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Impact of the evaluation of teaching devices on the professional conceptions of teachers and school administrations in Senegal: the case of five groups of elementary school in Dakar

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ABSTRACT*: The purpose of this article is to identify characteristics of the work situation that could encourage or increase the commitment of teachers and* curriculum *is defined according to two modalities characterizing the organization of teaching work in the school facility: cellular versus integrated. A process for evaluating teachers' and school administrations' conceptions is then developed with reference to this organization of school career paths. The empirical study focuses on 5 primary school teams trained for three years in the development and evaluation of their collective arrangements. An analysis of the responses (N == 64) to a questionnaire enabled us to compare the trainees' conceptions with those of other teachers. The results show that the tested system modifies the perceptions of the practitioners in order to better take into account the inputs of the two professional groups (teachers and principals) involved in the curriculum, the diversity of the learners and the inclusion of a personal practice improvement dynamic.*

KEY WORDS: teacher, curriculum, assessment, school administration

INTRODUCTION

The aim of the text is to study how teachers' and principals' conceptions regarding the organization of the curriculum can evolve as a result of the evaluation mode of the collective arrangements implemented in their school. The aim is to identify characteristics of the work situation and, in particular, of the institutional support from which professionals (teachers and principals) can benefit, which could facilitate or increase their commitment to improving curriculum quality.

To this extent, we first define curriculum quality in terms of two modalities characterizing the organization of teachers' and principals' work in the Senegalese school; we then discuss the importance of devices composing the actual curriculum with respect to this quality. We then determine a process for evaluating the conceptions of teachers and principals, in relation to this organization of the school career. An investigation is thus carried out on 21 elementary

school teams (representing 60 classes, 3400 pupils) trained and supported, during three years, by trainers, advisors, inspectors and researchers, in the elaboration and evaluation of their collective devices. An analysis of the responses (N = 64) to a questionnaire enables us to compare the conceptions of trainees with those of other teachers. The conclusion specifies a definition of curriculum quality and identifies the conditions under which its evaluation represents an asset for the transformation of the collective organization of teaching work.

Defining the quality of curricula

The evolution of the teaching profession, in the context of the reforms underway in most Western countries, is intensifying professional interactions at the local level, as research has consistently shown (Lessard, 2000; Van Zanten, 2004). The period of compulsory education, the one covered by a common curriculum, thus appears to be regulated by rather broad prescriptions which, in fact, strongly structure the work of the teachers: programs built in terms of competences, partly transdisciplinary; organization based on multi-year cycles; collaboration around school projects or sector contracts; integration of all learners, whatever their particularities; authentic, formative evaluation, aiming to ensure the progress of each individual, either by modifying the teaching context, or by adapting the learning assistance. The actors thus have a significant margin of initiative in the implementation of teaching programs and, as a result, the quality of the curriculum depends largely on local contexts.

In order to understand the mechanisms that govern this quality**,** it is necessary to characterize this curriculum: to discern, first, the mechanisms that correspond to different levels of quality, and then to identify the tools that determine these mechanisms of curriculum regulation.

An organized plurality of contents

The curriculum is defined in this text, following Forquin (1996, 1998), as an organized plurality of cognitive contents, spread out and ordered in time, within the framework of a formal educational institution. It is not simply a disciplinary program, but rather the intellectual configuration of the contents taught along an educational process. In a text that is a benchmark, Bernstein (1975) characterizes this arrangement according to two poles, which, he specifies, do not depend on the intuitive nature of the knowledge, but are social constructions, collective elaborations: either the knowledge is isolated from each other, according to a curriculum that he qualifies as a collection type, or the interactions between contents are explored, according to an integrated type. This categorization allows him to define two ways of configuring the contents, but also the teaching and evaluation systems. Two modalities are thus determined to qualify what the author calls the "educational code", in other words the modes of regulation of educational activities. In his text, through successive shifts which, he points out, call for empirical references, Bernstein (1975) applies this categorization to the organization of educational systems as well as to that of schools, and then to classroom practices and to the conceptions of teachers. These modalities thus make it possible to characterize both the general configuration of the contents, the devices and the paths that make up the curriculum and the way in which the teachers position themselves in relation to this organization of their collective work.

A first, closed mode of curriculum regulation is characterized by: a strict delimitation and constant prioritization of knowledge; professional relations that leave little room for collective initiative on the part of the teachers and for the autonomy of the learners; and an essentially normative evaluation that exclusively governs the progression of the school career. There are, however, variations within this mode, as some content, for example, may concern several teachers. This mode is referred to as collection by Bernstein (1975), to show that the student has, throughout his or her career, to collect knowledge in order to meet the evaluation standards, but other authors call it insular (Young, 2001) or cellular (Tardif and Lessard, 1999); the latter term will be used here to emphasize the fragmentation of the school organization. A second, open curriculum mode is characterized in the opposite way: knowledge is coordinated, either through the study of themes mobilizing several types of content (i.e., the discovery itineraries in French high schools), or through the harmonization of several teachers on the same content (i.e., the development of common assessments); interactions between teachers are explored in order to make practices more coherent, and the particularities of the learners are taken into account. This mode is generally referred to as integrated; while it also has variations, it is defined along three main dimensions:

- Coordination of content and consistency of actions of the different **education stakeholders;**
- Consideration of the particularities of learners and **different ways of accessing knowledge;**
- Teaching activities made more explicit and giving rise to **exchanges between teachers**

The general evolution of educational systems, as far as compulsory schooling is concerned, is oriented towards this integrated mode (Young, 2001), but this evolution is not without its drawbacks (Bernstein, 1975): it is possible that, in evaluations, the personal characteristics of learners (behavior, culture, taste) are privileged, in an implicit and excessive manner, to the detriment of objective cognitive skills. The integrated mode, which affects the person and his or her private life, could then prove more detrimental to the individual than the curricular mode; empirical results, although drawn from a small sample, confirm this approach (Roussier-Fusco, 2003). In order to avoid it, Bernstein (1975) poses four conditions:

- Develop teacher-to-teacher coherence between instructional and assessment practices;
- Coordinate, among teachers, the relationship between integrated understandings and corresponding classroom practices;
- Explain, between teachers and learners, what is assessed and the form of these assessments;
- Regulating change to the integrated mode through collegial leadership that also involves learners.

For Bernstein (1975), these modes interact both with teaching practices and with teachers' conceptions: on the one hand, if teachers do not really share the idea of integration, then basically, certain practices may remain closed and harm the whole system; on the other hand, if teachers practice in a context regulated under the integrated mode, then they will construct benchmarks that will guide them towards practices that are better suited to this type of curriculum. It is from this perspective, limited to the study of the interactions between the organization of the school and the teachers' conceptions, that this text is written.

The System as a Key Element of Curriculum Quality

Such an alignment of the working environment leads, locally, to design and implementation of collective measures in order, on the one hand, to create, among the teachers, reference points, implicit guidelines, which regulate and coordinate their individual activities and, on the other hand, to make explicit the evaluation criteria, without which it is possible neither to give meaning to what is taught nor to assess the relevance of school practices. The quality of the curriculum therefore depends, in part, on the existence of such mechanisms.

The teaching device is defined here as an arrangement, an organization of several simple educational actions. Induced by the institutional environment and constructed by professionals in order to achieve the curriculum targets, the device is easily recognizable by the actors - learners, trainers, and partners - and thus constitutes an essential element of the real curriculum. In this text, we will study curricular devices, those that are likely to regulate school learning in an integrated mode. Such arrangements constitute an ordering of educational situations or means that run over several years (one or more cycles), involve choices of objectives (disciplinary, multidisciplinary and transversal), provoke interactions between different types of actors (teachers of the cycle and the school, educational stakeholders and learners) and make explicit the methods of decision-making (evaluation, collection and communication of information between the educational actors). Such systems are represented, for example, by a portfolio that regulates the learner's progress from one cycle to the next, or by a document that lists and organizes the essential skills needed to continue the school career, provided that these instruments are developed, monitored and adapted by the actors in the school.

Because of the interactions they implicate, such devices could prove to be potentially formative for their implementers and contribute to the modification of their professional conceptions. This is what will be explored here

Curriculum quality criteria

The preceding reflections show that the organization of teaching activities and teachers' conceptions of school learning can be described along a spectrum that goes from a strict isolation of individual actions to their integration into a coherent whole. This positioning determines the quality of the curriculum. On the one hand, if activities are fragmented from one class-cell to another, the learner's journey would be subject to numerous breaks, would only make sense for those who succeed, and would depend largely on the personality of each teacher. Conversely, an integrated, coordinated organization of classroom activities would

make it possible to improve learning throughout the various cycles of compulsory schooling. However, the achievement of such objectives would depend on the implementation of mechanisms that would require teachers to make their activities coherent, to adapt them to the particularities of each learner, and to assess their relevance to the curriculum objectives. These devices therefore play a decisive role in the quality of the curriculum, since they should contribute to changing teachers' conceptions and practices. It is the teachers' conceptions of the curricular organization of their activities that will be evaluated here, according to the three dimensions resulting from the preceding analyses.

The first dimension consists of the coordination, more or less extensive and well thought-out, of class activities in a collective project. This dimension determines the extent to which teachers ensure that the activities implemented in their class are part of a broader dynamic, at least at the cycle level, so that the coherence of their organization can be perceived by the recipients of the curriculum. A second dimension relates to the consideration, more or less constructive, of inter-individual differences between learners. The question is whether it is reasonable for teachers not to limit themselves to planning activities for a class as a whole, but to adapt and differentiate the situations according to the particularities of the learners. Finally, the third concerns the more or less instrumented assessment of the effects of school activities and devices on the learners or their environment. The question is then to know whether, for teachers, it is important not only to carry out activities that the pupils enjoy or that allow the class to run smoothly, but to design situations whose impact on learning can be objectively assessed.

