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Impact of a skills-based approach on school performance: The case of elementary schools in the city of Richard-Toll, Senegal

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Abstract

This study aims to evaluate whether the skills-based approach used in the most recent reform of the basic education in Senegal improved the performance of elementary students and teachers. The study approach used questionnaires (300 respondents) and in-depth interviews (14 interviews) to compile the experience and opinions of stakeholders in the Richard-Toll schools. The results do not provide strong evidence for significant improvements in elementary students or teachers as a result of educational reform. Instead, the knowledge gained from the stakeholder interactions as part of this study suggest many weaknesses in using school completion rates as a measure of success.

Key words: *education reform, learning-teaching performance, pedagogical methods, Senegal, skills-based approach*

Introduction

For more than a decade now, French-speaking sub-Saharan Africa has been the scene of many educational reforms. In most countries, with some variations noted here and there, reform has generally been carried out by:

- (1) rewriting primary, middle and high school programs;

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- (2) renewing textbook collections;
- (3) training teachers, hoping for changes in learning content and in classroom practices and better teaching-learning effectiveness.

According to the basic education curriculum, it is necessary to concretely redefine planning methods, to organize and implement teaching-learning in close connection with the option of training a "citizen aware, responsible, respectful of the nation and able to participate in the development of his country" (Basic education curriculum, Preamble, 2005).

Applied to elementary education since 1996 in Senegal, the basic education curriculum sets the challenges to shake established routines, to make more or less obsolete some theories (behaviorism and "magistrocentrism"), while inviting to actively build the conditions of sustainable access to modern pedagogy of integration. This pedagogy would allow to mobilization and integration of a set of skills in order to solve a problem of learning or of everyday life's.

From 1996 to 2013, the basic education curriculum has taken its place in the programmatic system of basic education in Senegal. There are many questions that emphasize the effectiveness of expected changes in the basic education curriculum. How is this program implemented by teachers? Has it promoted changes in class practices? Has it allowed for better learning and for what outcomes? What does the educational community think about the basic education curriculum? Thus, this study attempts to measure the impact of the implementation of basic education curriculum on students' performance in the city of Richard-Toll.

Specifically, this study attempts to:

- (1) to review the weakness of the two previous reforms promoting an objective-based pedagogy and a content-based pedagogy (see background section, paragraph 1 and 2 for more information about these reforms);
- (2) to determine and analyze the evolution of the completion rate between 2005, the beginning of the reform evaluation and 2013, the year of the first certification evaluation);
- (3) to determine students' mastery level in French language and mathematics;
- (4) to interpret the evolution of final evaluations;
- (5) to assess the degree of ownership of the basic education curriculum by teachers as well as the opinions of the school system partners on the ongoing reform.

This paper is organized in three parts. First, the sociohistorical context of the emergence of the basic education curriculum is discussed. Then the methodology and the main results are presented. Finally, some limitations of the study and some suggestions in terms of research needs are discussed.

Background

In Senegal, between adaptations¹, crises and reforms in the aftermath of political independence², the recurrence of changes, related to demands for a Senegalese national school sovereign and at the service of development, is manifested by the design and implementation of curricula and teaching-learning methods that are always presented as being in step with the era and more likely to improve teaching practices. Indeed, from 1960 to the present day, elementary education has experienced the “old programs” promulgated by decree 79-1165 and replaced by the “new programs” since 1987, using pedagogy based on objectives.

The “new programs” were replaced - against their tendency to atomize too much knowledge - by the basic education curriculum in 1996, using pedagogy based on skills which is supposed to give students the capacity to mobilize and integrate skills for problem solving. From such a perspective, the financial contribution of government, partners and households to the national education effort is growing remarkably. At the elementary level, the cost per student has almost doubled, from 100 USD in 2005 to 195 USD in 2013, according to data from the 2012 report of the Senegalese Ministry of National Education.

