

Chapter 7 A comprehensive program assessment

If I had to do a comprehensive assessment...¹⁰¹

Transparency

- Initially I would like to know what a comprehensive assessment is. What is its role? Is it used to validate my ability to synthesize, to give me the opportunity to do a synthesis or other?
- I would like to know what will be evaluated, the evaluation methods used and the relative importance of the various components, from the very start of the program.
- I would like to know the test methods used, the consequences for failure in a course section, and conditions for rewriting an exam.
- I would like to know in advance what will be evaluated and what is at stake.
- I would like to know from the start – the beginning of the program – what the objects of the test are and I would like to be reminded of them during the course of the program.

Author's note:

The statements shown here are the spontaneous thoughts of teachers on comprehensive program assessment. They were collected by Cécile D'Amour during a series of ten professional development courses. Participants were given a few minutes to identify the characteristics of a comprehensive assessment that would validate their learning at the end of the program.

Connection to learning objectives and training

- The test at the end of a program should not be a complete surprise. The evaluation of learning done during the course should have prevented me from making it to the final evaluation without being sufficiently prepared. Weaknesses in my learning should have been identified and communicated to me.
- The test should be a logical continuation of the training. It should be relevant to the training both in terms of content and type of tasks.
- There should be a connection, a common thread between the courses, the evaluations within the course and the comprehensive program assessment, so that progressive integration can take place.
- The whole of the program should be taken into consideration; the test should reflect the same proportion of disciplines as found in the program.
- From the start of the program, I should be given opportunities to participate in activities that assist in the integration of learning.

Objects of the evaluation

- It should be a general test that encompasses the whole and not just a “part” of the learning; it should validate the mastery of essential learning.
- It should not only test knowledge.

¹⁰¹ Translated from *Pédagogie collégiale*, vol. 10, n° 1, October 1996.

- I would like it to be an opportunity for me to demonstrate my autonomy and my thoroughness, particularly as this autonomy applies to learning. At the end of a pre-university program for example, I should know how to acquire new learning on my own.
- The test should cover multidimensional objects and call into play several competencies.
- I would like the evaluation to deal with how I judge what I am doing, to evaluate my critical sense of judgment.

Evaluation methods

- We could use case studies, actual situations.
- The test should contain several sections to respect the scope and diversity of what is being evaluated. These sections could be classified as to the nature of the tasks and the time when they are “administered”. Even for pre-university levels, the tasks in a test must connect to real life situations.
- I would like the test to be in a format other than a written exam with time limitations.
- Several of my productions or processes should be taken into account, and observations should be made from several perspectives.
- I would like the tasks and conditions in which the test will be carried out to be authentic relative to the situations I will encounter in my professional practice. For example, the use of teamwork.

An interesting and stimulating challenge

- The first thing I would like is that we stop calling it a “test”.
- I would like to see the test presented as a challenge rather than an obligation; an activity that is both interesting and enriching.
- I would like an “authentic” evaluation, not a “phoney” one; I would hope that professors have faith in the evaluations (meaningful within the program and not just in keeping with ministerial demands).
- I would make room for personal expression.

The level of difficulty and requirements

- The level of difficulty for a test should be comparable to all other tests leading to similar certification.
- Professors who teach the program should be able to “pass” the test themselves; the student should not be asked to do something that the teacher cannot do.
- The requirements should be appropriate; success should be linked to minimum requirements in order to enter the labour market.

The timeframe for a comprehensive program assessment

- I would like the test to be given at the end of the program because until that moment, I am still learning. However, the test could be spread over a certain period of time (several days, one or two weeks).
- I would like the test to be given at the end of the program, without delay.
- It should not encroach on my vacation time.

Several of these reflections remain current. It would be interesting to validate them after several years of use within the college network in the implementation of the comprehensive program assessment.

To begin this chapter, we will review certain basic concepts and procedures along with a few examples of tools currently in use. Our interest in discussing this topic here has a lot to do with the qualitative analysis of comprehensive program assessments. This is why we are including three grids used to validate evaluation of learning practices within the program, that are to be used as pedagogical material in specific learning activities.

Chapter Synopsis:

Activity 7:

Evaluating a comprehensive program assessment

Tools:

Tool 7.A:	A definition of the comprehensive program assessment
Tool 7.B:	Objects of evaluation: essential learning Exit profile What is evaluated is being taught The grid of shared teaching responsibilities
Tool 7.C:	A good comprehensive program assessment: Conditions Student preparation during the program Choosing the type of evaluation test Example of a comprehensive program assessment
Tool 7.D:	Three grids for the evaluation or self-evaluation of a comprehensive program assessment

Document:

Document 7.A:	The evaluation of learning at college level: from course to program
Complementary document 5:	“The evaluation of learning at college level: from course to program”

Activity 7

Evaluating a comprehensive program assessment

Heading	Evaluating a comprehensive program assessment
Objectives	<p>Redefine the comprehensive program assessment.</p> <p>Validate the choice of tools used.</p> <p>Evaluate a comprehensive assessment.</p> <p>Reflect on current evaluation practices within the program framework.</p>
Description	<p>The implementation of a comprehensive program assessment is a complex activity from a program perspective. It is an opportunity to turn a critical eye on our evaluation by analyzing the components of the examination or test:</p> <ul style="list-style-type: none"> — Data relative to the program: essential learning as per the exit profile and the grid of shared teaching responsibilities. — Data relative to the evaluation test: <ul style="list-style-type: none"> ○ respect for the nature of a comprehensive assessment, ○ coherence between evaluation and training, ○ the criteria-based evaluation, ○ accuracy of the evaluation judgment and validity of the evaluation; relevance and thoroughness of the judgment development process, ○ stability of the evaluation judgment and results from one student to the next and from one version to another, ○ requirements concerning the student's relationship to the comprehensive assessment, ○ administrative implementation methods.
Unfolding	<p>A. Prerequisite: ask participants to provide a comprehensive assessment of their program.</p> <p>B. Pooling and discussions on the definition of a comprehensive program assessment. Has the perception of this program requirement evolved since its implementation? (Tool 7.A).</p> <p>C. In small work teams, evaluate the nature, relevance and thoroughness of tools used to collect data relative to the program: the exit profile and the grid of shared teaching responsibilities (Tool 7. B).</p> <p>D. Choose a comprehensive program assessment provided by a participant. Only one comprehensive assessment per work team. Working in teams of 4 to 6 people, proceed to the evaluation of this assessment using the three grids provided (Tool 7.D).</p> <p>E. Finish by reflecting and analyzing actual practices used in programs where participants teach. Do an analysis of difficulties encountered and enjoyable activities shared.</p>
Moderator's role	To fully understand the content of the three evaluation grids.

