### **FOREWORD**

The policy on Technical and Vocational Education and Training (TVET) with the theme "Technical and Vocational Education for Economic Advancement" was first prepared in 1992 by Sydney Walters who was the Deputy Chief Education Officer (Technical) at that time. It was edited and approved by the Education Systems Committee (ESC) and the Senior Policy Management Group (SPMG) and subsequently approved by Cabinet.

This new edition of the TVET policy with the theme "TVET: - Key for the Development of a Modern Competitive Workforce" articulates a development plan for TVET over the next ten years. It was prepared for the Minister of Education and the Council for Technical and Vocational Education and Training by Sydney Walters, Director of the Council for TVET.

### INTRODUCTION

The Government expects education to play its part in national development by providing the human capital necessary to satisfy the requirements of Business and Industry and the nation as a whole. Technical and Vocational Education and Training was, therefore, restructured to make a direct contribution to the realization of a sustainable economic development and ultimately a better standard of living for all. Given the immense scientific, technological and economic development envisage, particularly as a result of globalization, all TVET programmes will lead to an understanding of scientific and technological aspects of contemporary civilization in such a way that people will comprehend their environment and will be capable of taking a critical view of the social, political and environmental implications of scientific and technological changes.

The system is being organized to contribute to the attainment of national goals for Technical and Vocational Education and Training, and to meet the changing demand for a skilled workforce. These include:

- a) meet the need for highly skilled craftspersons and technicians through education and training during and after the secondary school level;
- b) make education and training opportunities available to all regardless of ethnic origin, sex, scholastic ability, aptitude, or place of residence;
- c) develop competencies needed for successful transition from school to work with emphasis on leadership skills, personal employability skills and moral worth;
- d) ensure that students/trainees acquire the competencies needed for employment or self employment in occupations of their choice and for which there are employment opportunities;
- e) promote programmes which are developed through collective efforts with the stakeholders;
- f) provide training or retraining for workers whose skills and technical knowledge must be updated as well as those whose jobs will be made redundant due to increasing efficiency, automation, or economic change; and
- g) expand the Technical and Vocational Education and Training programmes consistent with employment possibilities and national economic needs. (Adapted from Finch and Crunkilton 1989.)

In the quest for the fulfilment of these goals, the Ministry of Education and the Council for TVET will ensure that all citizens and those residing in Guyana have equal opportunity for access to education and training.

Over the next ten years the providers and stakeholders of TVET will have meaningful roles and responsibilities in the implementation and evaluation of the various policies and strategies articulated herein for the realization of these goals.

#### I. **DEFINITIONS**

In Guyana and the Caribbean Region, the use of the title Technical/Vocational Education and Training (Tech/Voc) was discontinued. It was replaced by the title Technical and Vocational Education and Training (TVET). This title must, therefore, be recognized as the official title for the field of Vocational Education and Training. The following definitions were taken from the Caribbean Glossary of Technical and Vocational Education and Training Terms (1991):

#### i. TECHNICAL AND VOCATIONAL EDUCATION

The broad objectives of Technical and Vocational Education distinguish it from Technical and Vocational Training or Occupational Training which is directed to developing the particular skills and related knowledge required by a specific occupation or group of occupations.

### ii. EDUCATION AND TRAINING, FORMAL

Systematic education and training programmes which normally take place in schools and other institutions within the regular school and university system.

### iii. EDUCATION AND TRAINING, NON-FORMAL

Education and training which takes place within industry and in institutions outside of the regular school and university system. It includes apprenticeship and part time programmes.

#### iv. EDUCATION AND TRAINING – INFORMAL

The life – long process of learning which goes on continuously and casually for each individual and where knowledge, skills and attitudes are acquired through experience

and contact with others.

#### v. TRAINING

A process that affects behavioural change by providing the skills, knowledge and attitudes required for employment in a particular occupation, group of occupations or field of economic activity.

#### vi. PRE-VOCATIONAL EDUCATION

Training arranged primarily to acquaint individuals with materials, tools and standards relating to a range of occupations, and to prepare them for choosing an occupational field or programme of training.

#### vii. POST-SECONDARY

Education beyond the secondary level which does not necessarily lead to a qualification.

#### viii. TECHNICAL AND VOCATIONAL

A term referring to the educational process when it involves, in addition to general education, the study of technologies and related sciences and the acquisition of practical skills and knowledge related to occupations in various sectors of economic and social life.

### ix. COMPETENCY-BASED

A series of learning experiences through which the trainee progresses at his/her own pace in the skills of the chosen occupation; and his/her increasing mastery of the skills is continuously assessed against appropriate predetermined standards.

### II. HISTORICAL PERSPECTIVE

Formal Technical and Vocational Education and Training evolved from the introduction of technical subjects in the primary school curriculum. Technical subjects such as Woodwork, School Gardening, Home Economics, Needlework and Bookbinding were taught. At that time exposure to primary education was accepted as preparation for employment. This level of education, therefore, was a form of Vocational Education. Persons who had successfully completed their primary education were able to gain employment in a wide range of low-level occupations.

Between 1890 and 1958 the expansion of the plantations and the introduction of new industries such as mining, timber, rice, fishing and shipbuilding increased the demand for skilled personnel at all levels. The number of primary and secondary schools that offered technical subjects on their curriculum gradually increased, particularly during the 1940s and 1950s.

In 1931 the Director of Education established three Handicraft Centres, now known as Practical Instruction Centres. They were located in Georgetown, New Amsterdam and Fellowship on the West Coast of Demerara. The Carnegie Trade School now known as the Carnegie School of Home Economics was established two years later in 1933.

The demand for skilled manpower at all levels reached an acute stage in the 1940s. Although an apprenticeship system was in place, this together with the efforts of the primary school system could not satisfy the labour market. The trend was for the major industries and the Colonial Government to recruit engineers and technicians from the developed countries.

The training of craftsmen which was done mainly through the apprenticeship system by some government ministries and departments, and the large industries such as bauxite, sugar, rice and shipbuilding was inadequate. This was so because of the "Sitting by Nellie" approach which was the methodology that was employed in those days and the limited number of apprentices that were trained over a stipulated five-year period. The training was purely practical in nature. These and other problems led to a three-pronged strategy in the training of skilled personnel. They were as follows:

- The expansion of pre-vocational education at the primary and secondary levels with the introduction of practical instruction centres and the continuous increase of practical instruction departments from 1953.
- ii. the development of post-secondary Technical and Vocational Education and Training institutions to provide classroom exposure for apprentices and special tailor made training courses for workers and the unemployed; and
- iii. the training of middle and senior level skilled personnel overseas.

As a consequence of this policy, the Government Technical Institute was established in 1951. In the years that followed several other major institutions were established. These include the

Guyana School of Agriculture (1963), the Guyana Industrial Training Centre (1968) and the New Amsterdam Technical Institute (1971). Some of the main industrial undertakings in Guyana, including sugar and bauxite, also established their own Training Centres. In addition, training was further expanded with the establishment of the Guyana National Service and some small Training Centres such as the Guyana Electricity Corporation Training Centre, and the Guyana Telecommunications Corporation Training Centre.

In the early 1970s the Faculty of Technology was established at the University of Guyana. This input enabled the University to train persons at the Diploma and later at the Degree level in limited fields of engineering. This development can be seen as an up-grading of the policy that was employed in the 1950s.

