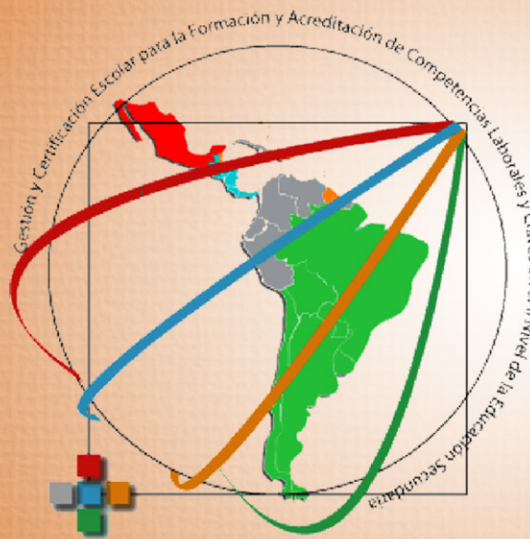




HEMISPHERIC PROJECT

A COORDINATOR'S GUIDE TO IMPLEMENTING COMPETENCY - BASED EDUCATION (CBE) IN SCHOOLS



THE CARICOM SUB-REGION



**A Coordinator's Guide to
Implementing Competency-Based Education
(CBE)
In Schools**

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Implementing Competency-Based Education (CBE)
In Schools**

Prepared for the OAS Hemispheric Project on
School Management and Educational Certification for Training
and Accreditation of Labour and Key Competencies in Secondary Education

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INTRODUCTION

This guide has been specifically developed for principals, coordinators and teachers associated with introducing competency-based education and training in schools. Several questions are posed, the answers to which guide the implementation of competency-based education and instructional material delivery. Many flexible innovative and creative methodologies emerge from the dynamics of this programme, and sharing best practices will lead to its successful implementation.

COMPETENCY-BASED EDUCATION

It is important that the operatives of the programme understand and are aware of the requirements of competency-Based Education (**CBE**). This section provides an overview to CBE and is essential reading for all coordinators, principals and senior staff charged with the implementation of the programme in secondary schools.

Through the establishment of industry lead groups, the National Training Agencies guide the development of the occupational standards and curriculum materials which are presented either in a modular format or in units. Both formats facilitate the competency-based training and assessment in the TVET system as the approaches seeks to systematically identify and develop essential skills, knowledge and attitudes for the job.

Competency-Based Education (**CBE**) is built on the philosophy that *“almost all learners can learn equally well if they receive the kind of instructors the need”*. To make this philosophy work CBE requires significant changes in the development and the administration of the modularized/unit-based programmes. Although technical vocational education has always been concerned with the practical demonstration of the skill, CBE places a new and systematic emphasis on this principle. In this approach, the systematic development and delivery of the training is guided by five essential elements:

- (i) The tasks to be taught are identified by the experts in the occupation.
- (ii) The programme allows each learner to have the opportunity to develop and tube evaluated on the competencies achieved.
- (iii) Assessment of competency is not only based on knowledge and attitude but primarily on the actual **demonstration** of the competency
- (iv) Occupational standards or unit competency standards should be used as the basis for assessing achievement and students/trainees should be aware of them.
- (v) Students progress through the programme by demonstrating the attainment of specified competencies.

CBE also dictates a change in the role of the teacher which changes from the conventional information-giver to that of a resource person. Hence, the students/trainees will have more responsibility for their own learning and progress. This kind of student/trainee involvement is critical to CBE. Therefore, at the start of the training programme students/trainees should be made aware of the key elements of CBE that is :

- how the programme operates
- the role of the teacher/instructor
- the responsibility of the trainee/student
- the occupational standards to be attained
- how and when competencies will be assessed

SOME IMPORTANT CHARACTERISTICS THAT SHOULD BE PART OF THE CBE PROGRAMME

- (i) A variety of teaching methods and aids are used
- (ii) Adequate materials, space and equipment are available.
- (iii) An environment that simulates the work place and work experience opportunities are available to students/trainees.
- (iv) Students/trainees are informed about criteria and attitude important to the occupation.
- (v) Each student's/trainee's programme should be individualized and self-paced.
- (vi) Learning activity is repeated/reinforced until competence is achieved.
- (vii) Programme completion is based on satisfactory achievement of all specified competencies.
- (viii) Individual student/trainee records are maintained and should reflect student/trainee progress.
- (ix) Continuous and detailed feedback is given to students/trainees on their progress.
- (x) Students'/trainees' rating should reflect the level of competency achieved.