	<p>To create a climate favourable to reflection.</p> <p>To encourage questioning.</p> <p>To support interaction between participants.</p> <p>At the end of the meeting, to proceed to a common validation of personal evaluation practices.</p>
Participants' role	<p>To openly discuss and analyze evaluation practices.</p> <p>To support interaction between participants.</p> <p>To validate their frame of reference.</p>
Pedagogical material	<p>Tool 7.A: A definition of the comprehensive program assessment</p> <p>Tool 7.B: Objects of evaluation: essential learning Exit profile What is evaluated is being taught The grid of shared teaching responsibilities</p> <p>Tool 7.C: A good comprehensive program assessment: Conditions Student preparation throughout the program Choosing the type of test Example of a comprehensive program assessment</p> <p>Tool 7.D: Three grids for the evaluation or self-evaluation of a comprehensive program assessment</p>
Support documentation	<p>Review the documents in chapter 6, the data remains valid in the comprehensive program assessment.</p> <p>Pay particular attention to documents dealing with authentic evaluations.</p>
Complementary document	<p>Complementary document 5: "The evaluation of learning at college level: from course to program"</p>
Approximate duration	<p>Minimum: 3 hours</p>

Tool 7.A

Definition of a comprehensive program assessment ¹⁰²

A comprehensive program assessment (CPA) is a summative evaluation activity that takes place at the end of a program, whose role is to certify the level of development of final competencies resulting from student integration of essential learning acquired during the study program.

For a clearer picture, let us review the components. The comprehensive program assessment is:

- **an evaluation activity** To develop a CPA is to select and build a tool; it is also to create an evaluation activity and all that it entails: plan and carry out the tasks required for the development of the test, implement methods for collecting data and preparing candidates, identify methods for recourse and rewriting exams, select, train and provide evaluators with a framework, implement a review process of the test, its adjustment and the development of subsequent tests, etc.

- **a summative evaluation whose role is to certify** It is a component of the validation of study that attests to the achievement of student learning relative to the established program goal.

A criteria-based evaluation is necessary to certify the result of learning activities versus the targeted goal rather than the results of other students. This presupposes that minimum requirements have been established and communicated to the students from the start.

- **at program end** If the CPA validates results of acquired learning in the program, it is only fair and logical that it take place at the end of the training and that the evaluation judgment on the student be left until the very end, i.e. when the student has had an opportunity to acquire all essential learning.

- **the level of development** It is beneficial for both for the student, the instructor and others in the specific field (labour market or university) that the CPA establish the level of competency development resulting from integrated learning acquired in the program and not merely provide a “pass or fail” observation.

¹⁰² Translated from Cécile D’Amour, *L’évaluation des apprentissages au collégial: du cours au programme*, Fascicule III-IV, 2^e volet. Avenues quant au comment faire. Comment faire l’évaluation des apprentissages?, Comment faire l’animation pédagogique sur ce thème?, Performa collégial, Doc. E.4.3, January 1997.

- **of final competencies** Final competencies in a program integrate all the competencies targeted by the program and covered during the course. They are complex in nature.

It is due to the learning acquired (from various types of knowledge) and its integration that the student has the capacity to act in the many situations he will encounter in his training, in the labour market or at university.
- **resulting from the integration** The word *integration* covers a broad range, including *the integration of acquisitions in a specific system for the student*: retention, comparison, organization, personal acquisition i.e., making it his own, awareness of his acquired knowledge, the extent and limitations of this knowledge, awareness of his weaknesses, development of concepts and personal values linked to future fields of intervention; and what belongs to the *integration of acquired learning into practice* (speech or action). It is not a question of re-evaluating learning in relation to each course but rather its integration.
- **by the student** This implies that care must be taken to ensure the judgment represents the result of individual student learning even if some tasks within the framework of the test may have been achieved through team effort.

In addition, it is expected that the training and teaching objectives achieved be identical for all students, with each student achieving his own level of integration. When dealing with competencies that all students in the program should have developed, the CPA must leave room for the personal character of the training results for each student.
- **of essential learning acquired during the program** A study program is made up of two components, specific and general training; mastery of competencies and integrating objectives should attest to the integration of learning achieved for both aspects of the program.

Tool 7.B

Objects of evaluation: essential learning

The exit profile

What the CPA evaluates is the result of the integration of learning. It is not a question of evaluating what has already been evaluated in previous courses or of evaluating everything that was covered in the program. In order to identify objects of evaluation that are significant for the CPA, we must first identify essential learning.

Essential learning

Essential learning consists in a sufficient amount of fundamental learning to allow official certification at end of program. Essential learning is complex and multidimensional learning that has been constructed during the training through the on-going integration of learning achieved in many courses. Essential learning refers to global expectations at end of training and to the most fundamental knowledge as well as that which determines effective behaviour in the labour market or at university.

The exit profile includes the essential learning for a program

The exit profile must correspond to the *level of competency* that we expect to see in an entry-level technician in the labour market or in a graduate who undertakes higher education. This level of competency becomes *the object* to which the CPA refers.

The regrouping of this learning into separate dimensions

From a perspective of basic education we can define essential learning and classify it according to various dimensions. Basic training should be centered on five parameters:

- an exit profile based on essential learning and not essential subject matters;
- the essential learning can be generic and trans-disciplinary;
- the essential learning is dependent on the specific original contribution of each discipline as to its fundamental and essential concepts, methods, approaches and historical benchmarks;
- this learning must facilitate the continuous development of the person; and finally,
- this learning must favour the dynamic social integration of the person.

