servicing;
- Auto Repairs (General);
- Auto Body Work;
- Auto Air-Conditioning.

Other areas that are also important for the workplace are-

- Auto Transmission;
- Advanced Diagnostics;
- Gasoline Fuel Injection.

Related Auto Repairs and Engineering areas identified included:

- Auto Electricity;
- Communication;
- Mathematics;
- Information Technology;
- Science;
- Auto Mechanical Technology.

Auto Repairs students at the Campden Park Technical Institute are prepared for the Level 1 of the Jamaica HEART/NTA programme. The Auto Repairs (Engineering) students at the Community College followed a more advanced programme geared towards the City and Guilds of London Institute certification.

Students reported that the main reasons for doing a programme in Auto Repairs were to obtain employment, for self-employment and to further their education and training.

The findings from the questionnaires further indicated that the students and teachers agreed that employment of graduates would mostly likely be obtained at Auto Dealers, Auto Mechanic

Shops and Transport Companies. Some of the graduates expect to work with mechanics and eventually to set up their own business.

The students agreed that their programme of study would enable them to obtain employment and they were confident that they would find employment on graduation. Sixty four percent (64%) of the students indicated their desire to pursue further education and training at a higher level.

The major barriers identified as affecting graduates from obtaining employment included the following:

- entry level requirements in the workplace are lower than those qualifications obtained at the Community College; and
- other skills/ subject areas are required with the qualifications in this area in the workplace.

The employers also noted the same programme areas identified by students and lecturers as important for the workplace. The companies reported no vacancies saying that slow growth in the business sector affected their companies' ability to employ more graduates. However, they all stated their willingness to continue to provide attachments and to participate in apprenticeship schemes. They are also willing to provide opportunities for students and lecturers to learn about new vehicles, tools and equipment. They pointed to the need for teachers also to be attached to business places so that they can be updated on modern technological developments in the same way that their students are updated when they go on attachments.

## **INTERVIEWS AND FOCUS GROUP DISCUSSIONS**

Meetings took place with the lecturers of the St Vincent and the Grenadines Community College. The College programme is in keeping with the policy direction of the Government and the College Strategic Plan. There is a policy and procurement manual in use in the College. The Campden Park facility has been designated a vocational centre for secondary level students who are doing the Technical subjects for CXC examinations and who would be doing Levels 1 and 2 for the Caribbean Vocational Qualification. Two other institutions have been earmarked for similar programmes.

The programmes offered at these institutions are for graduates to be able to gain entry- level employment and to have a sound foundation for further education and training in Technical and Vocational areas. The modern facilities at the College are well equipped with assistance from private sector companies. There are plans to acquire an auto mechanical computer and a technology laboratory. There is promise of assistance from private sector partners to share human resources with the institution; to assist the institution to expand its programmes and offer evening classes for persons who are already employed; to formalise a national advisory committee to assist in the development and implementation of policy decisions; to implement an

apprenticeship scheme; to provide work attachments for students; and, to make inputs to the development and review of programmes.

The institution's programme is highly regarded by employers. There was a situation when an employer selected a trainee on attachment to represent the company in a technological and diagnostic programme. The employer noted that his decision was based on his observation of the student's knowledge and ability to use his initiative.

With respect to growth areas in businesses dealing with Auto Repairs, as one employer remarked:

*“There will always be business for people with qualifications in this area – old and new vehicles have to be maintained and unfortunately accidents do happen so there is always work”.*

## **TRINIDAD AND TOBAGO**

### **MODERN LANGUAGES**

#### **Responses to questionnaires**

Twenty-three secondary level students; four tertiary level students, and four employers responded to the questionnaires.

#### **Responses from secondary level students**

The students' reasons for taking Spanish and French are ranked below in terms of levels of importance.

1. Obtain employment
2. To continue studies in French/ Spanish
3. To obtain basic skills for personal development
4. To meet scholarship requirements.

Spanish is the main Modern Language offered in schools. Other than the Teaching Service the private sector provides avenues for employment.

The components of the programme students identified as being useful in preparation for entry level employment are mainly communication – speaking and writing. The places where the students are most likely to find employment are in hotels, with airlines and travel agents.

