

Chapter 2 From teaching to learning: the impact on evaluations

General presentation

Important changes are taking place and impacting the pedagogical foundations of education and particularly the evaluation of learning.

“The concept of learning that has generated various reforms in Québec points to a paradigm rupture” (Tardif, 1998) a transition from a teaching paradigm to a learning paradigm. What does this mean? It does not mean that teaching now becomes a secondary function and that the focus is now exclusively on learning. Rather, it is a different way of viewing the relationship between learning, teaching and evaluation. These three components are no longer seen as independent entities; they are now seen in dynamic interrelationships within the educational framework of activities implemented by the teacher.”¹

“We see a major change in perspective in current teaching literature relative to the evaluation of learning. We echo this new perspective in the following pages, especially as concerns the authentic evaluation and competency assessment.”

The following authors emphasize a number of important changes linked to the new paradigm.

Robert Howe affirms:

“The evaluation per se, is a topic seen more and more frequently in writings on education. We question evaluation practices used in our classrooms and see an opportunity to evaluate the various aspects of our school system. For many of us, this type of thinking arouses some concern: We know that change is in the air and that this change is impossible to circumvent. We suspect it involves the way in which we evaluate learning. We also know that we will be personally challenged sooner or later, because our beliefs are at the core of the issue. Many fear these changes, others await them eagerly. This difference in attitude relative to current trends in evaluation is a natural occurrence in major transitional states. We are living a great change of paradigm in evaluation and change brings a certain amount of confusion in its wake, as it always does.”²

Marie-Françoise Legendre adds:

“Evaluations bring out many fears: fear of not being objective, of losing control, of lowering the standards. No one remains untouched! For some, evaluation fulfills the promise of attaining learning objectives and provides a solid foundation for determining student success or failure, using pre-established criteria. For others, it is a support function that assists learning to ensure educational success for the greatest number of students. Some want to avoid the danger of lowering performance levels. Others find it necessary to reconsider the role of evaluations in the global context of learning activities and instruction based on competency development. [...]

The transition from programs based on objectives to programs centered on competency development points to a paradigm shift that has serious repercussions on the way we view evaluations, their role in learning, the culture in which they originate and new requirements relative to accountability and methods used. We will initially specify what this “paradigm shift” is, and its implications on the evaluation of learning. We will then tackle the central question of

¹ Translated from Marie-Françoise Legendre, “Favoriser l’émergence de changements en matière d’évaluation des apprentissages”, *Vie pédagogique*, n° 120, September-October 2001, p. 15-19.

² Translated from Robert Howe, “Un nouveau paradigme en évaluation des apprentissages”, *Pédagogie collégiale*, vol. 6, n° 3, March 1993.

evaluation in a competency-based program. Lastly, we will see that the function of evaluation must fall under a shared accountability that grants the central role to professional judgment but also makes room for other involved participants.”³

In referring to our neighbours to the south, Jacques Laliberté stated in 1995:

“In the United States, inherent limitations in the widespread use of standardized tests led specialists and educators to seek other ways of evaluating student learning. Other factors include the ever-increasing influence of cognitivist and constructivist theories of learning and the influence resulting from a competency-based education or, on a larger scale, outcome-based education. All the above have profoundly affected the concept and implementation of the evaluation of learning for our American neighbours.”⁴

At the end of her research for Performa, Cécile D’Amour (1996) concludes:

“The new perspective is so different from the one which currently prevails that it is referred to as a new paradigm, a new frame of reference i.e., a set of concepts, hypotheses, principles and behaviours adopted by a community of researchers and intervenors that use them as general guidelines for research and activity in the field.

At a time when many colleges are questioning the evaluation of learning, this new paradigm can undoubtedly help move things along. It can be a frame of reference for teachers who wish to reflect on their evaluation practices and their underlying beliefs and values. It can be a promising path for teachers who seek to get out of “the rut of managing grades” and who want to make evaluations an educational activity. It can also be a source of inspiration for new learning evaluation methods currently being implemented in colleges, to ensure they do not become mere administrative tools but rather ways to improve the quality of teaching and learning.”⁵

To fully grasp the nature of these changes, this chapter documents the transition from a teaching paradigm to a learning paradigm as well as the characteristics of an evaluation of learning based on the new paradigm.

³ Translated from Marie-France Legendre, “Favoriser l’émergence de changements en matière d’évaluation des apprentissages”, *Vie pédagogique*, no 120, 2001.

⁴ Translated from Jacques Laliberté, “D’autres façons de concevoir et de faire l’évaluation des apprentissages”, *Pédagogie collégiale*, March 1995.

⁵ Translated from Cécile D’Amour et Groupe de travail à Performa, “Une évaluation des apprentissages marquée par le nouveau paradigme”, *L’évaluation des apprentissages au collégial : du cours au programme*, Fascicule II. Cadre de référence. Première partie : Les questions préalables, première édition, [s. l.], April 1996, p. 15-18.

Chapter synopsis:

Activity 2:

Characteristics of the evaluation of learning based on the new paradigm

Learning tools:

Learning tool 2.A:	From a teaching paradigm to a learning paradigm
Learning tool 2.B:	Summary of the characteristics of the two paradigms
Learning tool 2.C:	Statements to be discussed
Learning tool 2.D:	Summary of the characteristics of learning evaluations based on the new paradigm

Documents:

Document 2.A:	A new paradigm in the evaluation of learning
Document 2.B:	“Supporting the emergence of change in the evaluation of learning”
Document 2.C:	“Bringing changes to the evaluation of learning”

Complementary document:

Complementary document 2: “Alternate ways of designing and evaluating learning”

Activity 2

Characteristics of the evaluation of learning based on the new paradigm

Heading	Characteristics of the evaluation of learning based on the new paradigm
Objectives	<p>To identify the characteristics of the teaching paradigm and the learning paradigm.</p> <p>To recognize the characteristics of a learning evaluation based on the new paradigm.</p> <p>To evaluate the impact on evaluation practices.</p>
Description	<p>This activity describes the paradigm shift and its implication in the evaluation of learning.</p> <p>The task involves examining the new perspective, identifying its underlying dimensions and factors of change, reading its literature and identifying the characteristics of an evaluation of learning based on its perspective.</p> <p>The new perspective has a major impact on the way we conceive and implement learning evaluations. It also represents an opportunity to measure its influence on evaluation practices.</p>
Unfolding	<p>A. Individuals review:</p> <ul style="list-style-type: none"> — the first two pages of learning tool 2.A: “From a teaching paradigm to a learning paradigm”; — the summary tables of learning tool 2.B. <p>B. Group discussions to validate the understanding of participants, using learning tool 2.C.</p> <p>C. Beginning with a summary of characteristics of the learning evaluation, based on the new paradigm:</p> <ul style="list-style-type: none"> — to validate comprehension, compare characteristics using learning tool 2.D: “Summary of the characteristics of the evaluation of learning based on the new paradigm”; — to identify what is new and what is similar to current practices. <p>D. Evaluate the impact on personal evaluation practices (reference document: Document 2.C).</p> <p>E. Perform a final assessment so individuals can draw a portrait of their own evaluation practices, taking into account the new perspective based on the paradigm shift.</p>

Moderator's role	To create a climate favourable to peer interaction. To present frequent summaries so participants can validate their understanding.
Participants' role	To perform required reading. To openly express personal concepts and perceptions. To interact with other participants. To do a personal assessment.
Pedagogical material	— Learning tool 2.A: From a teaching paradigm to a learning paradigm — Learning tool 2.B: Summary of the characteristics of the two paradigms — Learning tool 2.C: Statements to be discussed — Learning tool 2.D: Summary of the characteristics of the evaluation of learning based on the new paradigm
Support documentation	As an extension to the activity, reading the following will clarify the changes relative to the new paradigm. A description can be found in the previous pages. — Document 2.A: A new paradigm in the evaluation of learning — Document 2.B: Supporting the emergence of change in the evaluation of learning — Document 2.C: Bringing changes to the evaluation of learning
Complementary document	Complementary document 2: “Alternate ways of designing and evaluating learning”
Approximate duration	This activity can be divided into two parts: Part A and B, approximately 2 hours. Part C, D and E, approximately 3 hours.
Comments	The discussions will be more beneficial if participants are asked to read the material beforehand.