Partners' contribution has increased from 19.9 million USD in 2005 to 72.4 million USD in 2013 for the elementary school (World Bank, 2012). The contribution from households was estimated at 246.2 million USD in 2002

1 See the book by Georges (1917). A moral conquest, a real advocacy for the adaptation of education to the African populations. *Paris, A. Colin*. 356 p. See also Senghor (1937). "The Resistance of the Senegalese Bourgeoisie to the rural people's school." In International Congress of Cultural Evolution Journal. *French West African Press*. 40-44. In developing his arguments, Senghor wanted to provoke his compatriots in Senegal who had long called for the full introduction of metropolitan school standards. Senghor developed his vision of school reform in the speech given at the Dakar Chamber of Commerce in September 1937. Relayed in the local press, this speech was also published later under the title "The cultural problem in French West Africa." In Senghor (1964). "Liberty I: Negritude and Humanism." *Paris, Le Seuil*. p. 11-21.

2 We talk about the crisis of the years 1968 and 1969, the reform of 1971, the General States of Education and Training Conference of 1981 and the National Commission for the Reform of Education and Training, the 1987's reform with the “new” programs, the strike and the 1988's white year, and the orientation law 91-22 of February 16, 1991.

(Senegalese household survey, 2002 – Senegalese survey on monitoring poverty, 2006).

In the city of Richard-Toll where this study was carried out, 15,384 USD are allocated each year by the municipality to schools to mitigate family expenses. Similarly, the Senegalese sugar company, in addition to a substantial contribution of approximately 692,307 USD, supports the municipality through construction/rehabilitation/equipment for classes and libraries.

The recognition of the interest in the implementation of basic education curriculum reform by public decision makers and partners, together with the observed scientific interest expressed on this subject through books dealing with planning and evaluation of educational content, justifies the need to know more about the latest curriculum's impact on student and teacher performance.

There is a need for conceptual clarification stemming from the frequent confusion between reform of education systems in general and, more specifically, program reform and reform of teaching methods.

Therefore, it seemed important to show that a study on the reform of curricula and teaching methods allowed, more directly and deeply, to report on the effectiveness of teaching-learning than could a measure of the effects of educational reform that is undoubtedly more complex, comprehensive, and challenging with regard to the means required.

In most cases, previous reforms have shown that the official school curriculum revolves around a methodological basis that does not dissociate sufficiently clearly enough to reconcile teaching methods and methods of learning. Very often, learning methods are confused with teaching methods, as if the teaching-learning relationship was self-evident and the way of teaching could determine how to learn. The content-based approach reform as well as the so-called objective-based approach reform promotes an evaluation based on the memorization of declarative and encyclopedic knowledge which does not favor interactions between didactic situations and students. Similarly, many studies that seek to report on school performance obscure the meso- and micro-dimensions and provide overall results that are often far from classrooms and what happens there. This type of bias is generally observed during large-scale evaluations or tests (sub-regional, continental or international) which do not sufficiently dissociate measures of student achievement and indicators that measure something else: the activity of schools and their own logics, such as repetition rates, which say nothing directly about what students learn. Thus, the information collected and aggregated into

"averages" is not sufficiently objectified and does not allow the effectiveness of student learning to be measured. The formulation of this research topic stems from the observation that Senegalese elementary education is still deeply marked by numerous deficiencies that suggest a lack of action and a decline in its effectiveness despite a series of program reforms, each time including a reform of teaching methods.

The main objective here is not to study the process of implementing basic education curriculum from its conception until the generalization of its implementation, but rather to conduct an empirical analysis of the effects of this ongoing educational reform on the effectiveness of teaching and on the performance of students in elementary school.

The hypothesis of this study is that the skills-based approach, suffering from both ineffective implementation and teachers' lack of ownership in their practices, particularly in French language lectures and mathematical lessons, did not improve the performance of elementary teachers and students in Senegal during the period 2005-2013.

The formulation of this general hypothesis stems from our ambition, probably very great, to extrapolate the results of this research to all schools in Senegal given the fact that the same training was used, roughly at the same time, regardless of localities, or seniority of teachers and their functions.

Review of previous studies

In the context of the reform of basic education curriculum, we were interested in the reflection of Philip H. Coombs (Coombs, 1989) about adaptation of curricula to local situations and realities in sub-Saharan Africa. This author argues that as an adult cannot persist in wearing the clothes of his childhood, as an education system cannot fall back on itself while everything around is transformed.

From this point of view, the conception of relevant programs, within the meaning of Verspoor (2003), must be a priority in Africa. Indeed, according to Verspoor, a school program is relevant when it links learning to the child's experience and environment while meeting the expectations and demands of parents. According to this author, such a program must also prepare the child not in today's world, but in society as it evolves over the next fifty years.