Basic training is expressed along two axes:

- a *trans-disciplinary* field (axis 1): training goals, attitudes, work methods, cognitive skills, oral and written communication skills;
- a *disciplinary* field (axis 2): concepts and approaches proper to various program disciplines.

What is an exit profile?

An exit profile includes the **educational objectives** that are defined for a given study program within a given **training program**.

Types of educational objectives:

- educational goals in general training
- educational goals in specific training
- general program objectives
- general educational goals in technical training

- objectives and standards determined by the ministère
- basic training
- professional socioaffective attitudes or capacities
- training elements of an establishment's educational project
- institutional orientations relative to basic training

Why an exit profile?

The exit profile is a training plan that primarily answers the question: *what type of person do we want to train?* An exit profile allows us:

- to explicitly define **training objectives** for a given study program;
- to establish **links** between the different courses within a discipline and different disciplines within the same program;
- to focus on what is **essential** to the training objectives; to facilitate **the integration of learning**;
- to identify **the contribution** of each course to the graduate profile;
- to define **explicitly** what will be **taught** and to share responsibilities for instruction (in which courses will the statements relative to the exit profile be taught?).

An exit profile includes:

- **a trans-disciplinary field (axis 1 of basic training) :**
 - work methods (ex.: to take notes, work in teams, manage time)
 - study methods (ex.: schematization, summaries)
 - cognitive skills (ex.: to analyze, synthesize, deduce, interpret) and intellectual processes (problem solving, decision-making)
 - oral and written communication skills
- **a disciplinary field (axis 2 of basic training) :**
 - essential knowledge: disciplinary concepts and methods specific for each program course

The content of the exit profile:

- is considered to be essential
- is considered as not having been acquired or completely acquired (that is why it is evaluated)
- is the subject of explicit instruction

Moreover, what is included must be the result of:

- planning
- teaching
- evaluation of learning

A reflection on comprehensive program assessments, and more globally on study programs as a whole, leads us to take into account the integration of learning, basic education or the development of the person, and the overall program approach.

Exit profile: Study program: Plastic arts (500.04)

Basic training

Axis 1: trans-disciplinary aspect

(personal development)

Axis 2: disciplinary aspect

(basics, concepts and approaches)

Integrating objectives	Personal attitudes	Procedures and study methods	Intellectual skills and processes	Oral and written communication	Concepts, principles, theories	Procedural knowledge
— To produce visual and artistic meaning	1.1 Displays intellectual curiosity and openness of spirit.	2.1 Can establish study and research goals	3.1 Shows proof of observation and analysis.	4.1 Drafts written communications that comply with rules for structuring text, spelling, syntax and grammar.	5.1 Identifies visual qualities from the sensory world and understands the interactive role they play.	6.1 Connects the formal, structural and semantic elements interacting in visual and artistic languages.
— To use the components and methods of organization for visual language	1.2 Is interested in various forms of artistic expression.	2.2 Uses reading and listening strategies to identify pertinent information in documented sources	3.2 Can produce summaries.	4.2 Communicates orally using appropriate terminology and rules for this type of communication.	5.2 Produces plastic visuals from observations and a summary of visual qualities from the sensory world.	6.2 Chooses and conceives work methods and artistic research based on his creative process.
— To use one's creativity.	1.3 Calls upon daring, playful spirit and imagination.	2.3 Takes notes in a clear and orderly way.	3.3 Is able to explain an artistic phenomenon.	4.3 Makes use of a variety of documentary sources.	5.3 Involves sensory perceptions in productions.	6.3 Plans technical stages for achieving the visual and artistic work.
— To conceive and produce various forms of images both stationary and in motion.	1.4 Shows commitment in his process	2.4 Locates, organizes, interprets and re-uses information from a variety of sources.	3.4 Uses critical arguments thoroughly.	4.4 Uses word processing software.	5.4 Identifies the components of visual language.	6.4 Uses a variety of tools, materials, procedures and technologies, exploiting their strengths and respecting their limits.

Basic training (continued)

Axis 1: trans-disciplinary aspect

(personal development)

Axis 2: disciplinary aspect

(basics, concepts and approaches)

Integrating objectives	Personal attitudes	Procedures and study methods	Intellectual skills and processes	Oral and written communication	Concepts, principles, theories	Procedural knowledge
— To establish links between the object of analysis, subject matter, tools and technical processes.	1.5 Achieves tasks autonomously and displays initiative.	2.5 Applies an intellectual work methodology.	3.5 Identifies problems.		5.5 Identifies organization methods for visual language.	6.5 Uses an analytical model in the history of art.
— To analyze, explain and critique various artistic productions from the visual arts world.	1.6 Acts with discipline, determination and perseverance.	2.6 Manages his time and stress effectively.	3.6 Displays an ability to make choices.		5.6 Knows the key theoretical concepts of colour.	6.6 Communicates orally or in writing on the production process of his images and their meaning.
— Awareness of what is at stake individually, socially, politically and historically with artistic creativity.	1.7 Displays a strong code of ethics.	2.7 Uses teamwork procedures.	3.7 Resolves specific problems by connecting knowledge from different fields.		5.7 Recognizes the specifics of various art forms.	6.7 Accomplishes the principal tasks required to organize an exhibition of works.

What is evaluated is being taught

The grid of shared teaching responsibilities

Once essential learning and learning indicators used in the summative evaluation have been defined, it is necessary to make sure that what is being evaluated has been taught. As seen in the exit profile definition, what is retained is essential learning and these “learning objects” must be included in instructional planning, the teaching content and the evaluation of learning.

The various learning objectives must be the understood implicitly. The grid of shared teaching responsibilities helps ensure this and establishes a progression of learning throughout the program. It highlights what is taught, in which course it will be taught and the type of instruction used, explicit, practical or transference.

Explicit instruction (E):

The direct instruction of knowledge, skills and attitudes resulting from the planning of teaching activities, the structuring and sequencing of the content and the evaluation of this knowledge.