The reasons given for difficulty in finding employment are ranked as given below.

- (a) Insufficient businesses employing persons specifically with language qualifications; and
- (b) Insufficient number of positions in businesses for persons with Modern Language qualifications.

Those who wish to continue their education indicated that their institution of choice is the University of the West Indies since they considered that qualifications from the University would improve their chances for employment.

## **Responses from tertiary level students**

The students at the Tertiary Level Institutions were of the view that the Associate Degree will serve as a stepping stone towards the Bachelor's Degree programme.

They noted that the attainment of Modern Language qualifications is very important or important for;

- further studies in Modern Languages, especially in a foreign country;
- employment; and
- personal development.

The tertiary level students listed as very important in preparation for employment the following skill areas;

- speaking;
- writing letters and short reports;
- preparing papers and technical documents;
- translating documents;
- doing simultaneous and oral translations.

The students considered that they are most likely or likely to obtain employment with their Modern Language qualifications in the Teaching Service. Other likely places are -

- Ministry of Foreign Affairs
- Hotel Industry
- Travel Agencies
- Tour Operators
- Airline Industries
- Regional Organizations
- Embassies
- Foreign Enterprises.

## Responses from employers

The employers indicated a preference for graduates with a Bachelor's Degree for positions as shown in the table below. Positions requiring an Associate Degree or CAPE are also shown in the Table below

### Employment Opportunities with required Qualifications

EMPLOYMENT OPPORTUNITIES	QUALIFICATION	
	DEGREE	ASSOCIATE DEGREE/ CAPE
Translator / Interpreter	Bachelor of Arts	
Researchers	Bachelor of Arts	
Foreign Lang. Specialist	Bachelor of Arts	
Managers	Bachelor of Arts	
Secretariat Officers	Bachelor of Arts	
Teachers	Bachelor of Arts / MEd	
Senior Secretaries	Bachelor of Arts	
Receptionist		AD/ CAPE
Marketing Officer		AD/ CAPE
Writers		AD/ CAPE
Programme Secretary		AD/ CAPE
Executive Ass. Admin.		AD/ CAPE

The employers are of the view that managerial positions require graduates with a Bachelor's Degree. The rationale is that the workplaces require individuals who can consistently operate at a high level of competence in oral communication; writing drafts, technical papers and other documents; and, translating papers and technical documents.

The employers noted that while graduates had technical competence, there was need for improvement in their ability to take initiative, solve problems and make decisions. The employers are also prepared to collaborate in providing attachments so that students can get practice in the language.

In the very few cases where there are vacancies, the employers gave the following reasons why they were not filled:

- slow growth in the business sector; and
- posts are being redundant;

The employers said that they were willing to partner with institutions in order to make inputs to programme development and review at the tertiary level.

## INFORMATION AND COMMUNICATION TECHNOLOGY

### Responses to questionnaires

Eighteen ICT tertiary level students, one tertiary level lecturer and twelve employers responded to the questionnaires.

### Responses from tertiary level students

The reasons given for studying ICT were for further studies, employment and personal development.

The courses they identified as important in preparing them for employment and those given by the employers are given in the table below.

#### Content/ Skills areas considered essential for Employment

Top five areas from students	Top five areas from employers
<ol style="list-style-type: none"><li>1. Hardware &amp; Software</li><li>2. Information Management &amp; Administration</li><li>3. Network Development</li><li>4. Graphic Design</li><li>5. Desktop Publishing</li></ol>	<ol style="list-style-type: none"><li>1. Network Development</li><li>2. Hardware &amp; Software</li><li>3. Information &amp; Technology Systems</li><li>4. Information Management &amp; Administration</li><li>5. Desktop Publishing</li></ol>

While there is some agreement, there is need for students to be aware of the changing demands of the workplace. This can be achieved through career guidance from the institutions in partnership with industry and when the students are placed on attachments.

The employment positions identified by the employers and the associated qualifications required are given in the table below.

