

# DEFINITION OF THE EVALUATION DOMAIN

Adult General Education

---

Diversified Basic Education Program

Biology

REPRODUCTION AND DEVELOPMENT

BLG-5071-2

September 2019

## Table of Contents

<b>Introduction</b> .....	1
<b>Evaluation Content</b> .....	2
<b>Explanation of the Evaluation Content</b> .....	3
Evaluation Criteria .....	3
Proficiency in Subject-Specific Knowledge .....	4
Weighting .....	5
Knowledge.....	5
<b>Specifications for the Evaluation Instruments</b> .....	7
Examination: Number of Parts, Sections, Procedure and Duration.....	7
Examination Content.....	7
Information-Gathering Tools.....	7
Authorized Materials .....	8
Assessment Tools.....	8
Pass Mark .....	9
Retakes.....	9
<b>Appendices</b> .....	11
Criterion-Referenced Rubrics (Practical Part) .....	13
Criterion-Referenced Rubrics (Theory Part).....	19

## 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 a 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.

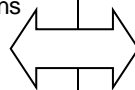
All the DEDs produced after June 30, 2014, by the Ministère de l'Éducation et de l'Enseignement supérieur (MEES) are prescriptive. Consequently, they are the reference documents to be used in the development of all examinations, be they ministerial examinations or those developed by adult education centres 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.<sup>1</sup>

Furthermore, 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.

- 
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

<b>General Information</b>	
<p><b>Broad Areas of Learning</b></p> <ul style="list-style-type: none"> <li>• Health and Well-Being</li> <li>• Environmental Awareness and Consumer Rights and Responsibilities</li> <li>• Career Planning and Entrepreneurship</li> <li>• Media Literacy</li> <li>• Citizenship and Community Life</li> </ul> <p><b>Subject Area</b></p> <ul style="list-style-type: none"> <li>• Mathematics, Science and Technology</li> </ul> <p><b>Families of Learning Situations</b></p> <ul style="list-style-type: none"> <li>• Research</li> <li>• Expertise</li> </ul>	<p><b>Program of Study</b></p> <ul style="list-style-type: none"> <li>• Biology</li> </ul> <p><b>Course</b></p> <ul style="list-style-type: none"> <li>• Reproduction and Development</li> </ul>
<b>Essential Elements Targeted by the Evaluation</b>	
<p><b>Subject-Specific Competencies</b></p> <ol style="list-style-type: none"> <li>1. Seeks answers or solutions to problems involving biology</li> <li>2. Makes the most of own knowledge of biology</li> <li>3. Communicates ideas relating to questions involving biology, using the languages associated with science and technology</li> </ol>	<p><b>Categories of Knowledge</b></p> <p>General Concepts:</p> <ul style="list-style-type: none"> <li>• Cell Division</li> <li>• Human Reproduction</li> <li>• Development</li> <li>• Biotechnology</li> </ul>
<b>Evaluation Criteria</b>	
<p><b>Evaluation Criteria for Competencies 1 and 3</b></p> <ol style="list-style-type: none"> <li>1.1 Appropriate representation of the situation</li> <li>1.2 Development of a suitable plan of action</li> <li>1.3 Appropriate implementation of the plan of action</li> <li>1.4 Development of relevant explanations, solutions or conclusions</li> </ol> <p><b>Evaluation Criteria for Competencies 2 and 3</b></p> <ol style="list-style-type: none"> <li>2.1 Appropriate interpretation of the issue</li> <li>2.2 Relevant use of knowledge of biology</li> <li>2.3 Appropriate formulation of explanations or solutions</li> </ol>	<p><b>Proficiency in Subject-Specific Knowledge</b></p> <p>Proficiency in subject-specific knowledge presupposes its acquisition, understanding, application and mobilization, and is therefore linked with the evaluation criteria for the competencies.</p>



## Explanation of the Evaluation Content

### Evaluation Criteria

The evaluation criteria are stated exactly as in the course.