In 1996 the Linden Technical Training Complex now known as the Linden Technical Institute was handed over to the Ministry of Education by GuyMine. The Essequibo Technical Institute at Anna Regina, Region Two was established in 2001 and the Upper Corentyne Industrial Training Centre at Kingston, Corriverton was established in 2006. Two other Vocational Training Institutions are to be established very shortly. One will be at Groenveldt, Leonora, Region Three and the other at Mahaicony, East Coast Demerara, Region Five. These institutions will address the policy of equality of access in addition to the alleviation of the skills needs of the highly populated regions.

Students of the hinterland regions are awarded scholarships each year to pursue studies in Technical and Vocational Education and Training Programmes at institutions in the Coastal Regions.

In 1973 the Community High Schools were established. Such schools were secondary institutions specially established with curricula that were designed to provide occupational skills necessary for the economic development of the communities in which they were located and concomitantly, the country as a whole. Academic and pre-vocational education subjects were taught for the first three years of the programme, after which students wrote the Secondary Schools' Proficiency Examination (SSPE) Part One. Those students, who were academically inclined, were transferred to a general secondary school so that they could pursue a more academically biased programme after being successful at the Secondary

Schools Proficiency Examination about the age of fourteen (14) years. Transfer was entirely dependent on the desire of the student. Those successful students who remained were required to specialize in a pre-vocational education subject for which they had individually, shown the necessary aptitude and interest. The Secondary Schools' Proficiency Examination (SSPE) Part Two was written at the end of the programme in the fourth year.

Some of the students who successfully pursued this programme were employed in industry as apprentices. Some requested to pursue further studies at the post-secondary institutions while a minority gained employment in their family businesses.

The Community High Schools are being converted to secondary schools. The duration of the programme is now five years and the SSPE examination was replaced by the Basic Competency Certificate Programme (BCCP) which is now being called the Secondary Competency Certificate Programme (SCCP) and the Caribbean Secondary Education Certificate (CSEC).

### IV. COMMON PROBLEMS OF THE SYSTEM

The depression experienced in the economy particularly in the 1980s impacted negatively on the system. The shortage of training materials such as hand tools, workshop equipment, text books, audio visual equipment and a general rundown state of the various physical plants, among other things, bore testimony of this. Since then, major civil works were done on the physical plants of all the post-secondary institutions and some of the practical instruction centres. However, such rehabilitation work is necessary and, therefore, must be continued.

In 2004 Tecsult International Limited conducted a survey of the Technical and Vocational Education and Training System for the Caribbean Development Bank. In looking at the capacity of the system as it pertains to lecturers/instructors they reported that "A high percentage of Instructors are deficient in technical skills, pedagogical skills or both".

As it pertains to tools and equipment they found that "Tools and equipment at the TIs are out of date, unserviceable or unavailable". They further stated that "The status of current

inventory was so bad that a strategic decision was taken not to list and describe every piece of antiquated equipment in 15 PICs, 7 TIs and the UG".

A mission from the Caribbean Development Bank visited Guyana during November 14-15, 2006. After visiting three Technical Institutions, they reported that "The labs and workshops visited are poorly equipped with antiquated tools and machinery many of which are non functional".

In addition, initial technical teacher training for lecturers/instructors at the post-secondary level which is being offered at the Government Technical Institute (GTI) needs to be better organized and the programme accredited. Initial technical teacher training at the prevocational level that is offered by the Cyril Potter College of Education is not meeting the needs of the system both in terms of the quantity and quality of the graduates.

The prevailing economic climate does not allow desirable levels of expenditure on Technical and Vocational Education and Training. While funds are provided for the maintenance of the physical plants of the post-secondary institutions and the establishment of new institutions the further development of infrastructure, the retooling of facilities and the acquisition of adequate training materials are now critical and continue to contribute to the decline of the TVET System. These factors exist while both old and new industries alike are equipped with modern facilities. Consequently, employers continue to demand to have an enlightened and skilled workforce.

# **SECTION A**

### The Council for TVET

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Excellence in Standards and Quality.

### VISION:

The vision of the Council for TVET is:

To ensure a Competent Labour Force to meet the changing demands of global competitiveness.

### **MISSION**:

The Mission of the Council for TVET is instructive in terms of the expected performance of the TVET System nationally. It states as follows:

The work force preparation in Guyana is committed to ensure that Business and Industry are provided at all levels of occupational standards with workers who are competent to provide a high quality of products and services as demanded by global competitiveness.

The Council for TVET was established by an Act of Parliament on July 22, 2004. The Constitution of the Council as articulated in the Technical and Vocational Education and Training Act of 2004 is as follows:

- a) the Council shall consist of not less than nine nor more than fifteen members;
- b) the members shall be appointed by the Minister from among students and other persons:
  - nominated by organizations including professional organizations, industry, commerce, employers and labour;
  - from the Ministry of Education and the public, appearing to him as having had experiences of and shown capacity in matters relating to Technical and Vocational Education and Training;
- c) the Director shall be an ex-officio member of the Council.

#### I. THE FUNCTIONS

The functions of the Council are:

- a) to advise the Minister on the measures required to ensure a comprehensive system of Technical and Vocational Education and Training that is suited to the development needs of Guyana;
- b) to establish, develop and monitor schemes for the training of craftspersons, technicians and technologist needed to sustain and enhance economic growth;
- c) to develop a national system of Competency-based Modularized Training and initiate its implementation;
- d) to expand the scope of industrial training within industry;
- e) to monitor and evaluate the delivery of all programmes;
- f) to monitor the Technical and Vocational Education and Training of apprentices;
- g) to undertake curriculum analysis and design and cause to establish training and apprenticeship programmes and vocational qualifications that are relevant to the needs of Guyana and where appropriate the needs of CARICOM member states;
- h) to establish national training standards and performance testing;
- to ensure through its inspectorate that curricula, standards, schemes and guidelines formulated by it are implemented by every Registered Training Organization and technical institute;
- j) to licence and keep a register of training organizations which it considers suitable to receive apprentices, and to licence and keep a register of public and private technical institutes which offer training that meets the requirements of the TVET Act;
- k) to approve organizations as Supervising Registered Training Organizations;
- to monitor all registered technical institutions and other tertiary institutions and regulate their facilities;
- m) to provide information and vocational guidance to persons about the choices available during their transition from general education to post-secondary Technical and Vocational Education and Training;
- n) to assist persons in finding placement for apprenticeship in industry and admission to technical institutes;
- o) to facilitate the provision of the facilities (which may include residential accommodation) for the successful training of those persons whom the Council

- considers need assistance of such facilities and in doing so shall have regard to any facility otherwise available to those persons;
- p) to promote the use of the distance mode of delivery for technical programmes;
- q) to cancel licences and certificates issued under this Act, when in its opinion there is cause to do so;
- r) to take appropriate steps to increase and improve the training of instructors, examiners and other training functionaries;
- s) to carry on or assist other persons in carrying on research into Technical and Vocational Education and Training or any matter relating to apprenticeship or training for employment in industry;
- to ensure the availability of labour market information on which training decisions may be made;
- u) to review the TVET Act of 2004 from time to time and make recommendations to the Minister for any amendments thereto; and
- v) to do all such acts and things as in its opinion are necessary for, or conducive to the proper discharge of its functions.