**Employment positions and their required Qualifications**

EMPLOYMENT OPPORTUNITIES	QUALIFICATION	
	DEGREE	ASSOCIATE DEGREE/ CAPE
Database Administrators	Bachelor's Degree	
Network Administrators	Bachelor's Degree	
System Analysts	Bachelor's Degree	
Web Administrators/ Designers	Bachelor's Degree	
Programmers	Bachelor's Degree	
Technicians/ Service Providers		Associate Degree
Help Desk Operators		Associate Degree/ CAPE
Computer Operators		Associate Degree/ CAPE
Database Developers	Bachelor's Degree	Associate Degree
Technical Specialist		Associate Degree
Executive Director	Post Graduate Degree	
ICT Manager	Post Graduate Degree	
ICT Tutors	Bachelor's Degree	

The employers were satisfied with the technical knowledge of graduates. However with respect to the 'soft skills' they noted the need for improvement in decision making, problem solving and taking initiative.

The employers (67%) were either seldom or never consulted about the development of programmes for students at the institutions but would willingly do so if asked. They also indicated their willingness to provide assistance in the form of attachments and to participate in any apprenticeship system.

## **AUTO REPAIRS (ENGINEERING/SKILLS TRAINING)**

### **Responses to questionnaires**

#### **Responses from tertiary level students, lecturers and employers**

Twenty-nine tertiary level students, three tertiary level lecturers and seven employers responded to questionnaires.

Both the students and lecturers agreed that the main areas of study that were relevant to the workplace were:

- Auto Maintenance and Servicing;
- Motor Vehicle Engineering;
- Auto Repairs (General) – Spray Painting & Body Work;
- Auto Air-Conditioning;
- Auto Electronics.

Components of programmes that were of lesser importance for the workplace were:

- Gasoline Fuel Injection;
- Advanced Diagnostic;
- Diesel Mechanics;
- Auto Transmission.

Auto students also need to do Mathematics, Physics, Communication and Auto Mechanical Technology.

The qualifications obtained in Auto Repairs were either a Diploma or a Certificate from the institution with the option to pursue a programme with City and Guilds of London Institute.

The main reasons given by students for doing Auto Repairs were to obtain employment; for self-employment; and to further their education and training. They indicated that they were most likely to obtain employment with Auto Dealers, Auto Mechanic Shops or to begin their own business.

The students all agreed that their chances were either excellent or very good for finding employment with the qualifications they obtained.

Forty- four percent (44%) of the students indicated that they are likely or very likely to continue their education and training in the field in aspects of the Auto Repairs and Engineering programmes at higher institutions.

The major barriers identified as affecting graduates from obtaining employment are given below.

- Other skills/ subject areas required with qualifications in this area in the workplace.
- Workplace needs qualification higher than those offered at the institution.

The responses from the employers show agreement with the programme components considered important for the workplace and the places where graduates can find employment.

Where there were vacancies, the employers said that these were not filled because of slow growth in the business. The employers expressed willingness to continue to provide attachments, to increase their involvement in apprenticeship schemes and to make available opportunities to expose students and lecturers to up-to-date equipment and instruments that are being used in a modern work environment.

## **INTERVIEWS AND FOCUS GROUP DISCUSSIONS**

Focus group discussions and interviews with key person provided qualitative data mainly. A list of persons who were interviewed and who participated in the focus group discussions is attached.

### **Modern Languages**

The College of Science, Technology and Applied Arts of Trinidad and Tobago (COSTATT) offers an Associate Degree in Modern Languages. The COSTATT sees itself as well placed to assist in the national efforts to ensure that graduates of institutions at all levels are competent in Spanish which is the priority foreign language identified by the Government. Students are accepted in COSTATT's programmes with CSEC qualifications. In addition to the College programmes students participate in a Life Skills programme and, in Compensatory Programmes and Academic Support Services (COMPASS). The College plans to introduce an 'immersion' programme in Spanish and a Bachelor's Degree in Modern Languages. There is no formal system for finding out where students are placed and the demands of the workplace. However, through informal networking, the College gets information that is used to shape its programmes.

