McGill Journal of Education Revue des sciences de l'éducation de McGill



Formative Assessment: Revisiting the territory from the point of view of teachers

Revisiter le territoire de l'évaluation formative du point de vue d'un groupe d'enseignantes du primaire

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Volume 46, Number 2, Spring 2011

URI: https://id.erudit.org/iderudit/1006438ar DOI: https://doi.org/10.7202/1006438ar

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Publisher(s)

Faculty of Education, McGill University

ISSN

0024-9033 (print) 1916-0666 (digital)

Explore this journal

Cite this article

Morrissette, J. (2011). Formative Assessment: Revisiting the territory from the point of view of teachers. McGill Journal of Education / Revue des sciences de l'éducation de McGill, 46(2), 247–265. https://doi.org/10.7202/1006438ar

Article abstract

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FORMATIVE ASSESSMENT: REVISITING THE TERRITORY FROM THE POINT OF VIEW OF TEACHERS

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ABSTRACT. This research documented the know-how of five elementary-school teachers regarding formative assessment, working from their point of view on the question. Group interviews gave them the opportunity to negotiate their "ways of doing things," by revisiting and elaborating upon assessment episodes that had been previously identified on classroom videotapes. An interactionist analysis served to describe the territory of formative assessment according to the range of their formal and informal "ways of doing things."

REVISITER LE TERRITOIRE DE L'ÉVALUATION FORMATIVE DU POINT DEVUE D'UN GROUPE D'ENSEIGNANTES DU PRIMAIRE

RÉSUMÉ. Cette recherche a documenté le savoir-faire d'un groupe de cinq (5) enseignantes du primaire en matière d'évaluation formative des apprentissages, et ce, à partir de leur points de vue. Des entretiens de groupe leur ont permis de négocier leur 'manières de faire' à partir de l'explicitation d'épisodes d'évaluation formative préalablement identifiés sur des enregistrements vidéo produits dans leur classe. L'analyse interactionniste réalisée conduit à décrire le territoire de l'évaluation formative selon l'éventail de leurs 'manières de faire' tant formelles qu'informelles, et à distinguer des conventions de la culture professionnelle des enseignantes à partir des 'manières de faire partagées', des routines ou théories-en-usage singulières à partir des 'manières de faire admises' et, enfin, des accords pragmatiques permettant de concilier la visée de soutien aux apprentissages de l'évaluation formative et certaines pressions sociales à partir des 'manières de faire contestées'.

Over the last 15 or so years, several Western nations have launched educational reforms designed to enable as many students as possible to achieve academic success (i.e., complete their high school education). In this context, attention to the formative function of assessment — that is, that aspect of assessment that supports rather than certifies students' learning acquisition — has come

under closer scrutiny, as evidenced by international initiatives such as "Formative assessment: Improving learning in secondary classrooms," put forward by the Organisation for Economic Co-operation and Development (2005), and by national initiatives such as that described by Hayward, Priestley and Young (2004) in "Assessment is for learning program" in Scotland, a program that aims to explore ways of bringing research, policy and practice in assessment into closer alignment using research on both assessment and transformational change. Likewise, the formative assessment practices of primary and secondary teachers have attracted the attention of many researchers that have, at the present time, been stepping up investigations in the classroom, adopting a range of angles to examine the ways teachers use formative assessment to support learning processes (e.g., Black & Wiliam, 2006; Torrance & Pryor, 2001).

In this context, which endows the subject of this study with greater social relevance, I recently conducted research into the know-how of primary teachers regarding formative assessment (Morrissette, 2010). To approach my subject, I have drawn on an interactionist perspective stemming from the work of George Herbert Mead (1967), whose hallmark is to focus research on the description of practices brought about by the meaning that actors ascribe to their actions. My research also carries forward with the work of sociologists such as Giddens (1987), who argue that lay actors also produce knowledge and "ways of doing things" both with and in a given culture.

As part of providing an account of this research, I will present a critical review of the literature surrounding formative assessment, bringing out a few tendencies in the process, including a prescriptive and normative relationship to teachers' practice as well as a mechanical, instrumental vision of the implementation of formative assessment. These considerations prompt me to propose a theoretical perspective based on a model of the actor and his/her know-how that borrows from the field of practical knowledge. I then explicate the process of field investigation, which took the form of a collaborative research project, followed by the analytic strategy drawing on conversation analysis. Rooted in an interactionist perspective, this strategy provides a means for identifying a range of "ways of doing" formative assessment. Further, it also serves to bring out: conventions of teachers' professional culture, as appearing from "shared ways of doing things"; certain singular routines or theories-in-use, as appearing from "accepted ways of doing things"; and pragmatic agreements serving to reconcile the tensions occurring between formative assessment's aim of supporting students' learning and institutional constraints and social pressures, as appearing from "disputed ways of doing things."