Learning tool 2.A

From a teaching paradigm to a learning paradigm

From a teaching paradigm to a ...	Learning paradigm
<p>In a teaching paradigm, learning is subordinate to teaching. In other words, students learn because they are taught and it is primarily the quality of the instruction they receive which determines the quality of their learning. From this point of view, the emphasis is on the teaching process more than on the learning process, and on the products or observable demonstrations of learning more than on the thought process or the reasoning process that underscore them. This concept, inherited from learning behaviorists and mastery learning in particular, places the emphasis on the “a priori” determination of objectives that correspond to the totality of skills— be they attitudes, aptitudes or knowledge — that we plan on teaching students and on the development of evaluation processes to determine with precision if the subject taught was actually learned.</p> <p>In short, we tend to establish a direct correspondence between what is evaluated and what is learned, between what is learned and what is taught. Teaching, learning and evaluation then correspond clearly to three distinct times within a linear sequence, and the student is unable to learn unless he has been taught and evaluations focus only on what was learned and consequently, taught!</p>	<p>In a learning paradigm, teaching does not determine learning. Its function is primarily to guide and support it. Therefore, it is not because someone teaches that the student learns since learning takes place independent of specific instruction. We can teach very well and still not achieve the desired learning objectives (Saint-Onge, 1992a). It is therefore impossible to establish a direct correspondence between what is taught and what is learned, since learning does not begin and end with teaching. It is equally impossible to evaluate with exact precision what has been learned as the student often calls upon knowledge other than what has been specifically taught (Legendre, 1998).</p> <p>In short, it is not because teaching takes place that students learn, but rather because learning is a complex process that is cognitive, social and emotional by nature, requiring specific teaching practices adapted to the nature of the processes mobilized. Such a paradigm regards evaluation as an integral part of the learning process.</p>

This is the perspective from which programs based on objectives are created, characterized by the establishment of numerous fragmented objectives corresponding to the knowledge and skills that must be taught and learned then evaluated. One of the negative side effects of these programs is that they anchor learning and teaching to the evaluation: we tend to teach what is easy to evaluate, and students tend to be motivated to learn relative to what will be evaluated! The result is evaluations that are undoubtedly appropriate for linear and fragmented learning, but that prove inadequate when it comes to evaluating global learning occurring through the progressive reorganization of prior knowledge – as is the case with competencies – rather than by the simple accumulation of knowledge.

Its primary function is not to sanction success or failure, but to support student learning and guide or reorient teachers in their pedagogical interventions. It presupposes a differentiated instruction, i.e. the ability to implement varied teaching and learning methods that take into account student diversity and allow them to travel on different paths towards academic success (CSE, 1993). This is the perspective of a competency-based program.

This program stresses the importance of not approaching the knowledge to be acquired in a compartmentalized and decontextualized way, but through interaction and in relation to contexts that validate its use (Legendre, 2000). It also calls upon the professionalism of the teacher who must select teaching strategies that are adapted to the targeted learning but also to the students and the specific context. Teaching, learning and evaluation are not considered sequential, like distinct moments in a process, but rather as dynamic interactions within the process. There is no need therefore to plan for evaluations that are separate from learning situations. Evaluations become an integral part of a teaching process that includes methods of regulation or self-regulation of learning and teaching activities.

Translated from Marie-Françoise Legendre, “Favoriser l’émergence de changements en matière d’évaluation des apprentissages”, *Vie pédagogique*, n° 120, September-October 2001, p. 15-19.

Learning tool 2.B

Summary tables

Table 1: Summary of characteristics of the teaching and learning paradigms⁶

Indicators	Learning paradigm	Teaching paradigm
Learning Concept	<ul style="list-style-type: none"> — Transformation of information and knowledge into viable and transferable knowledge — Integration of knowledge into cognitive diagrams — Creation of relationships 	<ul style="list-style-type: none"> — Memorization — Accumulation of knowledge — Interconnection of diverse knowledge
Classroom activities	<ul style="list-style-type: none"> — Begin with the student — Based on projects, research and problem situations — Interactive relationships 	<ul style="list-style-type: none"> — Begin with the teacher — High frequency of practical activities — Educational and vertical relationships
Evaluation methods	<ul style="list-style-type: none"> — Relative to competencies developed — Portfolios 	<ul style="list-style-type: none"> — Relative to knowledge — Tests requiring short answers
Proof of success	<ul style="list-style-type: none"> — Quality of understanding — Quality of competencies developed — Quality of knowledge constructed — Transferability of learning 	<ul style="list-style-type: none"> — Amount of information retained — Sometimes, the quantity of acquired knowledge
Teacher's Role	<ul style="list-style-type: none"> — Centered on providing support and the gradual removal of support — Sometimes a learner 	<ul style="list-style-type: none"> — An expert — A conveyer of information
Student's Role	<ul style="list-style-type: none"> — A builder — A collaborator — Sometimes an expert 	<ul style="list-style-type: none"> — A passive recipient — A learner who is in listening mode

⁶ Translated from Jacques Tardif, presentation to the ministère de l'Éducation du Québec, October 12, 1999.

The following table highlights differences between what the author calls “constructivism” (learning paradigm) and traditional trends (teaching paradigm) that are called “instructivism” because of the prevalence given to instruction (teaching) over learning.

Table 2: Principles of teaching/learning practices in constructivism and instructivism⁷		
	Constructivism (learning paradigm)⁸	Instructivism (teaching paradigm)⁹
Individual dimension		
1. Student’s role	Active builder of knowledge Collaborator, sometimes an expert	Person who listens Always a learner
2. Learning concept	Transformation of information into knowledge and meaning	Accumulation of information
3. Cognitive foundations	Interpretation based on prior knowledge and beliefs	Accumulation based on previously acquired information
4. Type of activities	Centered on the learner, vary according to learning styles Interactive relationship	Centered on the teacher Didactic relationship Same practical exercises for all learners
5. Type of environment	Supportive	Hierarchical
6. Type of curriculum	Rich in resources, centered on activities Provides access to information requested	Pre-established and fixed, provides only the resources required
7. Proof of success	Quality of understanding and construction of knowledge	Quantity of memorized information
8. Flow of activities	Self-directed	Linear and directed by the teacher
9. Evaluation	Relative to developed competencies, portfolios	Relative to information Tests with short questions Standardized tests
Social dimensions		

⁷ Translated from *La transition des instructivismes aux constructivismes par les technologies de la communication au service de l’enseignement/apprentissage à distance*, Télé-université, 2002. [<http://www.refad.ca/constructivisme.html>].

⁸ Author’s addition to the heading.

⁹ *Id.*

1. Concept of knowledge	A dynamic process that evolves over time and within a given culture	A static truth that can be acquired once and for all, independently of the learner
2. Teacher's role	Collaborator, facilitator, sometimes a learner	Expert, transmitter of knowledge
3. Teaching focus	Creating relationships Answers to complex questions	Memorization Focus on information
4. Principal actions	Centered on cooperative work Project development and problem solving	Individual readings and exercises
5. Social model	The community, sense of belonging People who act on their environment and are not only dependent on it Development of autonomy, metacognition and critical thinking	Classroom Learners as recipients of transmitted knowledge
6. The role of play	Play and experimentation as valid forms of learning	Play = waste of time Limited experimentation
Tools and technologies	Varied: computers, DVDs, technologies that impact the learner in his daily existence, books, magazines, periodicals, films, etc.	Paper, pencil, texts, some films, videos, etc.

In summary, this table shows that constructivists relate to a post-modern educational paradigm where the learner constructs his own interpretation of events and information. Knowledge is not set in stone. Authentic tasks and projects are considered stimulating. Constant collaboration is an integral part of educational practices.

Learning tool 2.C

Statements to be discussed

From a teaching paradigm to a learning paradigm

Statements to be discussed	My beliefs
Learning is subordinate to teaching. In other words, it is because we teach that the students learn and it is primarily the quality of the teaching that determines the quality of the learning.	Personal notes:
It is not possible to establish a correspondence between what is taught and what is learned.	Personal notes:
Students can only learn if they are subjected to some form of teaching and the evaluation must only deal with what has been learned.	Personal notes:
We tend to teach what is easy to evaluate and the students tend to be motivated to learn only what will be evaluated.	Personal notes:
The evaluation is an integral part of the learning process. Its principal function is not to sanction success or failure, but to support the student's learning process, to direct or reorient educational interventions.	Personal notes:
While support can be given to competency development, strictly speaking, we cannot teach a competency.	Personal notes:

Statements to be discussed	My beliefs
<p>Formative evaluation involves a rigid control of the learning progress for each student relative to the imposed criteria for success.</p>	<p>Personal notes:</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>
<p>To evaluate, regardless of the method used, is to make a judgment and the fact of assigning a grade on the basis of a normative or criteria-based evaluation in no way eliminates the involvement of judgment.</p>	<p>Personal notes:</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>
<p>If the evaluation administered to a student consists of completing a single exercise sheet, the teacher will not have access to pertinent data on which to judge the level of competency development.</p>	<p>Personal notes:</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>
<p>The transition from an evaluation centered on validation and selection to an evaluation, whose essential function is to support learning and teaching, marks an important shift in the evaluation culture.</p>	<p>Personal notes:</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>

Learning tool 2.D

Summary of characteristics of the evaluation of learning based on the new paradigm

The evaluation of learning at college is marked by the new paradigm; it is carried out in a professional manner and within a program perspective.