Competency 3 is not specifically evaluated. It is integrated into the other two competencies in evaluation situations designed for certification purposes. The evaluation criteria relating to it are based upon the criteria for the first two competencies in the *Framework for the Evaluation of Learning* in general education in the youth sector.

### Information Clarifying the Evaluation Criteria

#### 1.1 Appropriate representation of the situation

This criterion evaluates adult learners' ability to develop a representation of a problem related to human reproduction and its regulation by hormones or related to cell division mechanisms by stating it in their own words, diagramming it, dividing it into sub-problems, etc. It also evaluates adult learners' ability to identify the scientific or technological principles and issues associated with the problem to be solved or their ability to formulate a hypothesis for this problem.

#### 1.2 Development of a suitable plan of action

In a case that calls for the use of the modelling approach, this criterion evaluates adult learners' ability to select the information that will be useful for solving the problem. It also evaluates adult learners' ability to plan their actions by taking into account the scientific or technological concepts or the parameters to be considered. In a case that calls for the use of the experimental method and for which data was already collected, this criterion evaluates adult learners' ability to discuss the scientific or technological concepts or the parameters considered in order to justify the actions that were taken.

#### 1.3 Appropriate implementation of the plan of action

In a case that calls for the use of the modelling approach, this criterion evaluates adult learners' ability to carry out the procedures and operations outlined in the plan of action, to gather information, and to make corrections or changes to the plan of action. In a case that calls for the use of the experimental method and for which adult learners are provided with the results, this criterion evaluates the adult learners' ability to suggest modifications to the plan of action in order to seek answers or solutions to problems involving human reproduction and development.

#### 1.4 Development of relevant explanations, solutions or conclusions

This criterion evaluates adult learners' ability to analyze data using various forms of representation (diagrams, tables, observational drawings or graphs) in order to identify a trend and to check for consistency between the problem, the hypothesis put forward and the information obtained. It also evaluates adult learners' ability to produce explanations or defend arguments that support their solution. Finally, it evaluates adult learners' ability to follow scientific and technological terminology, rules and conventions and to use mathematical symbolism and formalism, if needed.

### 2.1 Appropriate interpretation of the issue

This criterion evaluates adult learners' ability to identify the relevant elements of an issue related to cell division or human reproduction and its regulation by hormones. It also evaluates adult learners' ability to identify the scientific or technological principles underlying the issue.

### 2.2 Relevant use of knowledge of biology

This criterion evaluates adult learners' ability to use concepts, laws, theories or models to demonstrate their understanding of the biological principles associated with the issue. It also evaluates adult learners' ability to identify the connections between these concepts, laws, theories or models and to anticipate their impact on the issue.

### 2.3 Appropriate formulation of explanations or solutions

This criterion evaluates adult learners' ability to provide explanations regarding a problem related to human reproduction and development; to take a position on a social or ethical issue raised by a test, technique or application related to reproduction; or to propose a solution to a problem. It also evaluates adult learners' ability to justify their position or solution based on their knowledge of science or technology. Finally, this criterion evaluates adult learners' ability to follow scientific and technological terminology, rules, and conventions in their explanations or justifications.

## Proficiency in Subject-Specific Knowledge

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

For this course, certain knowledge is explicitly evaluated. The following measurable cognitive skills were selected for evaluation.

### Skills

- Knows
  - Provides evidence of knowledge of manifestations or components of a scientific or technical reality  
E.g. chooses, connects, describes, defines, distinguishes, lists, names
- Understands
  - Uses elements of prior learning and draws information from them  
E.g. combines, demonstrates, identifies, illustrates, interprets, explains
- Applies
  - Uses a scientific or technological model or principle to establish information  
E.g. uses, represents, applies, determines, calculates, completes

## Weighting

The weighting for the evaluation of the competencies is determined in accordance with the *Framework for the Evaluation of Learning* in general education in the youth sector.

