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**Several Lessons from the Implementation
of a Curriculum Reform**

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**Working Document
DRAFT**

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Acronyms and abbreviations

ADEA	Association for the Development of Education in Africa
CONFEMEN	Conférence des Ministres de l'Éducation des pays ayant le Français en partage
MLA	Monitoring Learning Achievement
NESIS	National Education Statistical Information Systems
PASEC	Programme d'Analyse des Systèmes Éducatifs des Pays de la CONFEMEN
PRSP	Poverty Reduction Strategy Papers
SACMEQ	Southern Africa Consortium for Monitoring Educational Quality
SAP	Structural Adjustment Programs
UNESCO	United Nations Educational, Scientific and Cultural Organization

ABSTRACT

A curriculum reform is a complex operation. Various types of partnerships and certain conditions are essential throughout the activities involved in implementing a new curriculum. Some activities, however, bear risks likely to lead to problems. Nevertheless, these risks may be avoided by taking advantage of the experience of others. Unfortunately, a lack of communications about these experiences means that pioneering countries often find themselves in a situation of having to learn on their own. This document is part of an approach based on exchanges and sharing in the course of seeking to develop a quality curriculum. It was drawn up following a specific request from the ADEA, with the approval of the Ministry of Education of Senegal and the Canadian International Agency (CIDA). The main locus of observation is Senegal. But it is also based on long-term observations in many countries that confront the challenge of reforming their curricula. The goal is to draw a certain number of lessons that are universal enough that they are likely to be useful for other countries as they set about developing, testing and generalizing a reform.

1. INTRODUCTION

1. Based on what is happening in the developed countries, it is now commonplace to point out the poor quality of educational systems in Africa. They are even considered one of the main factors responsible for the persistent economic and social situation prevailing in these countries. This relatively recent recognition explains to a great extent the development of a critical climate that is now more favorable to a quality curriculum.

2. Several countries are currently playing the role of pioneer in undertaking practical reform of their basic education curriculum. Being a pioneer, however, demands not only courage, creativity and perseverance, but also, to be blunt, funding. It also means that it is difficult for them to be able to count on the practical experience of others. This leaves them following the good old principle of “learning by doing”. This principle does of course have several undeniable advantages. That said, it is nevertheless the case that it also encourages a sort of turning inwards that does not jibe well with the current climate of cutbacks in resources nor with the tight schedules that education ministries very often set for a curriculum reform. In this situation, it is worthwhile to encourage the sharing of the experience acquired up to now by countries that have undertaken a curriculum reform.

3. This document is thus set within a framework of sharing and has the goal of encouraging a constructive debate about different approaches. We have drawn lessons from various efforts to set up a framework for curriculum reform and from the evaluation of the programs in the many countries and various communities where we have been involved. These include, in particular, Quebec, Tunisia, Mauritius, France, Morocco and Algeria, the Democratic Republic of Congo, Togo, and Cameroon, to name a few, and on a smaller scale in the Montagnais Amerindian nation in Quebec, as well as with private vocational training networks in Europe, and others. For the purposes of this document it was not possible for us to fully abstract the experience acquired in these various countries, even though our main field of observation is Senegal. Indeed, it could just as well have been situated elsewhere, as we are hoping that the lessons to be drawn will find an audience and be of relevance to other countries in Africa and abroad. The point here is not simply to give instructions on what should or should not be put in a curriculum. It is, rather, to take stock of a certain number of lessons that are in the main based on in-depth observation of various events and processes that in isolation or in interaction influence the proper conduct of a curriculum reform.

4. Why then take Senegal as the main field of observation? Because we were given a specific opportunity to collaborate with this dynamic country in the context of the assistance Canada provides it in the form of a scientific framework for developing its national curriculum in basic education. The reason we have conducted our observations in Senegal, then, has more to do with opportunism than any desire to single out this country from among those reforming their curriculum. We are not therefore reporting here every event that caught our attention and could serve as a lesson. What we have chosen to report satisfies the following four conditions:

5. The events and processes on which any lessons drawn are based must not have an essentially “local” character, but must instead have a degree of universality that makes them of probable relevance to numerous countries;

- These events or processes have proven to be a success;
- These events or processes caused a major problem in operations;
- They worked only intermittently or were abandoned.