SECTION 1: THE BASICS

I. THE BASICS

Before you start:

1. You need to **become familiar** with the regional qualifications framework, the 5-tiered certification levels, the occupational standards and the curriculum guides. Regional occupational standards are in use and can be acquired from National Training Agencies (NTA Trinidad & Tobago and H.E.A.R.T Trust/National Training Agency Jamaica).
2. **Evaluate your existing resources.** The second step is to evaluate your existing training and learning resources against the facility standard. The facility standards will outline what are necessary for the delivery of the training programme in terms of work areas, equipment needed, physical space and so on. These are the required standards for the development of skills and are derived from industry requirements for the particular occupation or job.
3. **Review your arrangements against the standards to ensure they comply.** Relevant questions include:
 - (a) Does staff have access to all the instructional delivery material?
 - (b) Do teaching staff hold appropriate industry and teacher qualification?
 - (c) Are sufficient people familiar with internal quality assurance methodologies?
 - (d) Are teachers familiar with competency-based education and training methodologies?
 - (e) Are teachers familiar with assessment methodologies for competency-based education?
4. **Understanding competency-based occupational standards and assessment**
Teachers need to be confident that they understand the structure, content and outcome of the qualifications they will be delivering. Teaching staff should spend considerable time familiarizing themselves with the occupational standard, and the curriculum guides.
5. **Liaise with external bodies.** There will be times when you may have to refer to external bodies. These include industry personnel, employees and professional

bodies in your locality to expose students to the world of work and to gain competence with industry standards.

In any event, it is extremely important that careful selection of the skill area/occupational area is undertaken. It is recommended that schools pursue **only** those areas where facilities are in place to undergo skills training, or there are facilities close by (e.g. Industry) where students will have the opportunity to have 'hands on' exposure to industry standard.

SECTION II:

ORGANIZATIONAL ISSUES

II. ORGANIZATIONAL ISSUES

There are a number of steps that schools should go through to develop competency-based qualifications within the school curriculum.

These are:

- (i) finding out about the industry in your local area
- (ii) knowing your students and their interests
- (iii) making sure you have the appropriate physical and human resources available
- (iv) building a profile in the school and the community – an act that takes a considerable amount of time
- (v) building strong partnerships with industry.

Management Support

School principals and managers of training institutions have a significant role to play in ensuring transition from the traditional teaching of tech-voc to competency-based training and assessment. (Please make reference to the **CARICOM Process for Workplace Training, Assessment and Certification** document).

In schools where a good transition is made, the senior staff has:

- (a) displayed an accurate understanding of the nature of C.B.E.T;
- (b) ensured that staff have adequate time to explore and discuss the qualifications and the qualification framework;
- (c) organized staff to think creatively and holistically about the student group, the organization and delivery of the programme
 - the need to acquire or develop resources
 - the need to plan appropriate methodologies and system of delivery
 - the need to build relationships with relevant employers and/or create suitable work simulation environments
 - the need to ensure supportive administrative processes and structures are in place (e.g. area for records to be kept)

Staffing Arrangements

In many respects, staff is the key to the successful implementation of the curricula. If they understand and support the changes - and possess the knowledge and skills to manage the learning programme – then the transition should flow relatively smoothly.

Within this context, it is important to consider the schools' staffing arrangements. Is there a mix of a solid core of permanent staff supplemented by part-time industry-based staff who will deliver specific aspects of the programme? Are staff primarily long-term and permanent with solid theoretical/academic backgrounds, but without recent industry experience?

Although there is no correct staffing formula beyond ensuring that staff has the appropriate industry and trainer qualifications, the nature of the workforce you want to create will impact significantly on the preparation required to successfully introduce C.B.E in your school. If you employ a high percentage of part-time teachers with industry currency, you will need to consider questions relating to:

(a) the extent of their responsibilities, i.e.

are they expected to liaise with employers/organization, to organize work placements and maintain regular contact with local firms? If they are, what support and information do they need in order to fulfill the role?

(b) the degree to which holistic approaches to delivery and assessment are to be explored and encouraged.

Developing an integrated learning programme takes considerable time and effort; will part-time staff be expected to pursue these opportunities? Are they familiar with all aspects of the programme, or do their skills and abilities relate to specific areas of training?

(c) Staff Development

What information, knowledge and skills do part-time teachers need to deliver competency-based training? What support do they require in terms of quality assurance?

Conversely, if you have staff that is permanent, then a significantly different set of issues may arise in relation to:

- (i) **Industry currency.** Are all staff familiar with current industry practices?
- (ii) **Relationships with employers.** Are teaching staff required to organize work placements and monitor learner performance, or do industry liaison officers or workplace/placement coordinators fulfill this role? If this is to be part of a teacher's responsibility, have they established and maintained contact with local firms and organizations in the past, or is time required to develop appropriate networks?
- (iii) **Existing attitudes and values.** Are teaching staff prepared for the shift to competency-based education or do they view the change from a cautious, hostile or defensive perspective?
- (iv) **Staff development.** What information, knowledge and skills do full time employees need to deliver competency-based education? What support do they require in terms of currency and quality assurance mechanisms?

SECTION III:

TEACHING AND LEARNING

III. TEACHING AND LEARNING ISSUES

The following section explores the **major** issues raised by schools on the delivery of C.B.E. Not all matters addressed will be relevant to all schools. Similarly, there may be areas pertinent to your particular school that is not mentioned.

1. (i) **Identifying and selecting competencies to meet client needs**

Who are your clients? What skills and knowledge do they possess before they commence your training program? Why do they wish to gain a qualification? Will the learning methods and facilities available impact upon your clients' choice of occupation/job? Answers to these questions are needed to plan effectively.