Thus, following in the footsteps of the project initiated by Sadler (1998), I revisit the territory of formative assessment — this time, however, from the point of view of primary school practitioners.

THE "DEFICIT" AS AN ANGLE FOR APPRAISING FORMATIVE ASSESSMENT PRACTICES

To a large extent, it was a wave of criticism toward assessment research that led to the emergence of a conception said to support students' learning processes, alongside assessment that had, traditionally, been designed chiefly to grade and certify the acquisition of learnings. Beginning in the 1960s, authors from a range of disciplinary backgrounds weighed in against the proliferation of classification practices stemming from the American psychometric current, thus opening the way to prioritizing tests that measured students' learning. Authors in sociology (Becker, 1963; Bourdieu & Passeron, 1970; Perrenoud, 2004), anthropology (Rist, 1977), palaeontology (Gould, 1981), philosophy (Foucault, 1975) and even in evaluation (Crooks, 1988; Keeves & Alagumalai 1998; Mehan, 1971; Nichols & Berliner, 2007; Williams, Mosby & Hinson, 1978) have drawn attention to such issues as: the consequences of testing practices – for example, the secondary adaptations (e.g., plagiarism, cramming) that students develop in a context which continually threatens their integrity and self-esteem; the cultural biases of the tests used to assess their learning; the "instrumental illusion" – that is, the ingrained belief that it is possible to exclude all the interpretive processes which are necessarily involved in these practices; and, finally, the power ascribed to evaluation practices that, on the one hand, contribute to a form of control and standardization, and that, on the other, perpetuate certain social disparities. Thus, not surprisingly, there has been a growing interest in the formative function of assessment, serving to assist students' learning processes. During the last 40 years, formative assessment has been the subject of a considerable quantity of research, particularly so during the last fifteen or so years, owing to the curricular reforms referred to above.

A portrait of research on formative assessment

Until now, research on formative assessment practices had adopted various angles, in particular ones that focus on: the choice of tasks and the context in whey they are carried out (Wiggins, 1998); formative assessment as an avenue of professional development (Ash & Levitt, 2003); assessment criteria (Torrance & Pryor, 2001); the feedback provided to students (Tunstall & Gipps, 1996); the asking of questions by teachers (Black, Harrison, Lee, Marshall & Wiliam, 2002); and students' views concerning assessment (Cowie, 2005). As was noted by Black and Wiliam in 1998, the field is a disparate one. More than a decade later, however, a body of research has grown up, such that it has become easier to make out a few main trends, the first being a prescriptive, normative relationship to teachers' practice. Specifically, several research projects have been conducted according to a top-down approach, based on the idea that knowledge can be previously determined by researchers and then applied

by teachers. When placed next to the ideal models developed by academics, the formative assessment practices of teachers can only appear "impoverished" in comparison, as several authors have concluded (e.g., Nieuwenhoven & Jonnaert, 1994; Stiggins, Griswold & Wikelund 1989; Uchiyama, 2004).

A second trend is associated with an instrumental, mechanical vision of the implementation of formative assessment, wherein the teacher administers formal (i.e., paper) examinations, the assumption being that the feedback provided through the correction of these exams will enable students to progress. Several researchers who have adopted the experimental research model employing preand post-test thus claim to measure the effects of formative assessment (e.g., Herman, Osmundson, Ayala, Schneider & Timms, 2006). To those who adhere to an interpretive paradigm and adopt a more (socio)constructivist view of learning, this instrumental, mechanical vision of formative assessment sidesteps the question of interpretive processes, the complexity of communication, and the construction of meaning, as well as the fundamental role of the projects pursued by the people involved. Also, as highlighted by some authors (Third Assessment for Learning Conference Participants, 2009), it is not because students obtain good results in a test that learning is significant; students can "learn" to obtain good results in a test. Finally, the feedback given by the obtained grade in a test is of little interest for learning since it does not give sufficient information to students for them to know what they need to do in order to progress (Davies, 2000).

