Summary Report

Program Evaluation under College Education Renewal

Commission d'évaluation de l'enseignement collégial

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Introduction

Since 1993, the Commission d'évaluation de l'enseignement collégial has implemented several programs of study offered by public colleges, government schools, subsidized private colleges, non-subsidized private colleges leading to a Diploma of College Studies (DEC) or Attestation of College Studies (AEC). The exercise on which this summary report is based, and which included all public colleges and subsidized private institutions, initially focused on a general evaluation of the programs of study[1] defined in terms of objectives and standards according to the new approach put forward as a result of the college education renewal.

Evaluation Intent

In addition to evaluating program implementation in terms of objectives and standards, the Commission wanted this exercise to shed light on the state of progress of the college education renewal, in particular, the more major changes that it brought about.

The renewal introduced major modifications in the division of tasks between the Ministère de l'Éducation, du Loisir et du Sport[2] and the colleges. From then on, the colleges were to take part in developing the programs they would offer, giving them latitude in adapting their programs, for example, to the needs of the settings receiving their graduates (universities and job market) or based on certain features of their educational projects.

Moreover, the renewal also changed program development that would be defined based on another approach, namely, the competency-based approach. This approach would significantly impact the development and application of teaching methods and strategies for evaluating

1. In this context, the term program of study (or program) often means the program as developed and implemented by each college offering the program, with its own distinctive features, which differs from the program as defined by the Ministère de l'Éducation, du Loisir et du Sport. The Commission evaluates these local versions of programs and not the ministerial program.

2. At the time that college education renewal was introduced, the ministry responsible for this level of education went under the name of the Ministère de l'Enseignement supérieur et de la Science.

learning adopted this approach. The renewal also influenced training organization, which would thereafter be considered from the joint perspective of program vision and management: the program-based approach.

Report Overview

In this summary report, the Commission provides a portrait of the program evaluation exercise conducted in 2004. It begins by describing the exercise (objective and means) as well as its overall conduct. Then, it presents the main observation issuing from its evaluation of the programs evaluated as a whole. The observations focused on the self-evaluation process adopted by the colleges related to implementing the programs evaluated according to different criteria and implementing local *Science* programs evaluated during the current exercise. Lastly, the Commission draws conclusions based on its observations that more generally relate to progress in implementing the teaching reform and proposes some recommendations on various aspects that require further efforts to fully implement the renewal.

Exercise Overview

In September 2004, the Commission asked public colleges and subsidized private colleges to evaluate a program of their choosing, specifying that it could be a program they were already evaluating or that they intended to evaluate during the 2004–2005 school year. When a specific program hadn't already been selected, the Commission indicated its preference for programs defined according to objectives and standards, particularly the *Science* program or one of the biological or physical technology programs. The Commission specified the minimum criteria the colleges should use in their evaluation: program relevance, consistency of learning activities, choice of teaching methods with respect to program objectives, accuracy of learning evaluation, and program effectiveness. The Commission expected to receive the self-evaluation reports from the colleges no later than the end of the 2004–2005 school year. Since the exercise was announced after the colleges had planned their evaluations, the Commission allowed them to submit the self-evaluation report for a program that they evaluated the previous year, as long as it fulfilled the specified conditions.

In addition to giving the colleges a certain amount of latitude in selecting their programs, the Commission allowed them to apply the evaluation methods they had defined themselves in their individual Institutional Policy on Program Evaluation (IPPE).

Moreover, the Commission asked the colleges that had yet to assess the application of their program evaluation policy[3] and those that had to redo the evaluation to provide a summary assessment of their policies with their program self-evaluation reports.

3. It should be remembered that the Commission evaluated how each of the public colleges and subsidized private colleges applied their respective IPPEs in an exercise conducted between 1997 and 2002.

Exercise Overview

As in the past, the Commission, backed by outside experts,[4] analyzed the reports submitted by the colleges and visited each site. The site visits, which began in April 2005, enabled the Commission to gather the information needed to validate, clarify, or complete the college self-evaluation reports and to find out about changes that each college might have made to its program since conducting the self-evaluation. During each of the site visits, the Commission met with college management, the self-evaluation committee, students, and program teachers, whether for general or program-specific education. The Commission then produced a draft report for each program evaluated, which the advisory committee[5] studied to determine if the opinions were consistent with and equivalent to those in the other reports. The Commission then revised its draft reports, taking into account the remarks made by the advisory committee. The result was preliminary reports sent to each college for comment. This also provided the colleges with the opportunity to bring the Commission up-to-date on the work that they had undertaken since the site visits. After analyzing the college's comments, the Commission adopted the definitive version of its report, which was conveyed to the college, submitted to the Minister of Education, Recreation, and Sports, and made public on its Web site.

Targeted Institutions

This program evaluation exercise targeted 68 institutions:
48 public colleges and 20 subsidized private colleges offering one or more programs leading to a Diploma of College Studies (commonly referred to as a DEC).[6] At the time this summary report was written, the Commission had adopted the definitive versions of 66 program evaluation reports: 52 covered implementation of programs offered by the 48 public institutions[7] and 14 on programs offered by 14 of the 20 subsidized private institutions.

4. In evaluating all of these programs, the Commission called on the help of people working in the collegiate system. For pre-university programs, it involved individuals from the university community; for technical programs, individuals from the workplace. Appendix 4 contains the names of the outside experts that took part in the program evaluations conducted by the Commission.

5. The members of the advisory committee appointed by the Commission are listed in Appendix 3. These individuals also took part in the work of the site-visit committees.

6. Institutions under a ministry or university and non-subsidized private institutions were not involved in this exercise.

7. The Cégep régional de Lanaudière and Champlain Regional College were each counted as a single institution. Nevertheless, each of the three component colleges for the former and the three campuses of the latter evaluated one of their programs and produced self-evaluation reports. Consequently, both of these colleges produced three program self-evaluations.

Since the Commission had not adopted the definitive versions of the evaluation reports for four of the subsidized private colleges at the time this report was drafted, its contents do not reflect these colleges or their evaluations. The remaining four private colleges hadn't submitted their self-evaluation reports in time.[8]

Overview of the Evaluated Programs

Forty-four of the 66 programs evaluated are pre-university (with 5 distinct ministerial programs), 20 technical programs (corresponding to 17 different ministerial programs), and 2 programs leading to an Attestation of College Studies (AEC). See the table below. Thirty-one colleges evaluated implementation of their Science program and 9 others evaluated a biological or physical technology program (8 and 1, respectively). All the programs evaluated, except for Dietetics Technology, had been developed according to objectives and standards. In the case of the Circus Arts program and the Legal Technology program, the Commission allowed the two colleges concerned to evaluate the programs as they existed before the new objectives and standards approach, since the new versions had not been fully implemented.[9]

8. Appendix 1 provides the list of colleges for which the Commission evaluated a program and the colleges at which program evaluation is underway.

9. Program implementation is deemed complete a once an entire cohort of students has completed the program.

Table 1: List of Evaluated Programs

Program Type		Program	Number of Programs (local)	Subtotal
DEC	Pre-university	Science (200.B0)	31	44
		Creative Arts, Literature, and Languages (500.A1)	6	
		Fine Arts (510.A0)	3	
		Social Science (300.A0)	3	
		Dance (506.A0)	1	
	Career	Nursing (180.A0)	2	20
		Respiratory and Anaesthesia Technology (141.A0)	2	
		Forestry Technology (190.B0)	2	
		Circus Arts (561.08)	1	
		Fashion Marketing (571.C0)	1	
		Graphic Design (570.A0)	1	
		Administrative Data Processing (420.AA)	1	
		Medical Electrophysiology (140.A0)	1	
		Dental Hygiene (111.A0)	1	
		Community Recreational Leadership Training (391.A0)	1	
		Hypermedia, Micropublishing and, Office System Technology (412.A0) 1		
		Dietetics (120.01)	1	
		Mechanical Engineering Technology (241.A0)	1	
		Physical Rehabilitation (144.A0)	1	
		Tourism (414.A0)	1	
		Paralegal Technology (310.03)	1	
		Professional Music and Song Techniques, Performance (551.AB)	1	
AEC		Agents and Brokers in Individual Insurance (LCA.1P)	1	2
		Computerized Financial Management (LCA.AU)	1	
			Total	66

Observation Items

This section provides an overview of the observation items used for the Commission's examination. They relate both to the evaluation process used by each college and program implementation itself. In examining the programs, the Commission applied five criteria: program relevance, program coherence, teaching methods, evaluation of student achievement, and program effectiveness. The evaluation process, the various aspects coming under the criteria, and considerations about the *Science* program also figured among the observation items. This summary report focuses on the items that elicited notice, whether as strengths or as needing improvement.

Self-Evaluation Process

Since the beginning of the college education renewal, which officially introduced program evaluation as a college responsibility, college evaluation practices have improved and diversified. During this exercise, the colleges usually conducted their program evaluation according to the model defined in their IPPEs. Having centered their program examination on aspects related to implementation, some colleges added elements to meet the Commission's requirements.

As will become apparent below, even when colleges conducted their evaluations guided by their program evaluation policies, the items examined were not always analyzed thoroughly enough to substantiate the observations or, in some cases, not all program components were necessarily considered. Regardless of the program aspects dealt with by the colleges or the thoroughness of their analyses, the Commission used the same criteria to evaluate all of the program implementations. When required, additional information was gathered during site visits so as to ensure that the various programs were assessed fairly and equitably.

The Commission would like to point out, moreover, that, in order for the evaluation to be useful and beneficial, all of the program's elements, features, and its situation must be taken into consideration. In addition, any issues that could affect the quality of program implementation or program effectiveness must be explored.

The Commission used the following sub-criteria in its examination: the program issue dealt with by the college; evaluation-work specifications; the breadth of program components considered, including general education; data collection and analysis; and the action plan. In the case of certain sub-criteria, the Commission assessed how the process used by the colleges has progressed since the evaluation focusing on application of their program-evaluation policies. Lastly, the Commission highlighted the evaluation of the institutional policy on program evaluation certain colleges carried out concurrently with program evaluation.

Determining Program Issues

IPPEs must normally specify the criteria used to select programs for evaluation and plan the time at which evaluation begins. Program life cycle (program has been fully implemented or hasn't been evaluated for a number of years, etc.) must be taken into consideration as well as any issues arising from the specific situation, if applicable. The latter should figure in the program management chart. The program issue is the determining factor in conducting the evaluation, making it possible to specify the items for consideration, the evaluation criteria, and, for each item, the depth of analysis needed to carry out the work and achieve the targeted goals.

For the Commission's purposes, the term *issue* takes in a variety of realities such as a set of difficulties or problems affecting a program of studies resulting from its state or situation, or a set of questions or concerns requiring further study. It can also refer to one or more challenges arising out of a given situation and that which must be identified and accounted for so that the program can develop properly.

A program problem may be culled from observations in annual assessments of departments or program / program-follow-up committees (analysis of data from program information systems or management charts).

The large majority of colleges have program information systems and extracted valuable data from them for assessment and follow-up purposes. Some colleges have begun integrating qualitative data (ratings by students, graduates, and the communities served of teaching and various teaching aspects, such as methods and student assessment, or of the program itself, such as its relevance and coherence) into their quantitative data from their systems (number of enrollments, success rate, rate of university admissions, job-market placement rate, etc.). Qualitative data flesh out the program's portrait in a way that quantitative data alone cannot.

The preliminary examinations of program issues by some of the colleges enabled them to devise evaluation questions that could be answered by analysis, to prioritize the criteria most directly related to the issues, and to guide data collection and analysis. While most colleges identified an issue, not all did. Others did so but vaguely, which prevented them from guiding their evaluation adequately and from better focusing their efforts on program aspects that called for priority intervention. In still other cases, the colleges were unable to carry out their work within a reasonable amount of time. While they may have identified the program issue, some colleges didn't take it into account in their evaluation process. Others didn't deal with all the selected criteria or didn't bring together all the data related to the issue. In still other instances, they didn't let themselves be guided by the program issue in carrying out their analyses, which lacked rigor and depth. In some cases, the conclusions drawn by the colleges or the measures they adopted in their action plans didn't relate directly to the issue.

During the evaluation of IPPE application, the Commission made suggestions or recommendations to about 30 colleges to clarify the program issue to be evaluated. This exercise revealed that a significant proportion of the colleges followed this advice, since the Commission only made such recommendations, suggestions, or invitations to seven colleges.[10]. The Commission noted a clear improvement on this matter.