Not all modules/units within the qualification may be suited to learning in your institution. You may find that you simply don't have the resources to deliver particular modules. Check to make sure you are aware of the facilities, equipment and materials required. If the competence is going to be delivered in association with a work placement or enterprise based project, are there sufficient firms available and willing to support your students? Are there opportunities to develop competence through community based projects?

(ii) **Entry competences**

The modules/units within the qualification specify the **end** point of training. It does **not** specify the beginning. Some but not all modules require pre-requisites. It is important that the students hold the necessary underpinning skills and knowledge. These must include the appropriate levels of literacy, language and numeracy skills. If they don't exist at the appropriate level, your training programme must ensure that these areas are captured within the training programme. NB. (Some training institutions recommend at least a Grade 9 (Form 3) level of education prior to the start of the Level I C.B.E.T programme.

(iii) Exit points and articulation into higher qualification

Tech-voc training is a part of the secondary school curriculum which means that some students will be completing modules for levels I and II qualifications. Do your training programs take into account the competencies these students possess?

Learners who have completed the relevant qualifications at school have demonstrated an interest in, and commitment to, this occupation or industry sector. If places in your programme are limited, selection procedures should take their prior learning into account.

If school students are only completing selected units of competence, how are their choices being guided? If your learning program is delivering units of competence in clusters, schools should be aware of this so they can design programmes to maximize articulation.

(iv) Embedding underpinning knowledge in learning programmes

One of the challenges schools face with competency-based training is effectively integrating theory and practice. Competence is not just the performance of tasks but the application of skills to new and different contexts. For this to occur, students must be able to apply and transform knowledge in different workplace situations.

What is the relationship between theory and practice in a competency-based training programme? Is competence best achieved through separation or integration? Delivering outcomes based training suggests that teaching and learning should mutually reinforce the interdependence between knowledge and skill. This may raise questions about the structure of the delivery, the nature of learning activities, the location and content of learning and the role of teachers where different discipline areas may combine under the umbrella of competence.

In theory, embedding underpinning knowledge within a particular qualification sounds relatively easy. The challenge for teachers and schools, however, lies in the practicalities. Although the modules describe the underpinning knowledge required to develop competency, a significant number of teaching staff have argued that core concepts and skills have been overlooked or under emphasized. This raises a number of questions – not least of which is where and how such material will be delivered – a query that relates to the inclusion of all underpinning knowledge.

But focusing on the identification of ‘missing’ underpinning knowledge and where and how it can be included – as some teachers have done – can lead to a pre-occupation with ‘what the curriculum has left out’ rather than ensuring teachers focus on what is needed to achieve competency. If material that featured strongly in your previous curriculum or training programme has been diminished it is important to determine whether the knowledge is actually critical to the development of competency.

In some instances the information you have identified, information you may have taught for many years, is no longer relevant. Or it will have far less significance with the change in emphasis. In determining the theoretical information required within training programmes, schools have found it easier to begin by asking, ‘What knowledge and information do learners need to achieve competency?’ rather than focusing on their existing materials and endeavouring to match competencies with curriculum.

Irrespective of whether there are gaps you wish to rectify or not, there are a number of general questions and options you may find it useful to consider in determining the delivery of underpinning knowledge.

- Do learners need this information *before* they begin studying a particular module or units of competency? If yes, is it possible to:
 - provide a session with supportive learning materials focusing on background information?
 - develop a bridging programme?

- Do learners need this information as they proceed through the qualification? If so, does the information relate to one particular competency or a cluster of competencies? If the latter, would it be appropriate to develop a discrete unit or set of resources that address these issues? Can the information be incorporated within a number of modules or units of competency without duplication or material being inadvertently overlooked? Would it be best to link a particular section of underpinning knowledge to one competency? If so, what implications might this have for learners in terms of transfer arrangements and recognition of competence particularly if they need to move from one school to the next?
- Is it necessary to present the underpinning knowledge as theory or can it be developed through learning experiences? Can activities be created to enable student to acquire the required knowledge and skills? Are there alternative strategies members of the teaching team can adopt across their particular subject areas to ensure learners cover the underpinning material?

Underpinning knowledge can be delivered in a multitude of different ways. Your strategy will be influenced by the particular competency/ies, student needs, resources, timetabling, teaching approach and form of delivery.

2. Delivering the Learning Programme

The advent of CBE has engaged industry and educators in a debate about the nature of competency and learning and the role of education and training organizations in the pursuit of each.

Can individuals acquire the knowledge and skills they need solely through on the job training? Is it possible to learn about a specific job and hone and refine the necessary skills and abilities if training is confined to a school?

For the learners, employers and schools involved, institutionally based learning – with its emphasis on combining underpinning knowledge with practical skills – has been a highly effective means of fostering and engendering competency. Students will also gain other benefits from participating in a structured learning programme if thought is given to the range of experiences offered.

Development of Resources to Support Learning

All structured learning activities need to be supported by resources. These range from basic session notes produced by individual tutors to complex and technologically demanding software packages. The principle behind the design and development of all resources is the same and is based on a thorough understanding of the learning objectives to be achieved.