# II. TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING ACT

Technical and Vocational Education and Training as practiced at all levels, is governed by the laws of Guyana. Pre-vocational education which is a part of general education is catered for under the Education Act Cap: 39:01. Apprenticeship training is regulated by the Apprenticeship Act Cap: 39:04 and the Council for TVET and post-secondary Technical and Vocational Education and Training are regulated by the Technical and Vocational Education and Training Act of 2004. Consequently, the following will be undertaken on a timely basis:

- i. Government through the Ministry of Education, workers, employers, and civil society will ensure that the Education Act is reviewed, amended or updated from time-to-time so as to keep up with changes in the administration, management, financing, technology and the labour market.
- ii. The Apprenticeship Act Cap 39:04 and the TVET Act of 2004 will be reviewed, amended or up-dated from time-to-time by the Ministry of Labour and the Council for TVET respectively in collaboration with the stakeholders to ensure that they are current and relevant.

# **SECTION B**

### The Future Direction of TVET in Guyana

It should be noted that the Technical and Vocational Education and Training system served the nation well in the past in spite of some identifiable weaknesses. However, in looking at the immediate, proximate and long term economic policies, and the identified problems, the Council for TVET was established to regulate TVET systems, establish policies, standards, promote quality and to facilitate its further development. Improving the efficiency and effectiveness of both the formal and non-formal approaches in the delivery of Technical and Vocational Education and Training is of paramount importance. However, caution must be taken to avoid unnecessary duplication of programmes by some institutions/ organisations as further development of the system is pursued. As such, the Council for TVET will:

i. monitor the activities of technical and vocational institutions, and contribute to their purposeful and constructive development.

ii. promote the involvement of the private sector so that they contribute to the quality and further development of the Technical and Vocational Education and Training System.

iii. ensure that the establishment of private post-secondary institutions by persons or agencies is authorized by the Minister of Education when it is determined by the Council for TVET that the minimum requirements have been met.

- iv. collects information on competencies and emerging trends in the labour market from a variety of sources, including longitudinal studies, and not confined only to traditional occupational classifications.
- v. ensure that the standard of functional literacy and numeracy is substantially improved including the number of graduates from the science and technology programmes; and

vi. ensure that the ten year plan for Technical and Vocational Education and Training also takes into account the effects of globalization on the economy; the current world economic recession as well as migration of Guyana's citizens.

In addition, the following inputs will be invaluable in the quest to develop a cadre of fully trained persons such as craftpersons, technologists and technicians as part of the human capital necessary to impact positively on production and productively:

- training for employment will be intensified by the Ministry of Education through its
  Technical and Vocational Education and Training programmes in the secondary
  schools, practical instruction centres and the post- secondary institutions, as well as its
  special intensive new skills occupational programmes such as, skills for life and skills
  up-grading training activities which will be offered at both the secondary and postsecondary levels;
- ii. the Ministry of Labour through the Board of Industrial Training will contribute to this national effort by its apprenticeship and the youth empowerment skills training programmes;
- iii. the Ministry of Agriculture will make its contribution through the Guyana School of Agriculture which offers diploma and certificate programmes as well as its outreach field training programmes for the training of persons in the agricultural sector;
- iv. the Ministry of Culture Youth and Sport Training Centres will continue to play their part in this very important area of training for employment; and
- v. the private sector will be an important contributor to training for employment through their non-formal inplant training and other training activities. Their importance must be recognized and where appropriate technical assistance given to them to improve the quality of delivery and the standard and level of their various programmes.

## Manpower Needs

All Human Resource Development programmes will be informed by forecasts of manpower needs consistent with developments in science and technology and the intended establishment of new industries. The system will, therefore, rely on up-to-date statistical data on the manpower needs for the short, medium and long terms in developing its training strategies.

Training for employment must be seen as one of the most important inputs in the continued fight for economic prosperity. As such, it will be given the priority it deserves.

### **Human Resource Planning**

The Council for TVET will establish a working relationship with the Ministry and or Department which is responsible for human resource planning. Up-to-date statistical information on manpower needs must be provided to enable the Council to better plan its programmes to meet short and long term labour market demands. The Council for TVET will endeavour, therefore, to have information on a continuous basis in this regard.

### Strategic Plan

Increased human and infrastructural development activities at all levels of the TVET System must provide the physical and human resources necessary for the efficient and effective delivery of Technical and Vocational Education and Training programmes. Each institution in the public sector including the post-secondary institutions, the practical instruction centres, the practical instruction departments, the Board of Industrial Training and the training centres under the Ministry of Culture Youth and Sport will be required to prepare and implement a strategic plan so that they can positively respond to the demands of the next ten years.

## Reservoir of Available Skills

The development of a modern workforce and the realization of a reservoir of available skills must be seen as a national priority. In the development of such a workforce the curriculum for both the formal and non-formal systems must be upgraded. To this end, a national system of Competency Based Modularized Curriculum will be implemented. Each occupational programme will focus on the development of labour competencies based on the manpower needs of employers.

As we prepare to confront the challenges of the future, there is a consciousness that "knowledge becomes the basis of human labour but it also becomes increasingly evident that knowledge must be in context and relevant. Education becomes the centre of a new society, and what definitely distinguishes the poor from the rich – be they individuals or

countries – is not only whether they have less capital but also whether they have less knowledge and what they have is of poorer quality. People who cannot produce or consume relevant knowledge run an extremely high risk of exclusion." The Formujer Programme (2004).

## SECTION C

## Programme, Curriculum and Content

### I. CURRICULUM DEVELOPMENT

The Council for Technical and Vocational Education and Training will establish a Curriculum and Occupational Standards Development Unit. This unit will provide services for both the formal and non-formal systems, and initiate national curriculum development activities. Curriculum Lead Groups will be established to facilitate the development of new curriculum and review existing ones. The Lead Groups will also provide service to the Regional Councils. These groups will be made up of representatives from Business and Industry, as well as instructors of secondary and post-secondary institutions. The Curriculum and Occupational Standards Development Unit will co-ordinate the work of the Lead Groups. It will also liaise with sister organizations regionally and internationally.

The courses that are being offered by all TVET institutions will be reviewed and modified to provide education and training according to present and future trends. This will include computer application for all the various programmes and Computer-aided designs on a priority basis. In cases where there are acute shortages of skilled workforce, the Council for TVET will ensure that institutions design and deliver accelerated intensive tailor made courses to provide the skilled workforce required. Curriculum development initiatives will take into consideration the requirements of the CARICOM Revised Regional Qualifications Framework.

### II. CURRICULUM EVALUATION

Curriculum evaluation will be conducted on a formal and informal basis. It must be viewed as an integral part of curriculum implementation. Each new curriculum will be evaluated as a matter of policy. The evaluation process that will be employed will be determined by the curriculum developers. However, for national curriculum a thorough investigation will be done involving context, input, process and product evaluation. While the evaluators can

employ one of several techniques in the evaluative process, for national curriculum the evaluators must employ the quantitative and naturalistic techniques.