Competency 1, *Seeks answers or solutions to problems involving biology*, and Competency 3, *Communicates ideas relating to questions involving biology, using the languages associated with science and technology*: 40%

- 1.1 Appropriate representation of the situation (10%)
- 1.2 Development of a suitable plan of action (5%)
- 1.3 Appropriate implementation of the plan of action (10%)
- 1.4 Development of relevant explanations, solutions or conclusions (15%)

Competency 2, *Makes the most of own knowledge of biology*, and Competency 3, *Communicates ideas relating to questions involving biology, using the languages associated with science and technology*: 40%

- 2.1 Appropriate interpretation of the issue (10%)
- 2.2 Relevant use of knowledge of biology (20%)
- 2.3 Appropriate formulation of explanations or solutions (10%)

The weighting corresponding to the knowledge that is explicitly evaluated is 20%.

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

## Knowledge

Knowledge includes concepts.

The four general concepts are covered in the examination. It is not necessary, however, to include all the compulsory concepts for a given general concept.

For the knowledge targeted by the evaluation of the competencies:

- Two to four general concepts must be covered. For these general concepts, a representative sample of the compulsory concepts must be covered.

For the knowledge targeted by explicit evaluation:

- Two or three general concepts must be covered, including those not covered in the evaluation of competencies. Priority is given to compulsory concepts that were not covered in the evaluation of competencies.

**Concepts**

General Concepts	Compulsory Concepts
Cell Division	<ul style="list-style-type: none"> <li>• Cell cycle</li> <li>• Meiosis</li> <li>• Chromosome mutations</li> <li>• Cancer</li> </ul>
Human Reproduction	<ul style="list-style-type: none"> <li>• Reproductive system</li> <li>• Hormonal regulation</li> <li>• Gametogenesis</li> <li>• Fertilization</li> <li>• Fertility</li> <li>• Contraception</li> </ul>
Development	<ul style="list-style-type: none"> <li>• Embryonic development</li> <li>• Growth</li> <li>• Stem cells</li> <li>• Cell differentiation</li> <li>• Morphogenesis</li> <li>• Pregnancy</li> <li>• Apoptosis</li> </ul>
Biotechnology	<ul style="list-style-type: none"> <li>• Prenatal diagnoses</li> <li>• Medically assisted procreation</li> <li>• Intervention techniques used for reproduction mechanisms</li> </ul>



## Specifications for the Evaluation Instruments

### Examination: Number of Parts, Sections, Procedure and Duration

The examination consists of two parts that must be administered during different evaluation sessions. Adult learners are responsible for managing the time available to them for each part of the examination.

Total duration: 300 minutes

Practical part: Evaluation of Competencies 1 and 3  
Duration: 180 minutes

Theory part: Evaluation of Competencies 2 and 3, and Explicit Evaluation of Knowledge  
Duration: 120 minutes

### Examination Content

#### Practical Part

This part involves a situation from the *Research* family of situations designed to evaluate the development of Competencies 1 and 3 using criteria 1.1, 1.2, 1.3 and 1.4. Adult learners must solve a problem pertaining to fertility, chromosome mutations or cell development **using an experimental method or a modelling approach** that may involve the use of an observational instrument. The tasks to be carried out during an experimental method require an analysis of the data provided. The adult learner discusses scientific or technological concepts, analyzes the results and finds an answer to the problem while providing explanations. The tasks to be performed during the modelling approach include developing and carrying out an action plan and analyzing the subsequent results.

#### Theory Part

This part has two sections. One section is designed to evaluate the development of Competencies 2 and 3 using criteria 2.1, 2.2 and 2.3. Adult learners deal with one to three situations from the *Expertise* family of situations that involve an issue related to the reproductive system and its hormonal mechanisms or the complications associated with cell development. They also consider issues related to reproductive technology. The issues inherent to these situations require that adult learners provide explanations, take a position, propose solutions, justify their position or solutions, answer questions, consider the impact of applications related to reproduction or development on societies, etc. The other section is devoted to the explicit evaluation of knowledge.