The integration of teaching activities as a criterion of school quality

Each of the three dimensions of the curricular mode varies between two poles, cellular and integrated. Specifying the position on this spectrum then comes down to designing the evaluation reference framework. The latter was developed and tested, in an exploratory manner, using preliminary interviews and then an intermediate questionnaire (Grangeat, 2003). These approaches made it possible to stabilize a reference framework based on three dimensions. The first dimension, concerning the coordination of class activities in a team project, is defined according to three characteristics: the existence of a system common to several teachers; the development of a team dynamic; and the scope of the actors involved in the system. The second, relating to the consideration of the particularity of the students, consists of: recognizing the singularity of each one; modifying classroom practices and systems according to the results of the evaluation of their effects; adapting the activities to the plurality of learners. Finally, the third, which relates to the assessment of the effects of the teaching, includes: the development of tools for evaluating the system; the effective practice of this evaluation; the progression in this evaluation process leading to a distinction between the professional skills that have been mastered and those that remain to be perfected**.**

The evaluation of systems, source of transformation of practices

Such a curricular organization is unlikely to be easily implemented by teachers alone. The question is then to understand under what conditions curricular arrangements can lead teachers to move towards more integrated professional conceptions. The process of evaluating the quality of curricula could be such a lever for change.

Research shows on the one hand that when evaluation focuses on creating meaning throughout the learning or training process, it transforms initial representations (Cardinet and Laveault, 2001) and on the other hand, that the development of metacognitive secondly, that the development of metacognitive regulations, based on this type of evaluation, leads to a better understanding of the actions necessary for the success of complex tasks (Allal and Saada-Robert, 1992; Grangeat, 1999; Lafortune, Deaudelin and Deslandes, 2001; Noël, Romainville and Wolfs, 1995). Finally, the work carried out in the field of professional didactics supports the idea that professional skills, and therefore the conceptualizations that enable the practitioner to understand his or her own activity, are part of a developmental dynamic comparable to that of learning (Grangeat, 2006; Mayen, 1999; Pastré, 2005). Consequently, provided that the approach used is one that creates meaning and regulation, it would seem fruitful to involve the teacher in the evaluation of his or her own professional practices and, in particular, those relating to collective work (Altet, 2001; Bernard, 1998; Gather Thurler, 2000). Such an evaluation process could contribute to improving the quality of the curriculum.

Evaluation of curricular devices as a training component

This is the question explored in the following empirical study, which focuses on a training program that places educational teams in a position to evaluate their collective system. This training through evaluation - which lasts three years and involves practitioners, trainers, advisors, inspectors and researchers - consists, with each team of trainees, in problematizing the functioning of the school and then imagining, implementing and evaluating a curricular system. The training includes occasional inter- or intra-school meetings.

Three objectives, all of which give a central place to evaluation but whose respective importance evolves during the course of the action, structure this training.

- Elaborate: analyze the existing school functioning; construct a problem to be solved collectively and concerning the improvement of school learning; imagine a system aiming to respond to the problem.
- Carrying out: implementing the system; designing the reference systems of its evaluation; assessing the functioning of the system in order to reinforce the harmonization of actions; assessing the effects of the system in order to identify its impact on learning paths.
- To share: to write a report describing the process and its results; to communicate these results between the schools participating in the action**; communicate these results between the schools participating in the action.**

Question and methodological framework

The aim of the study is to understand how the process of evaluating curricular systems, with the teaching team of a school, in cooperation with outside professionals (other schools, trainers, advisors, inspectors, researchers), modifies the teachers' conceptions of the organization of their collective work. The hypothesis being that this modification would be due to a better shift in the teachers' points of view with regard to their activities, the learners and their own evolution.

This transformation would follow the three dimensions characterizing the integrated curricular organization. Teachers could then make explicit how they achieve:

- Move beyond a focus on their personal classroom practices to integrate them into a team, cycle or school project;
- Go beyond the design of activities adapted to the class as a whole, in order to consider the particularity of some of the learners;
- Go beyond the simple attention to the design of adequate activities, in order to appreciate the effects of the teaching devices on learning.

This change in conceptions - making explicit what is usually "taken for granted" in the organization of work at the school level, clarifying the conceptions implicitly at work within the real curriculum - would constitute one of the necessary steps towards practices in line with the objectives of an integrated curriculum. The present study therefore confines itself to this first stage, to what teachers claim about their practices.

The evaluation framework was used to construct the questionnaire used to collect the data: each of the 18 items in the framework gave rise to a question to which the respondents were asked to answer yes or no; an open-ended question then asked them to justify their choice. Two groups of respondents were formed: 34 teachers who had taken the training and 30 teachers from regular schools. Since these respondents were volunteers, the groups were not matched. However, data analysis allows for comparison of reported conceptions and practices; differences between the two groups are tested using the $\chi 2$, with the Yates correction applied if necessary.

Evaluate curricular quality along three axes

The teachers' curricular conceptions were analyzed according to the three dimensions identified above.

Coordinating classroom activities in a collective project

Regarding the coordination of personal classroom practices within a team, cycle or school dynamic, the quantitative analysis of the questionnaire responses (Table 1) showed that all the indicators were clearly positive for the group of teachers trained in the evaluation of curricular systems (ECS), whereas this was not the case for the schools not included in the approach (NID).