10. In its evaluations, the Commission was able to make recommendations, suggestions, or invitations to colleges to take action to improve aspects of their programs. A recommendation differs from a suggestion or invitation in that it is mandatory. When a college has received a recommendation to correct such and such a problem, it must do so and inform the Commission of the action taken and the results achieved.

Evaluation Specifications

The large majority of the colleges developed a set of specifications to guide them in a program evaluation. In order to be useful in planning work, the specifications must present the program issue or evaluation objectives from which the criteria used to evaluate the program are derived. Analysis comprehensiveness need also be determined. For the purposes of this exercise, the Commission specified minimal criteria, which the colleges were free to supplement with additional criteria related to the issues or evaluation objectives. The specifications also must indicate the data to be collected in order to carry out the analyses to bring out the program's strengths and items requiring improvement. This working plan also specifies the program aspects that must be accounted for. Lastly, the specifications indicate who is responsible for the work and sets out the task breakdown and schedule.

The Commission considers that the various stakeholder groups must take part in the process leading up to the adoption of specifications. Specifications development must be left to the stakeholders directly concerned by the program. Consultation on the specifications must be conducted with representatives of the entire faculty teaching disciplines within the program (core disciplines, contributory disciplines, and general-education disciplines). The consultation must also involve stakeholders or authorities that have the distance needed to provide a critique of the proposed specifications (such as the Commission of Studies). Lastly, the specifications must be approved by a decision-making body at the college that gives the work official status and confirms the authority of the people entrusted to carry it out. In this exercise, the specifications were most often drawn up by program stakeholders serving on an evaluation committee. The committee was generally composed of teachers involved in program-specific education and guidance counselors. Fairly often, the Director of Studies himself or one of his assistants settle sat on the committee. The colleges often called on individuals or officials with a certain amount of distance from the particular program for an unbiased, critical perspective of the specifications. This role was often played by the Commission of Studies or another college body, such as a program evaluation standing committee. Lastly, in several cases, the specifications were approved by competent authority.

The specifications developed by the colleges (which they complied with, for the most part) were generally sound tools for the tasks at hand.

The colleges have improved planning of the evaluation process in the time since the evaluation of IPPE application, when the Commission observed a lack of specifications in some cases and incomplete specifications in several others. At that time, the Commission sent out about 15 recommendations and some 25 suggestions relating to specifications (content, IPPE compliance, validation) and their application to the process to more than half of the colleges offering a program leading to a DEC. This operation provided an opportunity to assess how the colleges had progressed in this regard in the self-evaluation process.

Consideration of All Program Components

College programs of studies comprise a specific-education component and three general-education components (common, specific, and complementary). Program-specific education is based on one or more core disciplines (as in the case of the *Science* program) and often supportive disciplines. The common component of general education consists of four disciplines (language of instruction and literature, humanities, second language, and physical education). Under the framework of the this exercise, the Commission considered the attention paid by the colleges to the program as a whole, including general education, in order to determine to what degree it was taken into account in program evaluation. The Commission observed that this program aspect had either not been examined or only partially so, despite the fact that the college program-evaluation policies specify its importance. During the evaluation of IPPE implementation, the Commission found that “certain colleges had not taken into account all program components“ or that they “had paid little attention to one aspect of the program or another. In all, it was noted that three-quarters of the institutions fell short on one or another of these points.”[11]

In the current exercise, the attention given by colleges to general education was often limited to examining the success rate in the component’s various disciplines and in the standardized test

11. Commission d’évaluation de l’enseignement collégial, *L’application des politiques institutionnelles d’évaluation des programmes – Rapport synthèse*, 2002, p. 9–10.

for language of instruction and literature.[12] Despite its value, since it can be used to screen for aspects that should be examined more closely based on success indicators, this practice is inadequate in assessing the implementation of general education within a program. In some cases, the colleges looked at how the general-education courses were adapted to the program and how the general-education objectives were integrated into the comprehensive assessment (ESP).13 Too often, however, they neglected to take general education into account or, in the case of program coherence, to analyze its contribution in achieving program goals or the role played by general-education courses in the sequencing of program courses. From the outset of examining the issue, the college must determine which part of general education must receive particular attention and be taken into account in the evaluation specifications. At the very least, the college's evaluation must, in any event, give consideration to the contribution of general education in achieving program objectives, check its integration into program objectives evaluated in the comprehensive assessment (ESP), and examine implementation of the general-education component, in addition to considering indicators of success.

Moreover, program-specific education, in relationship to both core and supportive disciplines, was taken into account, particularly in reference to the component's coherence.

Data and Data Analysis

Rigorous, in-depth analysis of the relevant data needed to understand the problems identified in the specifications and program evaluation according to definite criteria provides the means for drawing fair, well-founded conclusions. These will serve in deciding on the actions for improving or developing the program.

12. The "standardized language of instruction and literature test is designed to determine if the student has acquired, by the end of the three general-education courses on the language of instruction and literature, the level of reading and writing skills needed to understand literary texts and to give a critical point of view that is pertinent, logical, and properly written. Passing this test is one of the conditions for obtaining a DEC." (free translation) Ministère de l'Éducation, du Loisir et du Sport. *Petit lexique de la sanction des études collégiales*, [online], 2005, [http://www.mels.gouv.qc.ca/ens-sup/ens-coll/ sanction/lexique.asp] (December 2008).

13. The comprehensive assessment determines if the student has achieved the program's objectives. Each college designs this text for each of its programs leading to a DEC. The student must pass this test in order to receive a diploma.

In light of what the colleges wanted to deal with, the collection of quantitative, perceptual, and documentary data was generally done well.

The analyses carried out by the colleges on certain aspects of relevance (especially, the rate of university enrollment or placement), on program coherence (in particular, consideration given to ministerial specifications, arrangement of learning activities, workload, and compliance of course plans with the institutional policy on the evaluation of student achievement), and on resources are, overall, developed to the point that appropriate conclusions can be drawn. That being said, the Commission observed a number of times a paucity or absence of relevant data on certain evaluation items, which resulted in weak analyses or none at all. The items most neglected were teaching methods and evaluation of student achievement, whose value was often only appraised in terms of student opinion. While it is relevant to know and analyze student opinion, the survey data on these items were inadequate to determine if the methods used fostered skills development and if the evaluation of student achievement made it possible to adequately measure skill acquisition. With respect to teaching methods, the colleges did not sufficiently examine their adaptation to program objectives and the competency-based approach, learning activities, and student characteristics. As for the evaluation of student achievement, it wasn't always demonstrated that each of the students achieved the objectives according to the defined standards. In this exercise, it would have been particularly appropriate to pay special attention to these two items, since the evaluated program had been revised in terms of objectives and standards. This program modification should have yielded important changes in teaching and evaluation of student achievement. Their suitability for the new realities in each program should have been appraised here.

During the evaluation of IPPE application, the Commission observed that the analyses lacked depth. It also recommended to 29 colleges and suggested to 15 others to push their analyses further. In its summary report on this exercise, the Commission indicated that the “issues most directly related to teaching itself”[14]– that is, evaluation of student achievement and teaching methods–had been the least well examined. In more than half the cases during the current exercise, data analysis, at least as presented in the college reports, was inadequate for making informed decisions about one program aspect or another,

14. Commission d’évaluation de l’enseignement collégial. *L’application des politiques institutionnelles d’évaluation des programmes – Rapport synthèse*, 2002, p. 12.

which led the Commission to examine aspects that weren't dealt with and validate the results during the site visits. Since the evaluation of IPPE application, much remains to be done on this matter.

Action Plan

Once a program has been evaluated, the college draws from the results a set of measures for adoption to resolve the problems discovered and make desirable improvements.

The colleges that prepared sound action plans determined measures appropriate for the changes they sought to introduce in implementing their programs in an order of priority, indicating the sharing of responsibilities and providing the schedules for carrying out their plans. The Commission wants to point out the importance that certain colleges gave to following up the plan to ensure it is implemented properly.

In more than half the cases during the evaluation of IPPE application, the Commission observed shortcomings in evaluation follow-up. Either the colleges hadn't developed a genuine action plan or the plan they produced contained shortcomings in terms of determining the action to be taken, establishing action priorities, setting a schedule, or breaking down responsibilities. During the current exercise, 8 colleges failed to produce an action plan and 26 others had to add one or more actions to their plans in order to better deal with certain program aspects requiring improvement: establishing priorities among the actions decided on or specifying the work schedule or break down of responsibilities. At the time of the site visits, the Commission was pleased to see that several colleges had carried out their action plans. This indicates that these colleges had fully bought in to the importance of program evaluation and its usefulness in improving the quality of education delivered.

From the Commission's standpoint, their adoption of an action plan at the same time as the self-evaluation report (which is its outcome) demonstrates their commitment to using their self-evaluations as springboards to taking appropriate action to ensure the quality and development of their programs. Moreover, by adopting their individual action plans, the college Boards of Governors were, in fact, providing themselves with an instrument for monitoring the progress of work.

IPPE Application

During the course of the current exercise, at the same time as evaluating their individual programs, 9 colleges had to redo their evaluations of their institutional policies on program evaluation[15] and 11 others had to evaluate its application for the first time.[16] Two of the colleges that had to redo the evaluation have yet to submit their reports. As for the 11 colleges that had to evaluate IPPE application for the first time, 2 had not yet developed their individual policies. In the case of three others, the Commission had not finished evaluating their programs when this summary report was being drafted.

As a result, this summary report looks only at the processes followed by the seven colleges that had to redo IPPE application and the six colleges that had to evaluate policy application for the first time. These colleges were asked to appraise the efficacy of policy application, which was to be annexed to the program self-evaluation report. In making its judgment, the Commission examined the procedure followed by the colleges (application of evaluation criteria, determining the issue, taking into account the general education), the data collected and their analysis, and exercising responsibility.

The first evaluation of IPPE application carried out by six colleges and the re-evaluation carried out by seven colleges yielded the following outcomes.

Table 2: Evaluation of IPPE Application

Effectiveness of IPPE application	First Evaluation (6 colleges)	Repeat Evaluation (7 colleges)	Main Issues Noted by the Commission
Effective application	**1 public college**	**2 public colleges**	
Partly effective application	1 public college 1 private college	4 public colleges	Depth of analysis (4 cases) Action Plan (5 cases) Consideration of general education (3 cases)
Ineffective application	1 public college 2 private colleges	1 private college	Data collection (3 cases) Depth of analysis (4 cases) Action Plan (3 cases) Consideration of general education (3 cases)

15. In following up the Commission's recommendations during the evaluation of IPPE Application to redo this evaluation.

16. Appendix 2 provides the list of colleges that had to evaluate IPPE application for the first time and those that had to redo it.

Whether for repeat or first-time evaluations of IPPE application, the main problems noted relate to analysis depth, development or updating of the action plan as a result of evaluation, and consideration of the program as a whole and, particularly, general education. It wasn't only in the case of colleges that hadn't effectively applied their policies that data relevant to evaluation (whether quantitative, perceptual, or documentary) had not been adequately collected.

In cases in which the Commission deemed that the IPPE had not been effectively applied, it suggested to a college applying its policy for the first time that the policy should be reviewed in order to serve as a real guide in conducting evaluations. The Commission also asked the college to submit an evaluation of policy application with its next program evaluation. As for the colleges who had to repeat IPPE application but whose new applications were deemed ineffective or partly effective, and they did not provide satisfactory follow up to all the recommendations made by the Commission during the evaluation of IPPE application effectiveness.

Conclusion: the Evaluation Process

The current program evaluation has led the Commission to conclude that significant progress has been made since evaluation of IPPE application. This is particularly true as regards determining program issues for evaluation and developing evaluation specifications. The Commission considers that it is important for the colleges to maintain the program-evaluation expertise they have acquired. Moreover, they should continue work to improve their evaluation processes, especially in the following areas: rigorous analysis of the various program aspects, particularly those related to teaching methods and evaluation of student achievement; consideration of the entire program—including general education—and development of a well-structured action plan that includes measures for program improvement and, as a result, improvement of the education offered to students. The follow-up to this should be entrusted to a competent authority accountable to the college's highest levels of management.