Practical instruction (P):

Practical application of the methods and procedures taught during the explicit instruction. The student is expected to apply learning he acquired previously.

It will probably be necessary to review the instructional stages of explicit teaching either to review the learning or to provide feedback to the student.

Transfer-type instruction (T):

Knowledge, skills and attitudes already taught are used in another context or in a broader context. The ability to transfer knowledge means to apply knowledge and skills to situations that are different from those which prevailed at the time of the initial training. In the following pages, we will see a sample grid of shared teaching responsibilities.

Example: Grid of shared teaching responsibilities

Exit profile statements	Section 1				Section 2				Section 3				Section 4				Section 5				Section 6				General training									
Program																																		
Forest management																																		
E = Explicit instruction																																		
P = Practical instruction																																		
T = Transfer																																		
	190-FGN-03	190-FGH-03	420-FHA-04	190-FGQ-05	190-FGU-03	190-FGR-03	190-FGR-03	190-FGW-03	190-FGT-04	190-FGV-03	190-FGY-06	190-FGZ-05	3 350-FHA-03	190-FGX-04	190-FHA-07	190-FHB-07	4 410-FHB-04	4 410-FHB-03	190-FHC-03	190-FHD-04	190-FHE-03	190-FHF-03	190-FGH-04	190-FHH-05	190-FHI-03	190-FHK-06	190-FHL-10	190-FHM-10	6 601-XYZ-04	6 604-XYZ-03	3 340-XYZ-03	1 109-XYZ-02	abc-XYZ-03	
	Analysis of work functions	Characteristics of the wood	Computer concepts	Measurements of logs and wood products	First cutting procedures	Software specialized in the transformation of forest products	Data acquisition procedures	Data processing techniques	Classification of softwood	Characteristics of products derived from wood	Assembling and joining processes	Wood treatment and drying	Communication and direction of work team	Classification of hardwood and white pine	Problem resolution relative to transformation of wood products	Finished product quality control	Supervision of personnel	Company dynamics and environment	Management of finished products and residues	Health and safety at work	Resolution of problems in work organization	Inventory management	Planting layout	Production volume of a transformation unit	Production costs	Logistics of a transformation unit	Efficiency of a transformation unit	Production programming and control	French	English	Philosophy	Physical education	Complementary course	
1.1 Displays consistent quality of spoken and written English.	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
1.2 Is autonomous in the acquisition of knowledge.			E			E														E	P						T	T						
1.3 Adopts a positive attitude vis-à-vis change.	E			P	P																						T	T						
1.4 Ability to analyze situations by identifying the key components of the problem.															E	P				E	P						T	T						
2.1 Is attentive to his safety and the safety of others.	E			P	P							P			P	P			P	E	P	P		P		P	P	T	T					
2.2 Is methodical, conscientious, precise and timely.	E	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2.3 Displays determination and responsibility for the task to be achieved.	E	P	P	E	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	T	T					
2.4 Demonstrates an ease of adaptation for rapid changes in situations.												E												P			P	P						
2.5 Participates actively in the work environment and freely expresses his opinion.															E	P												P	T					

Example: Grid of shared teaching responsibilities (cont'd)

Exit profile statement	Section 1			Section 2			Section 3			Section 4			Section 5			Section 6			General training															
Program																																		
Forest management																																		
E = Explicit instruction																																		
P = Practical instruction																																		
T = Transfer																																		
	190-FGN-03	190-FGH-03	420-FHA-04	190-FGQ-05	190-FGU-03	190-FGR-03	190-FGR-03	190-FGW-03	190-FGT-04	190-FGV-03	1 190-FGY-06	1 190-FGZ-05	3 350-FHA-03	1 190-FGX-04	1 190-FHA-07	1 190-FHB-07	4 410-FHB-04	4 410-FHB-03	1 190-FHC-03	1 190-FHD-04	1 190-FHE-03	1 190-FHF-03	1 190-FGH-04	1 190-FHH-05	1 190-FHJ-03	1 190-FHK-06	1 190-FHL-10	1 190-FHM-10	6 601-XYZ-04	6 604-XYZ-03	3 340-XYZ-03	1 109-XYZ-02	abc-XYZ-03	
3.5 Takes notes that are precise and orderly for interpretation, the writing and drafting of a report.				E P	P	P	E	P		P	P			P	P			P	P	P	P	P	P	P	P	P	T	T						
4.1 Uses accurate terminology to write technical reports and to orally express an opinion.		E	E	E	E	E	E	E P	E	E	E			E P	P	P			P	E P	P	P	E P	P	E	E P	T	T						
4.2 Writes texts that conform to spelling and grammar rules, and the syntax particular to the language.	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	E				
4.3 Consults and uses technical documents in English (for French students)						E P				P	P											E P					T	T		E				
4.4 Verbally communicates an opinion, a directive, a report on teamwork or a presentation.	P									P	P		P					P	P	P	P							T	E					
4.5 Analyzes, explains and critiques with coherent and accurate text.	P			P	P			P		P				P	P			P	P	P	P		P	P	P	P	P	T	E		E			

Tool 7.C

Is it a valid comprehensive program assessment?

“A comprehensive assessment designed to attest to the development of competencies targeted in a study program must necessarily go beyond the totality or summary of the learning covered in the course. Located at the end of the program, it must also validate the result of individual training based on the level of competency achieved. For this, the comprehensive assessment must verify if the competencies targeted in the program were effectively developed.

The comprehensive assessment cannot be built on the basis of different things to be learned or be considered the sum of important knowledge that the student has to master. It must be built on the basis of the competencies targeted by the overall training program and analyzed using standards that define the level of expected competency. The test is not a synthesis, a digest of all that was learned. If this were the case, we could not determine the level of competency achieved based on cumulative learning.

The test cannot be an abstract of all things learned. It must focus on the ability to confront situations that are relatively complex. These situations are chosen based on the requirements demanded for entry level in the labour market or at university. The test must validate both the specific and the general training. Indeed, competencies developed in general training will determine the use of English documents (for French students) in certain situations, of deductive reasoning needed to identify the problem, and the quality of the texts to be produced. The problem situation is thus selected according to its propensity to require the broadest use of the competency and its components developed throughout the training program.