### III. PROGRAMME CONTENT

The Council for TVET in its quest to implement the policy of training for employment will ensure that all Technical and Vocational Education and Training programmes:

- aim at providing scientific knowledge, technical versatility and a cluster of core competencies and generic skills required for rapid adaptation to new ideas and procedures and for steady career development;
- ii. be based on analyses and forecasts of occupational requirements by national education authorities, employment authorities, occupational organizations and other stakeholders;
- iii. include an appropriate balance between general subjects, science and technology, as well as subjects such as computer literacy, information and communication technology, the environment and studies of both the theoretical and practical aspects of the occupational field;
- iv. stress developing a sense of values, ethics and attitudes to prepare the learner for self-reliance and responsible citizenship;
- v. be based on curricula designed around core knowledge, competencies and skills;
- vi. include an interdisciplinary perspective to equip students to work in the changing employment environment, and incorporate a multicultural perspective, which may include the study of a foreign language as preparation for international employment; and
- vii. include entrepreneurial skills. (UNESCO/ILO, 2002)

### IV. DEVELOPMENT OF COMPETENCIES

The development of competencies must be promoted, with the involvement of the social partners, the ongoing identification of trends in the competencies needed by individuals, enterprises, the economy and society as a whole. The Council for TVET will ensure:

- a) the recognition of the role of the social partners, enterprises and workers in training;
- b) the promotion and recognition of workplace learning, including formal and non-formal learning, and work experience;
- c) the promotion of the expansion of workplace learning and training; and
- d) that stakeholders are consulted on issues of skills development.

### V. COMPETENCY BASED MODULARIZED TRAINING

Competency Based Modularized Training will be introduced in both the formal and non-formal systems. The modules will be designed to meet students'/trainees' needs and at the same time develop knowledge, skills, attitudes, values and other attributes that are considered critical towards the attainment of successful and satisfying employment. Entrepreneurial studies will also be offered in these modular programmes. The approach and the flexibility that will be employed with modular training will enable employers to benefit immensely from it.

### VI. FACILITIES AND OCCUPATIONAL STANDARDS

The development of Occupational and Facilities Standards for an occupation must be done before the development of the modules for the curriculum. The structure and content of the standards must satisfy national and regional occupational requirements. In the development of the curriculum, there must be congruence between the standards and the curriculum. Where approved standards are available in CARICOM, they will be acquired, adapted and utilized to inform the development of national curriculum.

### VII. EQUIPMENT AND HAND TOOLS

Each practical instruction department of the secondary schools and the practical instruction centres will be equipped to satisfy the facilities requirement of their curricula. Consulting the Non-Academic Education Norms must be seen as an invaluable exercise in this regard. The post-secondary institutions will utilize the Regional Facility Standards to acquire the appropriate tools, equipment and instruments in the up-grading of their facilities.

### VIII. HEALTH, NUTRITION AND HIV/ AIDS

Each of the post-secondary institutions must include topics on health, nutrition and HIV/AIDS on their national policy/social studies programme each year. The policy of the Ministry of Education and that of the Ministry of Health on Health, Nutrition and HIV/AIDS must be recognized and practiced by each TVET institution.

# IX. REVISED REGIONAL QUALIFICATIONS FRAMEWORK: LEVELS I-V

Guyana has adapted the CARICOM Revised Regional Qualifications Framework to inform the development of its National Qualifications Framework. The Council for TVET will initiate the development of the National Qualifications Framework. The Council will also disseminate information on the CARICOM Revised Regional Qualifications Framework and the new National Qualifications Framework to all TVET providers and stakeholders.

# **SECTION D**

## **Teacher Training**

Technical teacher training at the Cyril Potter College of Education and the Government Technical Institute is not meeting the nation's need for trained technical teachers in both the quality and quantity of its graduates. Consequently, the training of technical teachers at these institutions will be reviewed and upgraded. The Ministry of Education will ensure that:

- the curriculum for the initial training of technical teachers at the Cyril Potter College
  of Education is further developed with the acquisition of new facilities including
  laboratory equipment;
- ii. the output of graduate teachers be increased by sixty percent over the next two years;
- iii. technical teachers who are pursuing initial training will be required to serve short periods of internship in industry to up-grade their practical skills in specific areas of their specialization;
- iv. the initial training programme for lecturers/instructors of the post-secondary institution at the Government Technical Institute (GTI) will be reorganised and upgraded to conform with the regulations that govern such training, thus, enabling it to qualify for accreditation by the Ministry of Education or the Accreditation Council;
- v. the National Centre for Education Resource Development be used for the hosting and delivery of up-grading and up-dating programmes for technical teachers;
- vi. Competency-based Modularized Curricula will be introduced nationally for the training of technical teachers.
- vii. the curriculum at the Cyril Potter College of Education and the Government Technical Institute be up-graded to include the Competency-Based methodology as well as the Competency-based Assessment strategy; and
- viii. where practicable, the distance mode of delivery will be used as an additional delivery mode for the training of technical teachers.

# SECTION E

## Content/Delivery

### I. STANDARDIZATION OF TRAINING

The training of apprentices throughout the country will be standardized. This means that irrespective of where an apprentice is trained, the minimum criteria for assessment of achievement in terms of knowledge, skills and attitudes will be the same to meet the national and or regional standard requirements. To achieve this, the Council for TVET will:

- i. seek to have the Board of Industrial Training transfer apprentices from one plant to another to have a broad range of training in all modules as designed.
- ii. ensure that on successful completion of the training on all the modules, the apprentice returns to the Master with whom he or she is registered; and
- iii. ensure that formal basic institutionalized training for apprentices is compulsory. The duration for such training will be two years. The basic training will be broad based, with a ratio of sixty percent practical work and forty percent theory.

# II. CONTACT HOURS: STUDENT /TRAINEE-LECTURER / INSTRUCTOR RATIO

The Council will ensure that the minimum contact hours to be completed by each Lecturer/Instructor, Senior Lecturer and Principal/Administrator of the post-secondary institutions are adhered to by all administrative and teaching staff. The Council will also ensure that Principals/Administrators monitor this very important requirement to ensure compliance.

The impending introduction of Competency-based Modularized Curriculum at the post-secondary institutions will demand that greater attention be paid to the individual student/trainee. Monitoring and documenting of his or her progress must be done on a continuous basis.

To ensure efficient and effective supervision of each student's/trainee's performance, the class size will be twenty students/trainees to one Lecturer/Instructor. An additional five students/trainees may be registered to cater for drop out.

### III. INFORMATION COMMUNICATION TECHNOLOGY

The Ministry of Education will ensure that Information Technology programmes are available and taught at most of the primary and secondary schools. Where necessary, information technology centres will be established to service a cluster of schools which are in the environment of each centre. Those schools that cannot be serviced by a Centre will be equipped with the facilities and materials necessary to deliver the various programmes. Broadband Technology will be employed for the delivery of online programmes and access to internet communication at secondary and primary schools as well as the information technology centres.

At the post-secondary level a wide range of vocational programmes such as Basic Information Technology, Auto-CAD, Business Accounting and special programmes for science and research among others will be offered. In addition, the major post-secondary institutions such as the Government Technical Institute, the New Amsterdam Technical Institute, and the Linden Technical Institute will have studio facilities with satellite communication for the transmission of TVET by the distance mode of delivery. When twinning of these institutions is established with similar institutions internationally, the facilities will be used to receive special programmes that are beamed directly to any or all of the institutions at the same time. Online distance education programmes will be offered on an ongoing basis.

### IV. ADDITIONAL COURSES

Additional technical courses will be introduced in the secondary schools curriculum. The new courses will be identified on the basis of the needs of the communities in which the schools are located. As far as practicable, secondary schools will be equipped with facilities to make the introduction of Designed Technology possible.