3. The Modular Curriculum used for CBE

The curricula are divided into independent units referred to as modules to ensure success and mastery of each task before moving onto the others. **The modules are self-contained and can be studied separately as they ensure the acquisition of the competences needed to perform the activity under employment conditions. Each module represents a certifiable part of a job. However, eligibility for national certification requires the completion of all modules within the skill area, along with the related support subjects.** The modules can also be combined to suit the needs of the individual learners and to reflect changes in the occupation.

The curriculum is written in the form of Behavioural Objectives: Terminal and Enabling Objectives.

Terminal Objectives: describe that which the students/trainees must do to demonstrate competence in a task. They are made up of three essential components: performance, condition and standard/criteria.

Enabling Objectives: describe the subordinate skills which the students/trainees need to learn in order to perform the terminal tasks. These are made up of three essential components: knowledge, skills and attitudes.

The module time suggested represents recommended contact hours between the instructors and trainees. The time allocations are estimated for average trainees to complete each module and therefore may be adjusted to meet the needs of individual learners. Recommended contact hours must be supplemented by individual study and on-the-job training for successful completion of the training course.

Identify the learning objectives

Identification of resources required will have been part of the development of the training programme. Now it is necessary to identify the aim and objective of each resource to be used.

The overall aim of resources will be to support learners in achieving the objectives of the learning programme. However resources will also be required to support tutors in delivering the learning programme. This is particularly the case where resources are developed to be used by several tutors over a period of time.

Once the objective to be achieved has been decided it will be possible to examine what is available either to be developed in-house or source commercially.

Resources may aim to:

- Summarise/clarify learning points
- Encourage participation
- Allow skills practice
- Provide information
- Test skills
- Test knowledge
- Evaluate learning
- Encourage creativity

Development of resources

The type of resource used will depend mainly on the outcome to be achieved but it will also be influenced by other factors such as:

- Budgets and costs
- Timescales to be achieved
- Individual learning styles and abilities
- Venue and environment

Resources may be paper-based, visual or audio visual. Ideally they should be chosen to stimulate all of the senses which will be used within the work environment.

In skills-based training, resources may be required to replace or supplement real work activities. This allows practice in a “safe” environment to allow learning by trial and error. Any such simulated activity must be realistic and relevant.

Resources may be:

- Handouts
- Worksheets
- Video
- Activities
- Simulations
- Computer-based
- Interactive
- Demonstrations
- OHP
- Pre-prepared flip chart

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Resources may be used within a training session where their use can be explained and supported by a tutor. They may also be used by individuals following a training session or as part of a programme of self-directed learning.

Technology-based resources such as computer-based training, elearning, electronic whiteboards and simulators are becoming increasingly popular. Example of these can be found on the internet and there are many commercial developers. All trainers should make an effort to keep abreast of these developments. Particular care should be taken over consideration of learner ability when using this type of resource as training in the use of the technology itself may be required.

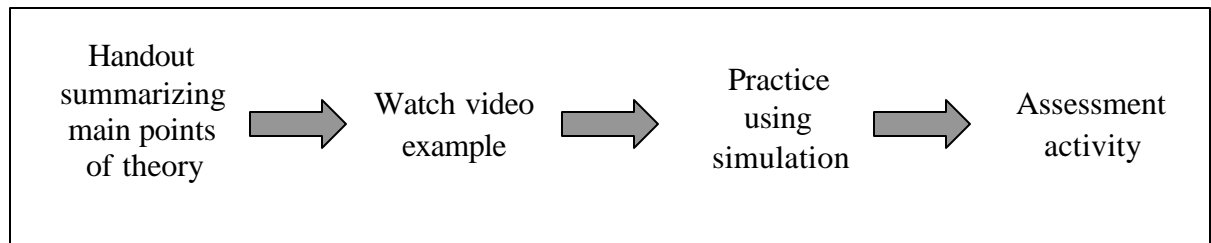
The development of resources should be accompanied by the development of a tutor/trainer guide. Where existing resources are being adapted it is also important to ensure that copyright and data protection legislation is considered.

In all cases resources should encourage the individual to learn and to transfer the learning to the workplace. The language used should be straightforward and avoid jargon at all costs.

Use and evaluation of resource

The development of resources cannot be considered complete until they have been used and evaluated. The use of the resource must be understood by the tutor and/or by the learner or it will be ineffective.

Ideally the use of resources within a training session or programme should be linked e.g.



After use, resources should be evaluated by both learners and the tutor/trainer. This evaluation allows the trainer/developer to ensure that the resources are:

- Accurate, relevant and effective
- Encouraging and motivating the learners to learn
- Efficient and flexible in use
- Accessible to all learners in terms of language, learning ability and physical ability
- Achieving the required learning outcome

(i) Simulating workplace conditions in a learning environment

Workplace experiences can be a very important component of the learning programme... but they are not always practical, available, suitable or appropriate. Yet to achieve competence students need learning and assessment environments that are realistic and relevant to the workplace. Simulated work arrangements provide a way forward and are used by many schools. Legitimate – and successful – strategies include:

- practice firms
- student managed businesses (e.g. retail outlet in a large school)
- training restaurants/canteens
- community/enterprise based projects

- scenarios and case studies
- role plays

What are the key conditions that need to be met for simulation?