### Information-Gathering Tools

#### Evaluation of Competencies

##### Practical Part

Two tools are used to gather information:

- The *Adult's Booklet*, which contains various tasks to be carried out.
- A model representing the problem to be solved using a modelling approach.

## Theory Part

The *Adult's Booklet* is the information-gathering tool and consists of the following two sections:

1. "Evaluation of Competencies"  
The adult learner carries out tasks related to the issues.
  
2. "Explicit Evaluation of Knowledge"  
The adult learner answers short-answer and essay-type questions.

## Authorized Materials

For the two parts of the examination:

- Additional blank sheets of paper
- Ordinary or scientific calculator

Information about the calculator:

- The data and programs stored in the calculator's memory must be erased before and after the examination. Before the day of the examination, adult learners must have been given the opportunity to learn how to reset their calculator's memory to zero.

For the practical part of the examination

- Materials required for modelling and observation, if necessary
- Computer, if necessary

## Assessment Tools

The criterion-referenced rubric is the assessment tool used by the teacher for the evaluation of the competencies. Criterion-referenced interpretation involves comparing the information gathered with the outcomes expected of the adult learner.<sup>3</sup> The rubrics are compulsory and include the following rating scale:

Competency development:

- Advanced
- Thorough
- Acceptable
- Partial
- Minimal

Checklists may also be provided to make it easier for markers. These checklists can be found in the *Marking Guide*.

---

3. Ibid., 28-29.

Each checklist and rubric focuses on the evaluation of specific competencies:

- Checklist and rubrics for the evaluation of Competencies 1 and 3, practical part
- Checklist and rubrics for the evaluation of Competencies 2 and 3, theory part

For the explicit evaluation of knowledge in the theory part, a correction key is provided in the *Marking Guide*.

### **Pass Mark**

The pass mark is 60% for the examination as a whole.

### **Retakes**

The adult learner must retake each part of the examination (practical or theory) separately.



## **APPENDICES – CRITERION-REFERENCED RUBRICS**



Adult General Education

<p style="text-align: center;"><b>EVALUATION</b></p> <p style="text-align: center;"><b>Criterion-Referenced Rubrics</b> (Practical Part)</p> <hr/> <p style="text-align: center;">Name of the Adult Learner</p> <hr/> <p style="text-align: center;">Name of the Teacher</p> <hr/> <p style="text-align: center;">Date</p>
--

Diversified Basic Education Program  
*Biology*

Course  
*Reproduction and Development*  
BLG-5071-2

Practical Part

**Competency 1: Seeks answers or solutions to problems involving biology, and Competency 3: Communicates ideas relating to questions involving biology, using the languages associated with science and technology (40%)**

**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 from the rubric that most closely corresponds to your assessment of the adult learner’s performance level.

Rating scale Evaluation criteria	Advanced competency development	Thorough competency development	Acceptable competency development	Partial competency development	Minimal competency development	Mark
<b>1.1 Appropriate representation of the situation</b>	Shows a thorough understanding of the problem by identifying all the scientific or technological principles and all the issues involved; when a hypothesis is required, provides one that is fully justified; when the parameters in the problem must be identified, takes all of them into account.  <p style="text-align: center;"><b>10 marks</b></p>	Shows an appropriate understanding of the problem by identifying most of the scientific or technological principles and the key issues involved; when a hypothesis is required, provides one that is correctly justified; when the parameters in the problem must be identified, takes the main ones into account.  <p style="text-align: center;"><b>8 marks</b></p>	Shows a satisfactory understanding of the problem by identifying some of the scientific or technological principles involved; when a hypothesis is required, provides one that is correctly justified; when the parameters in the problem must be identified, takes some of them into account.  <p style="text-align: center;"><b>6 marks</b></p>	Shows a limited understanding of the problem by identifying few of the scientific or technological principles involved; when a hypothesis is required, provides one that is either not justified or inadequately justified.  <p style="text-align: center;"><b>4 marks</b></p>	Shows a lack of understanding of the problem by identifying few of the scientific or technological principles related to the context.  <p style="text-align: center;"><b>2 marks</b></p>	<p style="text-align: center;"><b>/10</b></p>

