



**COUNCIL FOR TECHNICAL
AND VOCATIONAL
EDUCATION AND TRAINING**

**NATIONAL SYSTEM FOR
COMPETENCY BASED
EDUCATION & TRAINING**

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Preamble:

The Caribbean Single Market and Economy as well as the escalation of the effects of the demands of globalization dictate that Guyanese industries become more competitive and relevant as the dynamics of international competition reveals our weaknesses. In this regard, one critical area that is being addressed is workforce development. The need for a modern workforce with a reservoir of available skills must be seen as a national priority. Through the Council for Technical and Vocational Education and Training, the national system is being developed to have the capabilities to produce the human capital necessary to promote and sustain Guyana's competitiveness by the development and implementation of relevant and appropriate curricula for the training of persons to acquire labour competencies for satisfying and productive employment.

Consequently, under the functions of the Council for Technical and Vocational Education and Training, the Technical and Vocational Education and Training Act of 2004 states as follows:

"© To develop a national system of Competency Based Modularized Training and initiate its implementation".

Competency Based Modularized Curricula are used worldwide for the development of labour competencies in the training of persons for employment. They are developed with the use of Occupational Standards which inform the content of the curriculum. The competencies developed are, therefore, described as labour competencies. Mr. Martin Miranda (2003) in defining labour competency stated that ***"In a general way, it is understood that labour competency gathers the attitudes, knowledge and skills that allow the development of a comprehensive number of functions and tasks successfully in accordance with the performance criteria that are deemed appropriate in the labour environment. They can be identified in real work situations and they are described by grouping productive tasks according to areas of competence (more or less permanent functions) specifying in each of the tasks the criteria through which the performance can be assessed as competent"***.

In making his contribution to the subject of labour competencies Jim Tochansky (1989) wrote ***“Competencies are the techniques, skills, knowledge and characteristics that make a certain worker stand out over a regular worker with the same function or work category because of his performance”.***

Pursuance of Competency Based Education and Training Programmes must be seen as preparation for employment. The students’/trainees’ assessment is rated against the standards of the experienced worker. Such programmes are “industry lead”.

The main focus of the Post-Secondary Technical and Vocational Education and Training Institutions and the Apprenticeship System must be to train persons for employment. It means, therefore, that the curriculum must have appropriate Occupational and Facilities Standards as well as modules for the preparation of Students/Trainees of all the various programmes that are being offered. The labour competencies that are developed through training for employment programmes must satisfy national, regional and international occupational requirements.

The policy of equality of access to TVET and of the development of the individual is applied here for the benefit of all including the unemployed, the under-employed, sponsored persons, school leavers and persons with disabilities. The focus will also be for persons both male and female to pursue studies in non-traditional areas.

Curriculum Lead Groups:

Curriculum Lead Groups are small committees that are made up of experts from business and industry and the formal TVET System to advise on the validity of existing curriculum; advise on

curriculum innovation and change; develop curriculum when necessary; and up-grade existing curriculum. A Curriculum Lead Group is appointed for each occupational area. The work of Curriculum Lead Groups is monitored and supervised by the Senior TVET Officer with assistance from the TVET Officer Standards and Curriculum.

For a person to be appointed a member of a Curriculum Lead Group, he or she must have qualifications that are above the level of the programme he or she will be required to work with. The Curriculum Vitae of the individual must be examined by the Council before appointments are made. The levels of the occupational programmes the Curriculum Lead Groups are required to service are Levels i, ii, iii, and iv. Persons who have been selected to serve are required to do so voluntarily, however, a stipend can be paid to members of the Group for the execution of some of their undertakings.

Role of Business and Industry:

The role of business and industry is indispensable and critical to the development of Competency Based Modularized Curriculum. The Council for Technical and Vocational Education and Training will work tirelessly to secure the cooperation and collaboration of business and industry to make the services of suitably qualified persons available to serve on Curriculum Lead Groups.