The evaluation of learning is characterized by ¹⁰ :	Which, on a methodological plane, signifies:
1. An evaluation adapted to a competency-based approach , resulting in complex, multidimensional, integrated and transferable learning.	An evaluation: <ul style="list-style-type: none"> — that is global, multidimensional; — contextualized; — that provides students with real opportunities to demonstrate their competencies; — while ensuring standardization in passing requirements and evaluation criteria.
2. An evaluation that truly serves learning , an evaluation that is integrated into teaching and learning processes: that guides and helps students to assume responsibility for their learning and, finally provides a reliable validation of learning achieved.	An evaluation: <ul style="list-style-type: none"> — that is dynamic rather than static; <ul style="list-style-type: none"> ○ with snapshots taken at specific times to create a picture of learning in motion; ○ concerned with results but also with the process; — carried out within a didactic perspective and not one that is exclusively docimological; — used not only to establish reports or make assessments but also for diagnostic purposes; — that offers the possibility of various adjustments in the pursuit of learning; — that takes into account not only cognitive but also affective aspects; — that calls on a variety of evaluators (teacher responsible for guiding the learning, other teachers, students, evaluators from outside the educational environment); — that withholds making a final judgment on the learning achieved until the end of the complete learning period
3. An evaluation that is criteria based , that judges the achievement of learning objectives rather than seeking to classify students in relation to each other (normative evaluation).	An evaluation: <ul style="list-style-type: none"> — concerned with validity rather than discrimination; — that makes use of qualitative approaches using descriptive methods.

¹⁰ Translated from Cécile D'Amour and Groupe de travail at Performa, *L'évaluation des apprentissages au collégial : du cours au programme*, Fascicule II. Cadre de référence. Première partie : Les questions préalables, première édition, [s. l.], April 1996, p. 15-18.

<p>4. A forward-thinking methodology, re-establishing the role of professional judgment and recognizing student accountability, a thorough and adapted methodology.</p>	<ul style="list-style-type: none"> — that is adapted: — to the first three characteristics; — to the function of a given evaluation: support for the learning process or certification of learning achieved; — thorough, which means: — it allows judgment to play its role; — its methods and learning tools (scales, calculations, etc.) are properly employed, in accordance with their conditions of use.
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This second part completes the table of characteristics and stresses the value of professional judgment¹¹.

<p>A culture of shared responsibility (Legendre, 2001, p. 18 et 19)</p>	<p>From the perspective of evaluations integrated into the learning process we should accentuate the support provided by various learning functions. This would lead to a clear definition of the roles of intervenors in student education, beginning with the student himself. Moreover, we should not underestimate the importance of support given by the institution in stimulating dialogue within the program team.</p> <p>Thus the role assigned to <i>professional judgment</i>, far from isolating the teacher in his decisions, is closely linked to <i>individual and collective methods</i> and is included in the culture of shared responsibility. In other words, to provide means that ensure the highest educational success for the greatest number of students is not the sole responsibility of the teacher, but that of the organization as a whole.</p>
<p>The preponderance of professional judgment</p>	<p>An evaluation, regardless of the format used, automatically implies a judgment and assigning a grade on the basis of a normative or criteria-based evaluation in no way eliminates the need for a judgment.</p> <p>The role of professional judgment does not introduce an arbitrary element into an apparently neutral evaluation process. It simply recognizes the role of judgment in any professional activity, whatever it may be. The mark of professionals is the <i>capacity to make a judgment</i> in their field of expertise. It therefore seems necessary to bring a certain clarification to the concept of <i>professional judgment</i>.</p>

¹¹ Translated from Marie-France Legendre, “Favoriser l’émergence de changements en matière d’évaluation des apprentissages”, *Vie pédagogique*, n° 120, 2001, p. 18 and 19.

The characteristics of professional judgment ¹²

A professional judgment is a judgment that is autonomous and based on responsibility.

All professionals are constantly faced with situations that they must evaluate in order to make decisions, direct their interventions and revise them as need be. A professional is not content to merely do what is asked of him. He has the necessary *autonomy* to determine what seems appropriate, based on the data available to him and his personal knowledge and experience. Professionals are able to assume *responsibility* for their decisions and choices since the latter are supported by recognized expertise.

A person is regarded as a professional when they possess knowledge and experience that allows them to evaluate in a suitable way the various situations they experience in their practice. He should be able to make sound decisions and to assume responsibility for them; to succeed in his actions and make any adjustments along the way, taking new data into account. Autonomy and responsibility do not mean that the professional acts alone. This is not the case. In fact, a mark of professional autonomy and responsibility is to seek advice from a more experienced colleague or to find the expertise which supplements our own, when dealing with a situation that taxes the limits of our competency. In this respect, the teaching profession is no different from any other. Teachers are not simple doers. In the context of their daily practice, they never stop evaluating situations in relation to clues they find significant, they continue to make choices and decisions (Perrenoud, 1996). To upgrade the teacher's professional judgment does not mean introducing something new into teaching practices but rather recognizing that this judgment exists and assigning its rightful role in an evaluation that is an integral part of daily practice. It means accepting to maintain evaluation as an integral part of a teacher's field of activity.

¹² Translated from Marie-Françoise Legendre, "Favoriser l'émergence de changements en matière d'évaluation des apprentissages", *Vie pédagogique*, n° 120, September-October 2001, p. 15-19.

<p>A professional judgment is made with the help of tools.</p>	<p>Teachers have various tools (didactic tools, evaluation and self-evaluation instruments, etc.) that can be used within their professional activities. They must sometimes adapt the tool to the particular situation at hand. When they evaluate a situation, make a decision and accomplish an action, all professionals have a wealth of resources available that they can use, when it is relevant, useful or necessary to do so.</p> <p>However, competency does not rely on the tools we have at our disposal, but rather on our ability to use them. A tool is not good or bad in itself, but in relation to its relevancy to a context or established goal. With regard to the evaluation of learning, specific tools can be suitable for making a clear diagnosis on certain components of the competency, yet prove completely inadequate when it comes to evaluating a competency in its totality. Accordingly, existing evaluation methods are not put aside but must support professional judgment. This makes it possible to delimit their use and, if necessary, to design other tools that are better adapted to the new requirements identified in the follow-up and assessment of competencies.</p>
<p>A professional judgment is based on a competency to observe while the situation unfolds.</p>	<p>To observe does not mean to collect information passively, it means to record observations, actively organize and interpret them based on a frame of reference. To assess the development of competencies on the basis of observation, two conditions are necessary: access to pertinent data and the ability to give that data meaning. To access pertinent data, it is important to call on a sufficient number of diversified learning situations so the students may apply their competencies and pursue their development. To interpret data requires a sufficiently precise representation of the competency whose development is being supported.</p> <p>Every task has limitations relative to the data it can provide and every task does not necessarily allow us to evaluate a competency. Therefore, a variety of tasks relative to what we want to observe is needed so that we may avoid making a global judgment based on limited data.</p> <p>It is also necessary to avoid establishing a term-to-term correspondence between the task and the object of evaluation. One task can call several competencies into play, and the same competency can be required in several distinct tasks. Admittedly, when the teacher gives the students relatively complex tasks that require more than one competency, it is not possible to observe everything at the same time. Observation is selective by definition and it is completely valid to favour specific data based on the goals or the information sought. But we must not fail to recognize competencies other than the ones targeted by the observation when they appear. <i>“What counts in observation, specifies Perrenoud, is more the theoretical framework that guides and governs the interpretation of what is being observed than the instrumentation used.”</i></p> <p>In this respect, the teacher’s observations are closely linked to the underlying</p>

	<p>frame of reference, both in the selection of pertinent data and their interpretation, i.e. to interconnect them to determine the meaning. The competency that will be observed presupposes not only the ability to design learning situations likely to provide interesting material for what we wish to observe, but also the ability to interpret the data collected based on our experience and knowledge. An adequate representation of competencies to be developed and learning situations likely to support their development proves to be essential.</p>
<p>Professional judgment is an evolutionary judgment.</p>	<p>Professional judgment is <i>an evolutionary judgment as it relies</i> on a portrait taken at a specific time in the process, a portrait that can be modified through the addition of new information. On the one hand, the competency is evolving, as is its evaluation since it relies on information observed at a specific moment and within a specific context and situation. On the other hand, observations by the teacher are incomplete and can be enriched by the contribution of new data. Indeed, according to the learning situations proposed to students and the disciplinary contexts in which they take place, teachers do not necessarily have access to the same data. It is thus important, particularly with regard to transversal competencies, to share observations that come from varied sources.</p> <p>It is indeed through their actualization in varied disciplinary contexts that teachers will be able to make an assessment of the student's transversal competencies. The teacher's judgment can thus be enriched by observations made by other participants, such as other teachers or intervenors and even the students themselves. Professional judgment rests on the close cooperation of the various intervenors. New data can cause the teacher to modify or revise a portion of the judgment. It can also bring about an evolution in the frame of reference that supports the observations.</p>
<p>The professional judgment must be an ethical judgment in conformity with a set of values.</p>	<p>Teachers must not be prejudiced in their judgement of students. Their interventions are intended to support learning and development and must be founded on a "concept of educability", i.e. confidence in the potential of the child (Meirieu, 1991). As an educator, every teacher is endowed with a certain "power" and has an influence over his students. He must use this power and influence in an ethical manner; he must be particularly sensitive to the impact his evaluations have on the development of the student's academic, personal and social identity. Experience acquired in educational environments often carries lasting influences on student self-image both as a learner and as a human being. It can have a determining impact on the student's future social and professional integration. With respect to ethics, the teacher must acknowledge the limitations of his professional judgment, the need for a solid foundation and the possibility that his judgment may be called into question.</p>

Conclusion

From the perspective of competency-based development, an evaluation should not be considered a separate entity from the learning process, whose sole function is to make a judgment on the learning achieved. Any situation can be viewed from the dual perspective of the learning it hopes to achieve and the observations it elicits in support of the evaluation. It is not necessary therefore to design evaluations that are distinct from learning situations.