College Implementation of Programs based on Criteria

Program Relevance

When a college evaluates program relevance, it can verify how the education delivered aligns with the expectations of universities, students, and society and with job-market needs. As a result, the college will be able to judge if the program prepares students for the intended university program or job market. This is why the colleges must maintain relations with universities, employers, and their graduates. Relevance analysis can lead a college to focus, enrich, or update a program with respect to ministerial specifications (in the case of programs leading to a DEC). Indeed, it could even lead a college to submit modifications to the Ministère with a view to improving the program's relevance, which might even result in the creation of a new program.

Evaluating a program according to this criterion takes into account the rate of students admitted to university as well following up the academic progress of graduates at university, in the case of pre-university programs, or their placement rates on the job market, in the case of career programs and programs leading to an Attestation of College Studies (AEC).

Liaison with Universities, Employers, and Graduates

The relationships that colleges have with universities, employers, and graduates give colleges a better grasp of changes in their needs on an ongoing basis, so that they can adapt, focus, or update their programs based on the information gathered. The ties established with universities enables the colleges to take into account the requirements of these institutions and to ensure that their implementation of pre-university programs properly prepares students to pursue their educations. In the case of career programs, sustained relationships with employers provide colleges with information about the expected job-related skills, technological developments, and changes in the occupations that must be mirrored in the education delivered.

Since adoption of the *College Education Regulations* (CER), colleges have had much more latitude in defining their programs, despite the fact that this latitude varies according to program type (pre-university or career) and according to the programs themselves. For instance, in the latter case, the colleges are much more restricted with the *Science* program than with others. In the case of programs leading to a DEC, this latitude—even if delimited by ministerial specifications—enables colleges to adapt their programs to the needs of universities, employers, or the students they educate, with a view to them becoming employed or pursuing their education at a university.[17] In the case of programs leading to an AEC, the colleges are entirely responsible for defining their programs. This is why it is important for the colleges to make sure that they properly collect data about university and employers needs and get feedback from graduates about the education they received, in order to adapt their programs of studies on an ongoing basis.

The Commission repeatedly observed that the linkages between the colleges and universities, the job market, and graduates were inadequate and sometimes nonexistent.

In 22 out of the 44 pre-university programs evaluated, the colleges had not developed adequate liaison procedures with universities. Indeed, more than a third of this number hadn't developed ties with universities, at least with respect to these programs. Another third had unofficial exchanges with universities as the result of individual initiatives, which did not necessarily lead to concerted changes in the program. For this reason, the Commission suggested to the colleges that they should establish structured, recurrent linkages with universities in order to be familiar with their expectations, requirements, or needs and to be able to adapt implementation of college programs on an ongoing basis and to better prepare their students for university. The Commission, however, does not underestimate the challenge of establishing such linkages, especially for the colleges located at some distance from the universities attracting most of their students. Neither does it sell short the efforts put into establishing such linkages. Moreover, no networking with institutions of higher learning is possible if they do not show an interest, demonstrate their openness, and invest in it. It is nonetheless certain that establishing liaison procedures between colleges and universities would

17. The latitude is more restricted in the case of pre-university programs. For each competency, the minister reserves the right to determine the learning activities, number of units, discipline, and the like. The situation is different for career programs: the colleges can modify their education offering, for example, by putting more emphasis on a competency, by determining the disciplines supporting acquisition of competencies, and so on.

benefit students. It would ensure that they are consistently prepared for studying at the university level as well as promote consistency and complementarity between the education delivered by these two levels of instruction, since one would have a clearer idea of what the other does and expects.

As for the colleges offering the 20 career programs evaluated and the 2 programs leading to an AEC, the Commission suggested to 8 and recommended to 2 others that they should establish links with employers or systematize links so that their programs can keep pace with changing needs. The Commission considers that the colleges cannot make do with feedback from internship settings, which is nonetheless of value, when validating the relevance of their career programs. There are a number of reasons for this, such as the fact that these settings are not necessarily representative of the job market as a whole. Moreover, the information is not collected from these sources with the intent of verifying or ensuring program relevance. In addition, while relations with these settings foster maintenance and upgrading of knowledge of the various aspects of the job market, there is no guarantee that they will systematically and effectively yield knowledge about employer and job-market needs. By developing linkages with the job related to the program, teachers help keep the program up-to-date and take into account new needs. Nevertheless, it is through the joint efforts within the faculty in data gathering and through jointly sharing and processing the data collected individually that the program's teachers as a whole will be able to adapt the entire program to the job market's new or emerging realities. The active presence of teachers in the job setting is an asset, but it does not constitute a structured liaison mechanism with the work world. The Commission wants to emphasize that the management of relations with job settings comes under institutional responsibilities and cannot be based exclusively on individual initiatives.

The liaison mechanisms with graduates provide a means for gathering information about program relevance of various natures and about the education delivered under the program. Yet whether the programs evaluated were pre-university or career programs (as one as the two programs leading to an AEC), more than a third of the colleges had no liaison mechanisms linking them to their graduates or had not used a consultation process to elicit graduate feedback on programs, which could have been used for program improvement. In several cases, the mechanism in place was ineffective or the data obtained through consultation had not been used. What the Commission recommended or suggested to the colleges pertaining to graduate follow-up is broader than the colleges' surveys to ascertain if their former students are in school, working, or looking for work.

Rate of University Admissions and Job-Placement Rate

The rate of university admissions and the job-placement rate are indictors of program relevance. Clearly, in the case of the pre-university programs evaluated during the current exercise, the percentage of graduates that applied to universities and were accepted is satisfactory, even high. The same holds true for the job-placement rate for graduates of career programs obtaining jobs related to their education.

Follow-Up of University Careers of Graduates

A final aspect concerns following up on graduates attending university. This goes beyond simply collecting information about graduate admissions to universities in a program of their choosing. This information is available through the Conférence des recteurs et des principaux des universités du Québec (CREPUQ). The Commission suggested to half of the colleges who evaluated a pre-university program to follow up on the university careers of their graduates. Until recently, the colleges had been obtaining data from certain universities, particularly, Université Laval and Université de Montréal. Since November 2006, the Ministère de l'Éducation, du Loisir et du Sport has been providing the colleges with data about students going on to attend university.[18] This information includes overall data about students enrolled in a program offered by any Québec university. These data are broken down according to cohorts of individuals holding a DEC, by college, and by program. They deal with enrollment in a university program, perseverance until graduation, education interruption, and dropping out. These data provide important information about how well college graduates do in university.

18. These data can be found in the *Banque de données sur le cheminement universitaire des diplômées et diplômés du collégial entreprenant des études de baccalauréat, en continuité de formation, dans les universités québécoises*, which was developed by the Comité de liaison de l'enseignement supérieur (CLES).

Conclusion: Relevance of the Programs Evaluated

The very great majority of the programs evaluated respond to one of the main goals of college education: fostering the university admission of graduates or their entry into the job market. The rare exceptions aside, the Commission considers that the colleges have adopted the means for ensuring, at the time of implementation, that the programs are in alignment with the various educational and socioeconomic needs. In the case of pre-university programs, the colleges were able to make the most of the latitude given to them under the renewal in defining their programs. This holds true, as well, in the case of career programs, for which they had analyses of work situations. Several years have passed, however, since the new versions of the programs were implemented. In the interim, both needs and contexts have changed. The colleges would therefore do well to adapt their programs by adopting means to conduct ongoing analyses of job-market needs as well as the expectations of the universities and graduates. During the current exercise, the Commission deemed that relations with universities, employers, and graduates to determine their expectations, needs, and requirements, lacked adequate support from a liaison mechanism that would foster periodic exchanges or yield feedback about the education delivered or about the school-to-work transition or students moving on to university. This situation can gradually eat away at program relevance and hinder the ability to adapt to needs on a continuing basis.

Program Coherence

The Commission evaluated program coherence by verifying if the program general goals and objectives were taken into account in the constituent courses and by examining the arrangement of learning activities, the requirements specific to each learning activity as presented in the course plans, and the workload.

Consideration of Program Objectives and General Goals

The programs leading to a DEC have general goals and objectives. A program's objectives state the competencies that a student must develop in the program. The general goals of pre-university and career programs are determined differently. While the general goals for pre-university programs are program specific,

those for career programs have been defined for the programs as a whole. Program goals can include these general goals; if so, they are written into the competencies. General goals provide direction to the colleges in developing their local programs. They are teaching and learning objectives that are integral parts of pre-university and career programs.

Several colleges, especially those evaluating a pre-university program, were concerned about integrating general goals into student education. As a result, they closely examined this matter in order to determine to what degree the general goals were taken into account in master plans (if applicable), course plans, and the program comprehensive assessment. Some colleges even questioned their teachers, graduates, and students on their awareness of the general goals and how they were taken into account in courses. These colleges laid out the means they used to integrate general goals into education. When a program defined according to objectives and standards was being developed locally, the colleges settled on a local interpretation of the general goals, which was used to specify the means for incorporating the general goals into education. The colleges spread them across the various courses or, as the case many be, integrated the goals into the graduate profiles[19] they had developed. As a result, very many of the course plans specified the general goals targeted by the courses. In several cases, the Commission was able to appraise the means and instruments—such as master plans, matrices breaking down general goals and courses, etc.—developed by the colleges in order to ensure that the general goals were taken into consideration and took note of their efficacy.

The Commission deemed that, in 13 cases, consideration given to the general goals could have been or should have been improved in order to better integrate the educational aims of general and program-specific education. This, in turn, would enhance program coherence. Only in the case of pre-university programs—specifically, *Science*, with one exception—did the Commission find that the general goals had not been adequately integrated. The goals in the science program most often cited as problematic are “understand the relationships between science, technology, and society,” “define one’s system of values,” and “establish the framework for the emergence and development of scientific concepts.”

19. The graduate profile “specifies the knowledge, skills, and personal and professional attitudes targeted by the end of the program. It is one way of stating program objectives.” (free translation) Commission d’évaluation de l’enseignement collégial. *Évaluation des programmes d’études dans les secteurs Techniques administratives et Coopération – Rapport synthèse*, May 1999, p. 16.

One of the general goals that certain colleges focused on relates to the use of information and communication technologies.[20] They were endeavoring to verify that it had been effectively integrated into the new program or that the program had been brought into line with technological changes. This integration goes beyond simply using standard software (word processing, electronic spreadsheets, Web browsers, etc.), since the students use specialized software specific to a discipline as part of their learning. Moreover, as in the *Science* program, students are introduced to algorithm development. In a third of the programs evaluated, the Commission examined their integration. The outcome: a dozen programs (in 9 cases out of 12, the *Science* program) had adequately integrated information and communications technologies.

With only a few exceptions, the program objectives in the ministerial specifications were apparent in the various program course plans. Course content, as presented in the course plans, was consistent with the targeted objective. The learning activities defined by the colleges target the development of the competencies provided for in the ministerial specifications. Yet simply establishing a correspondence between competencies and the learning activities targeting their development does not necessarily associate a competency with a given course. Indeed, a competency can be developed across several courses. Moreover, a single course can foster the partial or complete development of more than one program competency. As a result, the colleges had to adopt means that not only enabled them to develop learning activities so as to foster competency development but also to spread the competencies across the various courses. In doing so, however, they had to avoid unnecessary duplication as well as ensure that all the competencies and their elements were covered by one learning activity or another. The work carried out by the colleges in developing local programs was quite good. With just a few exceptions, the learning activities were designed so as to help achieve objectives and covered the range of competencies and their elements, as provided for in the specifications. While the colleges have adopted tools to ensure program coherence (competency-to-course matrices, course master plans, etc.), these tools get set aside over time or their effectiveness flags because the way in which certain course plans interpret the local program description is not sufficiently consistent with the tools.

20. It should be remembered that using information-processing technologies figures prominently in the general objectives of certain of the pre-university programs evaluated in this exercise (*Science*; *Social Sciences*; *Dance*, *Creative Arts, Literature, and Language*). As for *Fine Arts*, also evaluated in this exercise, one of the goals is for students to be able to “demonstrate technical and technological skills associated with the fine arts.”

Arrangement of Learning Activities

The arrangement of learning activities in the evaluated programs was generally logical. It promoted acquisition of the basic elements needed to master more complex ones and, as the case may be, acquisition of the theory for undertaking practical exercises, labs, internships, and so on. The course sequence facilitated the integration and deepening of student learning in the program, right up to achievement of objectives.

Examination of Course Plans

The Commission evaluated two aspects of the course plans for program-specific education: the information they conveyed to students and their compliance with the *College Education Regulations* (CER), ministerial specifications, and the college's institutional policy on the evaluation of student achievement (IPESA). This examination was based on the analyses conducted by the colleges of their own course plans, supplemented by that made by the College for program-specific education course plans and, in several cases, those for general education per se.