Competencies developed via specific training can be seen more clearly in tasks to be accomplished, whereas those developed through general training can be seen clearly in the ability to process the problem situation. However, all the competencies necessary for resolution of the problem are implicitly present in the chosen situation. The comprehensive assessment must essentially allow for the observation of the capacity to resolve relatively complex problems. To achieve this, the test must:

- introduce problem situations that are realistic;
- introduce situations representative of those encountered by beginners and neophytes;
- allow for a judgment to be rendered on the level of competency achieved.

In fact, a valid comprehensive assessment is not a collection of components that belong to prior tests and lower levels of training. These have already been evaluated. The assessment is not an abstract of prior learning evaluations. It is the evaluation of a higher level of training. The comprehensive assessment must allow the observation of student performance at every step of the problem solving process.

To accomplish this, the task must be:

- relatively complex;
- definitely new;
- representative of situations awaiting the graduate;
- sufficiently problematic to be a valid attestation of competencies developed by the program.

To perform a comprehensive assessment is to use an evaluation strategy, not for assessing learning but for assessing competency development. As in the case for the evaluation of learning, it will be necessary to distinguish between a learning situation and an evaluation. We very often believe that the most complex situation a student has to face is work placement. This is certainly possible. However, for a test to be valid the situations presented must represent real life situations and the learning must have enabled development of the competencies prior to their assessment. It is a test, a task that the student must accomplish that allows for the observation and qualification of specific competencies. This task is not to be predetermined, but rather developed by the student himself in relation to the problems presented to him.”¹⁰³

Preparing students throughout the program

Like other training interventions, the evaluation of learning is conceived and conducted within a program perspective. Evaluation methods among courses should display consistency and connections that motivate students to focus their efforts on learning and help integrate learning rather than compartmentalize it.

These evaluation methods are conceived by taking into account the student level of development, a level that increases as students advance in the program. They maximize the development of self-evaluation skills and metacognition. Within each course, evaluation activities support learning so that each course effectively contributes what is expected and so the different forms of learning acquired in the various courses are integrated to the whole as effectively as possible. The results of the summative evaluation carried out in each course accurately reflect the degree of *mastery of the acquired learning* for each student. In this way, subsequent courses can count on a certain basic acquired knowledge. When many courses contribute to the same objective, we have to design both the formative and summative evaluations with regard to the whole of the courses in order to best achieve overall objectives.

In short, *all evaluation interventions contribute in their own fashion to the integration of learning throughout the program*. At program end, the comprehensive assessment can officially validate the acquisition of essential learning for each student and its integration during the training period. As stated by Jacques Laliberté (1995):

“The comprehensive assessment will allow students to demonstrate their ability to integrate and transfer learning. It is the most elaborate and complete stage in a program progression where students will have had many occasions and varied contexts to develop and demonstrate their abilities.”

¹⁰³ Translated from Michel Saint-Onge, *Pour une épreuve synthèse de programme utile*, Les cahiers du Renouveau, cahier n° 3, Collège Montmorency.

Choosing the type of evaluation test

The CPA can take various forms: project at end of studies, research, simulation, case study, portfolio, resolution of complex problems, complex productions, practical demonstrations, summary exam accompanied by practical activities, work production, etc.

In the context of competency assessment, evaluation tasks are generally complex and mobilize several types of knowledge and resources. They are authentic in that the achievement context for the tasks represents real life, the workplace, or higher education. These tasks allow for “observable demonstrations” of learning achieved by the student. They must also allow for the collection of data that corresponds to the selected indicators and criteria.

The development of a complex evaluation task generally includes:

- a description of the initial situation;
- instructions on actions to be performed;
- precise details on expected results and method for presenting these results¹⁰⁴.

Examples of complex tasks that students can be asked to accomplish¹⁰⁵:

- design and production of a plan (research plan, intervention plan for a professional field, etc.)
- analysis, interpretation of results based on the context, a theoretical framework, etc.
- production of a summary on a topic, using various sources
- within a research framework: elaborate the problem situation, develop the methodology, data collection, data processing, interpretation of the results, etc.
- within the framework of a group or personal intervention: analyze the situation, determine the problem situation, plan of an intervention, implement the intervention, use technical resources, evaluate the results of the intervention;
- problem resolution;
- evaluation of a process or a production in a given field, in a field of activities;
- public presentation (art interpretation, sport presentation, etc.);
- composition, creation.

In the context of competency development, the choice and development of evaluation tasks must conform as much as possible to integration and authenticity criteria and focus on competency. With regard to situations that ensure the validity of evaluation tasks, Mitchell (1989)¹⁰⁶ proposes the following:

- initially look for tasks that can be carried out in real life situations (ex.: training in the workplace, probation, etc.);
- in the absence of real life situations, choose sample situations that relate to real tasks (ex.: partial training in the workplace, laboratory, role play, projects, etc.);

¹⁰⁴ For example, for the development of a complex task such as a “problem situation”, refer to the index card included and to the examples of problem situations presented in Pôle de l’Est, *Processus de planification d’un cours centré sur le développement de compétence*, 1996, p. 91, p. 303-305

¹⁰⁵ List of complex tasks generally requested of students in D’Amour and others, *L’évaluation des apprentissages au collégial : du cours au programme*, Fascicule III-IV, 2^e volet-Doc. D.12b, Avenues quant au comment faire. Comment faire l’évaluation des apprentissages? Comment faire l’animation pédagogique sur ce thème?, 1997.

¹⁰⁶ Adapted from L. Mitchell. “Evaluation of competency”, cited by J. Burke, *Competency Based Education and Training*, NY, The Palmer Press, 1989.

- In the absence of situations dealing with “real contexts”, evaluate student performance in simulated situations (for example, problem situations, case studies, authentic problems, etc.) by evaluating the learning used to resolve problems or deal concretely with situations (in-depth treatment).