The challenge we face across the basic education curriculum is whether

contextualization of teaching-learning situations can lead to meaningful and useful teaching, more dynamic learning processes, and much better performance transfer.

The living environment is the inevitable area where much learning takes place informally and empirically. Indeed, the proper use of games and toys and the learning of certain roles in family life can provide many skills that teachers could develop at school. This is the socioconstructivist vision that underlies the reform of the basic education curriculum in Senegal with the skills-based approach as its methodological basis.

However, in most African countries where it has been implemented (Cameroon, Ivory Coast, Gabon), the curriculum seems to be characterized by teacher ownership difficulties: the concepts remain to be clarified and made more operational, the problem situations best suited to the various cultural contexts are to be invented, the methods of evaluation are to be renewed. In Senegal as elsewhere in Africa, this reform would polarize the actors and would be far from winning the support of the largest number of stakeholders. In this African context, the question of whether the curriculum will produce the expected results arises more and more openly and the answers become more and more clear or even obvious. In the opinion of Bernard et al. (2007), what the skills-based approach is talking about is levitating in the sky of ideas. This concern confirms the following:

"[...] most of the imported reforms are ready-to-wear technologies that jostle at the doors of the ministries of African countries" (Any-Gbayere, 2006).

However, in the opinion of Delorme (2008), the complexity of school issues in Africa is not of the same order or of the same nature as that of Western societies. Since then,

"[...] we must problematize these potentialities instead of standardizing them by imported or imposed engineering" (Any-Gbayere, 2006).

From this point of view, it appears that a curriculum must be anchored in the economic, cultural and social realities of a country. It must be specific and tailored to the educational needs of the country concerned. An approach designed to meet the educational requirements of one country cannot be parachuted into another country with different realities:

"All the more so in countries as different in terms of financial means and cultures as the territories of Europe and America on the one hand and those of Africa on the other" (Coumba Sall, 2014).

From this author's point of view, developing countries should take care of implementing their own curricula while taking into account their own realities instead of importing or letting themselves be forced into engineering reform which is not always appropriate for their educational systems. This is all the more true because according to the study on curricular reforms by the skills-based approach, made by the International Center for Pedagogical Studies (ICPS), the effects of this recent reform do not seem obvious for African countries:

"[...] it is possible that the developing countries have been offered a model of pedagogy totally out of step with what these societies really expect (ICPS, 2009).

"Reforms have lacked a communication and consultation policy beyond the initial decision-making. As a result, they are little known to the community but also to actors "(ICPS, 2009).

"[...] the costs have been little controlled, firstly because of the difficulty to paint a global picture of the situation, on the other hand, because of the persistence of the project logic despite the official will to pass to a program approach "(ICPS, 2009).

The ICPS study criticizes the lack of preparation that characterizes certain reforms concerning African countries. These reforms have resulted from what could be described as a fad and they have been adopted under pressure from international organizations. But prior work of preparation, adaptation, cost estimation and mobilization of resources is necessary before implementing any reform.

These findings also seem to give reason to Legendre who maintains that:

"[...] educators no longer give credence to school reforms prescribed by authority, [...] these reforms are quickly concocted under the sign of the political and economic urgency" (Legendre, 2002).

In a report of the ICPS, it is emphasized:

"[...] a skills-based approach is difficult to cope with a plethora of students and with insufficient or no support. This situation prevails in the five countries, including Senegal, where the ICPS carried out its study " (ICPS, 2010).

In the same report, ICPS notes that teacher training under the new approach lasts seven days. It is carried out by inspectors trained by the group of forty

inspectors who are the only ones to have been initiated by Canadian experts.

"[...] the training is thus downward; it becomes less relevant and hardly affects the teachers themselves" (ICPS, 2010).

With regard specifically to the level of concern and use of teachers in the reform process, Legendre (2002) believes that instead of parachuting reforms, from top to bottom, there must be a constant dialogue between the actors of the system, especially teachers. In other words, a reform must be the result of a long process of careful reflection with the various actors involved in the field.

Huberman (1983) argues that in any innovation of any importance in education, three units come into play: teachers who are placed in a new situation in relation to materials, students and other teachers; student-teacher-parent-school relationships as a bureaucratic organization.