The information yielded by the course plans was, for the most part, satisfactory. In other words, they were useful learning tools for students, providing information about course objectives, the course's place in the program, the assessment methods, and course requirements. Some of the course plans examined did not provide the assessment methods or did not state the requirements related to the learning activities. In some instances, the Commission proposed improving course plans that were either too long and complex or too short.

On the other hand, the course plans for 17 programs were deemed to be noncompliant either with the CER, ministerial specifications, or the policy governing evaluation of student achievement. In seven cases, a certain number of course plans either did not state or comply with the objectives and standards in the specifications. In six other cases, the contents of the course plans did not reflect the elements specified in the institutional policy on the evaluation of student achievement (IPESA) or even the CER, particularly with respect to evaluation activities. In the last four cases, the very process for validating course plans violated IPESA rules and was not applied by the stated officials.

Workload

The workload was evaluated from two perspectives: compliance with weighting and balance from one session to the next. In almost all of the programs evaluated, the requirements specific to each learning activity complied with the weighting set for these courses. The individual workload proved somewhat problematic, in rare instances, as revealed after collecting student perceptual data. The workload was too high or too low with respect to the weighting. In about ten cases, the Commission noted a lack of balance between the overall workload from one session to the next. This does not include instances in which the college lightened the workload, for considerations related to student achievement, of certain sessions deemed critical in academic progress, such as the first session.

Conclusion: Coherence of the Programs Evaluated

The Commission's evaluation brought out that, in the large majority of cases, the local programs developed by the colleges were in compliance with the objectives in ministerial specifications. Program general goals, however, were not always taken into account adequately in implementing certain pre-university programs, in particular, the *Science* program. The learning activities were arranged in a logical order. Overall, the workload was consistent with the weighting, despite some discrepancies in balance from one session to the next. Lastly, the course plans generally gave students the information required about course content and conduct. Some shortcomings requiring improvements were noted, however, in terms of plan compliance with the IPESA, ministerial specifications, or the CER. The Commission therefore concluded that the local programs had been properly developed, for the most part, but that their implementation did not always achieve the level of consistency that the colleges desired at the time of local development. The course plans, in particular, brought out this shortcoming.

Value of Teaching Methods

The evaluation of the value of teaching methods aims at certifying that the methods are suitable for attaining program objectives. This criterion applies both to overall decisions pertaining to the relative place of different types of teaching activities (such as internships and labs) and to educational choices that apply

to each of these activities. One of the specific features of the current exercise lies with the fact that this constituted the first and rather general program evaluation based on competencies.[21] For this reason, it paid particularly close attention to the changes that this new approach should have introduced in the local definition of the programs of studies. It also examined the methods with respect to their aptitude to develop the competencies under these programs.

As mentioned above, the colleges have paid little attention to this criterion, other than reporting on student appreciation of the methods used in the courses (interest they arouse, motivational nature, contribution to education). Accordingly, this is one of the aspects of program implementation for which the Commission had the least information. Nevertheless, when the evaluation reports did not provide it, the Commission made sure that it obtained all information required for the evaluation during site visits. The Commission observed that the colleges did not take the opportunity provided by this evaluation exercise to conduct an in-depth analysis of the value of their teaching methods from the perspective of their relevance and effectiveness with respect to competency development.

With just a few exceptions, the arrangement of the various types of teaching activities fostered the development of the targeted competencies. The Commission nevertheless indicated to several colleges that the practice of alternating theory with practical experience or labs had to follow a logical sequence fostering the acquisition of basic knowledge before its application in practical exercises.

As for teaching methods, the Commission deemed that several of the courses in about 20 programs evaluated evidenced teaching methods that were little or not suited to program objectives in general and to the competency-based approach in particular. The *Science* program accounted for 15 such instances. It committed the colleges to modifying their teaching methods so as to support the development of student competencies.

21. During the evaluation of general education (the specifications for which had just been redefined in terms of objectives and standards), the Commission had evaluated teaching methods taking into account the new approach. This, however, was not a program evaluation. Moreover, in the two evaluation exercises concerning programs leading to an AEC, the programs evaluated had not been developed in terms of objectives and standards.

In looking at the 20-some programs evaluated, the Commission observed that the teaching methods most frequently used in the courses led to more teacher involvement than student participation; lecturing was the most commonly used method. Lecturing has its place in the repertory of teaching methods. Indeed, it is suitable for meeting certain knowledge-transfer objectives. In the surveys conducted by the colleges and in their statements to the Commission, students generally expressed their satisfaction with the methods used by their teachers. They often criticized the lack of variety in methods and the lack of interaction in the lecture approach. Indeed, the students felt that lectures didn't hold their interest or motivate them.

Even in the cases that the Commission deemed that the methods could be brought more into line with program objectives, it pointed out the efforts of teachers in certain disciplines to diversify teaching methods and make them more appropriate for the competency-based approach. This was accomplished through the use of various teaching strategies such as the project-based approach, the problem-based approach, simulation exercises, case studies, simulations, and so on. Furthermore, in some of the 66 programs evaluated—including those with shortcomings in method suitability—certain activities organized throughout the program evidenced teacher efforts to promote the development of program competencies in their students (school-related and extracurricular activities, community programs developed by several programs, participation in competitions with the cooperation of students from other programs, etc.). Even though challenging, these initiatives were appreciated by the students because they called for student participation, helped them develop competencies through real or simulated occupational and research situations, fostered autonomy by giving them experience with teamwork, increased their interest in learning, and motivated them to pursue their studies.

The Commission encouraged the colleges to see that these initiatives or experimentations were used jointly by all of the program's teachers. In certain other cases, the Commission found that teachers needed pedagogical support and encouraged the colleges to provide teachers with the pedagogical assistance, training, and upgrading needed to develop and use methods suitable for competency development.

Conclusion: Teaching Methods

The evaluation of the teaching methods used highlighted the appropriateness of the various types of educational activities of the programs evaluated to the program's objectives. The Commission nevertheless noted—in a little more than a quarter of the programs evaluated and particularly in the *Science* program—that the methods used to develop competencies needed to be better adapted in several courses.

Evaluation of Student Achievement

As for the evaluation of student achievement, the Commission paid particular attention to four subjects: evaluation of each program competency; proof of mastery of the competencies as provided for in ministerial specifications (or the program description, in the case of AEC programs); equivalency of evaluations when a course is given by more than one teacher; and conformity of the evaluation methods and instruments to the IPESA. As in the case of teaching methods and for the same reasons, the Commission paid particular attention to the changes that competency-based program development should have incurred in the evaluation of student achievement.

As was observed with teaching methods, several of the college self-evaluation reports only lightly dealt with the evaluation of achievement. Indeed, the issue was ignored, analysis was limited to data from student and faculty surveys, or only conformity of course plans with the IPESA was considered. Moreover, the colleges did not always evaluate IPESA application when drafting and approving course plans. They often neglected to determine whether the evaluation methods and the evaluation instruments, in particular, enabled them to measure—adequately, fairly, and in compliance with the appropriate standard—the degree to which students achieved each of the program objectives.

Furthermore, in order to ensure that it had the information needed to render decisions about the evaluation of student achievement, the Commission examined the most recent course plans for each program evaluated and the course final examinations. This made it possible to complete, when necessary, and update the analyses that the colleges might have conducted of their programs according to this criterion.

In all of the reports that it produced within the framework of the current exercise, the Commission made the greatest number of recommendations, suggestions, and invitations in the area of evaluation of student achievement. This is also the area in which this is also the area in which most improvements must be made, since more than half of the recommendations to the colleges bear on the evaluation of student achievement and, more specifically, on the fitness of the methods and instruments used to do so with respect to their degree of achievement of each program objective according to the established standards.

Evaluation of Mastery of Each Competency

Generally speaking, the mastery of each program competency was evaluated. In a dozen cases, however, the Commission observed that certain competencies had not been fully evaluated. In some cases, competency elements in a given course were evaluated without determining the overall mastery of the competency in a comprehensive summative exam (which denoted the lack of an exit evaluation of the competency's mastery). In other cases, the various competency elements were spread across different courses[22] and the achievement of the objective in each course (all of which were to contribute to competency mastery) was evaluated without ensuring that competency mastery itself was fully evaluated. Several colleges resolved this issue by looking at the breakdown of elements for a specific competency across different courses and then determining the course in which overall mastery would be assessed.

Appropriateness of Means and Instruments for Determining Mastery of Competencies

The evaluation activities and instruments serve to measure to what degree each student masters each of the program competencies. In the case of programs leading to a Diploma of College Studies, the evaluation instruments used for the program comprehensive assessment must measure to what degree each student has integrated program competencies.

22. With respect to all the competencies for program-specific education and for some for the pre-university sector, the colleges themselves determine the learning activities and are under no obligation to tie a specific competency to a specific course. Consequently, the competency is developed solely through one course and one course alone targets development of a single competency.

The Commission found that, in nearly 50 of the programs evaluated, various factors prevented certain evaluation methods and instruments from consistently determining if competencies had been mastered.

Overall Evaluation Strategy

Competency-based program development incurs significant differences in the evaluation of student achievement. The focus no longer resides in verifying knowledge acquisition—often on a continuing basis—through a series of exams whose results are summed. Rather, it measures the degree of competency mastery using a comprehensive assessment. This paradigm shift has not yet brought about all the changes required by evaluating competency mastery across the board.

Ongoing summative evaluation is still apparent, as evidenced by the lack of a comprehensive assessment or, when there is one, the large number of summative evaluations, allowing students to accumulate a significant number of points before the final assessment. Ongoing summative evaluation cannot be used to determine competency mastery for a variety of reasons. Indeed, the competency itself may not be evaluated, but rather a fragmented set of knowledge or skills. Summative evaluation may not measure the degree of competency mastery. In this case, a student could pass a course without demonstrating mastery of the competency (such as by acquiring enough points early on in the course) or, on the other hand, master the competency by the end of the course but still fail because they did not accumulate enough points during the semester.

Furthermore, any awarding of points without evaluation of course objectives is incompatible with the evaluation of student achievement under a competency-based approach. Examples of this include bonus points, double value for the highest exam grade, and formative evaluation converted into summative evaluation. This may also be the case when points are awarded for class attendance or taking part in learning activities if one or the other is not tied to an objective.

Adequacy of Final Examinations

It can be assumed that a competency is developed before learning is complete. For this reason, the degree of mastery can only be evaluated once the training fostering the competency’s acquisition has been completed, which is why comprehensive evaluations are important. When a course covers a competency in its entirety (as

is often the case with the *Science* program), the course final examination evaluates competency mastery. As was seen, a competency may be developed within several courses. In such cases, the competency must be evaluated in its entirety and the most appropriate time for doing so determined.

The very nature of the final examination was problematic when it comprised activities tending to measure the degree of knowledge acquisition to the detriment of activities assessing the use of this knowledge in performing complex tasks related to those that the student would have to carry out in the workplace or at university. These activities included different types of questions: recall, multiple choice, true or false, or short answer. These evaluation methods do not always demonstrate competency mastery in analyzing various situations or phenomena, in applying a scientific procedure, or in using problem-solving methods.

Because the final examination is underweighted, it is not decisive in determining whether an objective has been met or not. In response to this problem, some colleges have imposed a dual requirement for success, such as passing the course is conditional upon receiving an overall course grade of at least 60% and passing the final examination.

Evaluation of Mastery of Each Competency

Evaluation activities must also make it possible to assess whether an objective has been achieved or a competency mastered by each student individually. In the case of the program comprehensive assessment, in particular (or any evaluation activity consisting of a project), the Commission found several cases in which the evaluation was of the work carried out by a group of students with no validation that each individual student had achieved program or course objectives. As a result, the grades received by students (either the group's grade or a large percentage of it) were not based on evaluations of their mastery of a competency or competencies.

Evaluation Equivalences

The equivalence of evaluations refers to the comparability in the evaluation of student achievement when a single course is given by several teachers. First of all, it depends on the means that the colleges adopt to ensure that the evaluations measure the same items in a comparable manner under similar conditions. The Commission noted the following means or practices adopted by the colleges: teachers giving the same course using common evaluation instruments, evaluation grids, or marking criteria; the development of common marking practices; the preparation of master plans providing milestones, even details, about the evaluation of student achievement, particularly during the final examination; and the development of tables of specifications used in designing the different evaluation instruments. In certain cases, the teachers engaged in discussions about evaluation instruments in order to compare their level of difficulty. The Commission found, in certain cases, that the final examination had been produced by a group of teachers giving the same course. Take, for example, how certain colleges examine the variation in performance of students in distinct groups: analyzing indicators, such as grade averages, can bring out discrepancies between groups that are significant enough to warrant further analysis.