In a program that places specific teacher interventions in the broader context of their contribution to general training, teachers are collectively rather than individually responsible for providing support to learning. The same applies to the evaluation that is part of the culture of shared responsibility. Lastly, in this context of collective responsibility, it is important to clearly recognize the roles and responsibilities of each individual and to examine them in light of their complementarity. It is from this perspective that professional judgment takes its true meaning and acknowledges the teacher's expertise.

The transition from an evaluation centered on approval and selection to an evaluation whose essential function is to support learning and teaching, marks an important change in our evaluation culture. It goes without saying that cultural changes do not occur overnight. We must take the time and apply the means necessary to evolve, to gradually modify current practices and adapt them to new requirements and constraints. We must also have a clear vision of the direction in which we are headed. Cultural changes do not mean that we must put aside all current practices and sweep them away. It is rather a realignment to better identify the role and limitations of current evaluation practices and to conceive of new practices that supplement, enrich and bring new meaning in a renewed context.

Document 2.A

A new paradigm in the evaluation of learning¹³

The evaluation of learning is not considered foreign to the pedagogical process. It is an integral part of teaching and learning; it facilitates the decision-making process as regards the behaviour of the professor and the process undertaken by the student.

The concept of evaluations is more and more evident in writings on education. We are questioning evaluation practices used in our classrooms and we see an opportunity to evaluate the various aspects of our school system. For many of us, this type of thinking causes some concern: we know that change is in the air and that this change is inevitable. We suspect that it involves the way in which we evaluate learning. We also know that we will be personally challenged, sooner or later, because it is at the very core of our beliefs. Many fear these changes, others await them eagerly. This difference in attitudes relative to current trends in evaluation occurs naturally in all major transitional states. We are living a great change in paradigm as regards evaluation and change brings, as it always does, a certain amount of confusion. [...]

The consequences

This new way of viewing evaluations forces us to re-examine the concept we have of the teacher-student relationship; it also causes us to question, among other things, the interpretation of grades that the professor assigns to his students as well as the impact of evaluations on teaching and learning.

The interpretation of grades

In an excellent study on grading practices, Suzan Brookhart explains that a grade assigned by a teacher will be analyzed on one hand, and used on the other. Therefore, because many professors worry about the use that will be made of the grade (failure of a student who was showing promise, abandonment of a training profile, difficulty in finding employment or gaining entrance to university), many teachers will add circumstantial variables to indicate the student has potential, has put forth valid efforts or shows promise. These variables (effort, participation, etc.) directly raise the grade that would be lower if based solely on acquired competencies.

This gives rise to a new problem. If we worry about the social impact of the evaluation to the point where we introduce diverse variables for the final grading, we reach a point where we are unable to interpret the grade assigned. According to Brookhart, several teachers are ambivalent when they think about the interpretability of the grade, on the one hand, and the social use of the grade on the other. According to her, several authors stress that this phenomenon calls into question the validity of evaluations and maintain that the interpretation of grades and the social impact of their use must be included in the criteria being analyzed with regard to the validity of an evaluation.

In the United States, professors are increasingly conscious of their social responsibility in this respect. Many are the target of lawsuits resulting from unjustified failures and successes among students.

¹³ Translated from Robert Howe and Louise Ménard, “Conseillers pédagogiques Collège Montmorency”, *Pédagogie collégiale*, March 1993, vol. 6 n° 3.

In this excerpt, references listed in the article were removed to avoid confusion with notes found at the bottom of the document page.

Teaching and learning

The choice of evaluation strategy, tools and practices impacts both students and professors, particularly in their selection of content and pedagogical approach. What is not evaluated tends to disappear from the *curriculum*. If this assertion is true, we can then say that exams and strategies used to evaluate have a determining influence on teaching and learning. According to Gong, evaluation has such a leverage effect that simply changing evaluation practices can modify teaching practices.

Guy Romano did some research on student study practices at college level. He notes that students develop study strategies that are more or less complex and have more or less depth depending on the exams they will have to pass. The choice of evaluation practice by the teacher (instrumentation, frequency, rating, feedback, strategies, and taxonomy levels) will therefore be the deciding factor, at least to some degree, for the study methods used by the students.

Lundeberg makes the same observations. If the student believes that the professor will evaluate his learning through the use of objective questions and that these questions usually measure memorized knowledge, he will tend to study superficially. Similarly, if students believe that the professor will use open questions and that these questions usually measure understanding or application skills, their study will be more in-depth and analytical.

Beginning with the first evaluation, students quickly pick up on what the professor considers important in the subject matter and tend to study relative to this perception. They tend to adjust their study strategies relative to their professor's evaluation strategy and this causal connection is so strong, according to Crooks that the best way of modifying student learning behaviour is to modify evaluation practices. Professors understand this and many try to influence the choice of study method by implementing specific evaluation strategies. In recent research, Green shows that some professors believe that "development questions" in exams are likely to discourage study when used to measure higher cognitive skills, because they call upon reflective and analytical capacities. According to these professors, students tend to trust their ability to improvise, to a certain extent. Based on this, teachers tend to use only objective exams that measure basic knowledge. On the other hand, some teachers believe that students study more when questions requiring development are used and that these questions lend themselves better to the measurement of higher cognitive skills. In spite of the apparent inconsistencies, these observations clearly show that professors want to adopt evaluation practices relative to the influence they want to have on study habits.

Conclusion

Although Ralph Tyler identified economic, social and political constraints needed "to shake off" the old paradigm, we recognize that research in humanities and evolution in the sciences of education and cognitive psychology help our understanding and the new paradigm to move forward. But the transition from the old to the new can be confusing. Indeed, in educational matters, we are not always able to accurately distinguish evaluation concepts by linking them to one paradigm or another. And, to complicate matters, many are not even aware that there is a paradigm – old or new – at the centre of the debate.

In any event, the old paradigm that dominated for the past forty years has given education an air of scientific precision while a encouraging tradition of scientific thoroughness, both in research and in psychometrics. But we are experiencing a definite paradigm shift in evaluation that is leading us to see evaluations as an integral part of education and a powerful tool for improving learning.

Document 2.B

“Supporting the emergence of change in the evaluation of learning”

Introduction

The many debates in the media on the evaluation of learning, held within the context of educational reform and the development of a new educational program in Québec schools, are very revealing. For one thing, the topic of evaluation brings out many fears: loss of objectivity, loss of control and lowering of *standards*. No one remains untouched! For some, it promises the achievement of learning objectives and provides an objective basis on which to determine student success or failure, as per pre-established criteria. For others, it should be a support to learning and assist in the academic success of the greatest number possible. Some fear that a change of perspective in evaluation will lead to a lower level of performance. Others consider it necessary to reconsider the role of evaluations in the global context of learning and teaching activities centered on competency development. To evaluate is to assess without knowing the impact of our evaluation; and to be evaluated is to be judged and, possibly, significantly impacted by the judgment (Lemay, 2000). It is thus not surprising that the question of the evaluation of learning is considered one of the major issues in the current educational reform.

The transition from programs based on objectives to programs centered on competency development points to a paradigm shift that has serious repercussions on the way we think of evaluations, their role in learning, the culture in which they originate and new requirements relative to accountability and methods. We will initially examine exactly what this “change in paradigm” is and its implications on the evaluation of learning. We will then tackle the central question of evaluation integrated in the learning process within a competency-based program. Lastly, we will see that this function of the evaluation must fall under a shared responsibility that grants a central role to professional judgment and makes room for other participants.

1. Change in paradigm

The concept of learning which supports the new educational program in Québec schools points to a “paradigm rupture” (Tardif, 1998) or, in other words, a break from a teaching paradigm to a learning paradigm. But what exactly does this mean? It certainly does not mean that teaching is considered a secondary function and that the focus is now exclusively on learning. It is rather a question of rethinking the relationship between learning, teaching and evaluation by seeing them not as independent entities, but rather in their dynamic interrelationship within an educational process. To better understand the nature of this change and its impact on the design of evaluations; let us briefly see what characterizes these individual paradigms.

From a teaching paradigm...