"As a variable in the education system, teachers are internal participants. They are those who play a legal and social role in the process of change. In other words, teachers are key figures in the final implementation of an innovation that directly addresses the learning process" (Huberman, 1983).

These remarks demonstrate that teachers are an essential link in the education chain and neglecting their role would compromise the success of any educational project. It is known that:

"[...] the many attempts in terms of changes in education have too often ignored teachers and the dynamics that drive them and the contexts in which they work" (Savoie-Zajc, 1993).

In order to facilitate ownership of change by teachers, reformers should make them aware of the importance of the role they can play in the reform and their responsibilities for the success of the initiatives taken. It's clear that:

"Teachers will only implement the discovery process of a proposed method if they have been practiced with them so that they can, in turn, make it discover by their students." (Belloncle, 1984).

"The educational change depends on what teachers do and think." (Fullan, 2007).

The role of teachers should not be limited to provide and evaluate learning, but as principal actors in the education system, their points of view are essential in any

process of change that wants to produce reliable results.

"Teachers need to participate in skill-training workshops, but they also need to have one-to-one and group opportunities to receive and give help and more simply to converse about the meaning of change" (Fullan, 2007).

The attitude of guardianship to give injunctions means that teachers are often the last persons to be informed of the changes they must make; this often creates frustrations and explains that teachers can be:

"[...] hostile to changes that are introduced in schools if they do not participate from the beginning or if they are not associated with them. The result is that no gradual, continuous, useful and sustainable educational renewal will be possible until educators are involved as designers and developers of school education projects" (Legendre, 2002).

It thus appears, according to the authors above, that positive and effective change in education can only be achieved if teachers play a leading role. In a pedagogical renewal, they must be consulted to determine their needs according to what Lapointe (1992) calls "the inductive model." This approach proposes to mobilize all the actors of the education system so that they can express their needs and expectations before making a curriculum. Only in this way a reform can produce the desired effects. Besides, what good is a curriculum for quality if it does not change teaching practices?

The primary issues of the basic education curriculum reform are the effects on students in terms of learning and societal development in the longer term. Throughout the training actions, it is expected that students develop skills. This being admitted, it must be recognized that these expected effects of a new curriculum are unlikely to be obtained if the curriculum does not transform teaching practices.

To achieve a planned change, it is not enough to offer a curriculum that is intrinsically quality (in the sense that it meets the quality requirements and criteria defined by the experts) and it is not enough that the content of this curriculum is negotiated and ratified by all the categories of actors concerned. It is important to take into account the logic of the actors in the field.

A primary characteristic, often forgotten, is that a new curriculum leads to the transformation of teaching practices; this may not be obvious because the change is not decreed. Prescribed reform inevitably provokes resistance. It also induces

changes in behavior on the surface: actors "haggle" innovation (Huberman and Miles, 1984). It sometimes leads to effects that are the opposite of those expected in terms of teaching practices and, consequently, in terms of student achievement.

Skills-based approaches have been implemented in several countries around the world. However, it seems to be particularized by the fact that it has not allowed the expected changes both in the way of teaching and in the quality of learning. In Senegal, considering the overall level of students and the frequency of reforms, some actors question the appropriateness and relevance of the skills-based approach.

Study area

A brief overview of the school personnel in Richard-Toll shows the current structure of the school (Table 1). Part of the Inspectorate of Education and Training of the district of Dagana, Richard-Toll became a city in 1980 and had then 3 elementary schools of at least 8 classrooms each. In these 3 schools, the number of students, which were already large enough, continued to increase year by year. This will justify the need to build other elementary schools especially in neighborhoods with high concentration of people. Today, with 20 elementary public schools, 2 private schools and 1 experimental school (French-Arab), the school population is estimated at 11,143 students including 5226 boys and 5917 girls for 235 teachers including 131 men and 104 women (Our calculations are based on data collected from school headmasters, 2016-2017, Table 1).

Table 1. Number of elementary schools and enrollment status in 2017.