In 28 programs, the Commission found a lack of equivalency in evaluations owing to the lack or ineffectiveness of practices that should promote equivalence in evaluation. In at least seven career programs, the evaluation of internships gave rise to problems because of the number of stakeholders in the evaluation process, the lack of consistency in practices, and the lack of or failure to apply evaluation criteria.

Conformity of Evaluation Means and Instruments to the IPESA

The policy on the evaluation of student achievement adopted by the colleges defines the responsibilities of the various stakeholders in policy application. As with any policy, its effectiveness depends on proper application. Most of these policies, deemed satisfactory or completely satisfactory by the Commission, include provisions on most of the points that have just been raised. Nevertheless, the problems observed in the evaluation of student achievement demonstrate that, in about 20 of the programs evaluated, the colleges did not always apply their IPESA in ways that attested to the attainment of each objective of the program evaluated, according to set standards, or to ensure the equivalence of evaluations.

Conclusion: Evaluation of Student Achievement

The evaluation of student achievement is one of the management aspects of the programs evaluated that required priority intervention on the part of the colleges to generalize adaptation of practices in evaluating student achievement to the competency-based approach, ensuring equivalence of evaluations, seeing that each student is evaluated individually, and making sure that the various stakeholders in applying the IPESA assume their responsibilities.

Program Effectiveness

The evaluation of effectiveness deals with the colleges' ability to recruit and retain students in a program who attain program objectives, in particular, by passing the program comprehensive assessment.

Student Admissions and Program Information

The colleges recruit and admit students that respond to ministerial admission requirements and are able to successfully complete the program. The Commission uncovered, however, specific admissions criteria for certain programs imposed by a small number of colleges that lacked transparency and could be detrimental to students. The Commission considers that the colleges must clearly specify the conditions for admission to their programs, have them adopted by competent authority, make the conditions public, and make them available to students seeking program admission. Moreover, in response to information about programs, their goals, local directions, specialization, internship access, and so on, in four cases, the Commission remarked that it considered this information had to be as accurate and complete as possible, from the promotional phase on, and that it must be disseminated so as to adequately inform possible candidates.

Student Success, Retention, and Graduation

The colleges took different approaches in analyzing data about academic progress. For instance, analyses varied in depth and data used. The parameters selected differed from one college to the next: some took into account success data (that is, data about passing first-semester courses, re-registration in the third semester, and graduation) for various segments of the student population

(students in the program that had been registered in another program or not; female students compared to male students; students broken down according to their high-school averages, etc.), academic-progress data for one or other of the education components (specific or general education). Some colleges also examined data broken down according to discipline and course (particularly to screen for pitfall courses).

The Commission compared student performance for each college against that of all the students in the system registered in the same program. In doing so, it discovered, in most of the programs evaluated, few significant problems related to success in courses, re-registration in the third semester, and graduation (in the prescribed time and in the prescribed time plus two years). Moreover, in nearly 30 cases, the Commission deemed that the colleges should intensify their analyses of the various indicators of success in order to better understand the reasons underlying their fluctuations or to find more appropriate means to increase the rates of success, re-registration, or graduation.

Program Comprehensive Assessment

Since January 1999, students working to earning a Diploma of College Studies must pass the comprehensive assessment for his or her program, as provided for in the *College Education Regulations*. The colleges have developed such assessments for every pre-university and career program.

In examining the various program comprehensive assessments, the Commission paid particular attention to the multidisciplinary nature of the assessment and its capacity to evaluate the degree to which each student had acquired the essential skills tied to program goals or the graduate profile, if the college had developed one. In this way, the Commission was able to determine if the program comprehensive assessment could measure and attest to a student's level of mastery of an integrated set of skills as a result of their studies in the program as a whole.

In about 30 cases, the Commission deemed the program comprehensive assessment to be satisfactory. It observed that some assessments explicitly took the program’s general goals into account. It also noted that the teachers in the various disciplines within a program jointly and collectively took up their comprehensive assessment, making it an activity that integrates the various leanings. In several cases, the comprehensive

assessment made the program genuinely cohesive and stood out as an eloquent testimony of the program-based approach. Involving general-education teachers in the development of the comprehensive assessment made it possible to incorporate into it the educational intentions of general education. These teachers were able to point out essential general-education skills and the marking criteria needed to assess their acquisition. Nevertheless, it must be kept in mind that the target is to integrate general-education educational intentions across the entire program so that the comprehensive assessment does not verify a set of skills already evaluated within the courses.

Several of the program comprehensive assessments were relevant activities that attested to student learning integration. They consisted of a project leading to a tangible production in the artistic field (creation or interpretation of a work), the scientific field (experimentation and public presentation of findings), the professional field (production of a marketing, operational, or project plan with actual customers), or the technological field (project design or implementation). In these cases, the students had to undertake an activity involving experimentation or actual work that went significantly beyond simulation yet remained consistent with program goals and objectives. Other comprehensive assessments—such as internships, in particular—did not lead to concrete productions but did aim at placing the student in a context in which the knowledge developed during their education had to be used in order to deal with problems of a complexity that a graduate in the given program should be able to resolve. Lastly, and that could also apply to either of the cases mentioned, several assessments were multiple in nature, unfolding in a number of steps that could call on competencies in various ways or consisting of various components (an experiment, research project, or internship leading to a literature search, conducting experiments or projects, writing scientific articles, giving presentations (sometimes in more than one language at conferences or shows, etc.). These occasionally rather ambitious assessments were often carried out by small teams and represented stimulating challenges for the students.

In examining program comprehensive assessments, the Commission raised the issue of the frequency of certain features that meant that the assessment did not fully serve the purposes for which it was intended. In a number of instances, the activities serving as the program comprehensive assessment were consistent with the *College Education Regulations* as well as being relevant and motivating. In 25 programs, the assessments were unable to verify and attest to integration of the program's essential knowledge.

In certain cases, when the assessment comprised several components, each component was considered separately from the others, thereby constituting a collection of unrelated assessments. This lack of a shared view in the program, which was observed a number of times, is not amenable to the program-based approach. Moreover, it is an impediment to the comprehensive assessment. Indeed, how can the program's essential knowledge be defined and its integration be evaluated while respecting the goals if the program teachers as a whole do not share a common view of the program?

What is more, the evaluative component per se of the comprehensive assessment evidenced shortcomings. In several cases, the assessment did not evaluate each student's mastery of competencies individually, but rather that of a group. As a result, it was impossible to substantiate that each student had integrated the program's objectives. The Commission also observed a lack of equivalence in some other cases in which the students in a program were free to choose the kind of assessment based on their courses of study or specializations. The lack of equivalence might have resulted from there being no evaluation grid, the amount of work required, discrepancies in the degree of difficulty of assessments within a single program, different weightings for the various activities in the assessment, or weighting differences in the core course corresponding to the comprehensive assessment. In as many cases, the Commission observed that the policy on the evaluation of student achievement was not complied with.

The Commission noted that, occasionally, registration for the program comprehensive assessment was conditional upon the student passing all of the general-education courses or being registered for all of the courses remaining in their program. This typifies the Commission's recommendation in its summary report on evaluation of general education.[23]

Lastly, the Commission mentioned to several colleges the importance of informing students, from the first semester, about this comprehensive assessment being given in the last year of their education and providing information about its administration.

23. The Commission had noted similar practices and recommended to the colleges to "include in the conditions for access to the final practicum or integration project of the program of studies, the successful completion, or the student being in the process of successfully completing, all general education courses." Commission d'évaluation de l'enseignement collégial. *Evaluation of the Implementation of the General Education Component of Programs of Studies – Summary Report*, 2001, p. 68.

Conclusion: Program Effectiveness

The rate of success in first-semester courses, the re-registration rate in the third semester, graduation rate in the prescribed time and in the prescribed time plus two years of the programs evaluated were deemed satisfactory overall. As proposed in their student success action plans, the colleges must continue monitoring the indicators of success so they can be appropriately analyzed to determine the main factors that impact on course success, perseverance, and graduation. In nearly half the programs considered, the program comprehensive assessments were relevant evaluation activities and appropriate for evaluating the skills acquired by students in the individual program components, including general education. This demonstrates actual progress since evaluation of the general education component, when the Commission concluded that "the importance given to the educational intentions of general education within the context of program exit assessments [was] insufficient."[24] In addition, the comprehensive assessments were activities that interested and stimulated students. Nevertheless, several colleges must push ahead with their efforts to improve program comprehensive assessments so that they demonstrate, in an equivalent manner, that each student has integrated the essential knowledge in all educational components.

Other Evaluation Criteria

The Commission asked the colleges to evaluate one of their programs by applying the Institutional Policy on Program Evaluation and using the evaluation criteria presented above. In order to ensure compliance with their policies' requirements, most of the colleges one or another of the following additional criteria: program management, resource suitability (human, material, financial), and student support and guidance. In reference to the last point, the Commission wants to call particular attention to the significant availability of teachers, their commitment to students, and their guidance of students, all of which foster student success.

Except in very rare instances, the Commission's advice to colleges about any of these additional criteria was incorporated into its remarks pertaining to related criteria, namely, coherence, teaching methods, competency evaluation, and program effectiveness.

24. *Ibid*., p. 46.

Science Program

During the current exercise, the Commission evaluated implementation of the Science program in 31 colleges, representing 47% of all programs evaluated. As seen in Exercise Overview herein, this was the most evaluated program.[25] Given the number of implementations evaluated, the Commission is able to share its observations and conclusions about this program based on criteria. We begin by briefly presenting the main characteristics of the program's students and its features.

Science Program Students

From 1999 to 2007, new registrants[26] in the *Science* program (200.B0) represented 30.3% of registrations in a pre-university program. The overall high-school average[27] of these students was 84.1%, while that of the other new registrants in the pre-university sector was 75.3%. Students registering in the Science program, therefore, have academic records that stand out above that of students in other pre-university programs. This is confirmed by their first-semester success rates and their graduation rates. From 1997 to 2007, the overall first-semester success rate in the *Science* program was 90.0%, compared to 82.6% for the other pre-university programs. From 1999 to 2005, 50.2% of Science students receive their diplomas within the prescribed time frame (two years), compared to 36.5% for all other students in the pre-university sector. From 1999 to 2003, the graduation rate for Science students two years after the expected length of study was 67.5%, compared to 56.2% for all other students in the pre-university sector.

25. It should be noted that the 31 implementations of this program evaluated here account for half of the Ministry-authorized implementations (62 public and subsidized private institutions have been authorized to offer the *Science* program).

26. A new registrant is a student registering for college for the first time (in a fall semester). The following data are based on CHESCO data (which provides indicators of academic progress of new college registrants), produced by the Ministère de l'Éducation, du Loisir et du Sport in fall 2008.

27. The average of final marks obtained by the students in the overall assessment of Secondary IV and V compulsory general education subjects.

Program Specifics

Developing the program according to objectives and standards was tested over a number of years in experimental projects before the official version of *Science* (200.B0) was adopted and implemented throughout the college system in fall 1999.

In its evaluations of the various local *Science* programs, the Commission concluded, in a number of cases, that the program implementations did not really conform to the approaches put forward under the renewal, namely, the competency-based approach and the program-based approach. Moreover, the ministerial specifications, particularly with respect to incorporating general goals into course content, were not fully complied with, even if the colleges were usually careful to follow ministerial instructions in defining their local versions of the program. The colleges and their teachers pointed out to the Commission that the program changes brought about during its 1998 revision were not stated with the precision needed to result in major modifications to the program as then offered.[28] Even though the new version of the program was developed taking into account university requirements, they hadn't radically changed. The difficulty of integrating learning because the competencies, with two exceptions, are discipline related was also brought out: program-specific education comprises four distinct disciplines supporting the program. As a result, the developments from the previous version were reinvested in the new program. According to the colleges, this explains why the course plans and even the teaching methods and evaluation strategies for these courses were relatively unaltered. Moreover, several teachers expressed their disagreement with the competency-based approach in developing pre-university programs. From the more specific point of view of Science teachers, the way the sciences have been taught has proven itself and yields the expected results for students, that is, access to university and pursuing their educations in a scientific field. A number of them are convinced that student achievement in the sciences naturally required competency mastery prior to implementation of the competency-based approach. As a result, they do not really see what this approach could contribute. According to the specifications, general goals “become specific teaching and learning objectives," and, as a result, must be accommodated by program courses.