There are several initiatives for instruction in Spanish in response to the national mandate for Spanish to be the second language in Trinidad and Tobago. Spanish is already offered at the secondary level and in some primary schools. There are also opportunities for persons to learn Spanish through non-formal interventions. It is essential for more persons to have a sound foundation in the language in order to continue their education at a higher level. The efforts for instruction in Spanish at a national level need to be coordinated with the tertiary institutions involved so that maximum use is made of resources and education programmes would be demand-driven. The need for people with competence in Spanish, in particular, is evident given the significant developments in trade with countries like Venezuela, Colombia and Argentina. Persons interviewed noted that the number of trade missions to South and Central America is

increasing and the number of meetings held in Trinidad and Tobago with non English-speaking countries (for example, the Summit of the Americas in 2009) is also increasing. Spanish-, French- and Portuguese- speaking people are also coming to Trinidad to learn about the country and how to do business. Managers and senior officials in the public and private sectors are at a disadvantage in making similar inroads if they are not fluent in the language of the other country.

Given the number of seminars and conferences held in Trinidad and Tobago, there is a pool of persons who are called on to do translations. The persons interviewed noted that the demands of these tasks require persons to have qualifications at the Bachelor's Degree level. Persons with these qualifications are mainly in the teaching service since there is not enough work for them to be fully employed as interpreters. Graduates with Associate Degrees are employed in the Teaching Service. However, this may be a temporary arrangement until they are able to continue their studies to get higher level qualifications. The graduates' chances of getting employment increase if the language component is a part of another programme, for example, Business, Tourism and Hospitality.

### **Information and Communication Technology**

The COSTATT offers an Associate Degree in ICT with emphasis on Networking; Computer Systems and Telecommunications. There is no formal system to track graduates. However, through informal systems and the attachment programmes for students, lecturers obtain information about where graduates are placed and what is required in the workplace. The areas of need in the workplace are: Networking; Database Administration; ORACLE; Business Systems Analyst; and Database Application Specialist. The COSTATT has also been approved as an ORACLE Academy and for CISCO and Microsoft qualifications. Information about labour market needs is obtained from places like the Chamber of Commerce and used at COSTATT in a Career Management System. The ICT Associate Degree graduates can go on to do a Bachelor's Degree at the UWI School of Business and Computer Studies and at external universities, for example, the University of Leicester.

The growth of e-business in all sectors and the computerisation of operations in the public and private sectors require persons at all levels to be competent in the use of ICT. In addition to the Government institutions, there are many private providers of education and training in ICT. These institutions now need to be registered and accredited by the National Accreditation Agency. There is need for collaboration among the institutions for articulation of programmes so that students can identify alternate pathways for continuing their education especially since most companies need people with Bachelor's Degree level qualifications.

### **Auto Repairs**

There is no Associate Degree in Auto Repairs. One Auto Dealer explained its working relationship with an institution training students in Auto Repairs. The students follow a programme for a National Vocational Qualification. During the training the company provides places for attachments. Depending on the numbers and the need, some of these students on

completing their training are employed by the company and they undergo further training for specialist certification. The company is aware of what is done at the institution and builds on that foundation when the trainees come to the company.

The people interviewed in this area noted that Auto Dealers and other employers in this field need employees who are knowledgeable about Auto Electronics. It is also necessary for students in this field to be able to find and use information electronically since many of the auto suppliers are putting their manuals on line.

The need for close links between the training institution and the workplace is critical in this area. Employers noted that the students get exposure to modern tools and machines in the workplace but they have to use outdated equipment at the institution. Since the upgrading of vehicles and tools periodically can be a significant investment, partnership arrangements can be made between the institutions and the industry for both students and lecturers to benefit from experience working with different types of vehicles and instruments.



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the Tertiary Education Response. Summary country reports. TLI Unit. UWI, Cave Hill Campus,  
Barbados.

**List of persons interviewed and in focus group discussions**

**ANTIGUA AND BARBUDA**

**Interviews**

Mr. Franklin S Benjamin,  
General Manager, Heritage Hotel

Mr. Henderson Bass,  
Executive Secretary, Antigua Employers' Federation

Mrs. Cyd-Charisse Elabanjo,  
Establishment Officer (Ag.), Establishment Department,  
Ministry of Finance, the Economy and Public Administration.