- Are the standards to be met qualitative or quantitative or a combination of the two?
- Is customer service or team work critical?
- What contingencies need to be covered?
- Are different contexts for performance required?

The occupational standards will assist you on many of these questions. Additional information is also likely to be needed as performance criteria often refer to 'industry standards'. This information will help you create simulations that are valid for training and assessment.

Another question that will arise is the extent to which performance standards in simulated training environments are able to meet those of a competent employee. Industry expectations of performance are high and it would be difficult to achieve the relevant standards without substantial skill development.

(ii) Community and workplace projects

The simulation of work environments and circumstances can provide a valuable teaching/learning strategy. Similarly, community and workplace projects can present learners with realistic and relevant experiences. Do not overlook your school as a workplace that may provide appropriate opportunities for student learning and assessment! These learning experiences will require careful consideration and planning. In identifying and negotiating student participation in projects you may find it useful to reflect upon the following:

- the nature of the community group/agency/workplace
- the purpose of the activity, the range of tasks to be undertaken and the connection between the project, the qualification level and competencies to be achieved

- design, management and direction of the project
 - who will be involved in determining the parameters of the endeavour?
 - what time span is required for planning, performance and evaluation?
 - will the community group/employer coordinate the activity?

(iii) Attitudinal (Generic) Competencies

Interwoven through all the occupational standards and modules are the core competencies common to, and essential for all occupations. Communicating, problem solving, gathering and analyzing information, using technology and working in teams are fundamental skills required in every workplace. These abilities underpin industry competencies and are an essential component of any learning program.

These employability skills support students in developing, adapting and transforming their industry skills into new contexts. In addition, they provide learners with the knowledge, skills and attitude needed for life long learning. However, concerns have been raised that teachers do not give sufficient attention to integrating these competencies into learning and assessment strategies. It is therefore important that attention be given to students throughout the learning programme to develop these attitudinal competencies which are critical to the employability. (A copy of an Employability Chart is attached to this document).

(iv) Work placements

Work placements can contribute to a learning programme in a number of different ways. All work placements will usually give students:

- the opportunity to build contact with employers that may lead to future offers of employment
- exposure to the culture of the workplace and the industry sector.

But work placements can offer a lot more, if structured in a purposeful manner:

- access to equipment and facilities that may not be available to training organizations

- opportunities to practice and refine skills learned in a learning setting
- opportunities to deal with clients, work with others and respond to the contingencies that arise in daily workplace operations
- a learning resource for students to identify issues, and source information and conduct projects that are linked back into classroom based learning.

Obviously the decision to offer work placement will be dependent on the availability of suitable firms and the resources you are able to commit to identifying, selecting and managing each placement. Thought needs to be given to which competencies will form part of the work placement, training and assessment arrangements. Similarly you should consider how standards are to be maintained across different work sites.

Work placement is a potentially valuable resource but like any other aspect of your learning programme, it needs to be managed. Students are usually quick to understand the difference between being given the opportunity to learn on the job and being exploited for their free labour.

Selecting work placements

With the increased emphasis on students being work ready there is growing competition amongst schools for placements. Given the potential shortage of venues, it is important that care is taken to ensure that workplaces are suitable for your educational and training purposes.

Establishing *exactly* what you want the placement to achieve and the organizational requirements that will enable learners to fulfill these goals is your first step. To this end it is important to consider:

- the type of equipment, experiences and supervision necessary and available
- what the learner should be able to observe, do, apply and contribute whilst on work placement
- whether the placement is solely for learning or whether it will also contribute to assessment

- how the placement will contribute to students' learning. How will you use individual and group workplace experiences as part of the learning programme? Will you, for instance:
 - design a workplace project/report for learners to complete?
 - ask students to examine particular practices for later discussion within the classroom?
 - encourage learners to identify areas for workplace improvement – and then use this information to embark on a quality improvement programme?

Sharing this information with learners and employers ensures all parties are aware of the reasons for the work experiences and their respective obligations and responsibilities.

In determining the nature of work placements there are a number of issues that inevitably arise including:

(a) Timing

It is appropriate to have work placements throughout the course (one day a week for example) or would block release at the end a term, semester or Certificate be of greater value? Do employers have a preference? Which arrangement would enable them to provide more extensive assistance and supervision? Is one particular model more relevant to certain competencies but not others?

(b) Organization

It is of utmost importance that a number of questions be asked in regard to the organization of work experience for student learners:

- Who is responsible for finding work placements?
- Are learners expected to identify and arrange their own industry experiences?
- If so, do they know what they'll be expected to do while on placement?

- Are they fully aware of your expectations as to recording and reporting requirements?
- What happens if they can't find suitable placements? Or if an apparently appropriate environment doesn't provide the expected opportunities and experiences?
- Is a designated member of staff responsible for selecting suitable work sites?
- Are they familiar with the aim and intention of the experience for students at each level if applicable?
- Do they know what resources, equipment and level of supervision is required?
- Is the relevant support documentation such as letters of introduction available?
- Have insurance and administrative arrangements been considered?
- Do individual teachers find placements for their students?
- Is time allocated for staff to visit and assess work sites for suitability and foster and develop industry contacts?