28. In some regards, the 1998 ministerial specifications differ little from the previous version. Indeed, the same topics appear, with the same content broken down according to the same model in which—except for two competencies—a competency is associated with a course. Moreover, as for the common objectives for program-specific education (with one exception), the learning activities have been defined with a significant amount of detail (field of study, discipline, weighting, number of units, and even details about content). This allows for very little freedom in local definition of the program and, in particular, attenuates the differences between the program defined according to objectives and standards and its former version.

Their usefulness, however, was not always appreciated, especially since some of them, as mentioned above, are more difficult to integrate and would require more teaching time to the detriment of discipline content.

The program has a number of specific challenges that several colleges raised. For several others, the evaluations provided an opportunity to update their programs and make modifications to bring them into line with ministerial specifications and to better accommodate the competency-based approach.

Main Observations about Program Implementation

The evaluations of implementations of the *Science* program highlighted that it responds to student needs and university requirements. Nevertheless, to ensure that their programs remain **relevant**, particularly as regards local choices, the colleges should do a better job of following changes in expectations and develop more effective liaison means with universities as will as with college graduates. They also need a means for more effectively following the progress of their students at university. The Commission made one or another of these suggestions to 26 of the 31 colleges whose *Science* programs were evaluated. The Science program is not the only one in this situation, since the Commission made the same suggestions to 10 out of the 14 colleges in its evaluations of pre-university programs other than *Science*.

As for program **coherence**, the Commission noted that 16 out of the 31 colleges whose *Science* programs were evaluated had to do better jobs of taking into account program objectives and, more specifically, in 12 of these cases, its general goals. Problems with collaboration in program management as well as a vision of the program not adequately shared by all stakeholders involved were observed in the *Science* program. This impacts on coherence in implementing the program. Fifteen of the 26 colleges receiving remarks from the Commission on this subject had their science programs evaluated.

As for **teaching methods**, the Commission noted that 15 colleges should bring their teaching methods into line with the competency-based approach and to see that more dynamic methods were adopted. The notices issued by the Commission on this topic for *Science* programs represent 79% of all notices pertaining to adapting methods in all programs. This leads the Commission to presume that, since the program revision in terms of objectives and standards, the teaching methods in the *Science* program have been changing more slowly and unevenly than in the other programs in shifting towards the competency-based approach.

As for the **evaluation of student achievement**, the evaluation methods and instruments used in 24 of the 31 implementations of the *Science* program evaluated did not always attest to achievement of the competencies. Nevertheless, the Commission had similar findings for the other programs evaluated in similar proportions. The situation was quite similar for equivalence of evaluation, in which shortcomings were noted in 13 *Science* program implementations out of the 28 cases identified. The lack of conformity in course plans and instruments for evaluating student achievement—in particular, the institutional policy on the evaluation of student achievement—were more frequent in *Science* programs, as indicated by the lack of conformity in 63% of cases.

Out of the programs evaluated, the *Science* program comprehensive assessment evidenced more problems than that for all other programs. Indeed, the Commission gave notices to 24 of the 31 colleges in which this program was evaluated on topics such as individual evaluation of student achievement, assessment equivalence, and overall integration of program components, including general education. Thirteen other programs in other colleges received similar comments.

Conclusion

The Commission's observations of the *Science* program lead it to conclude that it is not the program as defined in the ministerial specifications that makes implementation impossible, even if that might be at the root of the difficulties experienced by the colleges. Moreover, the implementations evaluated evidenced a number of difficulties that were encountered to the same degree in other evaluated programs. Some examples of shortcomings in several other evaluated programs include liaison with universities and graduates as well as monitoring the academic progress of students at university (these problems are common to pre-university programs); attestation of competency mastery; and, to a lesser degree, equivalence of evaluation. The problems more specific to the *Science* programs evaluated relate to adapting teaching methods to the competency-based approach and the program comprehensive assessment.

Indeed, 58% of cases evidencing problems with collaboration and a certain lack of shared vision of the program occurred in *Science* programs.

Despite these considerations, the Commission deems that the *Science* program as implemented by the colleges is effective and prepares students for studying applied sciences and health sciences at university. The evaluations the colleges conducted of their *Science* programs brought out the difficulties experienced since implementing the new version of the program. It also gave them the occasion to buy into the approaches put forward under the renewal: the competency-based approach and the program-based approach. The actions that they have taken in this regard as well as their follow-up on Commission notices will enable them to improve program implementation.

Conclusion: View of the State of Implementation of College Education Renewal

The college education renewal, initiated during the first half of the 1990s, changed the depth of program definition and program management along two lines: increasing program coherence and decentralizing teaching management.

On the one hand, so that the programs of studies could be more coherent, demanding, and adapted to needs, the core general education component was strengthened and made more coherent within the programs. Moreover, each of the programs was reviewed with a two-pronged approach: program development using a competency-based approach and program implementation and management using a program-based approach. On the other hand, the decentralization of teaching management gave the colleges broader responsibilities in developing college programs of studies. Another consequence was increasing college autonomy, which went hand-in-hand with establishing an internal evaluation instrument—specifically each institution adopting and applying evaluations of its programs of studies as required under the CER—and external evaluations conducted by the Commission.

A number of objectives evaluated during the current exercise—and their related problems—are linked to one aspect or another of the college education renewal, more specifically, the competency-based approach, the program-based approach, and the new responsibilities that have devolved to the colleges. Without producing a summary of the state of renewal implementation, the Commission can—based on the observations emerging from the current evaluation exercise—establish ties between observation items and the colleges' implementation of the renewal.

Competency-Based Approach

The large majority of the programs of studies leading to a Diploma of College Studies were revised according to a different approach since the initiation of the renewal, namely, the competency-based approach. Its features can be briefly stated as follows:[29]

- The objectives are developed based on competencies (skills, knowledge, attitudes, and behaviors) to be mastered according to definite standards, that is, the levels or degrees to which competencies must be mastered.
- The general goals are developed according to "macro-competencies" expected of students.
- Learning activities serve to ensure objectives are achieved and competencies mastered according to definite standards.
- Student mastery of competencies is attested to by an evaluation activity that can measure mastery according to the defined standard.

Generally, as was observed, the Commission considers that the local development of programs in terms of objectives and standards has been carried out well and few problems were encountered. The colleges have adopted tools for evaluating program development. It was in program implementation itself—particularly pre-university programs—that, in about 20 cases, lacked consideration of the general goals and objectives of these programs. The course plans and the impact on the courses reflect this. Moreover, as the colleges pointed out, integrating the general goals of the *Science* program into student education can make for difficult program implementation. A review of the general goals by the Ministère would better support the colleges in their obligation to comply with ministerial specifications.

This new approach to program development requires that teaching methods be adjusted to teaching that aims at developing competencies. Moreover, the strategies and instruments for evaluating achievement must also be significantly changed in order to correctly measure competency mastery.

Some disciplines or courses in nearly a third of the programs evaluated had teaching methods that were not adequately adapted to developing competencies. Three quarters of these cases

29. This is a free translation of the characteristics provided in: Service des programmes et des affaires étudiantes, Direction de l'enseignement collégial, ministère de l'Éducation. *Les prescriptions ministérielles et l'élaboration d'un programme défini en objectifs et standards,* 2000, p. 2.

were *Science* programs. The Commission does not consider that the teaching methods used prior to program revision are inappropriate for programs revised according to the competency-based approach. Indeed, it is of the opinion that they must be complemented with methods fostering the development of competencies and that these methods must be given preponderant importance.

As for the evaluation of achievement, it stands out by far as the aspect that received the most comments by the Commission, targeting most of the programs evaluated. More specifically, these comments related to adapting evaluation methods and instruments to be objective being evaluated (the level of development of competencies and not solely knowledge acquisition) and their functions (attesting to the mastery of competencies and not simply verifying the acquisition of specific knowledge). This is why:

the Commission recommends to the colleges that they:

– *Change teaching methods to bring them into line with the competency-based approach*.

– *Ensure that the evaluation of achievements provides for attesting to individual student mastery of program competencies and develop the necessary evaluation methods and instruments.*

– *Support their teachers in consolidating their appropriation of the competency-based approach in order to achieve these two objectives.*

Program Comprehensive Assessment

In several cases, the Commission was able to highlight the assessment, its relevance, and its adaptation to the competency-based approach as it related to determining assessment activities. Yet, as shown above, the conditions surrounding the assessment's evaluation do not always make it possible to attest to individual student integration of the program's contents (competencies related to program-specific education and general education). This is why:

the Commission recommends that colleges ensure that the program comprehensive assessment is able to determine if each student has mastered all of the program's competencies.

Program-Based Approach

The program-based approach fosters the coherence of programs of studies, which explains why it lies at the heart of the renewal. This approach entails having a program view and management that takes in every aspect of the program. It depends on all program stakeholders acting together on its development and implementation. It also supports taking ownership of the competency-based approach.

The vision of the program that stakeholders develop and share is the determining factor in defining what students should learn and achieve by the end of their programs and in developing the program comprehensive assessment itself.

During the institutional evaluation, the Commission concluded that, overall, the colleges had assumed their new responsibilities, had done quite a bit to "bolster program coherence,"[30] and had established program committees. Nevertheless, it noted that the program-based approach had not yet been generalized, although was "well on the way to implementation."[31] The Commission also pointed out that general education had a vague place in the programs.

During the current exercise, the Commission was able to observe that the colleges were pursuing consolidation of the program-based approach. Whenever observed by the Commission, occurrences of teachers working together on the program supported their ownership of the competency-based approach in a variety of ways. First of all, it stimulated teacher interaction in determining teaching methods, which contributed to learning integration and competency mastery. It had a similar impact on putting into place strategies for evaluating student achievement, making it possible to correctly judge if objectives had been attained according to the accepted standards. This was integrated into the master plans by colleges using such reference tools in developing course plans.

The Commission still noted a lack of joint action in the implementation of more than 26 programs (including 15 *Science* programs), which brought out that the program-based approach has not yet been fully implemented. This lack of joint action in managing and running

30. Commission d'évaluation de l'enseignement collégial. *L'exercice des responsabilités dans les collèges : une première évaluation institutionnelle – Rapport synthèse*, 2004, p. 47.

31. *Ibid.*, p. 21.

programs impacts on program coherence and, as a result, on educational coherence, which is also weakened by a lack of a shared vision of the program and its outcomes, in certain cases.

The Commission further noted that better implementation of the program-based approach would have enabled some colleges to better integrate general education and its overall educational intentions into the program under evaluation. This, once again, would have made the program much more coherent and would have fostered comprehensive integration of the education received by students, who would have better grasped its relevance. Better implementation would also have had a positive impact on teaching methods, the evaluation of student achievement, the coherence in applying departmental rules and the institutional policy on the evaluation of student achievement, and harmonizing departmental policies governing evaluation of student achievement. In the latter case, rules differing between departments can cause student confusion and can result in fairness issues. This is why:

> *the Commission recommended to the colleges to ensure the effectiveness of mechanisms for joint action that reflect the true spirit of the program-based approach.*

Educational Responsibilities Entrusted to the Colleges

The increase in college responsibilities—particularly those related to the local program development and management—is an immediate outgrowth of the decentralization of educational management under the renewal. During the institutional evaluation of colleges offering programs leading to a Diploma of College Studies, the Commission concluded that "[...] overall, the colleges had assumed their new responsibilities and had taken ownership of the new regulatory framework. Significant strides had been made in strengthening program coherence and in mastering the approach based on objectives and standards."[32] The current program evaluation exercise enabled the Commission to observe once again that the colleges, in general, are doing a good job of carrying out their responsibilities. Nevertheless, certain issues raised by the Commission deserve attention, specifically, links to universities, employers,

32. *Ibid.*, p. 47.

and graduates; and the application of program evaluation policies and the evaluation of student achievement as required under the *College Education Regulations*.

Under the renewal, the Ministère determine the means needed to ensure that the programs of studies were not only coherent but in line with university expectations and employer needs. For this reason, “clearer structuring between the college and university levels of education” and “greater flexibility in program and their adaptation to job-market needs”[33] [free translation].