### V. WORK STUDY/WORK EXPEREINCE

The Ministry of Education will invite employers to participate in the various pre-vocational education and vocational education programmes by providing, work experience to students/trainees. The Ministry will carry out this initiative on a formal basis throughout the country. The objective is to give students the opportunity to work along with skilled experienced persons in Business and Industry in their area of specialization. Such practical experience contributes to the individual skills development and career choice. The duration of any practical work experience will be dependent on the prevailing circumstances at each individual institution.

A profile of the student's/trainee's performance in his or her area of specialization will be supplied to the establishment with which the student is placed on internship. The establishment will be responsible for evaluating student progress throughout the duration of the internship, while the instructors/teachers will monitor student performance. Each party will be required to submit a report at the end of the internship. Such reports will form part of the students/trainees cumulative record.

Each Regional Education Department and the Department of Education, Georgetown will maintain a well established workstudy unit to provide a service to their schools. The size of the unit will be determined by the workload of the particular Region or Department.

Each post secondary institution will organize and manage its own work experience programme. The Ministry of Education will ensure that students on work experience programmes are covered by the National Insurance Scheme or by Industrial Accident Insurance. An orientation programme must be held for students/trainees before they go on internship.

### VI. POST-SECONDARY LEVEL EXAMINATIONS

The Council for TVET will expand the services of the Guyana Technical Education Examinations to issue the CVQ and trade testing in the non-formal sector. If considered necessary, the name of the Guyana Technical Education Examinations will be changed. The

examinations will be controlled by a Board with wide powers to ensure efficient and effective administration of all examinations. The Board's work will be carried out by a Secretariat.

Persons considered suitably qualified for training in measurement and evaluation will be identified, trained and placed in the Testing and Certification Unit of the Secretariat of the Council for TVET.

All the post-secondary institutions will be required to prepare their students/trainees to meet the standards of the Guyana Technical Education Examinations and the Caribbean Vocational Qualifications (CVQ). Recognition will be given to a course of study if the institution that is offering it meets the requirements of the examining body and the Council for TVET. These include areas such as accommodation, staffing, conditions of entry, length and content of course, approved facilities and occupational standards etc.

Apprentices will be required to satisfy the requirements of the Guyana Technical Education Examination and the Caribbean Vocational Qualification (CVQ) in both the formal and onthe-job aspects of their programme.

### VII. SUPERVISION BY EDUCATION OFFICERS

Present and future demands on the pre-vocational education system make it imperative that better supervision of this system be accomplished. Clinical supervision is a necessary input in the day-to-day management of the system particularly as it pertains to newly appointed teachers. Education Officers with the required competence must be readily available to promote and actively participate in this important exercise. In addition, the Secondary Competency Certificate Programme will require efficient and effective supervision of the practical instruction departments and the practical instruction centres.

The preparation of students for the Caribbean Examinations Council Examinations has become more complex because of the introduction of the School Based Assessment component of the various technical subjects. In addition, more schools are preparing students to write these examinations, resulting in increased workload on teachers. Supervision in this area at all levels will have to be intensified

# SECTION F

## Guidance and Counselling

Vocational and Career Guidance will be better organized and will focus on a variety of areas including gender bias and opportunities for persons with disabilities. Consequently, all the post-secondary institutions must provide guidance and counselling opportunities for all their students. Guidance should take into account the needs of industry, the individual and the family while preparing students and adults for a career. The TVET Council will:

- i. ensure that all the technical institutions view guidance as a continuous process, spanning the entire period of education/training;
- ii. ensure that instructors help students to pursue courses of education and training that are designed to realize their potential;
- iii. ensure that girls and women are encouraged and motivated to pursue Technical and Vocational Education and Training programmes particularly, non-traditional occupational programmes; and
- iv. ensure that guidance counsellors inform students of the various possibilities available in a particular field of interest and the possibilities of continuing education and further training.

# SECTION G

## Financing of TVET

Pre-vocational education will continue to be financed by allocations from the national budget. As the TVET Council makes effort to enhance the quality of the delivery of Technical and Vocational Education and Training, the budgetary provisions for professional development, instructional materials, laboratory equipment and supplies will continue to increase. Therefore, it will be necessary for adequate funding to be made available on an annual basis.

While government is the major contributor to financing education and training, it is becoming difficult to adequately provide the funds needed, given the limited resources and the increasing needs of Technical and Vocational Education and Training. The basic principle that Education and Training is a service to society means everyone is a beneficiary either directly or indirectly, and as such, should contribute to the financing - government, enterprises, and the individual. International practices have shown that the investment and the responsibility for the financing of Technical and Vocational Education and Training will generally be determined by the objectives of training, e.g. individual, enterprise or societal objectives. Countries can use different ways and means to foster investment in training and increase resources for training. Therefore, in reforming the funding of TVET the following should be considered:

- Government being a major contributor to financing training should create a general economic environment and incentives conducive to encourage individuals and enterprises to invest individually or jointly in Technical and Vocational Education and Training.
- ii. Government may influence the provision of training by subsidizing training; making budgetary allocation to training institutions; the use of general and income tax; in-service training vouchers and loans provided to trainees and payroll levy exemption.
- iii. Enterprises can invest in a number of financing schemes which may include levy systems, public grants, tax rebates, training credits, training awards, and individual training accounts.

iv. Individuals, considered a direct beneficiary of training, should contribute to the investment in education and training through anyone of the following: income taxes, tax credit/deductions, and tuition/fees.

The chosen mechanisms should take into account the special needs of the small and medium size employers, especially when levies are the chosen mechanism for the funding of training. The governance of funding distribution should be tripartite, or where these are agreed by the social partners, such governance should be bipartite. Decisions regarding government policies on Education and Training should be based on tripartite dialogue and give the tripartite partners the opportunity to develop the best ways and means to increase investments in training. (UNESCO/ILO, 2002)

# SECTION H

## Administration of Institutions

### I. INSTITUTIONAL STRENGTHENING

Two problems of the Technical and Vocational Education and Training System that gives the impression that they are perennial are the unstructured way the up-grading of the knowledge and skills of the administrative and tutorial staff of the various institutions are carried out, and the poor maintenance of their assets. It is observed that these two areas of weakness are not being addressed in a structured way. Consequently, they have impacted adversely on the quality of the delivery of the various occupational programmes and concomitantly on the quality of the graduates. This has brought to bear the loss of confidence by employers in the system to produce highly skilled graduates to satisfy their manpower needs. It is important too, to identify the frustrations being experienced by lecturers/instructors because of a lack of training facilities and poor salaries, and the apparent lack of interest that is shown by potential trainees/students for places in some of the specialized programmes, among the common problems of the system.

The institutional strengthening of each of the post-secondary institutions will be addressed with the successful implementation of the policies and strategies outlined herein.

### II. MAINTENANCE OF FACILITIES

Asset management in Technical and Vocational Education and Training will be done as a matter of policy, consequently, the establishment of a general maintenance programme for each practical instruction centre, practical instruction department of secondary schools and each of the post-secondary institutions will be formalized.

The Ministry of Education and the Council for TVET will ensure that each post-secondary institution, practical instruction centre and practical instruction department develop a routine maintenance programme each year. Such routine maintenance will be executed on buildings, machines, equipment and grounds. Where appropriate, routine maintenance work will be undertaken by the staff and students/trainees of the individual institutions.

The procedure for the writing off of unserviceable equipment will be reviewed and upgraded so that this formality can be dealt with expeditiously.

### III. STAFF APPRAISAL

Staff performance appraisal will be done on an annual basis by each of the post-secondary institutions. An approved appraisal instrument will be used for each category of staff. The findings of the appraisal as well as self-evaluation and interviews will be used to consider a staff for promotion and for selection to participate on staff development programmes.