Elementary schools	Teachers		Students	
Khouma Centre	M : 10	W : 07	B : 672	G : 678
Khouma Thiarène	M : 05	W : 07	B : 293	G : 304
Khouma GaMalick	M : 10	W : 08	B : 492	G : 531
Khouma Mbodiène	M : 03	W : 06	B : 224	G : 244
Richard-Toll 1	M : 09	W : 07	B : 306	G : 248
Richard-Toll 2	M : 09	W : 03	B : 213	G : 240
Richard-Toll 3	M : 12	W : 03	B : 305	G : 359
Campement	M : 14	W : 07	B : 286	G : 309
Richard-Toll 4	M : 07	W : 01	B : 143	G : 166
Ndiangué	M : 09	W : 06	B : 400	G : 480
Ndiaw	M : 05	W : 09	B : 384	G : 345

Diacksao	M : 03	W : 04	B : 123	G : 157
Gabriel Deshayes	M : 08	W : 12	B : 346	G : 317
Gaya 2	M : 08	W : 06	B : 333	G : 367
Thiabakh	M : 05	W : 05	B : 205	G : 222
Djidjéri commune	M : 03	W : 01	B : 24	G : 30
NdomboAlarba	M : 03	W : 03	B : 102	G : 88
Khalifa A. Sy	M : 01	W : 04	B : 75	G : 90
Thiabakh 1	M : 01	W : 05	B : 151	G : 140
French-Arab Ndiangué	M : 07	W : 00	B : 149	G : 152

(M: Men, B: Boys, W: Women, G: Girls)

Neighborhoods are mostly very populous, it is not uncommon to find an average of 45 to 50 students in classrooms. In some classes of the initiation course and the middle course 2nd year, the enrollment can reach 60 students usually siting with up to 4 students on the same table-bench. This situation is almost similar to many elementary schools in Senegal, especially schools located in urban areas where questions arise about education quality and management of large groups, among others. The study area is geographically accessible and easy to identify.

Methods

The approach in this study used a standardized questionnaire administered as a personal interview (in French or Wolof) and sometimes self-administered to 300 out of 484 targeted actors within the field of education. This approach facilitated the gathering of new data which was added to the statistics of administration origin collected from documents of the Collective of School Directors (CODEC) of Richard-Toll, the planning office in Dagana and reports from the Ministry of National Education (MEN), UNESCO, and the World Bank.

When more details on any specific aspects were needed, the study used individual semi-structured interviews with a maintenance guide for 16 out of 20 targeted individuals. The interview guide collected the opinions of institutional and political actors.

In total, 316 individuals were surveyed in their workplaces and homes.

To test the hypothesis, two dimensions (learning and teaching) are of interest in this study. These dimensions are analyzed, respectively through the evolution of flow indicators such as completion rate and performance indicators such as success rate and mastery rate. Those dimensions were also analyzed through the

degree of ownership of basic education curriculum and the appreciation of its implementation in classrooms (Table 2).

Table 2. Operational framework of this study.

Dimensions	Concepts	Indicators
Learning	Evolution of completion rate School performance	Repetition rate and dropout rate Mastery rate in French and mathematics in assessments Success rate for certification and final exams Results of collective test
Teaching	Degree of ownership of curriculum Implementation of the curriculum	Results of ordinary inspections Results of class visits Opinions from interviews

Results

Recent curriculum reform promoted a significant change in teaching methods, in particular to encourage new learning strategies. Observation of practices has shown that in lesson planning, teachers are keen to comply with the requirements of the skills-based approach as it appears in the instructional guides. Teachers use skills-based approach language and follow the prescribed steps.

On the other hand, the lectures have rarely revealed the effective implementation of the pedagogy of integration promoted by the reform. The pedagogy practiced still uses the objective-based approach or even the contents-based approach. The results indicated that 88% of teachers surveyed say that the basic education curriculum is a relevant program in its theoretical conception (Table 3).

Table 3. Responses relating to the question of the theoretical relevance of the basic education curriculum.

	Yes	No	Don't know	Total
Teachers	74	08	00	82
Professors at middle school	14	04	00	18
Total	88	12	00	100

The table shows that 74% of teachers argue that the basic education curriculum is not effective considering the many difficulties of its implementation (Table 4).

Table 4. Responses relating to the question of the effectiveness of the basic education curriculum as currently implemented.

	Yes	No	Don't know	Total
Teachers	23	74	03	100
Parents	09	64	27	100
Total	32	138	30	200

Despite the difficulties associated with its implementation, 74% of teachers surveyed believe that the basic education curriculum must be improved and maintained as an official program to better meet the needs of more meaningful education and real social utility (Table 5).