In a **teaching paradigm**, learning is subordinate to teaching. In other words, students learn because they are taught; and it is primarily the quality of the instruction they receive that determines the quality of their learning. From this point of view, the emphasis is on the teaching process more than on the learning process, and on the products or observable demonstrations of learning more than on the concept or reasoning process that underscores them. This approach, inherited from learning behaviorists and mastery learning in particular, places the emphasis on the *a priori* determination of objectives that correspond to the totality of skills — be it attitudes, aptitudes or knowledge — that we will teach and on the development of evaluation processes to determine with precision if the subject matter taught was actually learned.

In short, we tend to establish a direct correspondence between what is evaluated and what is learned, between what is learned and what is taught. Teaching, learning and evaluation then correspond clearly to three distinct moments within a linear sequence, with the student unable to learn unless he is subjected to instruction; the evaluation is focused exclusively on what was learned and, consequently, taught! From this perspective programs based on objectives are created and defined by numerous goals corresponding to the knowledge and skills that must be taught, learned, and then evaluated. One of the side effects of these programs is that they anchor learning and teaching to the evaluation: we tend to teach what is easy to evaluate, and students tend to be motivated to learn in relation to what will be evaluated! The result is evaluations that are undoubtedly appropriate for linear and fragmented learning, but which prove inadequate when it comes to evaluating global learning occurring through the progressive reorganization of prior knowledge, as is the case with competencies, rather than by the simple accumulation of knowledge.

...to a learning paradigm

In a learning paradigm, teaching does not determine learning. Its function is primarily to guide and support it. Therefore, it is not because someone teaches that the student learns, since learning happens independently of specific instruction, and we can teach very well and still not achieve the desired learning objectives (Saint-Onge, 1992a). It is not possible to establish a direct correspondence between what is taught and what is learned, since learning does not begin and end with teaching. It is equally impossible to evaluate with exact precision what has been learned, as the student often calls upon knowledge other than what has been specifically taught (Legendre, 1998).

In short, it is not because teaching takes place that students learn but rather because learning is a complex process that is cognitive, social and affective by nature, that requires specific teaching practices and that is adapted to the nature of the process used. Such a paradigm regards evaluation as an integral part of the learning process. Here, its primary function is not to sanction success or failure, but to support the student's learning process and guide or reorient the teacher's pedagogical interventions. It implies a differentiated instruction, i.e. the ability to apply varied teaching and learning methods that take into account student diversity and allow different students to take different routes towards academic success (CSE, 1993). This is the perspective of a competency-based program. This program stresses the importance of not approaching 'knowledge to be acquired' in a compartmentalized and decontextualized way, but through interactions and in contexts that validate its use (Legendre, 2000). The program also calls upon the teacher's professionalism in selecting teaching strategies that are not only adapted to the desired learning but also to the students and the specific context. Teaching, learning and evaluation are not considered sequential, like specific moments in a teaching process but rather as dynamic interactions within the process. There is no need therefore to plan for evaluations that are separate from learning situations. Evaluations become an integral part of a teaching process that includes methods of regulation or self-regulation of learning and teaching activities.

2. Evaluation integrated into learning

The ever-increasing distance between learning and evaluation is linked to the decontextualization of knowledge, disciplinary compartmentalization, the division of knowledge and the atomization of competencies. The growing gap is the result of the belief that knowledge and skills can be taught in small relatively stable units that are separate from each other and, once acquired, will combine and subsequently transfer from one context to another (for example: learning a grammatical rule, a list of vocabulary words, a definition, a mathematical algorithm, etc.) The learning situation consists of memorized knowledge and the use of previously taught skills, while the evaluation takes the form of a "test" relating to a specific subject, at a specific time and in a specific context, that is often artificial and restrictive (Tardif, 1998). In a competency-based approach, we cannot separate the acquisition of knowledge from the context in which it acquires its meaning. Consequently, the distinction between learning situations and evaluations seems of little importance. Every situation becomes an opportunity

for learning and evaluation insofar as it offers students the opportunity for metacognition, and an evaluation of the steps they has taken so far. It provides the teacher with observable data to track the development of competencies. One of the principal challenges of the new educational program in Québec schools is the emergence of new evaluation practices compatible with targeted goals, i.e. adapted to the process of developing competencies and to student diversity. It is within this context that **evaluation integrated into learning** takes its meaning, i.e. evaluations whose main role is to manage the learning process.

The regulation of learning and teaching activities

Let us say straightaway that with regard to the development of competencies, we cannot, properly speaking, teach a competency. A competency is not knowledge or skills that can be taught, learned, practiced, and then evaluated. For example, the competency to “write” is knowledge to act that mobilizes a diversity of external and internal resources and this competency is developed over the years. It calls upon knowledge and various strategies that the student will gradually have to adopt, but it cannot be reduced to procedural know-how that is applied in a certain order to a series of predetermined stages. There are various ways of completing a writing task depending on the goals, the nature of the activity, its context, the internal and external resources available to the student, etc. To approach learning from the perspective of competency development is to put in place learning situations that are favourable to this development, whether completing a task, solving a problem or carrying out a project.

From this point of view, a pedagogical structure includes the planning of learning activities based on clearly defined teaching goals, their adjustment along the way, and finally a review of the activities to facilitate learning. Since it is never possible to plan or anticipate all eventualities, teachers must adapt their own interventions to the effects observed. Similarly, they must provide timely feedback to the students on their process, which is also unpredictable. Teachers need to collect observations on the difficulties students have encountered and on the learning they have achieved so they can direct or reorient their teaching practices. Similarly, teachers need clues to evaluate the impact of their own interventions if they are to support students in their learning process. These aspects can relate to both the teacher’s pedagogical process and the student’s learning process. The on-going adjustments can relate to a specific aspect of the process or to more general aspects. We can thus establish a distinction between *micro-regulations*, which are short-term and integrated into the daily work of teachers, and *macro-regulations*, which are more systematic and call for a reflection by the teachers on their practice so they may re-direct their future interventions. They can occasionally resort to instrumentation but regulations are generally based on interaction that takes place during an activity. They also target the gradual involvement of students in the management or regulation of their own learning process.

The concept of regulation is linked to the well-known *formative evaluation* whose principal function is to ensure the progress of learning through a process of continuous regulation and that allows for adjustments or improvements along the way. In this respect, Perrenoud (1999) specifies: “*any evaluation that helps the student learn and develop is formative, in other words, it regulates the learning and development of an educational project*” (p. 120). Scallon (1999) formulates a similar notion when he discusses the formative evaluation in the context of situational pedagogy centered on the development of competencies and the achievement of trans-disciplinary objectives. Here, the emphasis is placed on the regulating role brought about by discussions between students and teachers and on the importance of involving student metacognitive capacity.

However, the concept of *formative evaluation* initially originated within the behaviorist approach to teaching and mastery learning, where the methods of regulation considered are corrective in nature and solely the responsibility of the teacher. The formative evaluation then exerts a stringent control over student progress relative to predetermined criteria that qualify success. It often takes the form of a criteria-based test, given after the learning period and followed by remedial teaching. In current practices, the formative evaluation has gradually lost its significance and initial purpose and become

synonymous with continuous micro-summative evaluations. The competency-based approach invites the academic environment to reconsider the formative evaluation within the broader framework of regulation and self-regulation processes occurring along the way, i.e., while the learning and teaching activities are unfolding, and subsequent to the activity, to better direct future teacher interventions. In this respect, the formative evaluation is only one form of regulation among others. The teacher's observations, student feedback, student interaction as well as co-evaluation and self-evaluation processes generally play an important role. In addition, the gradual assumption of responsibility by the student for regulating his activities not only supports learning, but, more importantly, represents a true learning objective since it involves developing students' metacognitive capacity by allowing them to self-regulate their own learning processes (Scallon, 1999).

The assessment of acquired learning

From the perspective of evaluation integrated into learning, it is not necessary to dissociate *the assessment of learning* that takes place at the end of the cycle and evaluates the learning achieved, from the *regulation activities* that support learning, since they complement each other. To assess learning, it is necessary to follow its progression. In developing competencies, a continuous regulation of learning and teaching activities is vital and it is considered beneficial to evaluate them at various moments within the cycle. The role of end-of-cycle assessments is to update the parents on their child's progress, let the student know where he stands and provide information for teachers in the upcoming cycle.

Even though **the assessment of learning** is linked to the *summative evaluation*, it is nonetheless different in many ways. In current practice, the *summative evaluation* can be generally summarized as the sum of partial results, as formal evaluations or tests carried out periodically during the school year. The assessment in this case is more a *snapshot* of the situation using a variety of data collected during the learning activity and not through formal evaluations designed for this purpose. This data is not merely cumulative but also subject to interpretation. This assessment is a global and summary evaluation relating to one or more competencies and generally accompanied by more precise data on certain aspects of learning. The data points to student difficulties and also to student strengths, since it is important to focus on these to support the student in his learning. When a student experiences certain difficulties that require intervention, they must be clearly defined in order to identify the appropriate support. But it is also essential to underscore students' acquisition, the progress they have achieved and the interest they display or the particular aptitudes they possess. *The assessment of learning must* be supported by evaluation methods that are compatible with the characteristics of a given competency (Legendre, 2000). It must take into account the complexity, as well as the global, interactive and evolutionary character of a competency.