(c) The role of work place supervisors and mentors

- (i) Are workplace supervisors expected to assess, supervise and/or provide specific training?

Irrespective of their role it's important that they are made aware of the aim and intention of the work place experience for students at each level.

- (ii) What information and support do supervisors/mentors need if they are to provide learners with the necessary assistance?

(d) Student support

The degree of learner support may vary considerably depending on:

- the age and experience of the learner (Year 11 students compared to learners completing the final term of their qualification)
 - the length and configuration of the placement (one day a week for ten weeks compared to six weeks full time)
 - the range and depth of scheduled work experiences and the number of competencies
 - the level of supervision provided within the workplace.
-
- What strategies will your work team employ to provide learners with support while they are undertaking work placements?
 - Who will be involved?
 - How often will contact occur?
 - What reporting mechanisms will be required?
 - Will work experiences be followed up in classroom discussions?
 - Will learners keep journals and/or records describing work events, activities and highlighting skill acquisition?
 - Will this material be used by staff to moderate the level of support offered to learners – and supervisors – in different work sites?

(e) Legal considerations

Work cover and public liability insurance need to be addressed. Similarly it is essential to adhere to relevant local or national legislation in relation to work placement if relevant.

**SECTION IV:
ASSESSMENT ISSUES**

IV. ASSESSMENT

Assessment, like learning delivery, occurs in a myriad of ways both on and off the job. For many schools, however, their concerns relate to the nature and amount of evidence required to infer competency. Some schools have focused on assessing students against each performance criteria for every element within every unit of competency – an act that has resulted in learner complaints of duplication and over-assessment, particularly where competencies have been delivered as stand alone entities. Assessment at the end of a module is the general rule of thumb, where the most appropriate assessment methodology is applied, where students have to demonstrate competency through theory as well as practical applications.

In order to avoid over assessment , an increasing number of teachers are using an integrated approach to teaching and assessment and are engaged in identifying:

- the knowledge, skills and attitude students need to display either on or off the job to demonstrate competency and the most efficient, effective and realistic way of organizing the assessment and evaluation process
- common themes and concepts within the Standards and Curriculum where holistic assessment of competencies is possible
- simulated work experiences, projects and work placements where a cluster of competencies and elements can be addressed in a realistic rather than artificial manner
- techniques for accurately recording elements and competencies achieved across different subject areas thus eliminating duplication of assessment.

Assessment is best when it is continuous, incorporates a variety of different activities and tasks and endeavours to expose students to a range of situations and contingencies (through simulation, hypotheticals, role plays etc.) Questions such as where will assessors be trained? Are there sufficient assessors? Are the assessors to be pulled from industry, the classroom, or a mix of both? In any event, who will deliver the training?

For many institutionally-based programmes, some form of work based assessment is integral to a learner's ability to display competency. If this is true for your particular programme you may find it useful to consider the following questions.

- Which particular competencies are to be assessed during work placement?
 - Do learners possess the underlying knowledge and skills or is additional workplace learning required?
 - Are employers/supervisors aware of the tasks they can realistically expect learners to perform?

- Who is responsible for assessing learner competence? The internal assessor? The external assessor? The employer? The supervisor? The teacher? What are the advantages/disadvantages of each approach? Is it possible – in terms of timeframes and workloads – to have the teacher and supervisor undertake joint assessments?

- What information are learners and supervisors given about:
 - the nature of assessment?
 - the tasks to be performed?
 - the conditions under which skills should be displayed?

- What recording/reporting tools are necessary?

And, most importantly, is the focus of the work placement assessment for certification? Or is the prime purpose to encourage *learning* in the workplace with assessment included as part of the overall process? These must be decided on prior to the start of the programme.

SECTION V:

QUALITY ASSURANCE

V. QUALITY ASSURANCE

Quality assurance speaks to a systematic process of checking to see whether a product or service being developed is meeting specified requirements.

In the case of competency based education, quality assurance looks at the procedures by which the training programme, the assessment and certification processes ensure the achievement of the objectives of training and assessment.

Quality assurance can be **both** internal and external. As it relates to competency based education, schools should have in place an internal quality assurance system where a team or a senior staff member is responsible for quality checks including accurate record-keeping, verification of competence, recording of grade and monitoring the procedure relating to training and assessment. Without quality assurance, there is no assurance of competence.

Record Keeping

In preparing for modularization, using the competency-based approach to training it becomes necessary to spend some time to focus on maintaining quality in the system through credible assessment procedures and proper record-keeping. In preparation, it is imperative that ***Skill Mastery Records*** are maintained for each learner, and that learners have access to and make use of these records to monitor their skill acquisition.

Proper record-keeping practices for administrative and assessment purposes ensures a sound recording and reporting mechanism upon which the assessment of modular training and assessment are built. Maintaining an accurate and reliable record system provides credibility, transparency and instills confidence in both the learner and in the overall programme.

