Éducation, Loisir et Sport Québec

Framework for the Evaluation of Learning

Science and Technology

Elementary School
Cycles Two and Three

April 21, 2011

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Framework for the Evaluation of Learning

Introduction

Following the announcement of new orientations regarding the evaluation of student learning by the Minister of Education, Recreation and Sports, the *Basic school regulation for preschool, elementary and secondary education* has been amended to require that, as of July 1, 2011, evaluation be based on the *Framework for the Evaluation of Learning* produced for each program. These frameworks provide guidelines for the evaluation of learning specific to each subject in the Québec Education Program in order to determine students' results, which will be communicated in the provincial report card.

The role of knowledge in evaluation

Knowledge is at the heart of student learning, since it provides the foundation for all school subjects. Knowledge gives students the means to reflect and to understand the world around them, and its acquisition is the first step in any learning process. Through the knowledge they acquire and through the connections they are able to make among different items of knowledge, students can develop an understanding of simple and complex concepts. Knowledge must therefore be acquired, understood, applied and used thoroughly. Evaluation must thus take place throughout the learning process to ensure proficient knowledge.

Organization of the evaluation frameworks

For each subject, the framework defines the criteria on which the student's results must be based. These evaluation criteria are based on the ones in the Québec Education Program.

The framework stipulates the weighting of the competencies that makes it possible to determine the subject marks to be recorded in the report card. Where applicable, it provides direct links to the *Progression of Learning* documents that give additional information on the learning specific to each subject in the Québec Education Program.

The teacher’s role in evaluation

Section 19 of the *Education Act* stipulates that teachers are entitled "to select the means of evaluating the progress of students so as to examine and assess continually and periodically the needs and achievement of objectives of every student entrusted to [their] care." It is therefore up to teachers to choose the means of evaluating student learning.

⟺	***This arrow*** indicates that the evaluation of learning involves a process of going back and forth between the acquisition of subject-specific knowledge and the understanding, application and use of this knowledge. Evaluation must thus take place throughout the learning process to ensure proficient knowledge.
Knowledge will be evaluated at specific times chosen by the teacher, who will determine the importance of the various dimensions to be evaluated in calculating the student's mark.	

To propose explanations for or solutions to scientific or technological problems

To make the most of scientific and technological tools, objects and procedures

To communicate in the languages used in science and technology

100% (Cycles Two and Three)

Evaluation of Learning

Evaluation criteria[1]
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▪ Proficiency of subject-specific knowledge targeted in the *Progression of Learning*:
  ▪ Material World
  ▪ Earth and Space
  ▪ Living Things
  ▪ Strategies*

▪ Appropriate description of the problem ▪ Application of an appropriate procedure ▪ Appropriate use of instruments, tools or techniques ▪ Appropriate use of scientific and technological knowledge
⟺
* The student must be provided with feedback on this element, but the element must not be considered when determining the student's mark in the report card.

Appendix

Information Clarifying the Criteria

Appropriate description of the problem	▪ Reformulation of the problem ▪ Formulation of a tentative explanation or solution
Application of an appropriate procedure	▪ Planning of work ▪ Implementation of procedure ▪ Readjustment of procedure, as required
Appropriate use of instruments, tools or techniques	▪ Handling of objects, tools or instruments ▪ Observance of safety rules
Appropriate use of scientific and technological knowledge	▪ Production of explanations or solutions ▪ Use of terminology, rules and conventions specific to Science and Technology

1. The elements under by the criterion related to the proficiency of subject-specific knowledge can be found in the *Progression of Learning*. Information clarifying the other criteria is presented in the appendix of this document.