In order to ensure that their programs remain adequately adapted to needs and to take advantage of all the freedom under the renewal, the colleges must equip themselves to "read" their communities. In locally developing their pre-university programs, the colleges must ensure that the education they deliver to their students responds to university expectations and adequately prepares their graduates to study at the university level. In developing their career programs (whether leading to a DEC or AEC), the colleges must ensure that the programs correspond to job-market needs. In order to see the relevance of their programs, the colleges must establish systematic, effective links with universities and the job market. In addition, they must survey their graduates, whether at university or on the job market, to get their feedback on the suitability of their education and any modifications they would like to see made to the program.

Moreover, the colleges need to systematically collect and analyze data about the progress of graduates in university in order to determine the effectiveness of their pre-university programs and the suitability of college education. Significant progress has been achieved recently, since the colleges now have access to data about their graduates entering university.

With respect to pre-university programs, the Commission observed that certain universities and colleges want to work together. One notable example of this is Université Laval. The Commission feels that mutual receptiveness to this on the part of universities and colleges to establish sustained relations will enable the universities to better understand college programs and the colleges to improve their programs while taking needs into account. The Ministère intends to fund collaborative projects between colleges and universities. The idea is to

33. Service des programmes et des affaires étudiantes, Direction de l’enseignement collégial, ministère de l'Éducation. *Les prescriptions ministérielles et l’élaboration d’un programme défini en objectifs et standards,* 2000, p. 2.

support projects targeting the development of exchanges between colleges and universities with a view to ensuring the efficiency of higher education, fostering better linkages between such institutions based on mutual knowledge of achievements and expectations, and changing programs for the greater benefit of students and society. This is why:

> *the Commission recommends to both colleges and universities to develop, with the support of the Ministère de l'Éducation, du Loisir et du Sport and on the basis they deem appropriate, projects that will enable the colleges to change their pre-university programs based on the needs of university education and university expectations.*

With respect to career programs and programs leading to an Attestation of College Studies, the Commission considers that the colleges have the responsibility of establishing effective liaison mechanisms with employers and that being familiar with their needs and changes in the job market are essential in making programs current. This is why:

> *the Commission recommends that colleges establish recurrent liaison mechanisms with workplaces in the economic sectors related to their career programs so that the education can be adapted to workplace needs and market changes.*

For pre-university and career programs as well as for programs leading to an Attestation of College Studies, the colleges must take care to regularly communicate with their graduates in order to have their feedback on the suitability of the education received with respect to their university education or their jobs when related to their fields of study. This is why:

> *the Commission recommends that the colleges ensure establishment of a liaison mechanism with their graduates that will enable the colleges to get feedback on the education delivered so that the local versions of programs can be improved and updated, as required.*

In relationship to their new responsibilities starting with adoption of the *College Education Regulations* in 1993, the colleges had, in particular, to come up with their program evaluation policies, modify their policies on the evaluation of student achievement, and apply one to the other.

The Commission had already pointed out the progress noted in applying program evaluation policies. Nevertheless, it considers that exercising their full responsibilities and grasping the quality of their programs require the colleges to consider every component of the entire program in their evaluations. Moreover, they must see that every aspect of program issues and evaluation objectives are analyzed in depth. Even more importantly since the renewal was initiated, program evaluation must look at the choices that the colleges made in the local definition of their programs. Moreover, in order to develop an accurate portrait of their programs—especially in the case of initial evaluations since their development in terms of objectives and standards—the colleges have a duty to find the modifications in their programs required under the new development method. In particular, they must examine the teaching methods as well as the means and instruments for evaluating student achievement to determine their relevance and effectiveness to development and to attest to student mastery of competencies. Since they are responsible for correcting all weaknesses observed in their programs, the colleges must also adopt a structured action plan that includes all the measures needed (in order of priority) to improve their programs and that can be devised from an in-depth examination of their programs.

As for the policy on the evaluation of student achievement and its application, the Commission, during the institutional evaluation, remarked "that, while a large majority of the colleges had policies deemed adequate, the supervision and control mechanisms were not always comprehensive and varied significantly from one college to the next" and that, in adopting course plans and methods for evaluating student achievement, the academic dean "often went no further than checking conformity with the institutional policy and rarely verified its application."[34] The current program evaluation confirms this observation: when a major change substantially modified the evaluation of achievement, the college should have been more vigilant in applying the policy on the evaluation of student achievement, particularly with respect to exercising responsibilities for developing and adopting course plans and evaluation instruments, so that they would be consonant with the new specifications defined in terms of objectives and standards.

These policies, which the colleges have taken on themselves, constitute essential components in their quality-assurance systems. They are responsible for seeing that these policies are applied effectively.

34. Free translation of: Commission d'évaluation de l'enseignement collégial. *L'exercice des responsabilités dans les collèges : une première évaluation institutionnelle – Rapport synthèse*, 2004, p. 23.

Appendix 1

Programs Evaluated or under Evaluation

This report is based on evaluations of programs given by the following colleges:

Institution	Program Evaluated and Number
PUBLIC COLLEGES	
Cégep de l'Abitibi-Témiscamingue	Science (200.B0)
Collège Ahuntsic	Medical Electrophysiology (140.A0) Collège
d'Alma	Fine Arts (510.A0)
Cégep André-Laurendeau	Science (200.B0) Cégep de
Baie-Comeau	Science (200.B0) Cégep
Beauce-Appalaches	Science (200.B0) Collège
de Bois-de-Boulogne	Science (200.B0)
Champlain - Lennoxville	Creative Arts, Literature,
and Languages (500.A1) Champlain - Saint-Lambert	Science (200.B0)
Champlain - St. Lawrence	Creative Arts, Literature,
and Languages (500.A1)	
Cégep de Chicoutimi	Science (200.B0)
Dawson College	Community Recreational Leadership
Training (391.A0) Cégep de Drummondville	Science (200.B0)
Collège Édouard-Montpetit	Science (200.B0) Collège
François-Xavier-Garneau	Science (200.B0) Cégep de
la Gaspésie et des Îles	Forest Technology (190.B0)
Collège Gérald-Godin	Science (200.B0) Cégep de
Granby Haute-Yamaska	Science (200.B0) Collège
Héritage	Science (200.B0) John
Abbott College	Science (200.B0) Cégep de
Jonquière	Creative Arts, Literature, and
Languages (500.A1)	
Cégep de La Pocatière	Science (200.B0) Cégep
régional de Lanaudière à Joliette	Administrative Data Processing
(420.AA) Cégep régional de Lanaudière à l'Assomption	Science (200.B0)
Cégep régional de Lanaudière à Terrebonne	Science (200.B0) Cégep de
Lévis-Lauzon	Science (200.B0) Cégep
Limoilou	Science (200.B0)
Collège Lionel-Groulx	Professional Music and Song Techniques, Performance (551.AB)
Collège de Maisonneuve	Dental Hygiene (111.A0)
Cégep Marie-Victorin	Physical Rehabilitation (144.A0) Cégep de
Matane	Science (200.B0)
Collège Montmorency	Hypermedia, Micropublishing, and Office System Technology (412.A0)
Cégep de l'Outaouais	Science (200.B0) Cégep de
Rimouski	Dietetics (120.01)

Cégep de Rivière-du-Loup	Graphic Design (570.A0)
Collège de Rosemont	Respiratory and Anaesthesia
Technology (141.A0) Cégep de Sainte-Foy	Forest Technology (190.B0)
Cégep de Saint-Félicien	Science (200.B0)
Cégep de Saint-Hyacinthe	Nursing (180.A0)
Cégep Saint-Jean-sur-Richelieu	Fine Arts (510.A0)
Cégep de Saint-Jérôme	Fine Arts (510.A0)
Cégep de Saint-Laurent	Dance (506.A0)
Cégep de Sept-Îles	Science (200.B0)
Collège Shawinigan	Science (200.B0)
Cégep de Sherbrooke	Nursing (180.A0)
Cégep de Sorel-Tracy	Creative Arts, Literature, and Languages (500.A1)
Cégep de Thetford	Science (200.B0)
Cégep de Trois-Rivières	Science (200.B0)
Collège de Valleyfield	Science (200.B0)
Collège Vanier	Respiratory and Anaesthesia Technology (141.A0)
Cégep de Victoriaville	Science (200.B0)
Cégep du Vieux Montréal	Mechanical Engineering Technology (241.A0)
SUBSIDIZED PRIVATE COLLEGES	
Collège André-Grasset	Social Science (300.A0)
Collège Bart	Paralegal Technology
(310.03) Centennial College	Social Science (300.A0)
Collège international des Marcellines	Social Science (300.A0)
Collège Jean-de-Brébeuf	Science (200.B0)
Collège Laflèche	Fashion Marketing (571.C0)
LaSalle College	Tourism (414.A0)
Marianopolis College	Science (200.B0)
Collège Mérici	Science (200.B0)
O'Sullivan College of Montreal	Computerized Financial Accounting—AEC (LCA.AU)
O'Sullivan College of Montreal	Agents and Brokers in Individual Insurance (LCA.1P)
Collège préuniversitaire Nouvelles Frontières	Creative Arts, Literature, and Languages (500.A1)
Conservatoire Lassalle	Creative Arts, Literature, and Languages (500.A1)
École nationale de cirque	Circus Arts (561.08)

The evaluations of the following college programs were incomplete at the time of publication of this summary report.

Institution	Program Evaluated and Number
SUBSIDIZED PRIVATE COLLEGES	
Notre-Dame-de-Foy Campus	Fashion Marketing (571.C0)
Collège Ellis, Drummondville campus	Paralegal Technology (310.C0)
Collège Ellis, Trois-Rivières campus	Paralegal Technology
(310.C0) École de musique Vincent-d'Indy	Music (501.A0)

The Séminaire de Sherbrooke and the Institut Teccart must submit their program self-evaluation reports in June 2009 and October 2010, respectively.

List of Programs Evaluated

Science (200.B0)
Cégep de l'Abitibi-Témiscamingue
Cégep André-Laurendeau
Cégep de Baie-Comeau
Cégep Beauce-Appalaches
Collège de Bois-de-Boulogne
Champlain - Saint-Lambert
Cégep de Chicoutimi
Cégep de Drummondville
Collège Édouard-Montpetit
Collège François-Xavier-
Garneau Collège Gérald-Godin
Cégep de Granby Haute-Yamaska
Collège Héritage John
Abbott College
Cégep de La Pocatière
Cégep régional de Lanaudière à
l'Assomption
Cégep régional de Lanaudière à Terrebonne
Cégep de Lévis-Lauzon
Cégep Limoilou
Cégep de Matane
Cégep de l'Outaouais
Cégep de St-Félicien
Cégep de Sept-Îles
Collège Shawinigan
Cégep de Thetford
Cégep de Trois-Rivières
Collège de Valleyfield
Cégep de Victoriaville
Collège Jean-de-Brébeuf
Marianopolis College
Collège Mérici

**Creative Arts, Literature,
and Languages** (500.A1)
Champlain - Lennoxville
Champlain - St. Lawrence
Cégep de Jonquière
Cégep de Sorel-Tracy
Collège préuniversitaire Nouvelles Frontières
Conservatoire Lassalle

Fine Arts (510.A0)
Collège d'Alma
Cégep Saint-Jean-sur-Richelieu
Cégep de Saint-Jérôme

Social Science (300.A0)
Collège André-Grasset
Centennial College
Collège international des Marcellines

Nursing (180.A0)) Cégep
de Saint-Hyacinthe Cégep
de Sherbrooke

Respiratory and Anaesthesia Technology
(141.A0) Collège de Rosemont
Collège Vanier

Forest Technology (190.B0)
Cégep de la Gaspésie et des Îles Cégep de Sainte-Foy

Circus Arts (561.08)
École nationale de cirque

Fashion Marketing (571.C0)
Collège Laflèche

Dance (506.A0)
Cégep de Saint-Laurent

Graphic Design (570.A0) Cégep de Rivière-du-Loup

Administrative Data Processing (420.AA)
Cégep régional de Lanaudière à Joliette

Hypermedia, Micropublishing, and Office Systems Technology (412.20)
Collège Montmorency

Dietetics Technology (120.01)
Cégep de Rimouski

Mechanical Engineering Technology (241.A0)
Cégep du Vieux Montréal

Physical Rehabilitation (144.A0)
Cégep Marie-Victorin

Tourism (414.A0)
LaSalle College

Medical Electrophysiology (140.A0)
Collège Ahuntsic

Dental Hygiene (111.A0)
Collège de Maisonneuve

Community Recreational Leadership Training
(391.A0) Dawson College

Paralegal Technology (310.03)
Collège Bart

Professional Music and Song Techniques, Performance (551.AB)
Collège Lionel-Groulx

Agents and Brokers in Individual Insurance—AEC
(LCA.1P)
Collège O'Sullivan de Québec

Computerized Financial Management—AEC
(LCA.AU) O'Sullivan College of Montreal

Appendix 2

Evaluation of Application of the Institutional Policy on Program Evaluation (IPPE)

Colleges that had to redo their IPPE evaluations during the current exercise:

Public colleges
Collège Édouard-Montpetit
Cégep de Jonquière
Cégep de
l'Outaouais Cégep
de Sept-Îles Collège
Vanier

Subsidized private colleges[1]
LaSalle College

Colleges that had to evaluate application of their IPPE for the first time during the current exercise:

Public colleges
Collège Gérald-Godin
Cégep régional de Lanaudière à Joliette
Cégep de St-Félicien

Subsidized private colleges
Conservatoire Lassalle
Collège préuniversitaire Nouvelles Frontières
Centennial College

The subsidized private colleges below evaluated application of their IPPE for the first time. Since the Commission's final versions of the evaluation reports for each of these colleges had not been adopted when this summary report was being drafted, the IPPE applications of these colleges was not taken into account.