They will contribute to the work of the Curriculum Lead Groups by participating on among other things, the development of job-descriptions for the various occupations; carry out task analysis of each job-description; the development of DACUM Charts; and the development of the Occupational and Facilities Standards. If CARICOM Occupational and Facilities Standards have being acquired for use in the system, the Lead Groups are required to have them adapted. Where appropriate, the services of Job Analysts and other curriculum specialists will be made available to the Curriculum Lead Groups to assist them in their work.

This involvement by business and industry will bring meaning to training for employment and the fulfillment of its objectives. However, it must be noted that the participation of business and industry in the activities listed above is in addition to their involvement in other sectors of the Technical and Vocational Education and Training system including curriculum delivery.

Competency Based Modularized Education and Training:

In its quest to satisfy its mandate for the establishment of a national system of Competency Based Modularized Education and Training, the Council for Technical and Vocational Education and Training is currently finalizing the development of twelve Competency Based Modularized Curricula for delivery by the Post-Secondary Institutions and the Apprenticeship System. They were developed by Curriculum Lead Groups. The work of the Lead Groups was supervised by Dr. William Sinette, who was attached to Humber College, Canada and Senior TVET Officers from the TVET system. The curricula are as follows:

- Cosmetology;
- Cook/Food Preparer;
- Garment Construction;
- Radio and Electronics;
- Agriculture Mechanic;
- Motor Vehicle Mechanic;
- Electrical Installation;
- Masonry;
- Carpentry and Joinery;
- Fitting and Machining;
- Welding and Fabrication; and
- Plumbing.

These twelve curricula are the first of several new curriculum that will be developed for use by the formal and non-formal sectors of the Technical and Vocational Education and Training

System. The choice of the occupational areas that will be given priority must be influenced by the critical nature of the manpower needs of business and industry.

National System of Testing and Certification:

The National System of Testing and Certification should be managed by a Board which has wide powers and responsibility for the testing and certifying of students/trainees who pursue studies on approved Technical and Vocational Education and Training Programmes. The Board will have the responsibility for National Vocational Qualification Certificate and Diploma Programmes at Levels i, ii, iii, and iv and the Caribbean Vocational Qualification Certificate. The Board will be an up-grade to the Guyana Technical Education Examination Advisory Board. Its role and function will have to be clearly defined. The Guyana Technical Education Examinations' Advisory Board will be subsumed by this new Board.

An Assessment and Certification Strategy must be developed for use with each new curriculum. Invariably, the system of continuous assessment is employed. Such performance assessment must measure the depth and breadth of the labour competencies that are being assessed in accordance with specified norms. Hether (1992) wrote: ***“Although all forms of assessment refer to the use of evidence, each form may have a different purpose. It is the purpose of the assessment which will define the nature and the process of the assessment system”***. Mertens (1999) wrote: ***Assessment means gathering sufficient evidence that individuals can perform according to specified norms***. The methods that are most frequently employed when evaluating competencies are as follows:

- Observation of performance;
- Ability tests;
- Simulation exercises; and
- Phase tests (Project).

The structure of the curriculum and the assessment strategy must allow students/trainees to exit and re-enter the various programmes if they so desire. This must be a characteristic in the development of the curriculum and the assessment strategy.

In developing the certification strategy, decisions will be taken on whether certificates or transcripts will be issued at the cut-off points and if so which one of the two will be more appropriate. The transcript or certificate will be recognized as work that was successfully completed and is credited towards national certification which will be awarded on successful completion of the whole programme.

It is required that particulars such as the title; the level; the objectives; the units of instructions; the number of hours of instructions for each unit as well as the total number of hours of the course are clearly stated at the back of the Certificate/Diploma. Certificates and Diplomas will only be awarded for the successful completion of approved courses. The insignia of the Council for Technical and Vocational Education and Training will be on each Certificate and or Diploma that is awarded, thus providing the basis for recognition by business and industry.

The development of the National System of Competency Based Education and Training and the National System of Testing and Certification Strategy will require the services of consultants to assist with the successful execution of specific tasks. The consultancies will be identified by the Council for TVET.