As can be seen, both tendencies bring into play a model of the actor viewed from the perspective of a deficit and of a previously determined territory that does not factor for the logic of work in the field. Some research, located closer to the fringes, has taken into account the point of view of teachers who have to implement formative assessment within the mesh of their practice. Conducted in partnership with practitioners, these research projects have, in particular, made it possible to identify: formative assessment strategies (e.g., Elliott, 1999); models for implementation in the interaction occurring in the classroom (Bell & Cowie, 2001; Leung & Mohan, 2004); as well as theorizations anchored in practice (Pryor & Crossouard, 2008) that re-socialize assessment - in other words, that show that assessment practices not only bring into play various issues, including issues of power, but are also implemented by actors located in particular contexts and driven by specific projects (Morrissette, 2009). As such, this body of research has laid the foundations for studying the knowhow of primary school teachers, based on what, in their view, constitutes the symbolic territory of formative assessment. To this end, I adopted a model of actors and their know-how that is conducive to developing a more comprehensive approach to practices and that recognizes the reflexive, oriented character of actions.

A MODEL OF THE ACTOR AND HIS/HER KNOW-HOW

As was suggested in the profile of research on formative assessment, teachers' practices are often judged according to the yardstick of decontextualized theoretical models and an applicationist perspective that brings into play previously determined appraisal criteria. Some researchers have opted for a different approach, subscribing to the postulate according to which actors have practical knowledge enabling to them to go about their daily business and that these actors are able to put such knowledge into words, partially at least. This postulate has rallied researchers associated with the field of practical knowledge, whose initial foundations were laid in the work by Schön (1983), The Reflective Practitioner, according to an epistemology of practice intended for academics charged with providing education and training in various professional practices. According to Schön's model of the actor, the everyday conduct of practitioners stem from a know-how that is mobilized on a situational basis and that is acquired through an accumulation of experiences; as such, this knowledge is "hidden" in their courses of action, meaning that this knowledge is implicit in the actions that they take and in their understanding of the situation confronting them.

The art of the traditional salt-marsh worker

While a number of research projects have worked directly from Schön's model of the actor (e.g., Desgagné, 1995), other research instead recalls the spirit of Schön's work. Such is the case of Delbos (October, 1983), who studied the traditional know-how of salt marsh workers along France's Atlantic coastline. By comparing their ways of doing things with other salt makers who use modern, so-called scientific techniques bringing into play a variety of steps, this researcher showed that all the skill of traditional salt marsh workers resided in their ability to tinker (bricoler) with the full complexity of the "reality" that they encounter in the course of their work. In particular, these workers are called on to interpret, according to the situation at hand, such indices as the level of water in evaporating basins, viscosity, the appearance of the crust of salt forming in the crystallizing pans, the marine flora and fauna present, etc. "It's something you can just see," say the salt marsh workers about these indices (Delbos, October, 1983). Their know-how also appears to rest on taking into account what happens in other salt works and on the historical dimension of the marshes of which they are in charge. Accordingly, salt marsh workers do not perform their work in pans that have become old or that have been abandoned for a few years, the same way that they perform this work in marshes that have been well tended. According to the perspective of Delbos, the know-how of salt marsh workers is highly context-specific, related to the continually particular conditions of their marshes. "It all depends," they say (Delbos, October, 1983). Delbos argued that the know-how of traditional salt marsh workers stems not only from tacit knowledge that has been accumulated about all the aspects of a production environment, but also from a skill that consists in drawing from an infinite collection of parameters those elements that, for the duration of a specific situation, are considered as being relevant. In short, it would appear that ongoing adjustment, on a situational basis, is the key to salt marsh work, as though constituting a kind of symbolic interaction with nature.