# IV. STAFF DEVELOPMENT/CONTINUOUS PROFESSIONAL DEVELOPMENT

Staff development programmes to up-grade and up-date the knowledge of lecturers/instructors and other special staff in their areas of specialization, and to promote pedagogical competence will be offered on a regular basis. Such programmes will take into account the strengths and weaknesses of the staff members concerned. The Council will ensure that all technical and vocational education institutions establish committees to organize staff development activities.

In addition to formal programmes, short internship programmes both locally and overseas, and including exchange programme with sister institutions in the Caribbean and other countries will be initiated and maintained. The Council will:

- i. ensure that instructors/trainers of Technical and Vocational Education and Training for occupational fields have relevant qualifications in their field of specialization;
- ii. ensue that skilled professionals working outside education are invited to teach in TVET institutions in order to link the classrooms more closely to the workplace.
- iii. develop quality standards for lecturers/instructors and create the opportunities for lecturers/instructors to meet such standards; and
- iv. provide to all lecturers/instructors the opportunities for professional development in their field of specialization including teaching of special needs students.

#### V. ELIGIBILITY CRITERIA FOR PROMOTION

The appointment and promotion of persons at the post-secondary institutions under the Ministry of Education must satisfy the eligibility criteria. The Task Team report on "Eligibility Criteria for Appointments and Promotions in Management, Tutorial, Education Technician and Workshop Assistants Positions at Post-Secondary Institutions" articulates the qualification requirements for these positions. This report must be seen as the authority when researching the requirements for appointments and promotions. All Personnel Managers, Principals and the Chairman of the Boards of Governors must be au fait with the contents of the report.

# VI. EQUALITY OF OPPORTUNITY: Gender, Persons with Disabilities, Person in Deprived Communities, Hinterland Residents

Technical and Vocational Education and Training is seen by the government as a fundamental right for all Guyanese. Pursuance of such programmes does not only enhance ones employment possibilities but also his or her job performance. At present, opportunities in Technical and Vocational Education and Training are readily available to persons who live in Georgetown, New Amsterdam, Linden, Essequibo Coast, Corriverton and nearby coastal and hinterland locations. The Government, through the Ministry of Education and the Council for TVET will ensure that all persons in remote areas, and especially individuals with disabilities have opportunity and access to Technical and Vocational Education and Training. This will be made possible through the establishment of new practical instruction departments in secondary schools, practical instruction centres and new post-secondary institutions, as well as through the introduction of mobile training facilities and the availability of distance education programmes.

The Ministry of Education and the Council for TVET will further ensure:

- i. that an inclusive education system at all levels for all citizens is realized;
- ii. that persons with disabilities have access to Technical and Vocational Education and Training;
- iii. that reasonable accommodation of the individuals with disabilities requirements are provided;
- iii. that persons with disabilities receive the support required to facilitate their

- effective education and training; and
- v. work with all TVET institutions to develop a transition programming committee, to assist students in their transition to employment or further education.

TVET providers must ensure that persons with disabilities are able to access general tertiary education, vocational training, adult education and lifelong learning without discrimination and on an equal basis with others. To this end, TVET providers must ensure that reasonable accommodation is provided to persons with disabilities.

### VII. CODE OF CONDUCT

Wherever TVET is being offered, whether in the formal or non formal system, the providers will:

- ensure that the regulations governing student/trainee conduct are brought to the attention of all students/trainees and be fully enforced;
- ii. ensure that where a manual is available, all students/trainees are given a copy; and
- iii. ensure that the approved procedures for the enforcement of institutions rules are adhered to by all students/trainees.

# VIII. NATIONAL REGISTER/INVENTORY OF ALL TVET INSTITUTIONS

The Council for Technical and Vocational Education and Training will license and keep a register of training organisations which it considers suitable to receive apprentices and license and keep a register of public and private technical institutes which offer training that meets the requirements of the TVET Act of 2004. The Board of Industrial Training will be registered with the Council as a Registered Supervising Training Organization. The post-secondary institutions in both the public and private sectors which satisfy the requirements will be registered as Registered Training Organizations.

### IX. ESTABLISHMENT OF NEW SCHOOLS/INSTITUTIONS

When the need for new technical and vocational education institution is identified, whether through research or social demand the Ministry of Education and the Council for TVET will

consider such demand, and if feasible establish such an institution. Existing structures that house the workshops and laboratories of practical instruction centres which do not satisfy today's criteria in terms of accommodation for laboratory, library and workshop facilities along with adequate sanitary facilities etc. will be modernized.

A study will be undertaken to determine the feasibility of the establishment of additional industrial training centres in some of the regions. In addition, the use of Mobile Training Units in remote areas of the coast and the hinterland to deliver programmes at the pre-vocational education level and where appropriate at the post-secondary level will also be investigated and implemented by the Ministry of Education in collaboration with the regions that will be the beneficiaries if found to be feasible.

# X. ESTABLISHMENT OF NEW PROGRAMMES AND DEPARTMENTS

Industrial growth and development will demand that the number of skilled graduates from the TVET System be substantially increased. This will include graduates of the traditional as well as new occupational programmes. This demand will increase the need for the expansion of the existing programmes and the introduction of new ones. Hence, all occupational programmes must satisfy the following requirements:

- i. meet the stipulations of the CARICOM Revised Occupational Standards and the National Vocational Qualifications;
- ii. be approved for implementation by the Council for TVET and ratified by the Minister of Education;
- iii. the curriculum of all new occupational programmes must be Competency-based.
- iv. all new curriculum must be developed with the use of approved Regional Occupational Standards.
- v. new departments must be shown on the organization structure of the institution and approved by the Minister of Education;
- vi. the staff requirement for the department must be approved by the competent authority on the recommendation of the Minister of Education;

### XI. MONITORING OF TVET

The delivery of Technical and Vocational Education and Training programmes at each of the post-secondary institutions where appropriate will be monitored by officials of the Ministry of Education and the Council for Technical and Vocational Education and Training. The delivery of the pre-vocational education programmes and the Secondary Competency Certificate Programme will be monitored by the Departments of Education, and the Unit of the Secondary Competency Certificate Programme of the Ministry of Education.

# XII. ACCREDITATION OF COURSES/ PROGRAMMES/ INSTITUTIONS

Accreditation of courses and post-secondary/tertiary institutions is the responsibility of the Accreditation Council of Guyana. However, the Council for Technical and Vocational Education and Training will collaborate and cooperate with the Accreditation Council to facilitate the accreditation process. Where appropriate, the two Councils will have representatives on committees established by each Council to promote specific accreditation concerns.

### XIII. SAFETY

The law governing Occupational Health and Safety and its regulations will inform the day-to-day safety practices of the post-secondary institutions, the practical instruction centres and the practical instruction departments as well as laboratories. Safety in the workshops, laboratories, school farms and even classrooms will be given a higher priority in the future. The Manual for the Organization and Management of Workshops/Laboratories in the Technical and Vocational Education and Training institutions must be used on a daily basis. Safety will also be stressed in the curriculum for the initial training of technical teachers. In addition, workshops and seminars will be held from time-to-time to continually sensitize technical teachers, their support staff and supervisors about safe working practices. Appropriate safety posters and stickers will be used in workshops and laboratories as constant reminders of good safety habits to the users and visitors of such facilities.