The largest quantitative difference between the two groups concerned the existence of a reference document in the school that enabled each teacher to monitor the functioning of the curricular system and to adjust the implementation of the joint project with the pupils for whom they were responsible (1.1.2). On this point, the analysis of the open-ended questions reveals that, in the ordinary schools (NID), the teachers sometimes say that they meet but without specifying the purpose of the meeting, and, more often, that they are satisfied with annual reviews or with each teacher's commitment to respect the common project. Conversely, in the schools that were formed (EDC), the teachers said that they referred to their evaluation document in order to make assessments based on the operating indicators that they had developed. This referent, who organizes the indicators for evaluating the functioning of the system, seems to make it possible for the various professionals in the education system (specialized teachers, educational assistants, psychologists, etc.) to explain their practices to each other and to cooperate. In fact, the analysis of the open questions shows, on the one hand, that the diversity of the professionals involved in the NID schools is less than in the DC schools and, on the other hand, their mode of participation differs significantly. Thus, in the NID schools, when these people intervene, it is rather in the form of services consisting, for example, of "doing" phonology, kinesiology or support, or accompanying school trips. Conversely, in the responses from the EDC schools.

Table 1

The coordination of individual practices in a curricular system

		EDC (N= 34)		NID (N=30)		Threshold
Criteria	Indicators	Yes	No	Yes	No	
1.1 Existence of a curricular device including classroom activities of the team members.	1.1. An identifiable system that engages the team in the improvement of the school organization	34	0	27	3	n.s.
	1.1.2. A document organizes the indicators for evaluating the functioning of the system	26	7	5	25	P ‹ 0.02
1.2 Dynamics of the educational team around the curricular system	1.2.1 Inter-cycle meetings are held regularly throughout the year to ensure the steering of the system	31	2	23	7	P ‹ 0.02
	1.2.2. Exchanges about classroom practices are frequent and effective.	31	2	21	9	P ‹ 0.02
1.3 Scope of the actors involved in the curricular system	1.3.1 Different specialized professionals Intervening in the school field cooperate in the scheme	29	4	18	12	P ‹ 0.02
	1.3.2 The school's partners are involved in the implementation of the team's scheme	26	6	23	7	n.s.

The integration of these members of the educational team who are not responsible for the classroom is a necessity for the effective functioning of the school and the actions of the various professionals are better harmonized.

This opposition between fragmentation and harmonization also appears in the methods of exchanging practices. In both groups, the informal aspect of these exchanges was strongly cited in the responses to the open-ended questions, although these differed quite a bit. Profoundly. Thus, the teachers from the regular schools (NID) mentioned exchanges during meetings, but above all mentioned the fact that it was by carrying out the project, by doing something together, that their practices were enriched. Only those in the trained group (EDC) indicate that meetings are scheduled, often on the cycle, to exchange practices related to the common system. The modification of practices, based on the reference framework of the curricular system and times These disparities between the two groups, revealed by the analysis of responses showing statistically significant differences, lead us to reexamine the results relating to the indicators for which the two populations appear similar. In fact, the responses to the open-ended questions show a clear distinction between the two groups. For example, when asked to describe their common project, teachers from non-supported schools

(NIDs) most often remain confused (i.e., language and science), while those from trained schools (EDCs) always give the same answer. (i.e., speaking to learn, learning to speak). The same is true of the brief description of the common project: NID teachers always state a series of themes that hardly seem operational, whereas those from EDC schools almost always cite two or three essential objectives of their system. Thus, behind an apparent similarity, with each school being able to cite a project common to the teachers, lies a major disparity: on the one hand, a thematic arrangement of actions and, on the other, a clearly identified scheme. This result suggests that, in the NID group, the educational team's project remains formal and is content to incorporate the views and preferences of each teacher - which is possible in Senegal since the system is based on the freedom of individual pedagogical choices - whereas, in the EDC group, these individual choices would be harmonized through the curricular device.

As a result, the first perspective of modification of curricular conceptions would be confirmed: training and helping teams to develop and evaluate their curricular devices modify the school organization in the direction of greater coordination of individual teachers' actions.

Consideration of the particularity of the students

With regard to taking into account the particularity of some of the learners, all the items are positive for the group of learners (EDC) except one, for which the responses are equally divided (Table 2). However, only two indicators distinguish the two groups in a significant way.

The indicator on which the teachers were equally divided was the questioning of students or their families about school functioning (2.1.1). However, on this point, the regular school teachers (NID) gave a clearly negative response and the two groups thus differed significantly. With regard to better identifying skills that are not immediately obvious in some students (2.1.2), the results are significant, showing that 80% of the EDC group said they were able to do this, compared to 66% of the NID group; however, many EDC teachers (40%) did not answer this question. Analysis of the responses to the open-ended questions indicates that those who did not respond said they were in a phase of doubt: the implementation of the device and the exchanges it entails highlight the difficulty of this detection, which they thought they had mastered before. For the teachers in the EDC group, the recognition of the singularity of the students seems explicit, even if, for many, it is marked by uncertainty. Moreover, it appears that, with a high degree of confidence, the EDC group was the one that said it practiced temporary groupings, inter-class workshops and breakdowns most often in order to take account of the diversity of learners (2.3.2).