The type of test selected must ensure that:

- methods used provide students with an opportunity to demonstrate what has been acquired in training;
- suggested tasks take into account the student’s level of integration at the end of the study program;
- proposed tasks are authentic;
- proposed tasks are truly representative of those encountered by a novice.

An example of a comprehensive program assessment is provided on the next page.

Example of a comprehensive program assessment

Presentation of the Plastic/Visual arts program (500.04)

The Visual arts (500.04) program is a pre-university training program designed primarily for those who wish to continue their studies in the visual arts.

This general-purpose training is required for entry into the following university programs: Visual arts, Teaching Art, History of art, Photography, Graphic arts, Design, Applied design, Multi-disciplinary arts, Cinematography and Scenography.

Integrating objectives of the program

Plastic arts (500.04)

- To produce visual and artistic meaning.
- To use components and methods of organization for visual language. Develop creativity,
- To conceive and produce images (stationary and in motion) in various forms.
- To establish links between the object of analysis, the subject matter, tools and technical processes.
- To analyze, explain and critique various artistic productions from the world of visual arts.
- To be aware of the individual, social, political and historical stakes relative to artistic creativity.

Summary of a comprehensive program assessment

The comprehensive program assessment is presented to the student in the following manner:

A. Production and distribution

1. Create an artistic work in visual arts. This work will attest to the integration of student knowledge and skills who has reached the end of his training program.
2. Showcase the work of program graduates in a professional context, within the framework of a collective exhibition.

B. Process and speech

3. Write an informative text on the work presented.
 - a) Document the process used to produce the work.
 - b) Analyze and situate it within the context of the history of art.

This part of the test is carried out through the use of a written text presented orally during a round table discussion or any other public presentation deemed appropriate.

Detailed description of a comprehensive program assessment

The work

Objective:

The student demonstrates his integration of knowledge and ability to produce visual meaning through the production of a work in the field of visual arts. He displays skills in conceiving and realizing a work of art by using tools, materials, techniques and processes specific to his field of knowledge.

Form and content:

The work produced within the framework of this integration activity is subjective, new and achieved in a discipline of the student's choice within the visual arts milieu. He makes his choice in consultation with the teacher and selects from the following: sculpture, installation, painting, drawing, digital photography, or video. He can choose one of these disciplines or integrate two or more.

The collective exhibition

Objectives:

The principal objective of this activity is to have the student showcase his work to the public in a professional context. The student must therefore display skills in organizing an exhibition of his work while taking into account all the aspects of such an activity. The student participates actively in all stages of realization: from the technical preparation to the exhibition of his work, from the promotion of the event to the communication of information on the work he is displaying.

Form and content:

An exhibition of works from each student within the group at the Musée régional de Rimouski or any other location deemed to be professional and appropriate. This exhibition includes communication normally used within these contexts:

- Press release
- Photographs of works on display
- Invitation, poster
- Summary texts of artistic approach used by the artists
- Interpretative texts for the public

Student tasks and responsibilities:

A. Individual responsibilities:

- To produce the work to be exhibited
- To draft a short informative text on the work
- To photograph the work to be exhibited
- To collaborate in all the stages of the project
- To offer assistance to other students in the group
- To help assemble exhibition, under the supervision students selected to oversee this task
- To attend the opening of the exhibition
- To draft a written text that will be presented orally during a round table discussion

B. Shared responsibilities for small groups:

- Advertising material: poster and invitation; press material: press release and interviews; interpretative sheets for the exhibition room: texts and index cards for work identification; planning of the physical layout of the exhibition, assembly and posting
- Assembly plans of and lighting
- Identification, packing and transport of the works; technical assembly of the work; lighting for the works
- Preparation of preview: invitation mailing list
- Reception for guests and a short speech to introduce the exhibition

C. Responsibilities shared by entire course-group:

- To maintain a climate favourable to the expression of individual viewpoints, while respecting the ethics relative to this type of activity
- To ensure the project maintains a professional quality

Written communication

Objectives:

The role of written communication is to validate student integration of knowledge and skills on a theoretical and historical basis. The written text also reflects the student's capacity to adequately use the language, to consult varied documented sources and to apply a methodology to work and research.

Form and content:

Create a text of approximately six pages (double spaced) using data processing software and print five copies on laser printer.

The text contains the following sections:

1. The process:
stages reached and choices made in the realization of the work
2. Problematics:
working hypotheses, research venues and aesthetic choices
3. Description and analysis of the work:
formal, structured and semantic components interacting in the visual arts
4. Positioning of the work within a historical context of art:
relationship between a student's work and a trend in art, a school of art or a movement in the history of art
5. Documentary sources consulted:
complete mediagraphy including at least two English references

The round table

Objective:

This main purpose of the activity is to validate student communication skills and ability to defend his arguments.

The student reads his written communication to the entire group and to jury members for the comprehensive program assessment.

Form and content:

The oral presentation of the written communication is done at a round table involving the group and the jury. The activity is held over two course periods and students take turns presenting their text, following a schedule established by the professor.

Each student is given a certain timeframe to give his presentation. He can add visual documents to his presentation or any other communication tool that enhances and clarifies the presentation.

At the end of their presentation, students answer questions from the audience. A discussion time is set aside at the end of the individual interventions. Those in attendance and the participants in the round table then initiate a discussion based on the ideas communicated during the presentation.

Realization context

The production of work to be exhibited

When the introductory courses and preparation for the integration project are over, students work individually or in small teams. There are regular meetings with the teacher and occasional meetings with the course group.

The production of work is done in a workshop and is supervised by the teacher. Work continues in a regular way outside the reserved period on the student's schedule (while respecting the weighting assigned to the course).

The student maintains a logbook during the realization of this project. It is regularly reviewed by the teacher so that individual student process can be monitored.

The collective exhibition

The teacher advises students of the various forms that this part of the integration project can assume. Following this presentation, the group uses critical thinking to help select the methods to accomplish this portion of the comprehensive program assessment.

When preparation begins for the collective exhibition, group meetings are more frequent and this continues until the end of the project.

Students work in teams and collaborate on the production of the exhibition. The teacher provides supervision.