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



Practical Part

**Competency 1: Seeks answers or solutions to problems involving biology, and Competency 3: Communicates ideas relating to questions involving biology, using the languages associated with science and technology (40%) (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 from the rubric that most closely corresponds to your assessment of the adult learner’s performance level.

Rating scale Evaluation criteria	Process	Advanced competency development	Thorough competency development	Acceptable competency development	Partial competency development	Minimal competency development	Mark	
1.2 Development of a suitable plan of action	Modelling	Clearly presents all the steps in a thorough procedure that makes it possible to provide an appropriate answer to the problem or to find a solution to the situation by taking into account all the relevant information and all the concepts or parameters to be considered.	Presents the steps in an appropriate procedure that makes it possible to provide an answer to the problem or to find a solution to the situation by taking into account most of the relevant information and most of the concepts or parameters to be considered.	Presents the steps in a basic procedure that makes it possible to provide an answer to the problem or to find a solution to the situation by taking into account some of the relevant information and some of the concepts or parameters to be considered.	Presents steps in an incomplete procedure that leads to only a partial answer to the problem by taking into account concepts or parameters that are largely or entirely irrelevant.	Proposes actions that do not lead to an answer to the problem, and does not take into account the concepts or parameters to be considered.		
	OR							
	Experimental method	Justifies the actions previously carried out by taking into account all the information provided in order to clearly identify all the essential elements of the plan of action that were considered during the data collection process.	Justifies the actions previously carried out by taking into account most of the information provided in order to identify almost all of the essential elements of the plan of action that were considered during the data collection process.	Refers to the information provided in order to identify some of the elements used to justify the choices made in the plan of action.	Names few of the elements used to justify the choices made in the plan of action.	Names very few of the elements used to justify the choices made in the plan of action.		
		<b>5 marks</b>	<b>4 marks</b>	<b>3 marks</b>	<b>2 marks</b>	<b>1 mark</b>	<b>/5</b>	

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

Practical Part

**Competency 1: Seeks answers or solutions to problems involving biology, and Competency 3: Communicates ideas relating to questions involving biology, using the languages associated with science and technology (40%) (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 from the rubric that most closely corresponds to your assessment of the adult learner’s performance level.

Rating scale Evaluation criteria	Process	Advanced competency development	Thorough competency development	Acceptable competency development	Partial competency development	Minimal competency development	Mark	
1.3 Appropriate implementation of the plan of action	Modelling	Controls all the parameters judiciously, records all relevant data, rigorously and methodically carries out all the operations outlined in the plan of action, and takes appropriate corrective measures where required.	Controls most of the parameters effectively, records all relevant data, carries out all the operations outlined in the plan of action, and takes some corrective measures where required.	Controls some of the parameters to some degree, records the data, but may make some omissions or errors; carries out the operations outlined in the plan of action, and takes no corrective measures when required.	Has difficulty controlling several parameters and following the steps in the plan of action, omits some of the operations, and does not consider taking any corrective measures.	Does not control the parameters involved and carries out the steps in a disorganized manner without considering the plan of action.		
	OR							
	Experimental method	Suggests improvements or corrective measures that are well thought out and correctly justifies them by using the concepts and parameters directly associated with the problem.	Suggests valid improvements or corrective measures and justifies them by using the concepts and parameters associated with the problem.	Suggests some improvements or corrective measures that are partially justified.	Names elements associated with the parameters to be controlled, but that lead to few valid improvements or corrective measures.	Names elements that are not associated with the parameters to be controlled to solve the problem.		
		<b>10 marks</b>	<b>8 marks</b>	<b>6 marks</b>	<b>4 marks</b>	<b>2 marks</b>	<b>/10</b>	

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

Practical Part

**Competency 1: Seeks answers or solutions to problems involving biology, and Competency 3: Communicates ideas relating to questions involving biology, using the languages associated with science and technology (40%) (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 from the rubric that most closely corresponds to your assessment of the adult learner’s performance level.