Table 5. Responses on the issue of improving and continuing to use the basic education curriculum.

	Keep as it is	To be maintained and improved	To be abandoned	Total
Teachers	00	74	26	100

Evaluating the implementation of the skills-based approach, in light of the systematization of remediation sessions and group work in class, this study compiled the opinions of students in the 5th and 6th year of primary school to more objectively understand those questions which might encourage teachers' subjectivism in their answers. Thus, besides 18% of students who did not reply and who wished to remain anonymous, all the others maintain that their teachers do not organize remedial sessions and that group work is not established in their classes (Table 6).

Table 6. Responses on the use of group work and individual remediation as components of the skills based approach.

	Group work	Individual remediation	Don't know	Total
Students	62	20	18	100

These assessments are corroborated by our observations that show that in terms of lectures, few teachers are able to turn the errors made by students into sources of learning: the remediation sessions are non-existent or are botched if they are sometimes attempted.

Moreover, teachers believe that the skills-based approach is very time consuming and that the question of the evaluation of learning should be reviewed, not only because it significantly increases the workload, but also because it does not provide information on students' actual achievements. The results obtained in French language and in mathematics show a fairly great weakness of students. For example, in the city of Richard-Toll, during a standardized evaluation in 2012, a distribution of the scores of the elementary 2nd year on a scale of 0 to 100 showed that 102 out of 200 students are weak to very weak in French and 147 out of 200 are weak in mathematics (Tables 7 and 8).

Table 7. Distribution of elementary 2nd year scores in French on a scale from 0 to 100 (standardized evaluation in Richard-Toll).

Scores	<15	[15-30[[30-45[[45-60[[60-75[>75
Numbers	04	36	62	47	29	22
Frequency	2	18	31	23,5	14,5	11
Cumulative frequency	2	20	51	74,5	89	100
Evaluation	Very weak	Weak	Mediocre	Medium	Good	Excellent

Source: Collective of headmasters in Richard-Toll, 2012.

Table 8. Distribution of elementary 2nd year scores in mathematics on a scale of 0 to 100 (standardized assessments in Richard-Toll).

Scores	<15	[15-30[[30-45[[45-60[[60-75[>75
Numbers	05	29	47	66	37	16
Frequency	2,5	14,5	23,5	33	18,5	08
Cumulative frequency	2,5	17	40,5	73,5	92	100
Evaluation	Very weak	Weak	Mediocre	Medium	Good	Excellent

Source: Collective of headmasters in Richard-Toll, 2012.

The analysis of these scores by activity revealed that only 20 students out of 200 know how to "give the general idea of a text" and that there are 54 out of 200 who "know how to calculate the half-perimeter of a rectangle of which one knows the dimensions."

The success rate of elementary 6th year in the collective test is estimated at 32% in 2013, the year of the first national evaluation with the basic education curriculum. This rate is far from the 2005 estimate of about 60%. The local success rate of the elementary 6th year national test in 2013 is 17%. And, from 2013 to 2017, the completion rate for certification is around 30% at the national scale. These performances are very weak.

Moreover, in reading capacity, the global method is recommended by the basic education curriculum. However, 51% of teachers are of the opinion that the former syllabic method is more effective, easier to use and more suitable for children whose mother language is not French. The syllabary continues to be bought by many parents, sometimes at the request of teachers, supposedly to teach children how to read.

If many parents do not know about the recent reform, those who know it adhere to innovation for one of its principles that link school with environment. However, in terms of school governance, over half (53%) of parents surveyed say they have not noticed a greater change and they argue that they are still marginalized. In view of these results, the hypothesis that the implementation of the basic education curriculum did not improve teaching-learning activities appears verified.

Implications of this study

The results of this study relativize the relevance of the completion rate as an indicator in the analysis of school performance.

This study reminds us that the socio-constructivist vision of the basic education curriculum is still largely in the state of prescription. This study shows that there is even a huge gap between the intentions of a curriculum that puts students at the center of the pedagogical relationship and that wants to make them architects of their knowledge; and the realities of a Senegalese society where school is still a place of transmission of knowledge already constituted that students should learn or respect, rather than invent or create. Many of the teachers interviewed regretted that there were no more conversation sessions and site visits class in the scheduling of school activities. This needs to be fixed because, as we observe, for effective school governance, people, who are able to reinforce teachings, must be invited at school or visited by students.