### XIV. RECORD KEEPING

Students/Trainees records at all the post-secondary institutions under the Ministry of Education will be fully computerized. The progress of all students/trainees who are pursuing training in Competency Based Education and Training must be kept on a progress chart and be displayed at a convenient place for the student to see and examine. All assessment records must be kept up-to-date. All students/trainees progress reports must be submitted on or before the due date.

### XV. REWARDS AND INCENTIVES

The Ministry of Education will expand on the award of rewards and incentives to the post-secondary institutions for outstanding performances. Awards and incentives will now be given to students/trainees; members of administrative staff; members of the tutorial staff; members of the clerical and other support staff and the institution itself. The incentives that are to be awarded will take various forms. The recommendations for the award of such incentives will be made by the Board of Governors.

### XVI. SECURITY

The escalating costs of tools, machines and other equipment necessitate the establishment of efficient and effective security services for the schools/institutions and practical instruction centres under consideration here. The post-secondary institutions must also be considered in this regard. The provision of improved security services will be matched by an intensive public awareness programme through the Board of Governors of the various institutions which will aim towards motivating persons in the environment of the school to assist in the protection of its assets.

# SECTION I

### **Pre-Vocational Education**

Pre-vocational education is training arranged primarily to acquaint individuals with materials, tools and standards relating to a range of occupations, and to prepare them for choosing an occupational field or programme of training. Pre-vocational education is an integral part of General Education. It must, therefore, be treated as such in the theory and practice of education. Pre-vocational education begins at the nursery education level as integrated activities in several units of instructions such as manipulation of shapes, building blocks, having hands-on experience with garden plots and plants and learning about nutrition.

At the primary level, the exposure continues through an integrated curriculum approach. Basic instructions are given in subject areas such as Agricultural Science, Industrial Technology, Home Economics, Business Education and Visual Arts. Students are also given exposure in the practical aspects of these subject areas particularly Agricultural Science, Visual Arts and Clothing and Textiles.

At the secondary level, pre-vocational education is offered in secondary departments of primary schools, practical instruction departments of secondary schools and practical instruction centres.

The Government through the Ministry of Education will completely restructure the secondary education programme in Guyana with the main focus on the phasing out of the Community High Schools. This restructuring will also see the expansion of the multiple path ways through the Secondary Competency Certificate Programme. This will have a positive impact on prevocational education in the secondary sector because of its mode of delivery which must be consistent with the strategies that are employed with Competency Based Modularized Programmes.

Students will be permitted to progress at their own pace. The secondary reform will also entail the production of texts, teaching materials and the development of strategies to deal with children in the above-average and below average ability ranges.

Beyond grade nine students will be engaged in the pre-vocational education subject areas leading to the Caribbean Secondary Education Certificate (CSEC) and the Caribbean Advance Proficiency Examination (CAPE) or the Secondary Competency Certificate Programme (SCCP) which is vocational in nature or Technical and Vocational Education and Training at the post-secondary level.

# I. WEIGHTING OF PRE-VOCATIONAL EDUCATION SUBJECTS

The weighting of the pre-vocational education subjects offered at the practical instruction departments of secondary schools, and the practical instruction centres will be adjusted. For the first three years, each student will be exposed to a double period of tuition in each subject area. This arrangement will permit the acquisition of skills and competencies that will assist in determining whether the student will pursue a technical and vocational education subject option leading to the Caribbean Examination Council (CXC) and or the Secondary Competency Certificate Programme (SCCP) as well as the Caribbean Advance Proficiency Examination (CAPE).

Students pursuing the Caribbean Examination Council (CXC) programme in a particular prevocational education subject area will be exposed to tuition of four to six periods, while those pursuing the SCCP will be exposed to forty percent of the total timetable in the particular prevocational discipline.

## II. PRE-VOCATIONAL SUBJECT AREAS

The subject areas that are offered in the pre-vocational education programmes are:

TITLE OF SUBJECT AREAS	SUBJECTS			
	SCCP	CXC		
Agricultural Science	Crops, Livestock, Agriculture	The Business of Farming, Crop		
	Engineering.	Production, Animal Production,		
		Horticulture*, Animal Management*		
		(*Double Award).		
Visual Arts	Art, Fabric Decoration, Fibre	Ceramics, Drawing, Imaginative		
	Craft, Leather Craft.	Composition, Graphic Design, Print		

		Making, 3-Dimensional Design, Fibre Arts, Surface/Textile Decoration, Leather Craft and Decorative Craft.
Home Economics	Catering, Garment Construction, Household Management, Cosmetology, Interior Decorating, Care of Special Groups Day-Care/Elderly.	Food and Nutrition, Clothing and Textiles, and Home Management.
Industrial Technology	Technical Drawing, Bench Fitting, Carpentry, Joinery, Electrical Installation, Masonry, Plumbing, Metal Machining, Motor Vehicle, Sheet Metal Work, Welding.	Electrical and Electronic Technology, Mechanical Engineering Technology, Building Technology – Woods/Construction, and Technical Drawing.
Business Education		Electronic Process Documentation, Management, Office Administration, Typewriting, Principles of Accounts, Principles of Business, Accounts, Economics, and Information Technology.

### III. AGRICULTURAL SCIENCE

This subject area is taught at most of the secondary schools. The content provides for the development of knowledge, skills and favourable attitudes in the areas listed above under Agricultural Science. It is compulsory for students in grades seven (7), eight (8) and nine (9) to be taught Agricultural Science where the facilities are available. Such an exposure to both practical and theoretical exercises will afford the students the opportunity to choose their options for the final two years.

In assessing the performances of the students, continuous assessment in both practical and theoretical work is used in the evaluative process for work study and the optional subjects. Evaluation is also done for the research and record keeping components of this subject. The acquisition of skills, knowledge and favourable attitudes by students will make them marketable for employment in their areas of specialization or will allow them to seek further training at the Guyana School of Agriculture, the National Agricultural Research Institute

(NARI), through special programmes of the practical instruction centres, or by any other approved programme.

At the secondary schools, students are timetabled for at least one double period weekly for the first three years. The students who opt for Agricultural Science in the final two years are timetabled for four to six periods. Their preparation is for the Secondary Competency Certificate Examination and or the Caribbean Examinations Council Examination in the General Proficiency double award and the Caribbean Advanced Proficiency Examination (CAPE).

### IV. HOME ECONOMICS

This subject area is compulsory for all students at secondary schools up to and including grade nine. In the fourth and fifth years, those students who opt for Home Economics may pursue studies in one or more subjects which will be finally tested at the Secondary Competency Certificate Programme and/or the CSEC General Proficiency and CAPE. The evaluative techniques are similar to those used in Agricultural Science.

### V. INDUSTRIAL TECHNOLOGY

At the secondary school level all students up to grade nine will be exposed to Industrial Technology as a compulsory subject area. At the end of the third year those students who opt for Industrial Technology will pursue one or more subjects of their choice.

As in the other subject areas, a cumulative record will be kept on each student. This will provide useful information for would-be employers. Additionally, the SCCP assessment will also be used in the evaluative process.

Like other pre-vocational education subject areas the third year Annual Examination, as well as, a cumulative record card for each student will be used to provide useful information for the selection of students in the pre-vocational stream in Industrial Technology. At the end of the fourth year most students would have completed the Secondary Competency Certificate Programme and towards the end of the fifth year, students will write the Caribbean Secondary Education Certificate Examination by the Caribbean Examinations Council.