6. In any case the events in question must be situated in a proper perspective. In the first part we will briefly sketch the history of the construction of the “new curriculum” in Senegal, first, because, to slightly paraphrase a famous author, the problem of history is the history of the problem, and second, because the country is the main source of the lessons drawn here. This “new curriculum” is based on a creative, modern approach that is now known as a “skills-based approach”. Senegal must thus be recognized as a pioneer in curriculum reform. The experience it has gone through in recent years is rich in lessons for the country. This is undoubtedly also the case for other countries that are undertaking curriculum reform.

2. BRIEF HISTORY OF CURRICULUM REFORM IN SENEGAL

2.1. Education, the main lever to overcome underdevelopment

7. Since the beginning of independence (the decade of the 1960s), the governments in Sub-Saharan Africa have made education the main tool in combating underdevelopment. This was stated clearly in the conclusions of the conference of heads of state in Addis Ababa in 1962. Subsequently, significant efforts have been made in this area, yielding substantial results. Unfortunately, the economic crisis that hit the continent in the 1970s dealt a heavy blow to the process of developing education systems, which, due to a lack of financial resources, began to decline rapidly.

8. The international community has repeatedly restated its determination to revive the educational system at various regional and international conferences. The financial resources needed have not, however, been forthcoming, and the situation of the educational system in most Sub-Saharan African countries has continued to deteriorate.

9. In 1990, the international community put education at the top of its list of priority actions to be taken to fight underdevelopment, and it made basic education the spearhead in this battle. The World Forum in Dakar (2000) confirmed this decision. The financial partners made a commitment that no country that had a credible plan to develop basic education would see its efforts remain fruitless because of a lack of financing. While quality education has been recognized for good reason as a powerful accelerator of development, experience has also shown that good intentions are not enough. Without minimizing the many significant efforts undertaken to improve the quality of education, the actual results in the ministries, schools and classrooms have nevertheless shown that the use of this accelerator has not always been mastered. Some reform programs have, for instance, been abandoned in mid-stream. In other cases, observations in the field have led us to conclude that the results achieved have not always come up to the aspirations that motivated the reform. Finally, some indicators have led us to believe that the amount of energy consumed by some programs to improve the quality of education has been greater than any benefits obtained.

2.2. Curriculum reform in Senegal

10. After the Jomtien Conference, in 1995 Senegal set up a ministry to take charge of basic education, which gave a new very substantial impetus to this field of education. The seminars in St-Louis (1995) and Kolda (1996) helped to develop the country's approach to basic education. This included drawing up and formalizing a general policy and an action plan. Basic education was thus sub-divided into two main blocs:

- Formal basic education, which includes elementary education and pre-school education;
- Non-formal basic education, which consists of adult literacy programs and local community schools, which deal with children aged 9 to 15 who are not able to go to school or leave early amidst a situation of very high drop-out levels.

11. The curriculum had a central role in the action plan and was considered to be a key factor for the improvement of learning quality. The goal was to draw up a unique

basic education curriculum for Senegal, while ensuring the proper coordination of the formal and non-formal sub-sectors. The curriculum consisted of a common core (75% of the content), while also dealing with local particularities (25%). The national discipline commissions were to draw up the content of the common core, while the academy inspectors took charge of dealing with local particularities. The following organizational arrangements were made:

- A permanent secretariat responsible for creating the conditions for steering the curriculum development properly and ensuring its coordination. This committee did not have any scientific role;
- A scientific committee consisting of university professors and professors from the teacher training institutes (ÉNS), inspectors, school teachers, retired teachers and a few representatives from other ministries (youth, sports, etc.);
- Specialized discipline commissions for elementary teaching, literacy, local community schools and pre-school education, who were responsible for technical work.

12. The Ministry's strategy thus consisted of relying on the country's skills. The commissions conducted their work for two years. They made an in-depth examination of existing programs and produced an initial version of the Schedule and Program Manual ("LHP") for the formal and non-formal sub-sectors.

13. The cabinet reshuffle that took place in August 1998 led to significant changes in organization and coordination as well as in the work teams set up to lead the various bodies. The permanent secretariat in the scientific committee underwent significant changes for the remainder of the work. This had an impact on the activities that had been set in motion by the former team. These changes saw the departure of many key coordination personnel and resource people involved in the academic discipline commissions.

14. The work has continued with a clear-cut determination on the part of the new team. Whereas previously the strategy was based first and above all on the national competence of the central departments of the Ministry, the latter modified its strategy to develop the curriculum with a view to greater participation and delegation of responsibilities. It now sought a pluralistic scientific framework with its development partners. It then opted for a strategy of building its curriculum based on the active participation of teachers, who, during the trial phase of the new program, were given responsibility for producing various pedagogical material that was to accompany the new program and on that basis to compose the curriculum. It was also arranged for the national technical teams and regional teams to handle supervision of the teachers. As part of this new process for curriculum development, the discipline commissions worked a great deal with resource personnel provided by the French cooperation agency. The Schedule and Program Manual ("LHP") was finalized in October 2000, and was tested during this same school year. The other curriculum tools (teachers guide, evaluation tool, etc.) were produced during the trial period and interaction with teachers in the classrooms.