Limitations of this study

This study included many visits to elementary schools, middle schools, specialized educational institutions and persons in charge of managing these educational institutions. Many contacts were made, especially with teachers, inspectors, parents and students. Participants took part in educational facilitation sessions, in meetings and workshops on curriculum reform. The people we met are of high quality and remarkable dedication. This means that the subjective conditions of a research were well brought together. On the other hand, we must admit that this work is not without pitfalls among which we note the absence of mid-term studies on the implementation of the recent reform at the departmental scale. This failure did not facilitate access to first-hand information. To this is added the inaccessibility of results from ordinary inspections supposed to attest to teachers' mastery of the skills-based approach. The requirement to conduct elementary teaching and university research activities at very different levels of instruction has certainly made the task more difficult, reducing the time needed for administration of survey tools.

Conclusions

This research has led to the discovery of very fruitful experiences that we could propose as a remedy to the needs of teachers for a more effective implementation of the basic education curriculum in Senegal.

The renovation of the method of reading and the publication of a school newspaper are two daring experiments encountered in the field and their contributions in terms of satisfactory results seem to support the hypotheses of this study relating to the lack of control of the reading method, and a lack of textbooks adapted to students' realities. At this level, the results of this study suggest that by making programs more flexible and giving more autonomy to teachers in the conception and implementation of learning situations, there should be no obstacles to authorize such innovations.

The realization of a study on the school system is not easy, probably because this school is today particularly controversial, but especially because, in such a field, we could not only remind others what is ongoing currently, namely the widespread implementation of a basic education curriculum that mobilized many

resources and was presented as a palliative to the inadequacies of previous programs. We also had to explain how teaching-learning has evolved with the recent reform in Senegal.

If we studied school in its pedagogical universe, it is above all to show how it can participate in individual development and therefore in the development of the society. We think that in the field of reform, everything is gained on the ground, at the heart of classes and with teachers. It is from the reality of practical situations, with flexibility and pragmatism that the school system must think to meet the confident expectations that students, parents and decision-makers place in it. This is the spirit of the skills-based approach that should corroborate the reality on the ground.

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References

- Any-Gbayere, S. (2006). Educational policy and development in Africa. *Paris, Harmattan*. 170 p.
- Baillargeon, N. (2009). Against Reform: The ideological drift of the Quebec education system. *Montréal*. 174 p.
- Belloncle, G. (1984). The Educational question in black Africa. *Paris, Karthala*. 272 p.
- Bernard, J-M., Nkengne-Nkengne, A. and Robert, F. (2007). The relationship between curriculum reform and primary school in Africa: Reality or fantasy? The example of skills-based approach. *Working Papers*. p. 4-7.
- Berthelot, J-M. (1992). The intelligence of the social. *University Presses of France*. 249 p.
- Combs, P. (1989). The global crisis of education. *Academic Publishing*. 374 p.
- Crahay, M. (2006). Danger, uncertainties and incompleteness of the skills logic in education. *French Journal of Education*, 154, p. 97-110.
- Crozier, M. (1963). The bureaucratic phenomenon. Essay on the bureaucratic tendencies of modern organizational systems and their relations in France with the social and cultural system. *Paris, Editions du Seuil*. 413 p.
- Delorme, C. (2008). The skills-based approach: between the promises of the declarations and the realities of the field, recognition or negation of the complexity. In: Moussadak Ettayebi, M., Operti, R. and Jonnaert, P. Skills logic and curriculum development. Debates, perspectives and alternatives for education systems. p. 113-126. *Paris, Harmattan*. p. 119.
- Del Rey, A. (2010). At the school of skills: from education to the factory of the successful student. *Paris*. p. 9.
- D'Hainaut, L. (1990). How to define a curriculum focused on basic training? *Collective Pedagogy Journal*, Vol. 3. p. 33-43.
- D'Hainaut, L. (1984). Ends for the purposes of education. *Paris, Nathan*. p. 115-129.
- Dembele, M. and Ndoeye, M. (2003). A relevant curriculum for quality basic education for all. In: The challenge of learning: improving the quality of education in sub-saharan Africa. *Paris*. 149-176,
- Fullan, M. (2007). The new meaning of educational change. *New York, Teacher College Press*. 312 p.
- Hardy, G. (1917). A moral conquest, a real advocacy for the adaptation of