Rating scale Evaluation criteria	Topic	Advanced competency development	Thorough competency development	Acceptable competency development	Partial competency development	Minimal competency development	Mark
<b>1.4 Development of relevant explanations, solutions or conclusions</b>	<b>a)</b>	Performs a meticulous analysis of all the data by using the appropriate representations, identifies a trend that is consistent with the results obtained, provides a comprehensive answer or solution suited to the problem, validates own hypothesis by making reasoned connections with the problem and the results and discusses the quality of the results.  <b>10 marks</b>	Performs an appropriate analysis of most of the data by using representations, identifies a trend that is consistent with the results obtained, provides an appropriate answer or solution to the problem, validates own hypothesis by making connections with the problem and the results and discusses the quality of the results.  <b>8 marks</b>	Performs an adequate analysis by making a few valid connections with the data collected, identifies a trend that correlates to some extent with the results obtained, provides an acceptable answer or solution to the problem and makes a connection between own hypothesis and the results.  <b>6 marks</b>	Performs a partial analysis by making few connections with the data collected, attempts to identify a trend based on the results obtained and provides an inaccurate answer or an incorrect solution to the problem.  <b>4 marks</b>	Provides a confusing analysis and an incorrect answer or solution.  <b>2 marks</b>	<b>/10</b>
	<b>b)</b>	Communicates clearly in all the required tasks and always follows scientific, technological and mathematical terminology, rules and conventions.  <b>5 marks</b>	Communicates clearly in all the required tasks and generally follows scientific, technological and mathematical terminology, rules and conventions.  <b>4 marks</b>	Communicates with some difficulty and does not always follow scientific, technological and mathematical terminology, rules and conventions.  <b>3 marks</b>	Has difficulty communicating and rarely follows scientific, technological and mathematical terminology, rules and conventions.  <b>2 marks</b>	Communicates in a confusing manner and very rarely follows scientific, technological and mathematical terminology, rules and conventions.  <b>1 mark</b>	

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

**Result: \_\_\_\_/40**



Adult General Education

**EVALUATION**

**Criterion-Referenced Rubrics**  
(Theory Part)

\_\_\_\_\_  
Name of the Adult Learner

\_\_\_\_\_  
Name of the Teacher

\_\_\_\_\_  
Date

Diversified Basic Education Program  
*Biology*

Course  
*Reproduction and Development*  
BLG-5071-2

## Theory Part

**Competency 2: *Makes the most of own knowledge of biology, and Competency 3: Communicates ideas relating to questions involving biology, using the languages associated with science and technology (40%)***

**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 from the rubric that most closely corresponds to your assessment of the adult learner's performance level.

Rating scale Evaluation criteria	Advanced competency development	Thorough competency development	Acceptable competency development	Partial competency development	Minimal competency development	Mark
<b>2.1 Appropriate interpretation of the issue</b>	Identifies all the relevant elements associated with the issues and the connections between them; identifies all the scientific or technological principles underlying the issues or the applications related to reproduction or development.  <b>10 marks</b>	Identifies most of the relevant elements associated with the issues and the connections between them; identifies most of the scientific or technological principles underlying the issues or the applications related to reproduction or development.  <b>8 marks</b>	Identifies some of the relevant elements associated with the issues; identifies some of the scientific or technological principles underlying the issues or the applications related to reproduction or development.  <b>6 marks</b>	Copies out some of the information associated with the issues; identifies few of the scientific or technological principles underlying the issues or the applications related to reproduction or development.  <b>4 marks</b>	Copies out information associated with the issues.  <b>2 marks</b>	<b>/10</b>

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

Theory Part

**Competency 2: *Makes the most of own knowledge of biology*, and Competency 3: *Communicates ideas relating to questions involving biology, using the languages associated with science and technology* (40%) (cont.)**

**Instructions:**

- For each criterion, circle the statements that correspond(s) to the adult learner’s performance level.
- In the last column, enter the mark from the rubric that most closely corresponds to your assessment of the adult learner’s performance level.

