

## SECTION C: PLANNING FOR INSTRUCTION

CTS provides increased opportunities for junior and senior high schools to design courses based on the needs and interests of their students and the circumstances within the school and community. Some strands may be appropriately introduced at the junior high school level. Other strands are more appropriately introduced at the senior high school level or to Grade 9 students. Refer to this section for recommendations regarding the Logistics strand, or the *Career & Technology Studies Manual for Administrators, Counsellors and Teachers* for a summary of the recommended grade levels for each strand.

### PLANNING FOR CTS

#### Defining Courses

Schools determine which strands and modules will be offered in a particular school, and will combine modules into courses.

Each module was designed for approximately 25 hours of instruction. However, this time frame is only a guideline to facilitate planning. The CTS curricula are competency based, and the student may take more or less time to gain the designated competencies within each module.

A course will usually consist of modules primarily from the same strand but, where appropriate, may include modules from other CTS strands. Refer to the *Career & Technology Studies Manual for Administrators, Counsellors and Teachers* (Appendix 4) for more information on course names and course codes.

Module selection and sequencing should consider:

- prerequisite(s)
- supporting module(s) (other CTS modules that may enhance the learning opportunity if offered with the module)
- module parameters:
  - instructional qualifications, if specialized
  - equipment and facility requirements, if specialized; e.g., safety modules.

The module parameters are defined for each module in Sections D, E and F of this Guide.

#### Degree of Flexibility

The CTS program, while designed using the modular structure to facilitate flexible timetabling and instructional delivery, does not mandate the degree of flexibility a school or teacher will offer. The teacher and school will determine the degree of flexibility available to the student. Within the instructional plan established by the school, the student may:

- be given the opportunity to progress at a rate that is personally challenging
- have increased opportunity to select modules that develop competencies he or she finds most relevant.

#### Integrating Basic Competencies

The basic competencies relate to managing learning and resources, problem solving and innovation, communicating effectively, working with others and demonstrating responsibility are developed throughout the CTS program, and are within each module.

Assessment of student achievement on the basic competencies is integrated throughout the other module learner expectations. Refer to Section G (Assessment Tools) of this Guide for the description of student behaviours expected at each of the four developmental stages defined for the basic competencies.

Assessment of basic competencies could include input and reflection involving the student, teacher(s), peers and others. Description of the observed behaviour could be provided through a competency profile for the module. Positive, ongoing interaction between the student and teacher will support motivation for student growth and improvement.

## Assessing Student Achievement

Assessing student competency is a process of gathering information by way of observations of process, product and student interaction.

Where appropriate, assessment tools have been defined to assist the teacher and student in the assessment. Refer to Section G (Assessment Tools) of this Guide for copies of the various tools (worksheets, checklists, sample questions, etc.).

A suggested emphasis for each module learner expectation has also been established. The suggested emphasis provides a guideline to help teachers determine time allocation and/or the appropriate emphasis for each MLE and student grade.

The Competency Profiles/Assessment Checklists have been validated with logistics professionals and may be most useful when the majority of student learning in the Logistics modules takes place in off-campus settings.

## Recognizing Student Achievement

At the high school level, successful demonstration of the exit-level competencies in a module qualifies the student for one credit. Refer to Section A of this Guide for more detailed information about how curriculum and assessment standards are defined in CTS. Refer to the *Career & Technology Studies Manual for Administrators, Counsellors and Teachers* (Appendix 12) for more information on how student achievement can be recognized and reported at the school and provincial levels.

## Portfolios

When planning for instruction and assessment, consider a portfolio as an excellent tool to provide evidence of a student's effort, progress and achievement. Portfolios will aid students in identifying skills and interest. They also provide the receiving teacher, employer and/or post-secondary institution proof of a student's accomplishments. The make-up and evaluation of

the portfolio should be a collaborative agreement between the student and teacher.

## Resources

A comprehensive resource base, including print, software and audio-visual, has been identified to support CTS strands. It is intended that these resources will form the basis of a resource centre, encouraging teachers and students to access a wide selection of resources and other information sources throughout the learning process. Unless otherwise noted, these resources are considered to be suitable for both junior and senior high school students.

Authorized resources may be obtained from the Learning Resources Distributing Centre or directly from the publisher or distributor. Refer to Section I (Learning Resource Guide) of this Guide for the complete resource list including curriculum correlations and resource annotations. Additional sources refer to noncommercial or government agencies that offer resources that may be of assistance in this strand.

## Sample Student Learning Guides

In addition to the resources, a Sample Student Learning Guide Template is available (refer to Section J of this Guide), and includes the following components:

Why take this module?

- What are the entry-level competencies?
- What are the exit-level competencies?
- What resources may be accessed?
- What assignments/activities must be completed?
- What are the timelines?
- How will the final mark be calculated?

## PLANNING FOR LOGISTICS

The following suggestions are provided to assist teachers and school and school system administrators as they plan to deliver modules from the Logistics strand.

## Selecting Modules

The scope and sequence chart in Section B provides an overview of the Logistics modules, indicating prerequisites and theme areas. Brief descriptions of the modules follow the scope and sequence chart in Section B.

At the junior high level, students may complete the Logistics module (LOG1010) or explore a range of competencies required in logistics by completing components from two or more of the introductory level modules.