Giddens'"competent" social actor

In the same vein, underlying the structuration theory of Giddens (1987) is a model of the social actor who is described as being "competent," not in terms of effectiveness and expertise but, instead, in terms of agency. More specifically, actors are conceived of as having a certain room to manoeuvre as well as resources for taking action; in addition, they are people who reflect on action and have the capacity to talk about it when prompted to do so. From this point of view, the competence of actors does not refer to a personal quality but instead to a condition of action: actors act according to the understanding that they have of the circumstances of their action — or, to put it in interactionist terms, according to their "definition of the situation" (Thomas, 1967). Further, Giddens conceived of the competence of actors as being closely bound up with the reflexive monitoring of conduct in the day-to-day continuity of social life, as illustrated by Schön's (1983) reflective practitioner, who carries on "reflective conversations." According to various authors, this reflectivity operates only partially at the discursive level. Giddens (1987), for one, distinguished between "discursive consciousness" and "practical consciousness." "Discursive consciousness" refers to everything that actors are able to give verbal expression to concerning the context and the intentions surrounding their actions or the actions of other actors; it is dependent on the prevailing interpretive schemes, namely, the modes of representation and classification that actors draw from their sociocultural references, viewed as conditions of their own action. "Practical consciousness," on the other hand, refers to everything that social actors know tacitly - that is, everything that they can accomplish in social interactions but that they are also unable to directly express discursively, such as routines. All the same, Giddens conceived that in certain contexts of elicitation, that which is tacit can be made partially discursive and thus that actors can provide an account of the rationales framing experience.

According priority to the point of view of "competent" teachers

This model of the actor makes it possible to focus on the formative assessment practices of teachers from the perspective of their know-how and the reflectivity with which they conduct their day-to-day practice. It also makes it possible to seek out their point of view in this area, considering how they are the ones who deal with the complexity of practice, which is indeterminate and interwoven with tensions and issues (Schön, 1983); they thus have

an informed point of view concerning the practical possibilities relating to the implementation of formative assessment. For example, if "it's something that you can just see," what are the signs that prompt teachers to engage in a formative assessment process? And if "it all depends," then what are the conditions that should surround implementation the implementation — or, preferably, the enactment — of formative assessment? What understanding do teachers have of the circumstances surrounding their day-to-day practice and that shape the actions they devise in this area? In short, how do teachers go about carrying out formative assessment? And, from the perspective of the interactionist (comprehensive) sociology of Mead, what meaning(s) should be ascribed to these practices?

A COLLABORATIVE APPROACH ROOTED IN THE CO-CONSTRUCTION OF KNOWLEDGE

With the dual aim of documenting the know-how brought into play by primary teachers in relation to the enactment of formative assessment, and of proposing a cartography of the territory on the basis of the meaning they ascribe to their practices, I developed an investigation scenario that accords a place of choice to the singular, "inside" viewpoints of practitioners and that is conducive to the explication of practices.

The field approach adopted in the present project is based on a model of collaborative research that offers practitioners a process designed to support their professional development, all within the framework of a formal research project (Desgagné, 2001; Morrissette & Desgagné, 2009). This model works from the assumption that practical knowledge can be put into discursive form through a process of researcher-practitioner collaboration structured around a set of reflective activities; in practical terms, shared reflection concerning practical experience serves as a basis for co-constructing profession-related knowledge. In this framework, the researcher does not adopt the position of an expert who has come to train practitioners, but instead that of a facilitator working to explicate practical knowledges.

Five female primary teachers (grades 4 to 6) from a school in the greater Québec City area (Québec, Canada) volunteered to take part in this research project, which favoured a non-prescriptive relationship, given that the collaborative contract agreed to with these teachers encouraged them to engage in a relationship of complementariness. In effect, their role consisted in drawing on their experience for the purpose of articulating their ways of enacting formative assessment; my role, on the other hand, for the most part involved fostering the process of explicating and sharing practices, and indeed facilitating the debates that were likely to emerge along the way.

Practically speaking, three types of reflective activities were proposed on an alternating basis over a period of five months. Videotaping was conducted in

their classes (3 times), and the teachers were invited to view these tapes for themselves; where relevant, they were to identify formative assessment episodes in these tapes. Following this, three individual interviews were conducted on the basis of a video feedback protocol referred to as "shared reflection" (Tochon, 1996), which involves the researcher and practitioner in the collaborative coconstruction of professional knowledges regarding a subject of mutual concern. During these interviews, the participants were invited to present the previously identified episodes and explicate the reasons underlying their actions. Both of these types of activity figured in a context that laid the groundwork for five group interviews conducted on an alternating basis. Within this framework, the teachers were invited to offer an account of the formative assessment episodes, to comment on the practices narrated by their peers, and to negotiate the meaning of these practices as this appeared from the anchoring in experience that individual interviews helped to make manifest. In point of fact, one of the aims of the group interviews was to leverage intersubjectivity to add further depth to these teachers' reflectivity (Morrissette, 2011).