The teachers are equally divided between those who say they modify the system according to the evaluation of its effects and those who say the opposite (2.2.1). For some of the teachers, adapting the system or the joint project is inevitable. For the EDC teachers, this was done on the basis of an evaluation based on the common reference framework (1.1.2). For the others, it depends more on the teachers' feelings and the learners' behavior. For another group of teachers, the system is perceived as stable. The EDC teachers say that, since the development

of the system required many meetings beforehand, its planning was correct and did not require any changes along the way. For the others, changes to the joint project, perceived as minor, were decided during informal exchanges that did not require an evaluation mechanism. When it came to varying or diversifying the learning situations (2.2.2 and 2.3.1), the responses of both groups were clearly positive. This result shows that the NID teachers who volunteered to answer the questionnaire have identical conceptions to those of the EDC group with regard to the modalities of differentiation that can be implemented in their own classrooms and on their own initiative.

TABLE 2

Consideration of the particularity of the students

		EDC (N= 34)		NID (N=30)		
Criteria	Indicators	Yes	No	Yes	No	Threshold
2.1 Recognition of surdents' uniqueness.	2.1.1 Teachers conduct surveys with students or their families on the relevance of the system.	15	15	3	27	P<0.02
	2.1.2 Teachers try to detect in some students skills that are not obvious at first.	15	4	19	10	ns
2.2 Adaptation of the system and classroom practices to the diversity of the students.	2.2.1 The rise of its effects leads the teachers to the modification of the device	18	15	14	15	ns
	2.2.2 The testing of new practices leads to a variation of the situations proposed to the students of the class	33	0	29	1	ns
2.3 Diversity of activities according to the particularities of each one	2.3.1 Activities provide for the diversification of situations according to the students in difficulty or in success.	32	0	22	4	ns
	2.3.2 Sessions allow for temporary grouping of students according to their diversity	30	3	20	8	**P<0.05**

As a result, the second perspective of modifying conceptions would be valid on two essential points for the organization of the curriculum: considering the point of view of the learner and his or her family regarding the functioning of the school; and introducing activities that go beyond the separation of classes. A certain collegiality in the regulation of the curriculum would thus emerge in the schools of the EDC group.

Assessment of the effects of activities on learning

In terms of assessing the effects of teaching arrangements on student learning, all but one of the indicators are positive for trained schools (EDC), while the same is not true for regular schools (NID). However, for two items, the two groups are not reliably distinguished (Table 3).

Three indicators are positive and distinguish the two groups with a very low risk of error. The first concerns the explicitness of the indicators for identifying the effects of the system on the learners (3.1.1): the majority of the teachers from ordinary schools (NID) did not develop such benchmarks, whereas the trained teachers (EDC) almost all referred to a document developed by the team. The other two (3.2.2, 3.3.1) relate to the idea that, in order to be improved, professional practices - whether they are part of the common project or not - can be evaluated by the teachers, using instruments that they create for themselves. Unlike their colleagues in NID schools, who are very divided on this point, teachers in EDC schools say they have internalized this way of practicing. This dynamic of evaluation and improvement of professional activities thus differentiates the two groups and marks a transformation of curricular conceptions.

The indicator (3.1.2) that is negative for the EDC group concerns the evaluation of the effects of the system by observing a few students chosen for this purpose (retaining six students - two successful, two struggling and two average - in order to pinpoint the effects of the system is a possibility arising from the training). Teachers in NID schools, who clearly tend not to practice such assessment or observation, never justify their response to this question. This gap probably reveals a lack of skills and knowledge in the evaluation of teaching processes among these practitioners; in fact, it is likely that for most of them, evaluation is only concerned with learners' productions or behaviors. In the trained group (EDC), those who justified their negative response argue that the class size allows for the observation of all subjects, without being limited to a sample; that is, they evaluate the effects of the device. Consequently, the analysis of the open-ended questions again allows us to distinguish the two groups explicitly and to better understand the ideas of the trained teachers.

TABLE 3

Assessing the effects of devices on learning

				EDC (N= 34) Threshold		NID (N=30)
Criteria	Indicators	Yes	No	Yes	No	
3.1 Development of tools for evaluating the system	3.1.1 Indicators for evaluating the effects of the curricular system are developed collectively.	25	8	12	15	P<0.02
	3.1.2 A reference document allows the observation of the effects of the system on some of the students.	15	18	7	23	P<0.10
3.2 Practices for evaluating the system and classroom activities.	3.2.1 The teachers note the effectiveness of the system on learning and school behavior.	33	0	28	0	ns
	3.2.2 The evaluation tools and approaches are extended to activities not related to the system.	33	1	18	8	P<0.01
3.3 Progression in the assessment of the system and classroom activities.	3.3.1 The elements of the system on which to focus improvement efforts are identified.	27	5	16	13	P<0.02
	3.3.2 A distinction is made between professional practices that have been mastered and those that need improvement	22	9	10	10	ns