At the senior high level, students are expected to complete successfully Logistics (LOG1010) as a prerequisite or corequisite to subsequent modules in the Logistics strand.

Schools may choose to offer high school students the option of enrolling in a course composed of modules from:

- one Logistics theme
- two or more Logistics themes
- two or more CTS strands.

## Instructional Strategies

Where appropriate, off-campus education instructional strategies should be considered to ensure that student learning is achieved in environments representative of the logistics sector.

Teachers are encouraged to offer Logistics (LOG1010), at least in part, in school and to use community resources to expand and enrich the context and content of the module.

At the senior high level, the Logistics modules shown in the Logistics scope and sequence chart may be offered by schools as a 3-credit course, or they may be grouped together with modules from other strands as 3-, 4-, 5- or 6-credit courses.

Following are a few examples of how Logistics modules may be grouped into sample courses.

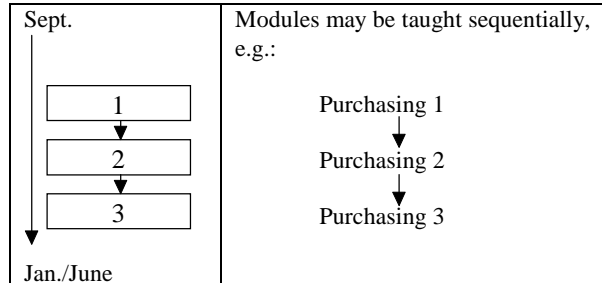
4 credits	<ul style="list-style-type: none"> <li>• Logistics</li> <li>• Warehouse &amp; Distribute 1</li> <li>• Traffic &amp; Transport 1</li> <li>• Purchasing 1</li> </ul>
3 credits	<ul style="list-style-type: none"> <li>• Logistics</li> <li>• Inventory Management 1</li> <li>• Inventory Management 2</li> </ul>
5 credits	<ul style="list-style-type: none"> <li>• Logistics</li> <li>• Warehouse &amp; Distribute 1</li> <li>• Warehouse &amp; Distribute 2</li> <li>• Purchasing 1</li> <li>• Purchasing 2</li> </ul>

## Organizing for Learning

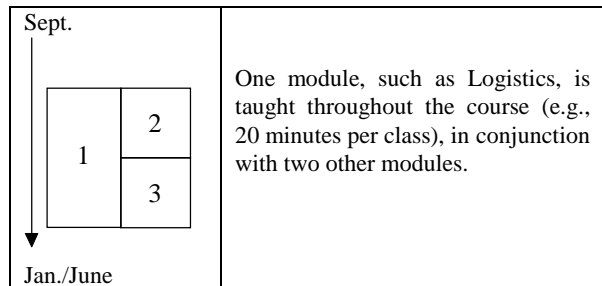
Before selecting modules, teachers should check the module parameters outlined in each module (see Sections D, E and F of this Guide).

Modules can be delivered sequentially, concurrently or combined. For example:

### Scenario A

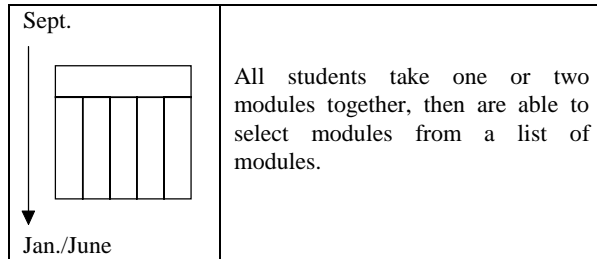


### Scenario B



Teachers can also allow students to progress at a rate that is personally challenging; e.g.:

*Scenario C*

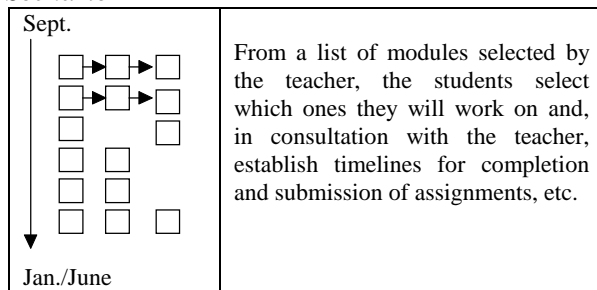


Note that project modules from the Logistics strand may be combined with modules from other strands to provide increased opportunity for students to develop expertise and refine their competencies. Project modules are **not** designed to be offered as distinct courses and should **not** be used to extend Work Experience 15, 25 and 35 courses.

**Improving Smooth Transitions to the Workplace and/or Related Post-secondary Programs**

Refer to Section H of this Guide for potential transitions students may make into the workplace and/or related post-secondary programs or other avenues for further learning.

*Scenario D*



**Identifying Linkages**

Modules in this strand may be taken in isolation from other CTS strands, or in combination with modules in other CTS strands. Suggestions about how these modules could be used to complement and enhance the competencies developed within a specific strand are outlined in Section H of this Guide.

In particular, modules from the following strands can enhance and complement competencies developed through completing modules from the Logistics strand:

- Career Transitions
  - Career Readiness theme
  - Job Safe Skills theme
  - Leadership theme
- Management & Marketing
- Information Processing.