Verification of results adds another dimension to assessment data. Verification of assessment procedures by “external experts” will ensure that quality of output is consistent and in keeping with the established criteria for competence.

Some points to bear in mind are:

- (i) Recording of data should be simple and efficient.
- (ii) Records of assessment should specify what evidence is collected, when it is collected and the method of assessment used.
- (iii) Assessment records should reflect all areas of performance i.e. knowledge, skills and attitude.
- (iv) Records should specify clearly the competencies assessed and the degree of competence achieved. This is critical in determining if assessment for the module is complete.
- (v) Assessment records may be used:
 - a. for certification
 - b. to determine training needs
 - c. for performance appraisals
 - d. for promotion
 - e. to determine equivalencies
- (vi) Records are confidential and should be treated accordingly.

It is therefore essential that data is accurately recorded and verified.

APPENDICES

REGIONAL QUALIFICATIONS FRAMEWORK

Type/Level of Programme	Orientation and Purpose	Credits	Entry Requirements	Occupational Competence	Academic Competence
Level 1/ Certificate	Completion of a preparatory programme leading to further study in a given academic or vocational area or entry qualification for a particular occupation.	Minimum 10 Credits	To be determined by the local training institution	Semi-skilled, entry level. Supervised worker	Grade 10
Level 2/ Certificate	To prepare a skilled independent worker who is capable of study at the next level (post-secondary)	Minimum 20 Credits	Grade 11 or Equivalent	Skilled Worker Unsupervised Worker	Grade 11
Level 3/ Diploma and Associate Degree	A post-secondary qualification emphasizing the acquisition of knowledge, skills and attitudes (behavioural competencies) to function at the technician/supervisory level and pursue studies at a higher level.	Diploma: Minimum 50 Credits Associate Degree: Minimum 60 Credits	4 CXC's, Level 2 Certification or Equivalent	Technician, Supervisory	Associate Degree Entry to Bachelor's Degree programme with or without advanced standing
Level 4/ Bachelor's Degree	Denoting the acquisition of an academic, vocational, professional qualification, who can create, design and maintain systems based on professional expertise	Minimum 120 Credits	5 CXC's, Level 3 Certification or Equivalent	Competence which involves the application of knowledge in a broad range of complex, technical or professional work activities performed in a wide range of contexts. This includes Master Craftsman, Technologists, Advanced Instructor, Manager, Entrepreneur.	
Level 5/ Post Graduate/ Advanced Professional	Denoting the acquisition of advanced professional post-graduate Competence in specialized field of study or occupation.		Level 4 Certification or Equivalent	Competence which involves the application of a range of fundamental principle at the level of chartered, advanced professional and senior management occupations.	

5-Level Qualification Framework

LEVEL I: Broadly equating to foundation skills in semi-skilled occupation

LEVEL II: Broadly equating to semi-skilled occupations

LEVEL III: Broadly equating to technician, skilled/craft occupations

LEVEL IV: Broadly equating to technician, para professional and supervisory occupations

LEVEL V: Broadly equating to general professional and management occupations

INSTITUTING AN EMPLOYABILITY/JOB ATTITUDE MONITORING POLICY

PURPOSE

One of the outcomes expected of CBE is the provision of world class workers who have the competitive edge in terms of their knowledge, skills and positive attitudes in finding their place in the job market for the utilization and provision of labour. Employers expect the holders of vocational qualifications to exhibit attitudinal qualities that best fit into the professional work environment. Above all, persons with the appropriate work attitudes have been facilitated in the developmental process especially where there are limitations in areas of skill and knowledge. A process must be defined whereby a student's work potential and characteristics/attitudes are rated, and such records are maintained as part of the training records of the institution.

POLICY

Each trainee shall be informed that he or she will be monitored during training for scholastic and positive attitudinal competencies. A system shall be in place whereby trainees are monitored in a transparent, fair and systematic manner throughout their period of training.

Positive attitudes shall be encouraged and promoted. Where negative attitudes are detected, the trainee shall be the beneficiary of counselling and continuous feedback with a view to producing a modified behaviour at the end of training. The evidence should be easily retrievable and manageable such that it can be represented in a summarized format on a record-keeping or data capturing form .

PROCEDURE

- The **attitude monitoring form** shall be discussed with all students both collectively and individually. The attitudinal factors on the form shall be explained to each trainee and allow for clarifications.
- Each teacher/senior teacher with responsibility for a class, shall assign a score on a scale of 1 to 5 to each attitudinal factor for each student. The score shall be based on a fair assessment of what appears to be the consistent characteristics of the student.

- Each teacher/coordinator is expected to complete the form at least once per quarter and submit it to the counselling department. This should be discussed with the student on an individual basis.
- This form should be completed **one month before each training term is completed.**
- The total score should be inserted in the column provided and represents a fraction of 50 points since there are ten (10) attitudinal factors.
- The average score arrived at from the three (3) term's assessments should be used as the final score.
- It is suggested that the details of the last attitudinal factors be represented on the trainee's file.
- It is expected that there will be sufficient feedback during the first six (6) months of the trainee's tenure. Hence during the last three (3) months of training, it is expected that there be behavioural changes to sharpen the trainee job readiness skills.
- It may become necessary to represent the summarized score (1 – 5) with a key on the reverse side of each certificate indicating the trainee attitudinal competence.