A competency is complex, it is not simply the sum of its components, but the result of their dynamic organization. It can only be evaluated globally, as components cannot be taken separately. In the course of learning, from a perspective of regulating learning and teaching activities, it may be more advantageous to work on specific components of the competency, such as a particular skill or knowledge. It is also pertinent to resort to more precise diagnostic tools to determine the nature or the source of the difficulties observed. However, we can only judge the development of a competency if the student is regularly placed in situations that are sufficiently complex to require the mobilization and integrated use of various resources. It is by confronting students with various tasks and encouraging them to apply their competencies that the teacher will be able to collect pertinent observations to evaluate their level of development.

A competency is global and integrating since it calls upon a diversity of internal and external resources and rests on the way an individual orchestrates its use in a given situation. Admittedly, it is possible and even desirable to identify *a priori* a certain number of indispensable resources that the student will be required to call upon in a given situation. But it is never possible to predict in an exhaustive way all the resources that students will need to accomplish a task, carry out a project or solve a problem. Indeed, these resources differ from one student to another, since students do not all have the same knowledge and

experience or interests and aptitudes. Consequently, there is more than one way of expressing competencies within a given situation.

Take the case, for example, of a teacher who should be able to evaluate student competency when it comes to writing texts even if the students do not use the same vocabulary, or develop ideas and structure texts differently. As a result, the teacher takes into account the overall totality of the competency when judging the development of a competency, and not each individual component used. Admittedly, to achieve various tasks, the student has to make use of varied knowledge and strategies. However, it is not each mobilized resource that is evaluated but rather the result of their dynamic interaction and mobilization in a variety of situations. Thus, when evaluating a competency as a professional, the teacher keeps track of student progress from the start of the training with observations made under a variety of circumstances. A competency is *interactive* because it does not exist by itself, but relative to the contexts in which it is used and the conditions that necessitate its use.

To evaluate a competency, contexts must be provided that require the deliberate activation of the competency and provide students with resources that maximize its use. For example, we cannot evaluate the competency “working cooperatively” if a student has not been given opportunities to accomplish tasks that by their nature require cooperative work. Other competencies will require other settings, contexts and conditions. The choice of situations that correspond to the competencies we want to observe, the analysis of resources needed to accomplish the task, and a context that provides meaning, are all essential factors. However, even when it is designed to elicit the activation of a specific competency, a learning situation usually calls upon more than one competency. It is therefore an opportunity for both learning and evaluation. Indeed, the student can only use his competencies if he is given opportunities to do so. And it is through mastery of competencies that students provide the teacher with pertinent observable data. It is also during these activities that students can be asked to use their metacognitive capacity to examine their own competencies. This is why there is no need, even when dealing with assessments, to differentiate between learning and evaluation situations.

A competency is evolutionary in that it develops through a series of situations in which it is called into use. However, this gradual development can be done at varying rates and according to different paths. This makes it difficult to determine a learning sequence that is identical for all students. Even though it is possible to have benchmarks for the student along the way, these measurements must not be interpreted as fixed moments in a sequential and linear acquisition process. In addition, with competency being evolutionary, the observations collected by the teacher in the course of learning, whether informally or done with the help of various tools, do not have the same degree of meaning relative to the assessment to be done. Teachers must use their judgment to evaluate the relative relevance of varying data or clues (a diversity of work, self-evaluation records, observation grids, comments made by the teacher, etc.), collected in various contexts and at various moments during the course of development. It is also the teacher’s responsibility to establish their meaning by interconnecting them.

This broader concept of evaluation, formative as well as summative, places professional judgment in a central position and also calls into question the role of the teacher as sole judge and evaluator. In **a culture of shared responsibility**, it is necessary to tackle the question of evaluation by giving the intervenors the role that is rightfully theirs.

3. A culture of shared responsibility

Even when the teacher implements learning situations targeting specific competencies, especially in the context of disciplinary learning, the student is necessarily called upon to mobilize other competencies, specifically *transversal competencies* that do not belong to a specific learning field but must be developed within all disciplines. Moreover, competencies acquired in a particular disciplinary context should be transferable to other disciplinary contexts. Consequently, it becomes very difficult to limit the influence

of a teacher to a circumscribed field because his interventions contribute to the attainment of general training goals. Within the framework of a program centered on competency development, all teachers are asked to contribute to the development of the competencies through their own interventions. However, if teachers have a collective responsibility relative to the general education of students and the development of competencies, they should also have a collective responsibility with regard to evaluations.

In addition, the new educational program in Québec schools grants students a major role in their own learning process. From a perspective of evaluations that are integrated into learning, we should ensure that the diverse participants responsible for student education are assigned their appropriate roles, starting with the student himself. Lastly, it is advisable not to underestimate the importance of the support offered by the school. Therefore, far from isolating the teacher in his decisions, the role assigned to *professional judgment* is closely linked to the *obligation of individual and collective means*, which are included in the culture of shared responsibility where implementing means likely to ensure the educational success of the greatest number of students is not the sole responsibility of the teacher, but rather of the institution as a whole.

The preponderance of professional judgment

The role we want to assign to professional judgment, both within the new educational program in Québec schools and within evaluation of learning practices, raises many concerns with parents and teachers alike. Many see a danger of replacing objective measurement with arbitrary interpretations. Parents fear that the intrusion of the teacher's judgment will compromise justice, equality and equity. The general belief is that an evaluation using grades is completely objective by definition and, consequently free from any biased judgment. Teachers, for their part, worry that they will be accused of being unjust and arbitrary if they do not rely primarily, even exclusively, on grades to inform the parents of their child's progress relative to targeted learning and the level of achievement at end of cycle.

However, whatever its form, an evaluation is a judgment and the use of grades for a normative or criteria-based evaluation in no way removes the need for judgment (de Landsheere, 1980). To make room for the professional judgment of the teacher is not to introduce arbitrary decisions into an apparently neutral evaluation process; it is to acknowledge the role of judgment in a professional activity, whatever it may be. The *ability to make a judgment* in a field where one is supposed to have acquired expertise is the mark of a professional. It thus appears essential to clarify the concept of *professional judgment*.

Let us examine certain characteristics.

A professional judgment is autonomous and based on responsibility.

Every professional is faced with situations he must constantly evaluate in order to make decisions, direct his interventions and revise them as need be. The professional is not content to merely do what is asked of him. He has the necessary autonomy to determine what seems suitable based on the data available to him, plus his own knowledge and experience. He is able to assume responsibility for his decisions and his choices, since the latter are supported by recognized expertise.

A person is regarded as a professional when they possess knowledge and experience that allow them to evaluate in a suitable way the various situations to which they are subjected in their practice, to make sound decisions and to assume responsibility for them by succeeding in their actions and making adjustments along the way to take new data into account. Autonomy and responsibility do not mean that the professional acts alone. This is not the case. It is in fact the mark of professional autonomy and responsibility to seek advice from a more experienced colleague or to find the expertise which supplements our own when dealing with a situation that taxes the limits of our competency. In this respect, the teaching profession is no different from any other. Teachers are not simple doers. In the daily context of their practice, they never stop evaluating situations in relation to clues that appear significant to them, in order to make choices and decisions (Perrenoud, 1996). To recognize the value of the professional judgment of the teacher is not to introduce something new into teaching practices, but rather

to recognize that this judgment exists, and assign it its rightful role in an evaluation that is an integral part of daily practice. It means accepting to maintain evaluations among the professional tasks incumbent on the teacher.

A professional judgment is supported by tools.

Every professional has the opportunity to use the diverse tools and instruments that are part of the external resources available in his field of competency. A surgeon will be able to demonstrate his expertise all the more if he has at his disposal the conditions and tools adapted to the nature of the intervention he is planning to undertake. A doctor will make a better diagnosis if he can subject the patient to appropriate tests or examinations. In the same way, teachers have various tools (didactic tools, evaluation and self-evaluation instruments, etc.) that they can use during professional activities. They must sometimes adapt the tool to the particular situation at hand. But all in all, when it comes to evaluating a situation, making a decision and accomplishing an action, every professional has a wealth of useful and pertinent resources available, if necessary,

Teacher competency however, does not rely on the tools teachers have at their disposal, but rather on their ability to put the tools to good use. A tool is neither good nor bad in itself, but rather based on its use within a given context or in relation to a targeted goal. Regarding the evaluation of learning, certain tools can perform a refined diagnostic on particular components of the competency, but can prove completely inadequate when it comes to evaluating the competency in its totality. Accordingly, existing evaluation methods are not to be discarded but must be supported by a professional judgment that alone makes it possible to ensure proper usage and, if necessary, to design other tools better adapted to the new requirements demanded by the follow-up and assessment of competency.