THE ANALYTICAL APPROACH: PRODUCING A CARTOGRAPHY OF THE TERRITORY

On the whole, the dual analytical strategy deployed on the material gathered during the group interviews falls within the field of discourse analysis (Wetherell, Taylor & Yates, 2001). To begin with, discursive content was thematized by induction, thus bringing out 12 themes to which the teachers related their formative assessment practices thereby, making it possible to produce an initial cartography of the territory. These themes were grouped together under two main categories that were respectful of categories that had been continually present in the episodes narrated by these practitioners, the idea being to chart out the territory according to the logic of work in the field. The first category, going by the name of "ways of defining the situation of students toward learnings," in reference to the concept of "definition of the situation" (Thomas, 1967), covered a set of six general practices that the teachers said they relied on to develop a judgment aimed at identifying learning acquisition difficulties for students or to recognize students' know-how respecting certain objects of learning. For example, taking stock of the approaches taken by students in all their everyday productions (e.g., classwork, homework, verbalizations) or decoding students' non-verbal signs constituted favoured ways of "defining the situation." The second category, going by the name of "ways of supporting students' learning," covered a set of six general practices that the teachers said were useful, according to their "definition of the situation," for supporting learning acquisition by students. For example, prompting reflection among students or (re)-organizing teaching/learning contexts were identified as ways of "supporting students' learning."

TABLE I. "Ways of doing" formative assessment

Ways of defining the situation of students toward learnings	Ways of supporting students' learning
Decoding students' non-verbal signs	Prompting reflection
Correcting homework	Instrumenting students
Using an erasable pad	(Re-)organizing teaching/learning contexts
Employing formalized procedures	Appropriate sharing out of ownership of learning between teacher and students
Taking stock of the approaches employed by students	Modulating individual/group ownership of learning
Sharing information and experiences with other educators	Providing support during end-of-grading- period evaluation

For each of these 12 general practices, a set of specific practices was identified. By way of illustration, *prompting reflection among students* as a "way of supporting students' learning" is associated with six different specific practices.

TABLE 2. Prompting reflection among students

Continually putting questions to students in order to stimulate and guide their reflection.

Allowing students' lines of reasoning to reach dead ends in relation to a given problem.

Destabilizing students in order to shake up their usual ways of doing things and to trigger personal engagement.

Using the portfolio to prompt students to assess their areas of progress.

Embedding feedback in an "after-the-fact" logic.

Employing a letter-based code of feedback.

In accordance with the interactionist point of view adopted in my research, which holds that such meaning as may be constructed is indissociable from the way it is produced during interaction between these teachers, a second phase of analysis was carried out, namely conversation analysis drawing on the work of Boden (1990). The meticulous examination of conversational negotiation made it possible to identify the processes of cooperation that developed between teachers concerning the explication of their ways of doing things (Morrissette, 2011), thus distinguishing between:

- "shared ways of doing things": those ways that gave rise to processes of mutual recognition during interaction between the teachers;
- "accepted ways of doing things": those ways that were the subject of an explication by a teacher and that did not receive any mark of adherence or objection from her peers;

• "disputed ways of doing things": those ways that prompted expressions of disagreement among teachers and that were not recognized from the outset as constituting a formative assessment practice.

The original combination of these two phases of analysis thus made it possible, on the one hand, to produce a nuanced description of the territory of formative assessment of learnings in relation to the group of teachers encountered (for the full description of the territory, see Morrissette, 2010). To return to the previous example, *prompting reflection among students*, as a "way of supporting students' learning," was, according to the interaction of the group of peers involved, broken down into six specific practices, two of which were shared, one of which was admitted and the remaining three were disputed.

TABLE 3. Prompting reflection among students: Shared, accepted and disputed ways of doing things

Continually putting questions to students in order to stimulate and guide their reflection.	Shared
Allowing students' lines of reasoning to reach dead ends in relation to a given problem.	Shared
Destabilizing students in order to shake up their usual ways of doing things and to prompt their engagement.	Accepted
Using the portfolio to prompt students to assess their areas of progress.	Disputed
Embedding feedback in an "after-the-fact" logic.	Disputed
Employing a letter-based code of feedback.	Disputed

On the other hand, and as will be presently seen below, this analytical strategy made it possible to bring out first, the conventions of the teachers' professional culture, stemming from "shared ways of doing things," second, certain routines or theories-in-use, stemming from "admitted ways of doing things," and finally some pragmatic agreements serving to reconcile the tensions that link formative assessments' aim of supporting students' learning with institutional constraints and social pressures, stemming from "disputed ways of doing things."

