# **DEFINITION OF THE EVALUATION DOMAIN**

## **Adult General Education**

Diversified Basic Education Program Computer Science

INTRODUCTION TO 2D ANIMATION

CMP-5074-2

September 2018



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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.<sup>2</sup> The DEDs and the criterion-referenced rubrics are recommended for this purpose.

2.

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

Ibid., 9.

## **Evaluation Content**

#### **General Information**

#### Broad Areas of Learning<sup>3</sup>

- Career Planning and Entrepreneurship
- Media Literacy

#### **Subject Area**

Mathematics, Science and Technology

#### **Families of Situations**

- Creation
  - Discovers what computers can do by consulting documentation and by experimenting
  - Creates by correctly using the appropriate functions
- Critical thinking
  - Evaluates his/her work by setting quality standards

### **Program of Study**

Computer Science

#### Course

Introduction to 2D Animation

#### **Essential Elements Targeted by the Evaluation**

#### **Subject-Specific Competencies**

- 1. Interacts in a computer environment
- 2. Produces computerized documents

#### Categories of Knowledge

- Nature, role and properties of objects related to 2D animation
- · Main components of an animation
- Frame rates
- Types of animation
- File formats associated with animation
- Storyboard
- Standard terminology associated with 2D animation
- Film terminology
- Managing animation files
- Creating and modifying objects
- Adding or modifying audio tracks
- Managing layers
- Controlling events in time
- Exporting an animation in an appropriate format

#### **Evaluation Criteria**

#### **Evaluation Criterion for Competency 1**

1.1 Use of appropriate strategies to interact and to troubleshoot

#### **Evaluation Criteria for Competency 2**

- 2.1 Thorough planning of the work
- 2.2 Appropriate formatting based on document type
- 2.3 Application of appropriate tools and functions
- 2.4 Rigorous compliance 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.

<sup>3.</sup> 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 criterion 1.1. To make a judgment related to this criterion, the teacher should observe the adult learner in the classroom. Of course, any observations made during the examination should also be taken into account.<sup>4</sup>

#### Information Clarifying the Evaluation Criteria

#### 1.1 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. application help function, tutorials, the Internet).

### 2.1 Thorough planning of the work

This criterion evaluates the adult learner's ability to determine the elements needed to produce the document.

#### 2.2 Appropriate formatting based on document type

This criterion evaluates the adult learner's ability to apply a variety of formatting elements to 2D images and to apply an appropriate format for his/her project.

#### 2.3 Application of appropriate tools and functions

This criterion evaluates the adult learner's ability to use the commands and tools needed to animate objects in 2D.

#### 2.4 Rigorous compliance with the constraints identified

This criterion evaluates the adult learner's ability to present a production compliant with the requirements of the task and the related quality standards.

#### **Proficiency in Subject-Specific Knowledge**

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

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<sup>4.</sup> Since this criterion is part of the evaluation 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 importance of each competency in the course. The competencies are weighted as follows:

Competency 1, Interacts in a computer environment. 10% Competency 2, Produces computerized documents: 90%

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   |  |  |  |
|--|--|--|--|--|
| Nature, role and properties of objects related to 2D animation |  |  |  |  |
| Main components of an animation                                | <ul> <li>Scenes and sequences</li> <li>Keyframes</li> <li>Symbols</li> <li>Animation clips</li> <li>Instances</li> <li>Vector-based and bitmap images</li> <li>Videos</li> <li>Sounds</li> </ul> |  |  |  |
| Frame rates  | <ul><li>Web</li><li>PAL</li><li>NTSC</li></ul>   |  |  |  |
| Types of animation   | <ul><li>Frame-by-frame animation</li><li>Interpolation or transformation</li></ul>   |  |  |  |
| File formats associated with animation                         | <ul><li>Raster-based animation (GIF, PNG)</li><li>Vector-based animation (SWF, SVG)</li></ul>  |  |  |  |
| Storyboard   |  |  |  |  |
| Managing animation files                                       | <ul> <li>Using the library to store and retrieve objects</li> <li>Choosing the types of images (vector or bitmap) appropriate to the situation</li> </ul>  |  |  |  |

| Categories of Knowledge                         | Prescribed Knowledge   |
|---|--|
| Creating and modifying objects                  | <ul> <li>Drawing objects using drawing tools</li> <li>Importing objects</li> <li>Arranging objects in a scene</li> <li>Changing the properties of objects</li> <li>Grouping objects</li> </ul> |
| Adding or modifying audio tracks                |  |
| Managing layers                                 | <ul> <li>Adding and deleting layers</li> <li>Naming layers</li> <li>Arranging objects in layers</li> <li>Grouping and ungrouping layers</li> </ul>   |
| Controlling events in time                      | <ul><li>Determining keyframes</li><li>Tweening</li></ul>   |
| Exporting an animation in an appropriate format | <ul><li>Compatibility</li><li>File size</li><li>Compression</li><li>Quality</li></ul>  |