Special Note To The Instructional Staff

- Team teaching may be employed in order that job readiness infusion can be planned for by both the skill and the support subjects instructors.
- A new dimension should be added to lesson planning process and should be a team effort at the institution. (i.e. all communication instructors; all calculations and computation instructors; instructors of same skill coming together to plan lessons with an emphasis on job readiness objectives).

- Job readiness attitudinal factors should be represented on the lessons plans and hence the realization of the job readiness objectives can inform the assessment process with the attached form where each trainee is assigned a score, based on the competencies displayed.

- It may be necessary for the Institution Management to focus on a particular job readiness competency each week, so that the entire staff is aware of the competency everyone should be focusing on: (e.g. February 2- 6, of any year, everyone focuses on **Language and communication at the work place**. All instructional staff are expected to exhibit and use **Language and communication** for that week. The assembly sessions can be used to articulate what is *Language and communication* and what is expected throughout the week, everyone should be free to correct each other, this could be incorporated in lesson planning, etc.

- Trainees should be given assignments on specific job readiness competencies, as and when necessary, to support the infusion process and to improve the consciousness on the part of the trainees.

- The completion of the student portfolio should be used by the institutions to assist with the job readiness infusion process.

STUDENT EMPLOYABILITY SKILLS INVENTORY FORM

EMPLOYABILITY SKILLS	COMPETENCIES	Demonstrated	Not Demonstrated
Work Ethic	Works well without supervision		
	Exhibits reliability and dependability		
	Accepts responsibility		
	Works beyond normal hours when needed		
	Shows pride in work		
	Accepts responsibility for own behaviour		
	Shows initiative		
	Conducts self in a calm and controlled manner		
	Demonstrates maturity in thoughts, actions and deeds		
	Exhibits patience		
	Manages time efficiently and effectively		
	Displays appropriate assertiveness		
	Evaluates own work		
Commitment	Observes all organizational policies		
	Displays a desire to improve		
	Gives best effort consistently and strive to please		
	Shows concern for future career with the organization		
	Understands the world of work and basic economic concepts		
Communication	Questions appropriately		
	Notifies supervisors of absences and reasons for absences		
	Demonstrates clear effective written and oral communication skills		
	Demonstrates good listening and responding techniques		
	Develops telephone skills		

Interpersonal Relationships	Works well with peers		
	Accepts authority and supervision; works effectively with supervisor		
	Accepts constructive constrictive criticism		
	Works as a team member		
	Displays a friendly and cooperative spirit		
	Accepts assignments pleasantly		
	Demonstrates tactfulness in difficult situations		
	Becomes aware of and accepting of cultural differences		
	Respects the rights and property of others		
	Displays leadership qualities		
	Identifies varying management styles		
	Understands self and accept value system of others		
Responsibility	Organizes work and manage time efficiently		
	Exhibits accuracy, precision, and neatness in work and work habits		
	Demonstrates ability to complete assignments in timely manner		
	Follows oral, visual, written and multi-step directions		
	Displays care for tools and materials		
	Strives to improve job performance		
	Seeks new assignments when time permits		
	Understands employer expectation		
Reasoning and Problem-solving	Displays flexibility		
	Integrates creative and innovative ideas		
	Synthesizes and processes job components		
	Adapts to changing demands of the job		
	Organizes work and manages time efficiently		
	Reasons and makes objective judgments		
	Understands rules and procedures		
	Applies basic skills		

Health and Safety Habits	Maintains a good work pace and production rate		
	Practises good personal hygiene		
	Dresses in a well-groomed, appropriate manner		
	Recognizes stress-related situations and deals with them effectively		
	Develops physical stamina and tolerance for the kind done		
	Maintains good personal health		
Personal Attributes	Develops a good self-esteem and positive self-image		
	Defines personal and professional goals		
	Demonstrates emotional stability		
	Exhibits positive attitudes		
	Demonstrates self-motivation and self-management		
	Develops an understanding of motivation for work		
	Exhibits self-confidence and self-awareness		
	Displays honesty in personal and work situations		
Job-Seeking and Getting-Skills	Becomes aware of creative potential		
	Utilizes creative ability in on-the-job situations		
	Prepares job applications and resumes		
	Conducts career/job search		
	Develops job application letters		
	Demonstrates effective interviewing skills		
	Displays understanding of benefits and payroll procedures		

**OCCUPATIONAL AREAS RECOMMENDED FOR
IMPLEMENTATION IN SCHOOLS
FOR CVQ PHASE ONE**

CONSTRUCTION

Electrical Installation
Carpentry
Plumbing
Welding
Masonry
Joinery

HOSPITALITY

Housekeeping
Food Preparation

BUSINESS ADMINISTRATION

Accounting
Secretarial Skills

APPAREL & TEXTILES

Garment Construction

AUTOMOTIVE

Auto Mechanics