A RANGE OF WAYS OF DOING FORMATIVE ASSESSMENT

The "shared zone": Conventions of a professional culture

Shared ways of doing things are those that were the subject of marks of mutual recognition whenever they were explicated among the group of teachers. Drawing on the work of Becker (1982), these shared practices are viewed as *conventions* of the teachers' culture, as practices of their professional group

that enable them to engage in their day-to-day activities of supporting their students' learning through formative assessment. Identifying these conventions made it possible to perceive all that is not thrown open to question by the group — that is, a kind of "stock in trade" on which teachers (at least those that were met within the framework of this project) rely on in their day-to-day activities. Four types of conventions thus emerged: 1) reifications, such as certain categories of students; 2) an identity-centred claim that linked formative assessment to the meaning that the teachers ascribed to their occupation; 3) cultural interpretive schemes; and 4) a black box. The last two types of conventions are illustrated below.

The mobilization of cultural interpretive schemes: The interpretation of students' nonverbal signs. One of the identified conventions concerns the mobilization of cultural interpretive schemes that stem from the gradual integration of concepts, theories and procedures that have, historically and socially, proved their worth in a given professional culture (Giddens, 1987). Thus, certain ways that teachers have of "defining the situation of students towards learnings" appear to involve the interpretation of students' non-verbal signs, as appearing from situationally-based monitoring. The teachers said they took cues from the gestures of students as part of an "informal process of formative assessment" (Bell & Cowie, 2001; Third Assessment for Learning Conference Participants, 2009). This particular way of "defining the situation" while engaged in a classroom activity appears to be founded on tacit consensuses about non-verbal signs of difficulty, such as a puckered forehead or a distraught look that the teachers felt themselves able to decode. The teachers all alluded to the importance of the interpretation of non-verbal signs in the assessment process; as with the salt marsh workers studied by Delbos (October, 1983), "It's something that you can just see." Moreover, it is important to qualify this observation by noting that the interpretation of the non-verbal signs of students also extended beyond perceptible signs. In fact, the teachers appeared to ascribe meaning to these signs on the basis of a prior analysis of the tasks planned with the objective of proposing the tasks to their students. This advance preparation, which shaped their monitoring of indices according to the situation at hand, would appear to be filtered by the knowledge that they possess of their work tools, textbooks, and ways of designing tasks for students. It would also appear to be filtered by the information that they deemed to be relevant concerning the family history and school record of students and that prompted them to focus on some students more than others. Here again, as with the salt marsh workers, "It all depends." In short, the teachers appeared to capably take their bearings when called on to interpret students' non-verbal signs — indices that while being non-discursive were no less apparent for all that — thanks to the perspective afforded by the common knowledge associated with their professional culture. Further, they also appeared to be able to adapt common knowledge to particular circumstances, all in accordance with the tasks to be proposed, the students involved, etc.

A black box in the form of the notion of "progress." An analysis conducted in a "foillike manner," an analysis that proceeds through the search for what was not explicated by the teachers – provides indication of another convention relating to shared ways of doing formative assessment. This particular convention can be viewed as a "black box" – in other words, as representing a theoretical notion that actors use without necessarily understanding all the ins and outs attending to it. When explicating their ways of doing things, the teachers made an abundant use of the notion of "progress," a core issue of formative assessment. As it so happened, they spoke of this notion as though its meaning were shared from the outset, as though they did not have to make the meaning clear to themselves. One of the preferred ways of "defining the situation of students" consisted in taking stock of the approaches employed by students (see Figure 1) on the basis of all the written traces that students left as part of their day-to-day work or that appeared from spaces of verbal interaction that had been specifically organized for this purpose. In the teacher' view, these specific practices enabled them to adopt perspectives concerning the individual "progress" of students or the "progress" of their group as a whole. That is also what they argued in relation to certain ways of "supporting students' learning," such as the teaching of knowledge or strategies – that is, specific practices that they believed would aid students to "progress". Thus there are grounds for inquiring into what teachers actually meant by aiding students to progress. Progress toward what? What standards did they refer to when assessing the advances of their students? What did an "advance" represent for them?