## **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.

Duration: 180 minutes

#### **Examination Content**

The task consists in producing a document using a 2D animation application.<sup>5</sup>

#### Information-Gathering Tools

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

#### **Authorized Materials**

- 2D animation application 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)

**Definition of the Evaluation Domain** 

<sup>\*</sup> Necessary materials

<sup>5.</sup> The goal of this course is to teach adult learners how to use a 2D animation application. It is up to the educational institution to choose the application that enables 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 2, *Produces computerized documents*, 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.<sup>6</sup> 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.

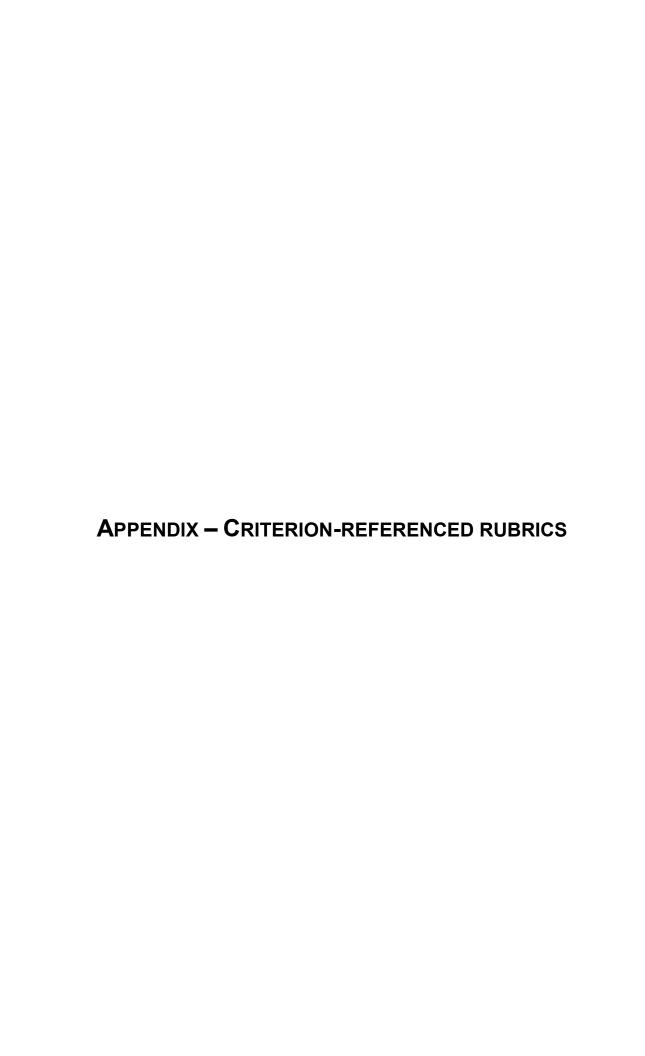
#### **Pass Mark**

The pass mark is 60%.

#### **Retakes**

The adult learner must retake the entire examination.

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



Adult General Education

| EVALUATION                   |
|------------------------------|
| Criterion-Referenced Rubrics |
| Adult learner's name         |
|                              |
| Teacher's name               |
| Date                         |

Diversified Basic Education Program

Computer Science

Course Introduction to 2D Animation CMP-5074-2

## Competency 1: Interacts in a Computer Environment (10%)

#### 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<br>competency<br>development                                      | Acceptable competency development                                       | Partial competency development                                    | Minimal<br>competency<br>development                                   | Mark |
|--|--|--|---|---|--|------|
| 1.1<br>Use of appropriate                  | Always uses appropriate help sources to troubleshoot.                      | Almost always uses appropriate help sources to troubleshoot.               | Often uses appropriate help sources to troubleshoot.                    | Sometimes uses appropriate help sources to troubleshoot.          | Rarely uses appropriate help sources to troubleshoot.                  |      |
| strategies to interact and to troubleshoot | Interaction with the application demonstrates a high level of familiarity. | Interaction with the application demonstrates a good level of familiarity. | Interaction with the application demonstrates a developing familiarity. | Interaction with the application demonstrates little familiarity. | Interaction with the application demonstrates very little familiarity. | /10  |
| Mark for competency 1:                     |  |  |   |   |  | /10  |