Two other components are positive but do not distinguish the two groups in any significant way. One item concerns the observation of the effectiveness of the system (3.2.1); however, here again, the analysis of the open-ended questions shows that the NID school teachers often remain vague in justifying this observation, whereas the EDC school teachers base it on precise indicators. Thus, to explain the effects observed, NID teachers most often respond with key words (i.e., more motivation, participation, curiosity), whereas EDC teachers base their explanations on specific arguments drawn from their indicators (i.e., awareness of lexical

deficiencies, improvement in oral language). The other is related to the dynamics of improving personal professional practices (3.3.2). This question resulted in a third of the NID teachers not responding and split the respondents evenly; teachers who respond in the negative - and presumably those who do not respond - believe that it is up to the staff of the inspecting body to identify practices that need improvement. In contrast, those in EDC schools almost all respond and clearly say that they have to distinguish between professional practices that they have mastered and those that they need to improve.

Consequently, the third perspective of modification of curricular conceptions would also be relevant: the teachers of schools trained and assisted in the evaluation of their curricular systems say they appropriate this approach, integrate it into their personal functioning and thus develop a dynamic of analysis and improvement of collective practices.

DISCUSSION OF RESULTS

The results of the survey show that, for all 18 items selected to characterize the quality of curricula: 7 items have frankly or relatively negative responses for teachers in regular schools (NID); 17 have positive responses for those in schools that have designed and evaluated a curriculum system (EDC). 1 item is exactly the same for respondents in the EDC group, while the responses are clearly negative for those in NID schools. The two groups differed significantly on 11 items. These differences concern: the harmonization of teachers' actions; the coherent commitment of all educational stakeholders; the instrumented, criterion-based evaluation of the effects of teaching practices; the taking into account of the opinions of learners and those around them regarding the organization of teaching; the relaxation of the partitioning of activities. These differences are central to the definition of curriculum quality. However, teachers in ordinary schools do not position themselves strictly in opposition to their colleagues: they include school partners in their actions, observe the effects of their project and are careful to adapt their activities to the particularities of the learners so that they do not always treat them as a whole. These elements ensure a good degree of coordination of the curriculum.

These results therefore make it possible to move forward on the question of the quality of curricula and its improvement as a result of the mode of evaluation: supporting schools, through a formative approach based on the clarification of indicators of the evaluation of their collective arrangements, helps teachers to develop better coordinated and more coherent curricular concepts. The quality of the organization of teaching work at school level could thus be improved. The reliability of this result remains to be discussed.

The first question to be explored is the similarity of the two samples before the training process. It is clear that no data are available on this subject: reliably matching two groups of teachers before a training process is extremely difficult to achieve. However, during the process itself, the trainees' sense of improvement in personal practice effectiveness was assessed. The trainees who responded to this intermediate survey said that they felt involved in a dynamic of improvement of their collective functioning within their school team and showed that this transformation consisted in a better coordination of their curricular activities (Grangeat, 2003). This study, by comparing the trainees' conceptions of the collective

organization of their work with those of teachers in schools not involved in the process tested, confirms this intermediate result. It is therefore longitudinal temporal consistency (Van der Maren, 1995) that reinforces the reliability of the results of the present study.

The validity of the result will be better, however, if the two groups differ only in their training in curriculum evaluation, and if the questionnaire targets the effects of this mode of professional support in a relevant way. In fact, the NID group received, at best, only thematic training (science, citizenship, language). Moreover, the composition of the two groups was identical: a majority of women, not in charge of the school, an average of 20 years of service, including seven or eight years in the school surveyed, and a distribution in each of the three cycles, with a predominance for the first. Finally, experience played no role in the difference between the two groups: no difference was found when comparing the responses of experienced teachers (more than eight years of service) with those of beginners. The questionnaire appeared to be relevant to the purpose of the study: the two groups did not differ on three items not corresponding to any indicator of the reference framework and added to test this validity.

It is certain, however, that the number of respondents and the collection of data exclusively by questionnaire are problematic; this opens up an avenue for future research, as approaching the processes of school functioning by means of a survey is an essential challenge (Scheerens, 2004). Nonetheless, within these limitations, the data presented here provide some useful insights into the evaluation of curriculum quality.

Assessing and transforming the quality of curricula

All in all, within the limits of its validity, this study makes it possible to make progress on three points: 1) the definition of curriculum quality, 2) the role played by the evaluative approach to this quality and by the institutional network, 3) the transformation of the organization of teaching work in the school.

Three methods for the quality of curricular organizations

The quality of the school probably depends in part on the arrangements that coordinate the actual curriculum, over the duration of at least one teaching cycle. It is these curricular arrangements that would make it possible to reduce the closed conceptions of the actors and that would create the benchmarks contributing to the modification of teaching practices (Grangeat and Besson, 2006). However, between the cellular and integrated poles, the empirical investigation reinforces the idea that the organization of teaching work is characterized along a continuum: between the two modes of curriculum regulation, the results highlight an essential level that corresponds to the conceptions of the ordinary school teachers who agreed to answer the questionnaire. In fact, these teachers - using their own skills, their personal commitment and the occasional support of a few trainers or advisers - manage to partially coordinate their activity.