The way in which the teachers spoke about the different subjects of knowledge provides an indication of what they meant by "progress." The fact is that, where certain school subjects like mathematics and writing were concerned, the progress of students appeared to correspond, on the one hand, to the gradual appropriation and the ultimate mastery of certain notions in context and, on the other hand, to the accumulation of knowledge. Where other school subjects such as history, geography or ethics and religious culture (a course taught in Québec primary and secondary schools) were concerned, the idea of progress would appear to refer to an ever sharper awareness developing from one year to the next, or to a continually expanding openness towards the generalized Other or various social realities. In relation to these disciplines, the idea of progress was understood as a kind of gradual de-centring of oneself and an opening of oneself up to the world.

The "admitted" zone: Some singular, creative practices

Admitted ways of doing things are those that were the subject of an explication by a teacher and that did not receive any mark of adherence or objection from her peers. As such, these ways were recognized as being part of the territory of formative assessment, without necessarily being resorted to by all the teachers. To again draw from the work of Becker (1982), these ways of doing things

were viewed as singular practices that developed out of personal experiences and that had satisfactorily held up in the field. Admitted ways of doing things manifested in terms of formative intervention routines focused on pedagogical differentiation. They also manifested in terms of "theories-in-use" (Giddens, 1987) or, put more simply, of pedagogical principles relating to formative assessment. An example of each of these types will be provided below.

Identifying the "island of resisters": The erasable pad routine. One of the teachers who took part in this research project employed, on an everyday basis, what she conceived of as a formative assessment routine when teaching her students a new notion. For this purpose, she used erasable ("write and wipe") pads on which students could write down words or sentences with a dry marker and that they then wiped clean using a cloth. In concrete terms, while teaching her students a notion, she regularly asked them questions; at her prompting, she had all her students raise their pads in the air so that she could get an idea of the general understanding that this group of students had developed of the notion at hand. For her, this was a practice that enabled her to make decisions about how, in the immediate term, to follow up on her lesson in keeping with the target objectives and how to make adjustments on an ongoing basis and in accordance with the situation at hand, much as did the traditional salt marsh workers studied by Delbos (October, 1983). Thus, following this quick "pulse-taking" exercise, she sometimes provided additional explanations whenever the group as a whole appeared to be confronted with a problem of comprehension, proposed other math manipulations by way of example, or decided to continue forward with a phase of exercises whenever she felt that students needed to put into practice what they had just grasped. In addition, this practice enabled her to identify what she referred to as her "island of resisters," those few students who had to be provided with additional, more personalized assistance. By availing herself of the necessary conditions with which to free herself from the remainder of the classroom group (for example, by giving them application exercises to do), she was then able to conduct a clinic with this smaller group of students. In this process, she began by diagnosing - in greater detail than was possible with the erasable pad - what they had not managed to understand; then, on the basis of this specific diagnosis, she developed and conducted interventions. As this teacher explained, this teaching/learning routine constituted an everyday formative assessment, enabling her to appraise the situation of students and to tailor interventions on the basis of what she had gleaned from their responses to her teaching.

A pedagogical principle: Making knowledges meaningful for students. From an interactionist perspective, the "theories-in-use" or pedagogical principles appearing from admitted ways of doing things relate to typical ways of "defining situations" that emerges as a result of teachers undertaking certain regular behaviours in accordance with the aim of formative assessment to support students' learning. In the view of one teacher, at issue was a type of favoured

formative intervention related to the idea of instrumenting students (see Figure 1) and that consisted in proposing a range of consolidation activities so that knowledges are meaningful for students over the long-term. This teacher maintained that basic knowledge was associated with each school subject and that the lasting appropriation of this knowledge by students was fostered by a series of activities that entailed making use of it in order to keep it alive and meaningful. In addition, she asserted that students ought to be provided activities that prompt them to take action – activities during which they had to get up and move about – arguing that knowledge was more fully imparted when the potential of what could be termed a certain "memory of the body" was mobilized. This pedagogical principle appeared to be bound up with the meaning that this teacher ascribed to the difficulty of teaching curricular knowledge, that with time, such knowledge often became "dead" knowledge for students, having little meaning and being retained only for a short time. It would also appear to involve a kind of understanding of memory, as though each activity served to deepen a groove until ultimately ensuring that it could not be erased with the passage of time. Thus, the conceptions underlying this way of theorizing her formative assessment practice brought into play a certain representation of cognition as well as a vision pertaining to what should be prioritized at school.