Written communication (presented orally)

Once the exhibition is open, the student continues his work individually, meeting the teacher regularly for support in completing his written work.

The course group reconvenes during the last two weeks of the trimester for the oral presentations on the written work. This is followed by individual and collective formative evaluations of the project.

An evaluation of the comprehensive program assessment

Individual student production is evaluated by a jury comprised of three teachers within the program and if possible, a representative from the professional field.

Stages of realization

1. Preparatory stages for the realization of the integration project:
 - Methodology and pedagogical formula used for this activity
 - Rules and code of ethics for teamwork
 - Planning of work to be realized
 - Schedule for meetings
2. Choice and definition of problematics of the individual project, approved by the teacher
3. Planning of individual approach for the realization of the project:
 - Preliminary work (drafts, technical tests, models, prototypes, ...)
 - Documentary research
 - Choice of process, procedures, tools and materials
4. Establishment of timetable for individual meetings:
 - Regular formative evaluation on the approach used and partial results achieved within the process of actualization
5. Production of the work in a workshop
6. Planning of the collective exhibition
7. Distribution of tasks inherent to the preparation of an exhibition:
 - Preparation of the communication promotional material for the event: posters and invitations, press releases and photographs of works on display
 - Drafting of the interpretive texts for the exhibition hall
 - Sketch of proposed exhibition (layout of the exhibition area)
8. The exhibition:
 - Preparatory steps for transport and packaging of work.
 - Transporting works
 - Final exhibition plan
 - Exhibition and hanging up of works
 - Lighting
 - Placing the interpretive texts and identification cardboards
 - Preparatory steps for a private viewing of the exhibition
 - Welcoming guests at the private viewing
 - Media interviews
 - Dismantling of the exhibition, packaging and transportation for the return trip

9. Drafting of the written communication for the round table:
 - Documentary research
 - Detailed outline of text
 - Drafting and computer processing of text
- 10 Presentation of the written communication
 1. Individual and collective formative evaluation of the integrating project
 2. Summative evaluation of the integrating project by a jury

Cégep de Rimouski, 1999

Tool 7.D

Three grids in support of the evaluation and self-evaluation of a comprehensive program assessment ¹⁰⁷

1. Checklist for the documents required in the evaluation of a CPA
2. Summary description of the CPA
3. CPA evaluation grid

¹⁰⁷ Translated from Cécile D'Amour and the Research Group at Performa, *L'évaluation des apprentissages au collégial du cours au programme*, [s. l.], 1996 [http://www.educ.usherb.ca/performa/documents/fiches/D_Amour_et_al.htm], Université de Sherbrooke, Performa.

**Grid 1: Checklist of documents necessary
for the evaluation of a CPA
Evaluation of a comprehensive program assessment**

In terms of the following components, the document is:	complete	incomplete	missing
Program data			
1. Exit profile:			
— Essential learning required in general training			
— Essential learning required in specific training			
2. Grid of shared teaching responsibilities relative to specific training			
including those of general training			
“Test” data			
3. <i>General information</i>			
a) Number of sections			
b) Sequence of sections			
c) Relative importance of sections			
d) Methods used to make a judgment on the overall test based on the results obtained in each section			
e) Ways of providing student feedback			
4. <i>Information on individual sections of the test</i>			
a) Evaluated objects and integration dimensions covered			
b) Evaluation methods (ex.: project, problem situation, etc.)			
c) Learning indicators			
d) Evaluation criteria and their relative importance			
e) Minimum requirements for each section (success thresholds)			

With regard to the following aspects, the document is:	complete	incomplete	missing
<i>General conditions</i>			
f) Admission requirements for the CPA			
g) Passing requirement			
h) Conditions for success			
i) Conditions for rewriting			
Data on student preparation			
5. Information relative to the CPA that will be communicated to students (what information? when? how?)			
6. Preliminary preparation throughout the program: Effective training and evaluation methods on level of learning integration in the course			
7. Immediate student preparation (in particular for an “integrating activity” in a course)			
8. Preparation for rewriting for students who fail			
Comments by the creative team			
9. On the choices made (which ones? how? why?)			
10. On the relationship between the selected indicators and the acquired knowledge to be evaluated			
11. On the aspects to be improved in later versions of the CPA			
12. On the evaluation methods for CPA experimentation			
13. On the methods to consider during later development of equivalent versions of the test			

Grid 2a: Summary description of the CPA

Evaluation of a comprehensive program assessment

General information (refer to Grid 1, component 3)

	Summary <i>description</i> of each component
a) Number of sections	
b) Sequence of sections	
c) Relative importance of sections	
d) What ensures that the student is truly given an opportunity to demonstrate his acquired knowledge	
e) Methods for rendering a judgment on the overall test based on the results obtained in each section	
f) Student feedback	

Evaluation Grid 2b: Summary description of the CPA

General information (refer to Grid 1, component 4)

	Summary description of each component
<p>a) Evaluated objects and dimensions of integration that are covered</p>	
<p>b) Methods of evaluation (project, problem situation, training in the workplace, problem resolution, etc.)</p>	
<p>c) Learning indicators</p>	
<p>d) Evaluation criteria and relative importance</p>	
<p>e) Minimum requirements for each section (success thresholds)</p>	

Evaluation grid 2c: Summary description of the CPA

Information on general conditions (refer to Grid 1, component 4f, g, h, i):

	Summary description of each component
a) Admission requirements	
b) <i>Passing</i> requirements	
c) Conditions for <i>success</i>	
d) Conditions for <i>rewriting</i>	

Grid 3: Qualitative analysis of a CPA

Presentation

This grid is a tool used in the evaluation of a CPA test. It makes it possible to systemize the analysis of the test and record partial judgments that will be rendered for the final assessment of the whole. During the experimentation period of a CPA, the grid can also be used in a formative perspective to support the development of more satisfactory tests.

All evaluation grids are based on choices. This particular frame of reference refers to the summative evaluation and the integration of learning (components of the frame of reference that are valid for the evaluation both from a course perspective and a program perspective) as well as the definition and particular requirements of the CPA.