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

## **Competency 2: Produces Computerized Documents (90%)**

#### 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<br>competency<br>development   | Thorough competency development  | Acceptable competency development  | Partial competency development   | Minimal<br>competency<br>development  | Mark |
|---|---|--|--|--|---|------|
| 2.1<br>Thorough planning of<br>the work           | Planning, whether in the form of a text, list, sketch or other, is very detailed, and all the required elements are taken into account.         | Planning, whether in<br>the form of a text, list,<br>sketch or other, is<br>sufficiently detailed,<br>and almost all the<br>required elements are<br>taken into account. | Planning, whether in<br>the form of a text, list,<br>sketch or other, is<br>partially complete, but<br>most of the required<br>elements are taken<br>into account. | Planning, whether in<br>the form of a text, list,<br>sketch or other, is<br>limited, and most of<br>the required elements<br>are missing.          | Planning, whether in<br>the form of a text, list,<br>sketch or other, is very<br>limited.   | /15  |
|   | 15  | 12   | 9  | 6  | 3   |      |
|   | Formatting elements (animation of objects, fonts, colours, textures, etc.) are varied and fully appropriate.                                    | Formatting elements (animation of objects, fonts, colours, textures, etc.) are varied and very appropriate.  | Formatting elements (animation of objects, fonts, colours, textures, etc.) are appropriate.  | Formatting elements (animation of objects, fonts, colours, textures, etc.) are seldom appropriate.   | Formatting elements (animation of objects, fonts, colours, textures, etc.) are rarely appropriate.  |      |
| 2.2 Appropriate formatting based on document type | Technical conventions associated with 2D animation (brightness, dimension of the scene, fluidity, streaming format, etc.) are always respected. | Technical conventions associated with 2D animation (brightness, dimension of the scene, fluidity, streaming format, etc.) are almost always respected.                   | Technical conventions associated with 2D animation (brightness, dimension of the scene, fluidity, streaming format, etc.) are often respected.                     | Technical conventions associated with 2D animation (brightness, dimension of the scene, fluidity, streaming format, etc.) are sometimes respected. | Technical conventions associated with 2D animation (brightness, dimension of the scene, fluidity, streaming format, etc.) are rarely respected. | /20  |
|   | 10  | 8  | 6  | 4  | 2   |      |

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

## Competency 2: Produces Computerized Documents (90%) (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.

| those 2D and objects  2.4  Rigorous compliance  | nal product takes<br>count all of the<br>equirements and<br>standards.            | The final product takes into account almost all of the task requirements and quality standards.  | The final product takes into account most of the task requirements and quality standards.  | The final product takes into account few of the task requirements and quality standards.        | The final product takes into account very few of the task requirements and quality standards.        | /20  |
|---|---|--|--|---|--|------|
| those 2D and objects  2.4 Rigorous compliance with the constraints  The fir into act task requality | equirements and   | takes into account almost all of the task requirements and   | into account most of the task requirements   | into account few of the task requirements and   | takes into account very few of the task requirements and   | /20  |
| functions those 2D and  |   |  |  |   |  |      |
| functions those 2D ani  | 35  | 28   | 21   | 14  | 7  |      |
| demor<br>high le<br>proficion<br>of com<br>Application of   | ency in the use<br>nmands and<br>ons, especially<br>relating to the<br>imation of | The final product demonstrates a high level of proficiency in the use of commands and functions, especially those relating to the 2D animation of objects. | The final product demonstrates proficiency in the use of commands and functions, especially those relating to the 2D animation of objects. | The final product demonstrates a low level of proficiency in the use of commands and functions. | The final product demonstrates a very low level of proficiency in the use of commands and functions. | _/35 |
|   | Advanced<br>ompetency<br>evelopment   | Thorough competency development  | Acceptable competency development  | Partial competency development  | Minimal<br>competency<br>development   | Mark |

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