The "disputed" zone: Some "pragmatic agreements"

Disputed ways of doing things are those that were not accepted from the outset as being a part of the territory of formative assessment whenever they were explicated during group interviews. Taking a higher analytical view of the different postures adopted by the teachers during disagreements made it possible to bring out, from among the signs of dispute, tensions between the implementation of formative assessment and certain social and institutional constraints. The relationships emerging between these various aspects served to identify the "pragmatic agreements" deployed by the teachers — specifically, ways of carrying forward with formative assessment's aim of providing differentiated support to learning processes while also factoring appropriately for these constraints and pressures. One of the pragmatic agreements thus identified is presented below as an illustration of this art of compromise.

Alternatives to static, decontextualized evaluation: The portfolio and the tripartite meeting. One of the institutional constraints alluded to by the teachers in connection with their "ways of doing things" was the organization of school time around standardized governmental examinations. In Québec, the elementary education school year is divided into four periods with a report card issued which provides an assessment of the progress of each student relative to target learnings. In addition, the last semester involves standardized testing imposed by the provincial government. This constraint, which notably stems from an obligation of accountability by the school toward parents, produces a tension

between the requirements associated with static evaluation, which consist in producing a periodic portrait of what students are able to accomplish, with the discontinuous and indeterminate time of students' learning. The teachers effectively bore witness to the gap between *learning time*, the time required for constructing a personal and collective meaning around the learnings prioritized at school, and *evaluation time*, the rigid, standardized time dedicated to certifying each student in relation to a pre-established norm. According to the teachers, there was, with the production of a report card, a risk of producing a reductive, decontextualized snapshot of what students were able to accomplish. Furthermore, teachers question the ability of governmentally imposed exams to render an accurate portrait of the pupil's capacities.

In response to this tension, the teachers deployed a pragmatic agreement that consisted in re-introducing the meaning of a student's learning progress while also contextualizing his or her acquired learnings. They did so specifically by attaching a portfolio to the report card to be given to the student's parents during a three-party meeting. This cultural artifact served as a support for a dynamic interpretation of each grading period, offering a portrait of the student's progress through different related tasks and presenting self-evaluation grids that had been filled out by students. The children were invited to place their productions in relation to one another and to use these grids to propose a representation of their productions; in this process, they were supported by the teachers, who provided them with yardsticks for assessing their own learning progress. During tripartite meetings, the parents, the student and the teacher compared their respective notes, thus bringing to the fore a compatible representation of the situation of the student in relation to the school learnings. Aside from the fact that crossing interpretations in this manner fostered the sharing of views, it also served to develop a fuller, negotiated portrait of the student's situation at school and thus to provide a basis for identifying converging strategies of action to support his or her learning progress. All in all, this pragmatic agreement brought into play a viable "can-do know-how" in a context of accountability that could, initially, appear to be a source of constraints and indeed problems.

Taken together, the conventions of the teachers' professional culture, a range of singular, creative practices, and pragmatic agreements relating to ways of doing formative assessment, provide a clear illustration, following the theorization of Pryor and Crossouard (2008), of how the classroom is far from being impermeable and how the practices implemented in this space are in fact negotiated practices integrated into a mesh of mutual influences (Morrissette & Legendre, in press).

CONCLUSION

As should by now be clear, by looking into the meaning that formative assessment practices have for those who put them into practice, this research project

has helped to bring out a range of formal and informal practices in this area, a number of which have gone unnoticed or undocumented until now. As one example, the notion of formative assessment routines constitutes an original research finding in this field. The ways of doing things thus identified indicate that formative assessment practices are founded on a know-how that is dependent upon a professional culture, a capacity for innovation, not to mention a flexibility in the field that makes it possible to transform constraints into resources, all as part of encouraging differentiated support for students' learning. In point of fact, when formative assessment practices are approached from a comprehensive perspective and from the angle of practical knowledge, the picture that emerges is one of practitioners who engage in *bricolage* (a savvy, practically oriented tinkering and assemblage), — that is, who are *competent* actors according to the meaning ascribed to this word by Giddens (1987), as was seen above.

Beyond affording this nuanced description of a territory consisting of three zones, the present research project has made it possible to identify a "whole-of-practice know-how" on which all ways of doing things appear to depend: the organization and management of interactions with the objective of supporting students' learning. In light of how, from the viewpoint of teachers, formative assessment is associated with pedagogical differentiation, it would appear that good classroom management constitutes an overriding consideration when creating conditions conducive to formative interventions among certain students. This field-based know-how thus affects a blend between two objects that would otherwise appear to belong to two different research fields but that would, at the same time, profit from a cross-directional approach in future investigations concerning formative assessment.

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