At this level, the curriculum is neither cellular nor integrated, but lines of coherence appear: common themes federate the teachers' actions, the association of the school's partners is pursued, attention is paid to the effects of the common project on the learners, and

differentiated class sessions take into account the diversity of the school population. This result is in line with other investigations which have identified the fact that, between the operation of closed class-cells and the organization of teams, there is, to a very large extent, the "open class" (Barrère, 2002). The challenge, at the school level, is to go beyond this intermediate mode of operation by moving towards greater coordination in the organization of collective work

A formative and interactive assessment approach

The empirical investigation also confirms the idea that the nature of the evaluative approach plays a role in the success of this qualitative leap towards an integrated curriculum (Cardinet and Laveault, 2001). The approach studied here is formative and interactive in nature in that it is interested in conceptions, processes and products (what teachers think, what they try, what they succeed in doing); it is part of a time frame that allows for regulation and interaction (three years); it recognizes the skills of the trainees (the teams choose the device to be evaluated); It aims to ensure that professionals take ownership of the curriculum evaluation indicators (the explanation of the process and product reference frameworks is an important part of the training); it is based on reference documents that set improvement objectives (reference tables and experimental reports); it stimulates interaction between different actors (the network of schools, trainers, advisors, inspectors and researchers). The quality of curricula would be improved by such an evaluative approach.

Indeed, the study indicates that such an evaluation modifies the conceptions of collective work: the teachers say that they manage to decentralize from their initial point of view in order to coordinate their activities in a team setting, to evaluate the effects and to modify their practices in the direction of a better individualization towards the learners. In this respect, these results are in line with those of other research studies: those which, in terms of learning, determine the conditions under which formative and interactive evaluation contributes effectively to the development of skills (Allal, 2002); others which, in terms of training, show that the organization of workshops for reflection and action, bringing together the teachers of a school or sector, enables them to move towards the conceptions characteristic of an integrated curriculum (Andrews and Lewis, 2002).

A necessary institutional network

Finally, this study reveals that it seems difficult for isolated teaching teams to follow a trajectory aimed at a more thoughtful management of the collective aspects of their work. In order to move away from a fragmented mode of work, they should be able to count on a facilitating professional environment, to be part of an institutional network, which support them during this transformation of their functioning. This result is in line with other studies which highlight the need to create networks of cooperation and exchange, and synergies between schools (Dutercq, 2000) in order to create a kind of organizational learning tool (Gather-Thurler, 2000) and to organize more collegiality in the regulation of school operations (van Zanten, 2004; Verhoeven, 1999). This result leads to the study of the effects of the establishment of a network of educational institutions and the organization of the work situation on professional skills (Grangeat, 2004; Grangeat and Munoz, 2006).

CONCLUSION

From a pragmatic point of view, this study outlines a process for improving the quality of curricula. In the institutional system studied, a few elements appear to be levers contributing to the modification of conceptions, in the sense of better coordination between professionals: identifying a curricular system that gives coherence to the actions of the school's teachers and allows for communication with the network of partners; clarifying the indicators necessary for the improvement of the quality of curricula. the actions of the school's teachers and enables them to communicate with the network of partners; clarifying the indicators needed to regulate the functioning of this system, to note the achievement of its objectives and to publish its results; carrying out surveys among the recipients of the curriculum in order to take their points of view into consideration in the transformation of the school.

In order to support this dynamic interaction, it appears that the schools studied were never asked to report on their operations, but to report, to and with other professionals, on the way in which the latter were designed, evaluated and improved. A future study may explore the conceptions of professionals working with teachers collaborating with teachers.

From a heuristic point of view, this study could make some contribution to research on the link between teacher training, curriculum evaluation and school quality improvement. Indeed, the results tend to reinforce the hypothesis of a relationship between the organization of work and teachers' conceptions; they thus open up two research perspectives. The first is to specify the continuum between the cellular mode, closed to the classroom and the discipline, and the integrated mode, open to cooperation and interactions: the aim is to identify these modes of curriculum regulation much more precisely than by defining an intermediate position, which is too consensual to shed light on the mechanisms of modification of professional competences. The second consists in specifying the contribution of the elaboration and evaluation of curricular devices in this professional dynamic: it is a question of identifying the components of the work situation which could have an impact on the teachers' conceptualizations and the quality of the curriculum.

Références

Allal,1. (2002). «Acquisition et évaluation des compétences en situation scolaire», dans J. Dolz et E. Olagnier (dir.), *L'énigme de la compétence en éducation***,** Bruxelles, De Boeck, p. 77-94.

Allal, 1. et M. Saada-Robert (1992). «La métacognition: cadre conceptuel pour l'étude des régulations en situations scolaires », *Archives de psychologie, 60,* p.265-296.

Altet, M. (2001). «Pratiques d'évaluation et communication en classe », dans G. Figari et M. Achouche (dir.), *L'activité évaluative réinterrogée,* Bruxelles, De Boeck, p. 78-83.

ANIDrews, D. et M. Lewis (2002). «The experience of a professional community: Teachers developing a new image of themselves aNID their workplace», *Educational Research,* 44(3), p. 237-254.