The professional judgment of teachers is based on their competency to make observations while the situation unfolds.

To observe does not mean to collect information passively, it means to record, actively organize and interpret observations based on a frame of reference. To assess the development of competencies on the basis of observation, two conditions are necessary: access to pertinent data and the ability to give that data meaning. To access pertinent data, it is important to employ a sufficient number of diversified learning situations allowing students to apply their competencies and pursue their development. To interpret data requires a sufficiently precise representation of the competency whose development is being supported. If a student is asked only to complete an exercise sheet, the teacher will not have access to sufficient data for judging the level of competency development.

Every task has limitations relative to the data it can provide and every task does not necessarily allow us to evaluate a competency. To this end, we need to use a variety of tasks relative to what we want to observe so that we may avoid making a global judgment based on an insufficient number of tasks. It is necessary however to avoid establishing a term-to-term correspondence between the task and the object of evaluation. One task can call several competencies into play, and the same competency can be required in several distinct tasks. Admittedly, when the teacher gives the students relatively complex tasks that require more than one competency, it is not possible to observe everything at the same time. Observation is selective by definition and it is completely valid to favour specific data based on the goals or the information sought. But we must not fail to recognize competencies other than the ones targeted by the observation, when they appear. *“What counts in observation, specifies Perrenoud, is more the theoretical framework that guides and governs the interpretation of what is being observed than the instrumentation used.”*

In this respect, the teacher’s observations are closely linked to the underlying frame of reference, both in the selection of pertinent data and their interpretation, i.e. the way they relate to each other, their meaning. The competency that will be observed implies not only the ability to design learning situations likely to provide interesting material on what we wish to observe, but also the ability to interpret the data collected

based on our experience and knowledge. Consequently, an adequate representation of competencies to be developed and learning situations likely to support their development proves to be essential.

Professional judgment is *an evolutionary judgment as it relies* on a portrait taken at a specific time in the process, a portrait that can be modified through the addition of new information. On the one hand, the competency is evolving, as is its evaluation since it relies on information observed at a specific moment and within a specific context and situation. On the other hand, observations by the teacher are incomplete and can be enriched by the contribution of new data. Indeed, according to the learning situations proposed to the students and the disciplinary contexts in which they take place, teachers do not necessarily access the same data. It is thus important, particularly as concerns transversal competencies, to share observations from varied sources.

Teachers will be able to make an assessment of students' transversal competencies by observing their actualization in a variety of disciplinary contexts. The judgment of the teacher can thus be enriched by observations made by other participants, such as other teachers or intervenors and even the students themselves. Professional judgment rests on the close cooperation of the various intervenors. New data can cause the teacher to modify or revise a portion of the judgment. It can also bring about an evolution in the frame of reference that supports the observations.

Lastly, it should be stressed that a professional judgment must be *an ethical judgment* in conformity with a set of values. The teacher must always be careful not to be biased towards the student. His interventions are intended to support learning and development and must be founded on a "concept of educability", i.e. confidence in the potential of the child (Meirieu, 1991). As an educator, every teacher is endowed with a certain "power" and has an influence on his students. Teachers must use this power and influence in an ethical manner; they must be particularly sensitive to the impact of their evaluations on the development of the academic, personal and social identity of the student. Experience acquired in educational environments often carries lasting influences on the student's self-image both as a learner and as a human being; it can have a determining impact on the student's future social and professional integration. With respect to ethics, teachers must acknowledge the limitations of their professional judgment, the need for a solid foundation and the possibility that their judgment may be called into question.

Conclusion

The new competency-based educational program in Québec schools demands particular requirements that contribute to the establishment of a favourable context for the emergence of changes relative to the evaluation of learning. The purpose of this article was to highlight some of these changes. From the perspective of competency-based development, evaluation should not be considered distinct or separate from the learning process, with the sole function of making a judgment on the learning achieved. Any situation can be viewed from the dual perspective of the learning it hopes to achieve and the observations it elicits in support of the evaluation. It is not necessary therefore to design evaluations that are distinct from learning situations. In a program that places the specific interventions of the teacher in the broader context of their contribution to general education, teachers are collectively and not only individually responsible for providing support to learning. The same applies to evaluation that is also part of the culture of shared responsibility. Lastly, in this context of collective responsibility, it is important to recognize the roles and responsibilities of each individual clearly and to examine them in light of their complementarity. It is from this perspective that professional judgment takes its true meaning and acknowledges the expertise of the teacher.

The transition from an evaluation centered on approval and selection to an evaluation whose essential function is to support learning and teaching marks an important change in our evaluation culture. It goes without saying that cultural changes do not occur overnight. We must take the time and apply the means necessary to evolve, to gradually modify current practices and adapt them to new requirements and constraints. We must also have a clear vision of the direction in which we are headed. Cultural changes do not mean that we must put aside all current practices and sweep them away. It is rather a realignment to

better identify the role and limitations of evaluation practices and to conceive other ways of evaluating which supplement and enrich them and contribute towards giving them new meaning in a renewed context.

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Document 2.C

Bringing changes to the evaluation of learning¹⁴

New trends in the evaluation of learning propose changes to the nature of the objects evaluated, the relationship between evaluation and learning, the way of interpreting results, and the methodology used.

Two articles published recently in *Pédagogie collégiale* discussed the major change in perspective occurring with the evaluation of learning in the United States, where we hear more and more talk about *assessment*. This new point of view finds support here, specifically as concerns authentic evaluations or the assessment of competencies.

This article includes excerpts from *L'évaluation des apprentissages : du cours au programme*. It includes two instalments: the first one introduces the problem and the second presents the initial part of the reference framework for the evaluation of learning. It will be followed by a second instalment in the fall and will include suggestions and material to support changes in evaluation of learning practices. This documentation was produced by a working group at Performa, thanks to a subsidy from the Regroupement des collèges Performa. Cécile D'Amour served as research agent. The excerpts used for this article are taken from section C.2 of Booklet I (p.30-36) and section A.3 of Booklet II (p. 15-17).

The new perspective differs from the one that has prevailed to date, and many are calling it the new paradigm i.e. a set of concepts, assumptions, principles, and behaviours adopted by a community of researchers or intervenors who use them as general guidelines for research and activity in the field.

At a time when many within the college environment are questioning the evaluation of learning, the new paradigm can undoubtedly help the debate move forward. It can be used as a frame of reference for teachers who wish to reflect on their evaluation practices and beliefs and the values that underscore them; and it can be a promising path for teachers who seek to extricate themselves from the rut of grade management, bring changes to evaluations and turns them into pedagogical activities. It can also be a source of inspiration enabling evaluation of learning measures that are being experimented in colleges today to be more than mere administrative rulings and truly contribute to the quality of teaching and learning.

We will examine this new perspective, specifying the dimensions and factors of change in question by examining how it is being expressed in writings and by identifying the characteristics of an evaluation of learning based on this new paradigm.

¹⁴ Translated from Cécile D'Amour, "Changer l'évaluation des apprentissages", *Pédagogie collégiale*, May 1996, vol. 9, n° 4.

Dimensions and factors of change

Authors who define the context for the paradigm shift speak of various dimensions of change. We have identified four key ones: the nature of the objects of evaluation, the relationship between evaluation and learning, the interpretation of summative evaluation results, and the methodology used to carry out an evaluation.

The nature of the objects of evaluation

The object of evaluation is still learning, but the nature of the learning in question has changed as a result of two influences, one from within the world of education and the other from without.

On one hand, teaching and learning concepts have been modified, particularly by the influence of constructivism and cognitivist psychology; on the other hand, learning objectives have also changed: they often relate to higher abilities of integration and transfer — with transfer taking place not only within the academic context but also beyond.

The relationship between evaluation and learning

We now consider evaluation as an integral part of learning. Previously, the accent in evaluation was placed on validation; the main emphasis is now on support of learning, both from the perspective of a diagnostic tool and an evaluation per se.

Here too, internal and external influences have been at work: changes in learning concepts have brought to light various aspects requiring diagnostic interventions and the regulation of learning (non-linear character of the process, positive role of errors, affective dimensions, etc.). Besides, social requirements relative to academic success are on the rise, both qualitatively and quantitatively. This calls for support measures to be more present and diversified.

The interpretation of summative evaluation results

Whereas the normative perspective once prevailed, a clear consensus is now spreading with regard to the relevance of using criteria-based interpretation: the learning achieved by a student is compared to the targeted goal (evaluation with a criteria-based interpretation) rather than being compared to the performance of others or distributed according to the normal curve (normative evaluation).

This change results mainly from the fact that school is designed (at the very least, this is what the official statements say) as an instrument of training, of personal and professional development, and not as an instrument of social selection.