Mr. Eustace Hill, Dean of Academic Affairs,  
Antigua and Barbuda International Institute of Technology

Mr. Adrien Julien  
Ministry of National Security and Labour,

Mrs. Jacintha Pringle, Director of Education,  
Ministry of Education, Gender, Sports and Youth Affairs

Mr. Linden Spencer,  
Managing Director, Lowger Bus Lines,

Mr. Lowell Spencer,  
Chairman of the Board, Lowger Bus Lines

Mr. Eden Weston  
Permanent Secretary,  
Ministry of Education, Gender, Sports and Youth Affairs

Mr. Hesketh Williams,  
Commissioner of Labour,  
Department of Labour, Ministry of National Security and Labour

## **Focus Group Discussions**

### **Group 1: Lecturers at Antigua State College**

Mr. Edson Buntin, French Lecturer  
Mr. Eustace Browne, Automotive Lecturer  
Ms. Janice Edwards, IT Lecturer  
Ms. Samantha Leacock, IT Lecturer  
Mr. Jared Roberts, IT Lecturer

### **Group 2: Employers**

Mr. Terry Ephraim, e-Commerce Coordinator, Ministry of Information, Broadcasting, Telecommunications, Science and Technology  
Ms. Arlene Nelson, Customer Service Manager, LIME, Antigua  
Dr Patricia George, Planning Unit, Ministry of Education

## **BARBADOS**

Mr. B Arrindell  
Barbados Private Sector Association

Dr. Gladstone Best  
Principal, Barbados Community College

Mr. Ian Browne  
Barbados Chamber of Commerce

Mr. Stephen Broome  
Systems Solutions

Mr. Anthony Harewood  
Illuminat (Barbados) Ltd

Ms. Heather Hennis  
ICT Resource Person

Ms. Margot Tuach  
Barbados Community College

Ms. Gashin – Ward  
Barbados Community College

Mr. Tony Walcott  
Barbados Employer Confederation

## **DOMINICA**

### **Interviews**

Ms. Antoine  
Human Resource Assistant,  
Public Works Corporation

Ms. Josephine Corbette  
Senior Administrative Officer,  
Ministry of Establishment and Human Resource

Mr. Cyril Dalrymple,  
Director,  
Dominica Employers Federation

Mr Max Dennis Andrew  
Ministry of Education

Ms. Jermaine Jean-Pierre  
Director of ICT Unit, Computer Center,  
Ministry of Establishment and Human Resource

Ms. Weeverly Jules  
Education Planning Unit  
Ministry of Human Resource Development, Education, Sports and Youth Affairs

Mr. Timothy Lavinier  
Chief ICT Officer,  
Ministry of Education,

Mr. Thomas Letang  
General Secretary,  
Public Service Union

Mr. Al Lewis  
Manager, Al Motors Ltd

Mr. Stafford Morancie  
Stafford Morancie Workshop

Mr. Karol Phillip  
Manager, Campbell's Business Systems & Services

Ms Caryl Williams,  
MIS Department, National Bank of Dominica

## **GRENADA**

### **Interviews**

Mr. Joseph Andall  
T A Marryshow Community College

Dr. J Britton  
Principal, T A Marryshow Community College

Mr. Thomas Chase  
T A Marryshow Community College

### **Focus Group: Ministry of Education**

Ms. Veda Bruno-Victor  
Permanent Secretary

Ms. Pauline Finlay  
Senior Planning Officer

Mr. Persad  
CXC Registrar

## **JAMAICA**

### **Interviews**

Ms. Faith Clemens, Principal  
Montego Bay High School  
Former Modern Languages Educator

Mr. Reginald Gayle  
Director  
Language Learning Centre

Mr. Rodcliffe Robertson  
Human Resource Director,  
Grand Palladium Fiesta Hotel, Hanover

Mr. Hugh Shim,  
Executive Director,  
Tourism Product Development Company (TPDCo) Training Division

Mr. Godfrey Townsend  
CARIBIC Vacations

Dr Angela Samuels – Harris  
Principal, Montego Bay Community College  
Chair, The Joint Committee for Tertiary Education (JCTE)  
Academic Committee Chair, Council of Community Colleges of Jamaica (CCCJ)

### **Focus Group: Ministry of Education Region IV**

Ms. Vilma Miller  
Education Officer – Secondary

Ms. Hyacinth Stern  
Community Relations, Education Officer

Ms. Minna Thompson  
Education Officer - Primary

**Focus Group: Montego Bay Community College**

Mr. Glendon Harris, President  
Jamaica Automobile and Limousine Tours Ltd (JCAL)