Collège Ellis campus de
Drummondville Collège Ellis campus
de Trois-Rivières École de musique
Vincent-d'Indy

1. The Institut Teccart and the Séminaire de Sherbrooke must also redo the evaluations of their IPPE applications and report on them to the Commission in their next program self-evaluation reports.

Appendix 3

Members of the Advisory Committee

John Keyes[1]
Commissioner
Commission d'évaluation de l'enseignement collégial

Nadine Arbour
Researcher
Groupe Ecobes - Cégep de Jonquière

Louise Balaux
Coordinator, Développement pédagogique
Cégep de l'Abitibi-Témiscamingue

Diane de Grosbois Educational Advisor
Collège Ahuntsic

Daniel Gatien
Science teacher
John Abbott College

Gilles Kirouac
General Secretary
Université Laval

Alain Lamarre
Associate Academic Dean
Cégep Vieux Montréal

Éric Lavigne Coordinator, *Science, Creative Arts, Literature, and Languages* Program
Collège André-Grasset

M. Jean Morin
Academic Dean
Collège Laflèche

Lise Ouellet
Coordinator, Service de développement pédagogique et institutionnel
Cégep de Sainte-Foy

Jocelyne Bolduc Project Coordinator
(September 2004 to February 2006)
Commission d'évaluation de l'enseignement collégial

Jean Perron
Project Coordinator (from February 2006)
Commission d'évaluation de l'enseignement collégial

1. Commissioner responsible for operations since January 2007. Patricia Hanigan served from September 2005 to June 2006; Nicole Lafleur served in an acting capacity.

Appendix 4

Outside Experts

Chantal Alarie
Biology teacher
Collège Laflèche

Nadine Arbour
Researcher
Groupe Ecobes - Cégep de Jonquière

Hélène Arsenault
Nursing teacher
Cégep de Baie-Comeau

Rachel Aubé
Academic Dean
Cégep Beauce-Appalaches

Chantal Audet
Graphic-arts teacher
Dawson College

Johanne Authier
Educational advisor
Collège Ahuntsic

Louise Balaux
Coordinator, Développement pédagogique
Cégep de l'Abitibi-Témiscamingue

Michel G. Barette
Artistic director
Coopérative de spectacles Zakouski

Marie-France Bélanger
Academic Dean
Cégep de Sherbrooke

Marcel Benoît
Program coordinator
Professional Music and Song Techniques
Cégep de Drummondville

Pierrette Bergeron
Educational advisor
Cégep Limoilou

Edward Berryman
Sociology teacher
Cégep de Sainte-Foy

Sylvie Bessette
Educational advisor
Cégep de Sherbrooke

François Bibeau
Associate Academic Dean
Cégep Limoilou

Youri Blanchet
Teacher, *Graphic Arts*
Cégep de Rivière-du-Loup

Lucie Boissinot
Artistic and educational director
Les Ateliers de danse moderne de Montréal inc.

Jean-Pierre Bonin
Educational advisor
Collège Ahuntsic

Michelle Bouchard
Educational advisor
Collège d'Alma

Vincent Bourassa
Organic architect, Integrator
CSST

Jeannot Bureau
Educational advisor (retired)

Pierre Cadieux
Training consultant

Claude Caron
Professor
Université Laval

Madeleine Cauboue
Professor, Department of Forest and Wood Technologies
Cégep de Sainte-Foy

Florian Côté
Educational advisor, Continuing education
Collège d'Alma

Fernand Cousineau
Economics teacher
Cégep de Matane

Françoise Creusot
Teacher, *Paralegal Technology*
Séminaire de Sherbrooke

Diane de Grosbois
Educational advisor
Collège Ahuntsic

Anna Dera
Biology teacher
Champlain - St. Lawrence

Denis Deschamps
Educational advisor
Cégep de Victoriaville

Céline Deschênes
Program coordinator, *Respiratory and Anaesthesia Technology*
Cégep de Sainte-Foy

François Desjardins
Associate Academic Dean
Cégep de Rimouski

Jo-Anne Dittmann
Educational advisor
Cégep de Granby Haute-Yamaska

Marie-Michelle Doiron
Educational advisor
Cégep de Rimouski

Hélène Dozois
Fashion-Marketing teacher
Campus Notre-Dame-de-Foy

Martine Dumais
Officer, Student Success Center
Cégep Limoilou

France Dussault
Coordinator
Cégep régional de Lanaudière à Joliette

Yves Favreau
Coordinator, Modern Languages Department
Marianopolis College

Anne Fitzpatrick
Associate Academic Dean
Marianopolis College

Claude Fortin
Teacher, *Mechanical Engineering Technology*
Cégep Limoilou

Francis Foy
Consultant, Retail marketing management

Marie-Claude Frenette
Teacher, *Paralegal Technology*
Collège de Maisonneuve

Marie Gagnon
Associate Academic Dean
Collège de Maisonneuve

Sylvie Garant
Educational advisor
Cégep de Jonquière

Nancy Gardner
Research and Development Officer
Canadian Food Inspection Agency

Daniel Gatien
Science teacher
John Abbott College

Hélène Gaudreau
French teacher
Cégep de Sainte-Foy

Brigitte Giroux
Associate Academic Dean
Cégep de Saint-Hyacinthe

Claude Grégoire
French teacher
Collège Mérici

Daniel Guillemette
Coordinator, Chemistry Department
Cégep de Sainte-Foy

Joann Hamel
Program coordinator, *Science* program
Cégep de Victoriaville

Richard Harris
Physics professor
McGill University

Michel Haworth
Graphics Arts teacher
Cégep Marie-Victorin

Lyne Hébert
Coordinator, Physical Rehabilitation Department
Collège Montmorency

Robert Howe
Higher Education Consultant

Alain Huot
Teacher, *Nursing*
Cégep de Lévis-Lauzon

Rocco Lafigliola
Physics professor
Marianopolis College

Denise Jamison
Associate Academic Dean
Cégep de Drummondville

Gilberte Jean
Teacher, *Creative Arts, Literature, and Languages*
Cégep de Rimouski

Suzanne Julien
Physiotherapist
CLSC Québec-Sud

Helen Keyes
Nursing teacher
Dawson College

Gilles Kirouac
General secretary
Université Laval

Jean-Paul Laberge
Program coordinator, *Community Recreational Leadership Training*
Cégep de Drummondville

Hélène Arsenault
Associate Dean, Academic and Students Services
Cégep de Drummondville

Jeannine Lafontaine
Chemistry teacher
Cégep de Sainte-Foy

Suzie Lagrandeur
Teacher, *Business Administrative Technologies*
Cégep de Thetford

Georges Thomas Lake
English teacher
Centennial College

Hélène Lalancette
Biology teacher
Cégep de Granby Haute-Yamaska

Alain Lamarre
Associate Academic Dean
Cégep du Vieux
Montréal

Patricia Lapointe
Educational advisor
Cégep Limoilou

André Lapré
Academic Dean (retired)
Collège André-Grasset

Lyne Larocque
Director, Service center
CAA-Québec Travel

Carol LaVack
Educational advisor
Cégep de Drummondville

Éric Lavigne
Program coordinator, *Science, Creative Arts, Literature, and Languages*
Collège André-Grasset

Paul Lavoie
Associate Academic Dean
Cégep de Sherbrooke

Denis Le Bel
Teacher, *Graphic Arts*
Cégep Marie-Victorin

André Leclerc
Associate Academic Dean
Cégep de Trois-Rivières

François Leduc
Teacher, *Business Administration Technology*
Collège Montmorency

Maurice Lorent
Educational advisor (retired)
Cégep de Beauce-Appalaches

Danielle Malbœuf
Associate Academic Dean
Collège François-Xavier-Garneau

Carlo Mandolini
Cinema and communication teacher
Collège André-Grasset

Bruno Martel
Physics professor
Cégep de St-Félicien

Roger Martineau
Coordinator, Communications and development (retired)
Cégep de Victoriaville

Thomas McKendy
Associate Academic Dean
John Abbott College

Katherine McWhaw
Educational advisor
Dawson College

René Moisan
French teacher
Champlain - St. Lawrence

Christian Morin
Educational advisor
Cégep de Sainte-Foy

Jean Morin
Academic Dean
Collège Laflèche

Jean-Paul Laberge
Recruiting officer
Desjardins Sécurité financière

Mireille Nadeau
Program coordinator, *Science* program
Cégep de Trois-Rivières

Gilles Nédélec
Teacher, *Science*
Collège d'Alma

Yves Noël
Teacher, *Mechanical Engineering Technology*
Cégep de Trois-Rivières

Lise Ouellet
Coordinator, Service de développement pédagogique et institutionnel
Cégep de Sainte-Foy

Camil Pagé
Coordinator, Mathematics Department
Cégep de Sainte-Foy

Guy Papillon
Academic Dean
Cégep de Saint-Hyacinthe

Élaine Paré
Teacher, *Respiratory and Anaesthesia Technology*
Cégep de Sherbrooke

Jasmin Parent
Head, Medical Electrophysiology Department
Hôpital de l'Enfant-Jésus

Claude Parenteau
Music teacher
Cégep de Trois-Rivières

Guillermo Pieli
Chemistry teacher
Collège international des Marcellines

Jean-Paul Rajotte
Educational advisor
Cégep de Drummondville

Nicole Raymond
Associate Dean, Academic and Students Services
Collège de Bois-de-Boulogne

Benoît Régis
Teacher, Mathematics Department
Cégep de Thetford

Johanne Renauld
Academic Dean
Collège Bart

Michel Rioux
Specialist, Physical science
Ministère des Ressources naturelles et de la Faune

Quentin Robinson
Director
Quebec Lodge Camp

Nicole Rousseau
Director, Continuing Education
Cégep Limoilou

Brian Rowley
Mathematics teacher
Champlain - Lennoxville

Julie Roy
Fashion-Marketing teacher
Cégep Marie-Victorin

Jean-François Savard
Management consultant
Cégep Limoilou

Élaine Simard
Educational advisor
Collège de Rosemont

Robert St-Amour
Chemistry teacher
Collège Ahuntsic

France St-Jean
Teacher, *Respiratory and Anaesthesia Technology*
Collège de Rosemont

Ninon St-Pierre
Academic Dean
Collège international des Marcellines

Pierre Steiner
Consultant, Design and communication

Huguette Thibeault
Biology teacher
Cégep de Saint-Hyacinthe

Josée Thivierge
Research Officer, Sociology and anthropology
Cégep de Jonquière

Nicole Tremblay
Training consultant

Lyne Trottier
Teacher, *Dental Hygiene*
Cégep de Trois-Rivières

Daniel Trudel
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Cégep Limoilou

Mireille Vachon
French teacher
Marianopolis College

Gilles Valiquette
President
Musitechnic services éducatifs inc.

Nathalie Vallée
Coordinator, Technical Education
Collège Ahuntsic

Sylvie Vézina
Academic Dean
Collège O'Sullivan de Québec

Bruno Voisard
Chemistry teacher
Cégep André-
Laurendeau