

DEFINITION OF THE EVALUATION DOMAIN

Adult General Education

Diversified Basic Education Program

Computer Science

OPERATING SYSTEMS

CMP-5081-1

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Introduction

The Definition of the Evaluation Domain (DED) ensures consistency between a course and the related evaluation instruments. The DED is used to select, organize and describe the essential and representative elements of the course. The DED is based on the program of study and the course, but should by no means replace them in the planning of instructional activities.

All the DEDs produced after June 30, 2014, by the Ministère de l'Éducation et de l'Enseignement supérieur (MEES) are prescriptive. Consequently, they are the reference documents to be used in the development of all examinations, be they ministerial examinations or those developed by adult education centres or by Société GRICS (BIM). The DEDs thus serve as a model for preparing multiple equivalent versions of examinations that are valid across the province.¹

In addition, as set out in the *Policy on the Evaluation of Learning*, adult learners must know what they will be evaluated on and what is expected of them.² The DEDs and the criterion-referenced rubrics are recommended for this purpose.

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1. Québec, Ministère de l'Éducation du Québec, *Policy on the Evaluation of Learning* (Québec: Gouvernement du Québec, 2003), 47.
 2. Ibid., 9.

Evaluation Content

General Information	
Broad Areas of Learning³ - Health and Well-Being - Environmental Awareness and Consumer Rights and Responsibilities Subject Area - Mathematics, Science and Technology Families of Situations - Information - Interacts by interpreting signals he or she receives and using input and output peripherals - Creation - Discovers what computers can do by consulting documentation and by experimenting - Critical thinking - Critically examines computerized communication tools by applying evaluation criteria - Validates information by using validation criteria	Program of Study - Computer Science Course - Operating Systems
Essential Elements Targeted by the Evaluation	
Subject-Specific Competencies - Interacts in a computer environment - Adopts behaviours that reflect a concern for ethics, safety and critical thinking	Categories of Knowledge - Characteristics of at least two operating systems - Ergonomic characteristics of the workstation - Terminology associated with operating systems - Configuring settings and basic functions of two operating systems - Workplace ergonomics - File and folder management
Evaluation Criteria	
Evaluation Criteria for Competency 1 1.1 Accurate interpretation of messages and signals 1.2 Use of appropriate strategies to interact and to troubleshoot 1.3 Judicious application of evaluation criteria Evaluation Criterion for Competency 3 3.1 Judicious integration of information in accordance with the constraints identified	Proficiency in Subject-Specific Knowledge Proficiency in subject-specific knowledge presupposes its acquisition, understanding, application and mobilization, and is therefore linked with the evaluation criteria for the competencies.

3. The broad areas of learning are stated exactly as in the course. However, the person who designs the evaluation instrument may choose other broad areas of learning.

Explanation of the Evaluation Content

Evaluation Criteria

The evaluation criteria are stated exactly as in the course.

The examination focuses little, if at all, on criteria 1.1 and 1.2. To make a judgment related to these criteria, the teacher should observe the adult learner in the classroom. Obviously, any observations made during the examination should also be taken into account.⁴

Information Clarifying the Evaluation Criteria

1.1 Accurate interpretation of messages and signals

This criterion evaluates the adult learner's ability to react appropriately to explicit and implicit messages transmitted by operating systems, i.e. by adapting the interface to his or her needs, setting up an ergonomic work environment and using the available material resources.

1.2 Use of appropriate strategies to interact and to troubleshoot

This criterion evaluates the adult learner's ability to use sources of computer help (e.g. operating system help function, tutorials, the Internet).

1.3 Judicious application of evaluation criteria

This criterion measures the adult learner's ability to overcome obstacles related to interacting with operating systems.

3.1 Judicious integration of information in accordance with the constraints identified

This criterion evaluates the adult learner's ability to validate the credibility of sources of information and the compatibility of hardware and applications.

Proficiency in Subject-Specific Knowledge

Proficiency in subject-specific knowledge is assessed through the evaluation of competencies, using tasks related to the evaluation criteria.

4. Since these criteria are evaluated for the purpose of certification, the teacher should make a judgment concerning the adult learner's ability **at the end of the course**. The mark given should not be based on several evaluations done at different times during the course.

Weighting

The weighting for the evaluation of the competencies is determined in accordance with the relative weighting given each competency in the course. The competencies are weighted as follows:

Competency 1, *Interacts in a computer environment*: 80%

Competency 3, *Adopts behaviours that reflect a concern for ethics, safety and critical thinking*: 20%

The weighting of the evaluation criteria appears in the assessment tools provided in the *Correction and Evaluation Guide*. Adult learners must be made aware of the evaluation criteria used to evaluate them and the corresponding weighting of each criterion.

Knowledge

The following table presents the prescribed knowledge selected for the examination. However, in special cases, particularly when an application does not have the tools and commands needed to acquire all of the prescribed knowledge, the missing items can be replaced with equivalent knowledge.

The examination must require adult learners to apply a representative sample of the knowledge indicated in the table.

Subject-Specific Content

Categories of Knowledge	Prescribed Knowledge
Characteristics of at least two operating systems	• Software publishers • File system • Rights and privileges of users and administrators • Elements of the interface • Control panel (system preferences)
Ergonomic characteristics of the workstation	
Configuring settings and basic functions of two operating systems	• Customizing display settings • Setting time, date and regional options • Selecting the keyboard input language • Using components and peripherals efficiently
Workplace ergonomics	• Positioning oneself properly • Adapting the work area • Arranging the desktop efficiently
File and folder management	• Understanding and using file display modes • Handling files and folders

Specifications for the Evaluation Instruments

Examination: Number of Parts, Sections, Procedure and Duration

The examination is administered in one evaluation session. Adult learners are responsible for managing the time available to them.