Barrère, A. (2002). « Pourquoi les enseignants ne travaillent-ils pas en équipe?», *SEDCiologie du travail*, 44, p. 481-497.

Bernard, H. (1998). «Évaluer pour améliorer l'enseignement», *Mesure et évaluation en éducation, 21(2), p. 1-3.*

Bernstein, B.(1975).«On the classification aNID framing of educational knowledge **»,** dans *Class, Codes aNID Control,* vol. 3, LoNIDres, Routledge aNID Kegan Paul, p.85-115.

Cardinet, J. et D. Laveault (2001). «L'activité évaluative en éducation: évolutions des préEDCcupations des deux côtés de l'Atlantique», dans G. Figari et M. Achouche (dir.), *L'activité évaluative réinterrogée,* Bruxelles, De Boeck, p.15-32.

Dutercq, Y. (2000). «Administration de l'éducation: nouveau contexte, nouvelles perspectives », *Revue française de pédagogie,* 130**,**p. 143-170.

Forquin, ***J.-c.*** (1996).*École et culture: le point de vue des sEDCiologues britanniques***,** 2e éd., Bruxelles, De Boeck.

Forquin, ***J.-c.*** (1998). «Curriculum **»,** dans P.Champy et C. Étévé (dir.), *Dictionnaire encyclopédique de l'éducation et delaformation,* Paris, Nathan, p. 239-243.

Gather Thurler, M. (2000). «L'innovation négEDCiée: une porte étroite », *Revue française de pédagogie,* 130**,**p. 29-42.

Grangeat, M. (1999). «PrEDCessus cognitifs et différenciation pédagogique», dans C. Depover et B. Noël (dir.), *L'évaluation des compétences et des prEDCessus cognitifs:. modèles, pratiques et contextes***,** Bruxelles, De Boeck, p. 115-127.

Grangeat, M. (2003). «Effets de l'évaluation des dispositifs curriculairessur les conceptions et les pratiques d'enseignants de l'école primaire», *Mesure et évaluation en éducation,* 26(3), p. 61-83.

Grangeat, M. (2004). «Effets de l'organisation de la situation de travail sur les compétences curriculaires des enseignants **»,** *Revue française de pédagogie,* 147, p. 27-42.

Grangeat, M. (2006). «Formation continue et développement des compétences des enseignants», ***Éducation permanente,*** 166, p. 171-188.

Grangeat, M. et **C.** Besson (2006). «Analyse du métier d'enseignant sous l'angle des activités réflexives: coNIDuite empirique ou proactive de l'activité? **»,** ***Formation et pratiques d'enseignement en questions,*** 3, p. 17-31.

Grangeat, M. et **G.** Munoz (2006). «Le travail collectif des enseignants: activités de coopération et de partenariat d'enseignants de l'éducation prioritaire», ***Formation emploi,*** 95, p. 75-88.

Lafortune, L., **C.** Deaudelin et R. DeslaNIDes (2001). «Formation à l'accompagnement dans une optique réflexive et métacognitive», dans 1. Lafortune, **C.** Deaudelin, P.-A. Doudin et D. Martin (dir.), *La formation continue: de la réflexion* à *l'action,* Québec, Presses de l'Université du Québec, p. 45-71.

Lessard, **C.** (2000). «Évolution du métier d'enseignant et nouvelle régulation de l'éducation », *Recherche et formation,* 35, p. 91-116.

Mayen, P.(1999).«Des situations potentielles de développement», *Éducation permanente***,**139, p. 65-86.

Noël.B; M. Romainville et J.-1. Wolfs (1995). «La métacognition: facettes et pertinence du concept en éducation», *Revue française de pédagogie,* 112, p. 47-56.

Pastré, P.(2005).«La conception de situations didactiques à la lumière de la théorie de la conceptualisation dans l'action», dans P. Rabardel et P. Pastré (dir.), *Modèles du sujet pour la conception: dialectique, activité, développement***,** Toulouse, EDCtarès, p. 73-108.

Roussier-Fusco, E. (2003). «Le modèle français d'intégration et les dynamiques interethniques dans deux écoles de la banlieue parisienne», *Revue française de pédagogie*, 144, p. 29-37.

Scheerens, J. (2001). «Mesurer les iNIDicateurs sur le fonctionnement des écoles par voie d'enquêtes», *Politiques d'éducation et de formation***,** 3, p. 59-75.

Tardif, M. et C. Lessard (1999). *Le travail enseignant au quotidien: expérience, interactions humaines et dilemmes professionnels***,** Bruxelles, De Boeck.

Van der Maren, J.-M. (1995). *Méthodes de recherche pour l'éducation***,** Bruxelles, De Boeck.

Van Zanten, A. (2004). *Les politiques éducatives***,** Paris, Presses universitaires de France.

Verhoeven, M. (1999). « PrEDCéduralisation et réflexivité : des outils pour la régulation des établissements scolaires ? », *Éducation et sEDCiété***,** 4(2), p. 143-163.

Young, M. (2001).« Du "curriculum en tant que construction sEDCiale " à la "spécialisation intégrative" », *Revue française de pédagogie***,** 135, p. 29-34.