Rating scale Evaluation criteria	Advanced competency development	Thorough competency development	Acceptable competency development	Partial competency development	Minimal competency development	Mark
<b>2.2 Relevant use of knowledge of biology</b>	Thoroughly analyzes all the issues by anticipating their impact, by judiciously applying own knowledge, and by identifying all the connections between the biological concepts, laws, models, principles and theories.  <p style="text-align: center;"><b>20 marks</b></p>	Correctly analyzes all the issues by anticipating their impact, by correctly applying own knowledge, and by identifying most of the connections between the biological concepts, laws, models, principles and theories.  <p style="text-align: center;"><b>16 marks</b></p>	Analyzes most of the issues superficially by applying own knowledge somewhat correctly, and by identifying some of the connections between the biological concepts, laws, models, principles and theories.  <p style="text-align: center;"><b>12 marks</b></p>	Applies own knowledge related to the issues in a manner that is mostly incorrect, and identifies some of the connections between the biological concepts, laws, models, principles and theories.  <p style="text-align: center;"><b>8 marks</b></p>	Names very few of the biological concepts, laws or principles, and does not make any connections with the issues presented.  <p style="text-align: center;"><b>4 marks</b></p>	<p style="text-align: center;"><b>/20</b></p>

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

**Competency 2: Makes the most of own knowledge of biology, and Competency 3: Communicates ideas relating to questions involving biology, using the languages associated with science and technology (40%) (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 from the rubric that most closely corresponds to your assessment of the adult learner’s performance level.

Rating scale Evaluation criteria	Topic	Advanced competency development	Thorough competency development	Acceptable competency development	Partial competency development	Minimal competency development	Mark
<b>2.3 Appropriate formulation of explanations or solutions</b>	<b>a)</b>	In all the situations, provides judicious explanations, proposes relevant solutions or defends own opinions by meticulously organizing the elements of the message presented. Bases own opinions or solutions on scientific or technological principles and discusses the issues associated with the problems by taking into account all the relevant factors.  <b>5 marks</b>	In all the situations, provides accurate explanations, proposes acceptable solutions or defends own opinions by appropriately organizing the elements of the message presented. Bases own opinions or solutions on scientific or technological principles and discusses the issues associated with the problems by taking into account some relevant factors.  <b>4 marks</b>	In most of the situations, provides correct but incomplete explanations, proposes partial solutions or gives own opinion by partially organizing the elements of the message presented. Presents some issues associated with the problems by taking into account very few relevant factors.  <b>3 marks</b>	In several situations, provides rough explanations or solutions or gives own opinion by organizing few of the elements of the message presented. Names one issue associated with one problem without presenting any relevant factors.  <b>2 marks</b>	Provides rough explanations or solutions, or forms unfounded opinions.  <b>1 mark</b>	<b>/5</b>
	<b>b)</b>	Always follows scientific and technological terminology, rules and conventions.  <b>5 marks</b>	Generally follows scientific and technological terminology, rules and conventions.  <b>4 marks</b>	Sometimes follows scientific and technological terminology, rules and conventions.  <b>3 marks</b>	Rarely follows scientific and technological terminology, rules and conventions.  <b>2 marks</b>	Very rarely follows scientific and technological terminology, rules and conventions.  <b>1 mark</b>	<b>/5</b>

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

**Final result: \_\_\_/40**





**Éducation  
et Enseignement  
supérieur**

**Québec** 