Ms Pauline Reed, Immediate Past President  
Montego Bay Chamber of Commerce

Mr BrianThelwell  
Jamaica Automobile and Limousine Tours Ltd (JCAL)

**Focus Group: Montego Bay Community College**

Ms Melissa Hamilton, Spanish Lecturer  
Montego Bay Community College

Ms Glenda Ledgister, Spanish Lecturer  
Montego Bay Community College

Ms Loraine Walker, Modern Languages Lecturer  
Browns Town Community College

Mr Yuri Zalazar, Education Officer, Spanish  
Ministry of Education, Region II

## **ST. KITTS AND NEVIS**

### **Interviews**

Ms. Julie Charles  
Human Resource Manager,  
St. Kitts Cooperative Credit Union Ltd.

Ms. Thelma Richard  
Human Resource Management and Development,  
Government of St. Kitts and Nevis

Mr. Wesley Wharton,  
Director, Information and Technology,  
The National Information and Communication Technology (ICT) Centre,  
Government of St. Kitts and Nevis

### **Focus Group: Automotive**

Mr. Calvin Nicholls,  
Director, Unit Development Centrica & AutoCare

Mr. Myron Liburd  
Lecturer – Auto Mechanic Repairs  
Clarence Fitzroy Bryant College

Mr. Valentine Lindsay  
Manager, Car Spares/Serviceing  
S. L Horsford & Co. Ltd

Mr. Randolph Taylor  
Adult Education Unit, Clarence Fitzroy Bryant College

## **ST LUCIA**

### **Interviews**

Mr. Desmond Astwood, IT Manager - Financial Management (FINMAN) Project

Mr. Jeremiah Louis-Fernand, Managing Director - General Business & Technical Services (GBTS)

Mrs. Cathy Gill, IT Curriculum Officer - Ministry of Education

Mr. Marcus Jolie, IT Manager - LIME (Cable & Wireless)

Mr. Brian Louisy, Executive Director - St. Lucia Chamber of Commerce Industry & Agriculture

Ms. Estellita Louisy, Lecturer – Business Studies (BS) Dept (Coordinator IT Courses) Sir Arthur Lewis Community College

Mrs. Vernamay Louisy, Human Resource Manager - Sir Arthur Lewis Community College

Mr Carson Millar, Coordinator of the Information Technology Services (ITS) Department – Sir Arthur Lewis Community College

Ms. Estellita René, Education Officer for TVET - Ministry of Education

Mr. Martin Weekes, Executive Director - St. Lucia Employers Federation

Mr. Shane Wells, Service Manager - Beachcomber Ltd.

### **IT Lecturers (SALCC) Focus Group Meeting:**

Mrs Annie Auguste, Lecturer & HOD – Electrical & Electronics Engineering (EEE) Department

Mr Kurt Harris, Lecturer - EEE Department

Mr Arthur Plummer, Lecturer - EEE Department

Mr Royston Emmanuel, Lecturer – Division of Teacher Education & Educational Administration (DTEEA)

Mr John Satney – Lecturer – DTEEA, TVET Programme

Ms Estellita Louisy, Lecturer – Business Studies (BS) Dept (Coordinator IT Courses)

Mrs Linda Joseph, Lecturer – BS Department

Mrs Louise McVane-Simmons, Lecturer - BS Department

**Auto Repairs Lecturers (SALCC) Focus Group Meeting:**

Mr James Finisterre, Lecturer & HOD – Mechanical Engineering (ME) Department

Mr Cornelius Marcus Gideon, Lecturer – ME Department

Mr Rohan JnBaptiste, Lecturer – ME Department

Ms. Estellita Louisy, Coordinator for Focus Group Meeting

**ST MAARTEN**

**Interviews**

Ms. Rhoda Arrindel, Language Division Head - University of St Maarten

Ms. Carmen Barran, Human Resource Manager - Pelican Resorts

Mrs. Oldine Bryson-Pantophlet, Director - Public Education, Department of Education