The requirements, which a CPA must respect, are numerous because of the nature of this test (summative evaluation at end of program) and its objectives (fundamental, indicative of student ability to transfer knowledge and resulting from the integration of varied learning acquired in the two program components).

The relative importance of the requirements varies according to the perspective.

Some are impossible to circumvent:

- on **an ethical** level (fairness and equity, for example); and
- on **the methodological** level (validity of the evaluation tools and the soundness of judgment, for example);

Others are of great importance:

- on **the pedagogical** level (the challenging and motivational character of the CPA and the feedback provided);

And one is highly significant:

- on the **practical** level (the efficiency of the operation).

It is noteworthy that all data recorded in the CPA file (data on the program data, on the test itself and on the students' preparation as well as comments of the creative team – see Grid n° 1) are used to make a judgment on the CPA test in question, but this data is not considered in isolation. Indeed, to judge whether each requirement relative to the CPA is respected, there is much data that must be taken into account simultaneously, as well as any interactions.

Codes used for marking judgments

For the overall judgment on the test

- U** “unsatisfactory”: certain requirements were not met and must be achieved or improved.
- P** “passing”: basic requirements are all met minimally (and some more than minimally) but improvements are expected.
- S** “satisfactory”: all requirements are met (more than minimally).
- VS** “very satisfactory”: all requirements are met more than minimally and on the whole characterized by a high level of quality.

For the judgment relative to each requirement

- NM** “not met”.
- MM** “minimally met”.
- SM** “satisfactorily met”.

Grid 4: Qualitative analysis of a CPA

Evaluation grid for the comprehensive assessment of a program

Overall judgment based on all the partial judgments recorded below.

Unsatisfactory: _____ Passing: _____ Satisfactory: _____ Very satisfactory: _____

Requirement ¹⁰⁸	NM	MM	SM
Data relative to the program			
1. Includes the essential learning for the program = <i>Exit profile</i> = Clear, concise and organized presentation			
2. Includes information to indicate at what moment and in what course it was achieved = Grid of shared teaching responsibilities = Information on relationships between fields of learning = Information on the progress of learning			
There is a consensus on the subject of this data for teachers involved in			
3. the specific training			
4. the overall program			
Data relative to the evaluation test			
A. Respect for the particular nature of a CPA			
5. Objects of evaluation selected for the CPA are representative of essential learning for the program			
6. The objects selected call upon learning achieved within the whole program (both components)			

¹⁰⁸ NM = not met

MM = minimally met

SM = satisfactorily met

Requirement ¹⁰⁹	NM	MM	SM
7. Objects retained for the CPA cover the required fields and the choices made in the subject matter are justified.			
8. The various dimensions of learning integration are present = Integration of acquired knowledge (retention, organization, personal acquisition, awareness of the acquired learning) = Integration of acquired learning into practices (in actions accomplished and arguments to support them)			
B. Consistency between evaluation and training			
9. Providing effective training so students acquire the necessary learning and reach the level of integration required by the test. We make sure what is evaluated has been taught.			
C. Criteria-based evaluation			
10. The evaluation judgment is criteria-based.			
11. The evaluation criteria are clearly defined.			
12. The minimum requirements are clearly defined.			
13. The requirement level is reasonable and corresponds to what could be expected from a graduate student.			
14. The requirement level is comparable to other CPAs.			
D. Accuracy of the evaluation judgment			
15. <i>Through the validity of the evaluation tool</i> The number, nature and sequence of the indicators in sections of the test, the authenticity of the tasks, the quality of the tools and the relevance of general conditions are likely to allow for an accurate judgment on what is being evaluated.			

¹⁰⁹ NM = not met

MM = minimally met

SM = satisfactorily met

Requirement ¹¹⁰	NM	MM	SM
<p>16. <i>Through the relevance and the thoroughness of the judgment development process</i></p> <p>The choice of evaluators, their work methods and supervision, how judgment is formed for each test section and for the whole test, and the benchmarks used for the judgments (evaluation criteria, definition of the minimum requirements) are likely to support the accuracy of the judgment.</p>			
E. Stability of the evaluation judgment and its results			
<p>17. <i>From one student to another, from one team of evaluators to another.</i> Conditions relative to the exercise of judgment are established in order to support the stability of the judgment.</p>			
<p>18 <i>From one test version to another</i></p> <p>Various versions of the test are designed to ensure the reliability of test results regardless of the version used.</p>			
F. Requirements concerning student relationship to the CPA			
<p>19. The test is designed to offer students a real opportunity to demonstrate acquired learning (nature of the test, latitude given students, opportunity to be heard, etc.).</p>			
<p>20. The test is designed so that results accurately reflect the degree of mastery achieved by students at the end of the program.</p>			
<p>21. The test is designed so that results accurately reflect the degree of mastery of a particular student, while taking into account the singular character of the integration achieved.</p>			
<p>22. The nature of the test is such that it becomes a meaningful student activity, a challenge, a stimulating and motivating undertaking.</p>			

¹¹⁰ NM = not met

MM = minimally met

SM = satisfactorily met

Requirement ¹¹¹	NM	MM	SM
23. Measures are taken so that rules that impact the activity are known and understood by the students.			
24. Evaluations done during courses are designed to give students an accurate picture of their progress in the attainment of learning evaluated by the CPA.			
25. Methods to provide students with feedback on the test are identified. The main purpose is to help students understand the judgment made by the evaluators, but they also provide a clear understanding of the learning they have acquired, at the very moment they enter a new phase in their ongoing training.			
26. Measures are taken so that students who fail the CPA can adequately prepare for rewriting it.			
G. Requirements relative to the overall CPA			
27. The elaborated CPA is the result of a consensus among teachers involved.			
28. in the specific training			
29. in the overall program			
30. The elaborated CPA complies with policies relative to the evaluation of learning.			
31. The CPA operation is efficient: it is carried out correctly while respecting the responsibilities, time and effort required by teachers and students alike.			

¹¹¹ NM = not met

MM = minimally met

SM = satisfactorily met