Verification of Standards:

The Facilities and Occupational Standards acquired by the Council were developed by the Caribbean Association of National Training Agencies (CANTA), approved by CARICOM and

supplied by HEART/NTA of Jamaica. The Council is committed to use the CARICOM Occupational Standards and Facility Standards for the development of curriculum. However, they have to be put through a verification process to ensure that they satisfy the minimum national requirements. If changes are necessary, they will be done without adversely affecting the minimum regional standards. Verification of the content of the modules of each curriculum must be done to ensure that there is congruence with the Occupational and Facilities Standards. The verification process is carried out by the Curriculum Lead Groups for each occupational programme that is being verified. Supervision of the process is done by curriculum development experts from the Council for Technical and Vocational Education and Training.

Assessors:

The testing of students/trainees requires the services of Internal and External Assessors. At each recognized grading point, the services of both Internal and External Assessors must be available to conduct the assessment that is to be done. On completion of an assignment that is to be graded, the first assessment is conducted by the Internal Assessor who is normally the Lecturer/Instructor. The findings of the Internal Assessor are verified by the External Assessor and a grade is awarded to the student/trainee. Such assessment determines whether the student/trainee will go on to the next module or repeat the one for which the assessment was conducted. On successful completion of the full programme he or she will be awarded a national Certificate or a Diploma. This form of assessment will be used for the programmes that are being offered by the Post-Secondary Institutions, the vocational programmes that are being offered at the Secondary Level and the Apprenticeship System.

Instructional Techniques:

Competency Based Modularized Curriculum is relatively new to Guyana. Consequently, very few persons are au fait with the methodology that is applicable to its delivery. It means, therefore, that all the Lecturers/Instructors as well as the administration and line management

functionaries of the Post-Secondary Institutions, the Apprenticeship System and the Secondary Sector must be trained to deliver such programmes. It is also necessary for this methodology to be included on the programme for the initial training of Technical Teachers at the Cyril Potter College of Education and the Technical Teacher Training Programme at the Government Technical Institute.

Pilot Testing:

Pilot Testing of the curriculum, is basically the trying out of the curriculum materials in a Post-Secondary Institution and or the Apprenticeship System with students/trainees who are similar to those who will use the material. The focus is on the practicality, acceptability and quality of the curriculum materials. Of equal importance too is the effectiveness, efficiency and generalized ability of the materials. The Lecturers/Instructors who are involved in the delivery of the curriculum, the line management functionaries of the institution, the administrators and the students are all required to observe the delivery process of the curriculum and submit verbal and written reports.

The evaluator who is the coordinator of the activity will take decisions as to the desired action that is to be taken if adverse reports are made. The role of all the parties in the process must be clearly defined and fully understood by them. After a successful Pilot Test the curriculum is ready for implementation.

National and Regional Commitments:

Guyana is committed to CARICOM through the Council for Human and Social Development (COHSOD) to further develop the Technical and Vocational Education and Training System nationally by achieving the following:

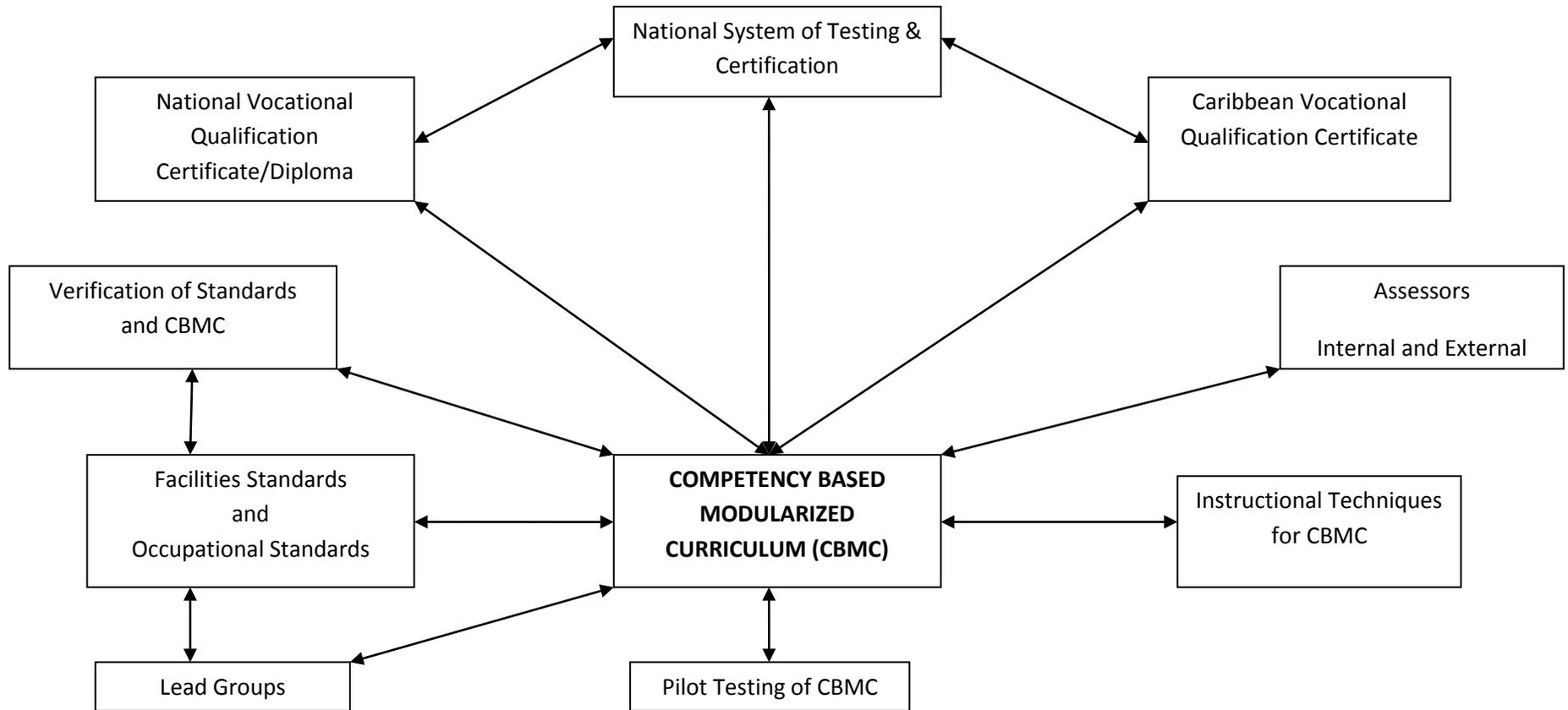
- the establishment of a National Training Agency with legal status;
- the establishment of a national system of Competency Based Modularized Education and Training;
- the testing and certifying of unqualified craftsmen/artisans who are desirous of travelling to CARICOM Member States to seek employment. The certificate that will be awarded is the Caribbean Vocational Qualification Certificate. To be eligible to award this certificate, Guyana must satisfy CARICOM's requirements.

To this end, the Council for TVET was established in October, 2006. With the promulgation of the Technical and Vocational Education and Training Bill in Parliament on the 22nd. July, 2004, the legal status of the Council for TVET cannot be questioned. Consequently, to qualify for the issuance of the Caribbean Vocational Qualifications Certificate the following are currently being executed:

- the development of Competency Based Modularized Curricula for the establishment of a national system;
- the training of Internal and External Assessors to conduct the assessment of students/trainees performance;
- the training of Lecturers/Instructors, administrators and line management functionaries in the delivery of Competency Based Modularized Curriculum;
- the verification of the Occupational and Facilities Standards as well as the verification of the modules of the curriculum;
- the orientation of Lecturers/Instructors, line management functionaries and administrators on the implementation of the curriculum;
- the development of a strategy for the testing and certifying of uncertified craftsmen/artisans with the use of Competency Based Education and Training assessment strategies.

The successful execution of these activities will enable Guyana to be eligible to issue the CARICOM Vocational Qualification Certificate (CVQ). However, the strengthening of the Council's Secretariat must be done urgently so that its work can continue to be executed with efficiency and effectiveness and at the same time being able to cope with the escalating work load. The figure below shows the national system for Competency Based Modularized Education and Training.

COUNCIL FOR TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING



NATIONAL SYSTEM FOR COMPETENCY BASED EDUCATION AND TRAINING.

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