### VI. VISUAL ARTS

Visual Arts as a subject area is introduced at the nursery and primary levels, to lay the foundation for such studies at the secondary level. Similar to the Agricultural Science, this subject area is compulsory for all students up to Grade nine. Its branches as identified under pre-vocational education subject areas will be pursued at the secondary level in Grades ten (10) and eleven (11).

Students who opt for the Visual Arts, will pursue one or two of the branches mainly through practical instruction. This subject will be examined and treated in a similar manner to the other pre-vocational education subjects. The students in the secondary schools who opt for Visual Arts will go on to satisfy the requirements of the Secondary Competency Certificate Programme and or the CSEC General Proficiency Examinations.

### VII. BUSINESS EDUCATION

This subject area is introduced at Grade nine in secondary schools. The students will be exposed to at least one session of a combination of three subjects. Those students who opt for Business Education in Grades ten (10) and eleven (11) may pursue studies in one, two, or even three subjects in this area, leading to the CSEC Examinations. Similar to other subjects in the pre-vocational education programme, continuous assessment and a practical examination will be used to evaluate the students' achievement.

### VIII. ROLE OF PRACTICAL INSTRUCTION CENTRES (PICs)

Practical instruction centres are institutions which provide pre-vocational education programmes in Agricultural Science, Home Economics and Industrial Technology. They are Grade "A", Grade "B" or Grade "C" centres according to the number of students who attend them. Practical instruction centres provide training in the required subject area or areas where there are little or no facilities in the secondary schools within easy access of such centres.

Practical instruction centres will also facilitate the continuing education programmes organized by the Adult Education Association, the Board of Industrial Training or the Ministry of Education. In this way special programmes will be offered to out-of-school youth

leading to recognized certification and self-employable skills. One such programme is the Skills for Life Programme which was established to train out-of-school youth.

# SECTION J

### Activities To Be Undertaken As Policy Initiatives

For the national system of Technical and Vocational Education and Training to respond positively to its part of the foregoing and develop quality products in accordance with the needs of industry, and the nation, various major areas of concern must be addressed.

As such the Government of Guyana through the Ministry of Education, the Ministry of Labour, Human Services and Social Security, the Ministry of Culture Youth and Sport and the Council for Technical and Vocational Education and Training will as a matter of policy undertake the following:

- initiate the review of the Industrial Training Act Cap. 39:04 and make appropriate amendments so that it has congruence with the TVET Act of 2004;
- strengthen the Secretariat of the Council for Technical and Vocational
   Education and Training so that it has the capability of discharging all its
   functions as outlined in the TVET Act of 2004;
- conduct a study of the content and level of the Basic Craft, Craft, Advanced
   Craft and Technician courses to determine how they compare with the
   CARICOM Revised Regional Qualifications Framework;
- iv. establish national training standards based on the CARICOM Revised Regional Qualifications Framework;
- work with the Accreditation Council and other agencies to satisfy
   CARICOM's requirements for the free movement of skilled persons in the region;
- vi. establish a national system of Competency Based Modularized Curricula for the post-secondary institutions and the apprenticeship programme;
- vii. establish a national system of testing and certification as well as vocational qualifications that are widely recognized and relevant to the needs of Business, Industry and the Caribbean region;
- viii. promote quality assurance in the delivery of TVET nationally;

- ix. establish new practical instruction centres, practical instruction departments of secondary schools and post-secondary institutions as the need arises;
- x. expand the training of technical teachers at the Cyril Potter College of Education;
- xi. upgrade the Technical Teacher Training facilities at the Government Technical Institute so that it provides on-going training for the lecturers/instructors of the post-secondary institutions and instructors in industry;
- xii. provide tools and equipment in adequate numbers for practical instruction departments, practical instruction centres and the post-secondary institutions;
- xiii. give post-secondary institutions greater freedom to expand on their provisions and to be more flexible in catering for the demands of prospective students/trainees and Business and Industry;
- xiv. promote links between schools/institutions and Business and Industry so that students/trainees will have a better understanding of the world of work and enable Business and Industry to make meaningful contributions to the system;
- xv. promote a national programme of computer education and training for the primary, secondary and post-secondary levels;
- xvi. promote the implementation of Entrepreneurship Education at all postsecondary institutions and those practical instruction centres and practical instruction departments offering the Secondary Competency Certificate Programme and the Skills for Life Programme; and
- xvii. ensure that all students get better information and guidance about the choices available to them as they progress from the general education system to the post-secondary Technical and Vocational Education and Training System.

# **SECTION K**

## Promoting and Advancing of TVET

### I. DIALOGUE WITH SOCIAL PARTNERS

The Council for Technical and Vocational Education and Training will seek to gain the approval of the social partners in the development and implementation of its education and training policies. The Council will:

- strengthen social dialogue on issues relating to education and training as a basic principle for programme development, relevance, quality, and cost effectiveness of delivery, and the administration and management of institutions;
- ii. provide support to the social partners to enable them to participate in social dialogue on issues of skills development; and
- iii. maintain and improve a coordinated education and training system within the concept of articulation, taking into account the role of the government and the social partners.

### II. RELATIONSHIP WITH INDUSTRY

Business and Industry involvement in the further development of TVET was mentioned before, however, their invaluable contributions cannot be overemphasized, consequently, they will be encouraged to expand their participation in the work of the formal Technical and Vocational Education and Training institutions through the establishment of partnerships. Apart from having representatives on the Boards of Governors of the post-secondary institutions, Business and Industry will:

- i. be invited to serve on committees and boards;
- ii. release suitably qualified persons to lecture on a part-time basis in some institutions;
- iii. provide on-the-job training for students/trainees and lecturers/instructors; and
- iv. release persons to serve as members of curriculum lead groups.

#### III. MARKETING OF TVET

The marketing of Technical and Vocational Education and Training must be done on a continuous basis to remove the stigma that is attached to it. Such public awareness

programmes must increase the nation's awareness of TVET and its role in national development. The council for TVET will:

- i. promote the use of the news media so that it is used as one of the prime movers of such programmes on an ongoing basis;
- ii. ensure that all the departments and institutions that are involved in the delivery ofTVET contribute to this public awareness drive.

### IV. INTERNATIONAL SUPPORT

The Council for Technical and Vocational Education and Training will be proactive in its quest to cooperate and collaborate with the English speaking Caribbean countries and Guyana's Latin American neighbours on matters pertaining to Technical and Vocational Education and Training.

### **CONCLUSION**

This policy on Technical and Vocational Education and Training articulates a major development plan for the further development and efficient and effective delivery of Technical and Vocational Education and Training. It advocates better managerial control; the acquisition of modern facilities at all the post-secondary institutions, the practical instruction centres and the practical instruction departments to enhance the delivery of their practical programmes; and the Cyril Potter College of Education and the Government Technical Institute for the initial training of technical teachers; organized and well structured staff development activities; an overhauled and expanded physical capital; the establishment of a modularized curricula; and a reorganized guidance and counselling service among others.

As Guyana continues to organize itself to achieve economic and industrial development, and the challenges of the twenty-first century continue to unfold, the development of an efficient and effective Technical and Vocational Education and Training system is necessary. To persevere with the system as it is will be to perpetuate and, in the not too distant future, accentuate to critical proportions the inability of the system to serve the nation adequately. Immediate and decisive action as outlined herein will therefore be timely.