- education to the African populations. *Paris, Armand Colin*. 356 p.
- Kettele, J-M. (2000). Socio-historical approach to teach skills. *Brussels: De Boeck University*. p. 83-92.
- Jonnaert, P. and Masciotra, D. (2007). Socioconstructivism and logic of skills for studying programs: A double challenge. In: Lafortune, L., Ettayebi, M. and Jonnaert, P. Observing reforms in education. *University of Quebec Press*. p. 53-74.
- Lapointe, J-J. (1992). Conducting a study of need in education and training: A systemic approach. *University of Quebec Press*. 322 p.
- Legendre, M-F. (2008). The notion of skill at the heart of curriculum reforms: Fashion effect or driver of change in depth? In: Audigier, F.; Tutiaux-Guillon, N. Skills and contents. The curriculums in question. *Brussels, De Boeck University*. p. 51-65.
- Legendre, R. (2002). Stop school reforms to resolve the crisis now. *Montreal, Guérin*. 291 p.
- Lavallée, J. (2008). Against the educational reform. *Quebec: VLB Editor*. 320 p.
- Paquay, L., Defeche, N. and Dufays, J-L. (2002). How to reconcile formative evaluation and certification evaluation? What contributions from the learner? In: Paquay, L., Carlier, G., Commes, L. and Huynen, A-M. (2002). The evaluation of skills by the learner: Practices, methods and foundations. *Louvain-la-Neuve*. p. 85-95.
- Perrenoud, P. (2004). Obligation of competence and analysis of the work: makes recount in the profession of teacher. In: Lessard, C. and Meirieu, P. (1999). The obligation of results in education. *Brussels, De Boeck University*. p. 207-232.
- Perrenoud, P. (2003). Anchoring the curriculum in social practices. *Brussels: Editions De Boeck*. p. 18-20.
- Perrenoud, P. (2000). School seized by skills. In: Bosman, Ch., Gerard, F-M. and Roegiers, X. (2000). What future for skills? *Brussels: Editions De Boeck*. p. 21-22.
- Perrenoud, P. (1993). Curriculum: the real, the formal, the hidden. In: Houssaye, J. Pedagogy: An encyclopedia for today. *Paris, ESF*. p. 61-76.
- Roegiers, X. (2008). Skills-based approach in francophone Africa, some trends. *Paris: IBE UNESCO*. p. 82-85.
- Sall, C. (2013). Implementation of the basic education curriculum in Senegal. *Quebec-Montreal*. 122 p.

- Senghor, L.S. (1937). "The Resistance of the Senegalese Bourgeoisie to the rural people's school." In International Congress of Cultural Evolution. *West African French Press*. p. 40-44.
- Senghor, L.S. (1964). Liberty I: Negritude and Humanism. *Paris, Le Seuil*. p. 11-21
- Sylla, A. (1982). "From strike to reform: Teachers' struggles and social crisis in Senegal." *Work paper*. p. 61-73.
- Verspoor, A. M. (2003). The Learning Challenge: Improving the Quality of Education in Sub-Saharan Africa. *Paris, ADEA-Harmattan*. p. 203-231.

Regulatory texts

- Basic education curriculum, preamble. (2005).
- Decree 79 1165 of December 20, 1979 on the organization of elementary education in Senegal.
- Decree 93 789 of May 25, 1993, creating academic and departmental inspections, amended by the decree establishing the inspection of education and training in Senegal.
- General states of education and training. (1981).
- Law 2004-37 of December 15, 2004 amending and supplementing the national education guidance.
- Law 91 22 of February 16, 1991, on the orientation of national education.
- New programs. (1987).
- Pedagogical guides of elementary education, 1st, 2nd and 3rd stage. (2008), *Senegalese Ministry of National Education*.

Periodicals and evaluation documents

- National report on the ten-year education and training program. (2010). *Senegalese Ministry of National Education*.
- Official journal of the French West Africa. (May 10, 1924). N° 1024.
- Senegalese household survey. (2002).
- Senegalese survey on monitoring poverty. (2006).