Methodology

The role of measurement is redefined and reduced, the role of observation and judgment is increased; qualitative methods are employed, concepts of validity and reliability are re-examined to better adapt them to the conditions of evaluation which prevail in education (and which differ largely from psychometrics), etc. These changes are closely dependent on the four dimensions of change that we have just described. As such, changes in the nature of the objects of evaluation, in the evaluation-learning relationship and in the way of interpreting the results will necessarily bring about modifications in methodology. Moreover, two other factors are at play here. On one hand, like many other fields in humanities, evaluation is progressively freeing itself from the vice-grip of measurements and quantitative methods. On the other, we are witnessing increased requirements with regard to the quality and reliability of evaluation, for a number of reasons:

- increased awareness of the importance given to social expectations relative to the effectiveness of academic establishments;
- increased awareness of the impact of evaluation methods and results on students' study behaviour, their goals and the paths they choose for their studies and career;
- general social trend to respect rights of individuals, to seek fairness and equity;
- general trend towards professionalism in teaching;
- importance of reliable information on student acquisitions in order to offer the most coherent and effective type of education.

We should mention that evaluation concepts evolve due to underlying philosophies that also evolve through social constraints. Consequently, evaluation methods are also changing. Furthermore, we can conclude by saying that: “it is thanks to research and evolution in humanities, education and cognitive psychology that our understanding of the new paradigm is evolving”.

What's in a name

When we read current writings on the assessment of learning originating from here and elsewhere, many expressions are used to describe trends that are more or less current, and more or less widespread, relative to the evaluation of learning. Expressions like: *competency assessment, assessment, authentic assessment, alternative assessment, and performance-based assessment*.

To make sense of all this, we should first clarify the meaning of these expressions, in particular by associating them with the four dimensions of change we mentioned earlier. It should be noted that the meaning given to each expression varies based on the author! In addition, an explicit definition is not always provided. To help the reader distinguish clearly among meanings, we will discuss what seems essential as well as elements that may help better understand the meaning of the new trends in evaluation.

Trends	Key dimensions of change
<p>Alternative assessment</p> <p>Among the many expressions linked to new trends in evaluation of learning, “alternative assessment” is the most generic. It is used by most authors to qualify the various practices that differ from traditional practices, particularly standardized multiple-choice tests.</p>	<p>One or several dimensions</p>
<p>Assessment</p> <p>The <i>assessment</i> is a type of evaluation characterized by systematic observation and judgment that is criteria-based, and by its support for learning. It is truly in the service of learning and integrated within the process of learning itself. This perspective is accurately expressed by the term “<i>assessment as learning</i>”.</p> <p>This perspective of evaluation as a support for learning is similar to the concept of formative and diagnostic evaluations; it is also compatible with the use of <i>assessment</i> for the purpose of sanctioning learning.</p>	<p>Methodology Relationship between evaluation and learning</p>
<p>Learning-assisted evaluation</p> <p>To the best of our knowledge, this expression was introduced by Hadji³. It reflects a similar approach to <i>assessment as learning</i>.</p>	<p>Relationship between evaluation and learning</p>
<p>Competency assessment</p> <p>Authors who talk about competency assessment highlight the specific nature of competencies as well as the methodological requirements for this type of evaluation.</p> <p>There is an obvious interest in using a “performance-based evaluation” to assess multidimensional learning that is integrated and transferable, as is the case with competencies (this does not mean that performance is the only type of competency indicator that can be used).</p>	<p>Nature of learning and, therefore, evaluation objects Methodology</p>

Performance assessment	<p>The expression “<i>performance assessment</i>” highlights the type of data used to make a judgment. In spite of the variations shown by different authors, it is always a student activity (an action, behaviour, a demonstration, etc.) that allows for the most direct observation of student skills and ability to use the learning.</p> <p>We should not lose sight of the fact that within a learning approach based on competency, it is the performance, the process and the product, which are strictly speaking, indicators of competency — not the competency itself. Here, the degree of inference is relatively decreased in relation to other indicators.</p> <p>Therefore, the value relative to the evaluation of performance, the evaluation of the process, and the evaluation of the product, refer essentially to the methodological dimensions of change — resulting from the modifications to the nature of learning we want to evaluate.</p>	Methodology
Process/ Product assessment	<p>In a context of education within a competency-based approach, it seems appropriate to speak of a “performance-based assessment” rather than a “performance assessment”.</p>	
Performance-based assessment	<p>In a context of education within a competency-based approach, it seems appropriate to speak of a “performance-based assessment” rather than a “performance assessment”.</p>	
Authentic assessment	<p>When we speak of authentic assessment, we refer to the characteristics of the tasks and evaluation contexts that are being investigated.</p> <p>In an authentic evaluation, the student not only directly demonstrates his mastery of the competency; he does it within a context and with tasks that bear key similarities to real situations requiring the competency.</p> <p>This authenticity of task and context can appear under various guises: the stimulus, complex task, time allocated for the achievement of the task, available resources, control the student has over how to carry out the task, quality standards of performance, requirements, consequences, etc.</p>	Methodology
Criteria-based assessment	<p>In an evaluation based on criteria, the evaluation judgment is supported by criteria and by comparing student results to the targeted end-of-learning objectives rather than by comparing them to the results of a global student population.</p>	Methodology

An evaluation of learning marked by the new paradigm

The new paradigm involves important changes to our usual ways of evaluating learning. Below is an outline of the methodological characteristics of an evaluation of learning at college level that reflects the new trends.

The objects

The evaluation must be adapted to a competency-based approach, dealing with learning that is complex, multidimensional, integrated and transferable. This requires an evaluation that:

- is global, holistic, multidimensional; contextualized;
- provides students with authentic opportunities to demonstrate their competencies;
- assures a standardization of conditions for evaluation criteria and success.

The function

Within the framework of the new paradigm, evaluation is truly at the service of learning. It must be integrated into the teaching-learning process to guide, support, and help students to assume responsibility for their learning and, finally, validate the learning achieved in a consistent fashion. To achieve this, we must ensure that evaluations:

- are dynamic rather than static (snapshots taken at various moments to create a portrait of learning in motion; focusing on the process used and not only results);
- are didactic in perspective, not exclusively docimological;
- are not merely official statements or judgments, but also offer a diagnostic dimension;
- are open to many adjustments in the pursuit of learning;
- benefit from the input of a variety of evaluators (teacher who guided the learning, other teachers, students, evaluators from outside the school environment);
- are capable of encompassing not only the cognitive dimension but also affective aspects;
- withhold the final judgment on acquired learning until the end of the learning period.

The interpretation of results

It is necessary to use a criteria-based evaluation for an interpretation that judges the achievement of learning objectives, rather than one that classifies students in relation to each other (evaluation with a normative interpretation). This is an evaluation that:

- uses a qualitative approach with descriptive methods;
- is concerned with validity rather than discrimination resulting from a docimological (measurement and evaluation) point of view.

Conclusion

Adopting the new paradigm means significant changes in the way we view and carry out evaluations of learning. We believe that these changes can greatly benefit the college environment and the school system in its entirety. It is necessary however to be aware that when we speak of a paradigm shift, we are on the side of specialists rather than practitioners. Teachers are often quite adept with the paradigm of “pragmatic intuition” says De Ketele⁴. In many cases, they are unaware of the thought processes at the heart of their own practices. Therefore these practices can display varying degrees of similarities to the old paradigm that once dominated the world of specialists.

This great diversity in evaluation practices and their intuitive character must be taken into account because they create difficulties when adopting a new frame of reference and new practices, in particular with conceptual confusion and anachronistic elements (old concepts and practices that persist within the new policies).

As stated by Howe and Ménard, “the transition from the old paradigm to the new one is not done without confusion. Indeed, in pedagogical discourse, evaluation concepts are often incorrectly identified as relating to one paradigm or another. And to further complicate the matter, many do not even seem aware that a paradigm, old or new, is at the centre of this debate.”

To bring about pertinent changes that are coherent and long lasting, we need clarity and understanding. It is also necessary for teachers to understand what lies beneath their practice, to introduce greater controls and coherence and to link their practice to a frame of reference.

While aware of the work and remaining questions, it seems pertinent that teachers adopt coherent evaluation methods based on the new perspective gaining prominence in the evaluation of learning. Current thinking and experimentation carried out by teaching personnel will also contribute to the consolidation of new trends.

1. Translated from J. Laliberté, “D’autres façons de concevoir et de faire l’évaluation des apprentissages”, *Pédagogie collégiale*, vol. 8, n° 3, March 1995, p. 9-13; Robert Howe and Louise Ménard, “Un nouveau paradigme en évaluation des apprentissages” *Pédagogie collégiale*, vol. 6, n° 3, March 1993, p. 36-40.
2. Robert Howe and Louise Ménard, *ibid.*, p. 39.
3. C. Hadji, “L’apprentissage assisté par l’évaluation (A. A. E.), mythe ou réalité?” *Cahiers pédagogiques*, n° 231, February 1990, p. 20-23.
4. J.-M. De Ketele, “L’évaluation conjuguée en paradigmes”, *Revue française de pédagogie*, n° 103, April, May and June 1995, p. 59-80.
5. Robert Howe and Louise Ménard, *ibid*