Time: 180 minutes

Examination Content

The task consists in comparing the characteristics of two operating systems.⁵

Information-Gathering Tools

- Adult's Booklet
- The adult learner's production (computerized document)
- The printed sheets, if applicable

Authorized Materials

- Operating systems installed on a computer or other device*
- Internet access
- Printer connected to the device
- Removable medium (or storage space) containing the files needed for the production, if applicable
- Personal course notes
- Reference documents (paper or electronic format)

* Necessary materials

5. The goal of this course is to teach adult learners how to use operating systems. It is up to the educational institution to choose the operating systems that enable learners to explore most of the prescribed knowledge for the course.

Assessment Tools

For the evaluation of Competency 1, *Interacts in a computer environment*, and Competency 3, *Adopts behaviours that reflect a concern for ethics, safety and critical thinking*, the criterion-referenced rubric (one for each competency) is the assessment tool used by the teacher. Criterion-referenced interpretation involves comparing the information gathered with the expected outcomes.⁶ These rubrics are prescriptive and include the following rating scale:

Competency development:

- Advanced
- Thorough
- Acceptable
- Partial
- Minimal

A checklist is provided in the Correction and Evaluation Guide to help markers use the criterion-referenced rubrics.

Pass Mark

The pass mark is 60%.

Retakes

The adult learner must retake the entire examination.

6. Québec, Ministère de l'Éducation, *Policy on the Evaluation of Learning* (Québec: Gouvernement du Québec, 2003), 28-29.

APPENDIX – CRITERION-REFERENCED RUBRICS

Adult General Education

EVALUATION

Criterion-Referenced Rubrics

Adult learner's name

Teacher's name

Date

Diversified Basic Education Program
Computer Science

Course
Operating Systems
CMP-5081-1

Competency 1: Interacts in a Computer Environment (80%)**Instructions:**

- For each criterion, circle the statement(s) that correspond(s) to the adult learner's performance level.
- In the last column, enter the mark that corresponds to the assigned rating(s). The only mark that can be allotted for a given level is that indicated in the rubric.

Rating scale Evaluation criteria	Advanced competency development	Thorough competency development	Acceptable competency development	Partial competency development	Minimal competency development	Mark
1.1 Accurate interpretation of messages and signals	Always responds appropriately to explicit and implicit messages sent by the operating system. 15	Almost always responds appropriately to explicit and implicit messages sent by the operating system. 12	Often responds appropriately to explicit and implicit messages sent by the operating system. 9	Has difficulty recognizing and interpreting explicit and implicit messages sent by the operating system. 6	Has great difficulty recognizing and interpreting explicit and implicit messages sent by the operating system. 3	____/15
1.2 Use of appropriate strategies to interact and to troubleshoot	Always uses appropriate help sources to troubleshoot. 5	Almost always uses appropriate help sources to troubleshoot. 4	Often uses appropriate help sources to troubleshoot. 3	Sometimes uses appropriate help sources to troubleshoot. 2	Rarely uses appropriate help sources to troubleshoot. 1	____/15
	Interaction with the operating system demonstrates a high level of familiarity. 10	Interaction with the operating system demonstrates a good level of familiarity. 8	Interaction with the operating system demonstrates a developing familiarity. 6	Interaction with the operating system demonstrates little familiarity. 4	Interaction with the operating system demonstrates very little familiarity. 2	

Assign a mark of 0 when the adult learner's performance does not correspond to any of the statements in the rubric.

Competency 1: Interacts in a Computer Environment (80%) (cont.)**Instructions:**

- For each criterion, circle the statement(s) that correspond(s) to the adult learner's performance level.
- In the last column, enter the mark that corresponds to the assigned rating(s). The only mark that can be allotted for a given level is that indicated in the rubric.

Rating scale Evaluation criteria	Advanced competency development	Thorough competency development	Acceptable competency development	Partial competency development	Minimal competency development	Mark
1.3 Judicious application of evaluation criteria	Measures taken to overcome obstacles faced when interacting with the operating systems are always appropriate. 50	Measures taken to overcome obstacles faced when interacting with the operating systems are almost always appropriate. 40	Measures taken to overcome obstacles faced when interacting with the operating systems are often appropriate. 30	Measures taken to overcome obstacles faced when interacting with the operating systems are sometimes appropriate. 20	Measures taken to overcome obstacles faced when interacting with the operating systems are rarely appropriate. 10	___/50
Mark for competency 1:						___/80

Assign a mark of 0 when the adult learner's performance does not correspond to any of the statements in the rubric.

Competency 3: Adopts behaviours that reflect a concern for ethics, safety and critical thinking (20%)**Instructions:**

- For each criterion, circle the statement(s) that correspond(s) to the adult learner's performance level.
- In the last column, enter the mark that corresponds to the assigned rating(s). The only mark that can be allotted for a given level is that indicated in the rubric.

Rating scale Evaluation criteria	Advanced competency development	Thorough competency development	Acceptable competency development	Partial competency development	Minimal competency development	Mark
3.1 Judicious integration of information in accordance with the constraints identified	Information sources and compatibility of the equipment with the applications are always validated. 20	Information sources and compatibility of the equipment with the applications are almost always validated. 16	Information sources and compatibility of the equipment with the applications are often validated. 12	Information sources and compatibility of the equipment with the applications are sometimes validated. 8	Information sources and compatibility of the equipment with the applications are rarely validated. 4	___/20
Mark for competency 3:						___/20

Assign a mark of 0 when the adult learner's performance does not correspond to any of the statements in the rubric.