Mr. Claret Connor, Manager - The Cliff Residence/Hotel Hospitality Division

Mr. Samuel Dovesma, Manager - Virtual Technologies

Mrs. J. Flemming, President – University of St. Maarten

Mrs. K. Claudette Forsythe-Labega, Director - Department of Education

Mr. Alonzo Hassel, Manager - Insel Air

Mr. Theophilus Thompson, Director - Caribbean Institute for Social Education Foundation (CIFSEF)

## **ST VINCENT AND THE GRENADINES**

### **Interviews**

Mr. Elton Bailey, Cash Money Investment, Sion Hill Bay

Mr. Rueben Cabral, Manager - Auto Care Limited

Mr. Paul Crease, TVET Coordinator - Ministry of Education (STATVET Office)

Mr. Bertille (Silky) DaSilva, Manager - Toyota Car Dealer

Mr. Mike De Freitas, Manager - De Freitas Motors

Mrs. Susan Dougan, Chief Education Officer - Ministry of Education

Mr. Eustace Quammie, Eustace Engineering Supplies

Mr. Nicolas Gill, Head of Automotive Division - Coreas/ Hazells Inc

Mr. Denis B Joyette, Joyette's Auto Collision & Auto Body Supplies

Mr. Calvert Lewis, Manager - General Equipment & Services Corporation

Mr. Morris Prescod, Instructor - Campden Park Multipurpose Centre (STATVET Office)

### **Focus Group Meeting:**

Mr. Verrol Bailey Auto Repairs Lecturers (SVGCC)

Mr. Raffique Browne, Auto Repairs Lecturers (SVGCC)

Mr. Daniel Thom, Auto Repairs Lecturers (SVGCC)

Mr. Eustace, Eustace Engineering Supplies

Mr. Gill, Head of Automotive Division, Coreas/ Hazells Inc

Mr. Joyette, Joyette's Auto Collision & Auto Body Supplies

Mr. Calvert Lewis, General Equipment & Services Corporation

Mr. Morris Prescod, Instructor, Campden Park Multipurpose Centre

## **TRINIDAD AND TOBAGO**

Mr. Gregory Aboud  
President, Downtown Owners & Mergers Association

Ms. Debra Alexander  
Human Resource Manager, Neal & Massy Automotive Limited

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Dr. Cheryl Bennet  
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Ms. Linda Besson  
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Employers Consultative Association of Trinidad & Tobago

Mr. Nigel Bhagwatsaran  
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Mr. Pedro Centeno  
Executive Director, Caribbean Institute of Languages & International Business

Mr. Emmanuel Gonzales  
President  
College of Science, Technology and Applied Arts of Trinidad & Tobago

Dr. Deborah Maharaj-Newling  
Principal  
The Professional Institute of Marketing & Business Studies

Mr. Roy Marslier  
Managing Director, Academy of Auto Mechanics Ltd.

Mr. Junior McIntyre  
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Mrs. Natasha Mustapha-Scott  
Chief Executive Officer, Trinidad & Tobago Manufacturers Association

Ms. Tamera Pooran-Seepaul  
Vice President-Human Resource, Fujitsu

Ms. Giselle Roberts  
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Professor Clement Sankat  
Pro Vice Chancellor & Principal, University of the West Indies, St Augustine

Ms. Shanmatee Singh  
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Ministry of Labour & Small & Micro Enterprise Development

**Focus Group: Cipriani College of Labour and Cooperative Studies**

Mr. Navin Boodhai  
Research & Development Manager, National Training Agency

Mr. Mervyn Extavour  
President / Coordinator / Lecturer  
National Association of Technical, Tertiary & Professional Educators of  
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Ms. Vashti Guyadeen  
Research Publications & Info. Manager  
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Dr. Roy Thomas  
Lecturer / Labour Market Specialist  
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**Focus Group: Ministry of Labour**

Ms. Tessa Ali, Human Resource Division  
Ms. Bedassie, Statistical Division  
Ms. Serrette – Hutson, Statistical Division  
Ms. Claudette Gomes, Statistical Division

**Focus Group: Neal and Massy**

Ms. Deborah Alexander, Human Resource Manager  
Mr. Randy Bailey, Training Manager  
Mr. Gary Rambissoon, Officer – Information and Communication Services