15. A seminar attended by the coordination team, members of the discipline commissions and teachers (school directors and teachers where the trial was conducted) assessed the LHP after the first year of testing. The trial was considered unsatisfactory overall for several reasons, including:

- The implementation of the LHP posed enormous difficulties for teachers; drawing up the pedagogical records was laborious and often simply put aside because it took too much of their time;

- The toolbox provided to the teachers proved not to be suited to local realities; none of the other curriculum tools were developed;
- The teachers were so burdened by preparations for the classes that they had no time to carry out other activities (conducting the LHP, drawing up the pedagogical records, the evaluation tools, etc.).

16. Following this rather disappointing assessment, the curriculum was entrusted to the Department of educational planning and reform (DPRE), which was henceforth responsible for coordination. Three bodies were set up in coordination with scientific assistance from the CIDA for the curriculum:

- The National committee for curriculum management (CNPC) and the Permanent technical secretariat (STP). The CNPC is composed of all the national directors and department heads in the ministry in charge of the educational sector, in particular the department of elementary education, the early childhood department, the department of adult literacy and basic education. The CNPC is responsible for decision-making, orientation and implementation. It is headed by the director of the DPRÉ.
- The STP is part of the DPRÉ and is the technical arm of the CNPC. It is responsible for the CNPC secretariat and coordination of the technical commissions. It reports regularly to the CNPC.
- The technical commissions are responsible for developing the curriculum tools.

17. At the conclusion of its first meeting, the CNPC decided on a strategic pause in order to:

- Deepen the assessment of the work conducted since 1996,
- Develop a new action plan in order to ensure the proper coordination of the formal and non-formal sub-sectors, re-write the LHP, and develop other curriculum tools (practical teachers guide, training modules for educators, teachers, literacy instructors and inspectors, pedagogical materials, glossary).

18. Since then an annual action plan has been drawn up and the technical commissions have been set up. The implementation of the action plan is underway. It has the following goals:

- Redraft the LHP, now called the Skills manual (“Livret de competences”);
- Develop a practical teachers guide; develop a training module for pre-school teachers, elementary school teachers and literacy instructors;
- Develop a training module for inspectors of pre-school education, elementary education and literacy programs;
- Develop a curriculum glossary.

19. The CNPC decided on a work strategy involving two phases. First, it asked the teams of specialists in academic matters created to develop the program and the other pedagogical materials to work on their own in order to produce a preliminary initial version of this material, which was to be checked with a small number of teachers and external experts in national content. It then requested that a final version of these documents be produced in interaction with the teachers, who are to take part in testing the curriculum during the 2003-2004 school year.

20. This double-sided strategy is based on the principle that developing basic pedagogical tools first requires work on the part of specialized technical experts. This will ensure that the teachers have better work tools during the testing phase. This will also help facilitate their active participation. The CNPC was of the opinion that on this basis the teachers, working together with the curriculum developers, will be more highly motivated to develop the program and the accompanying pedagogical materials. This also

assumes that this material will be realistic and suited to the specific situation and the skills-based approach as part of the reform.

21. As we write these lines, the skills manual is being finalized and work on the practical guide has begun. This is all supposed to be finished by end September 2003. Beginning in October, the work on developing the curriculum is to be continued in the classrooms (a scaled-down sample of classrooms and teachers) to test and correct the tools already developed in order to adapt them to the capacities of the teachers who will be using them.

3. THE RELEVANT LESSONS FOR THE PRECONDITIONS OF A CURRICULUM REFORM

22. Experience in the field shows that at least two key elements need to be taken into account in planning a reform: partnership between the key stakeholders in the educational system, and a realistic schedule and expectations.

3.1. The partnership

23. This is currently a very fashionable term. For various reasons, praiseworthy or not, people want to be hooked up, they want to say their piece, and they also want in various ways to see everything and know everything. This is all the more so in situations likely to disturb a greater number of people. Despite any reassurances that show the improvements a curriculum reform will bring about, it will invariably alarm key stakeholders in the educational system. Experience has proven to us that it is risky in these circumstances to short-circuit frank, transparent collaboration between all those involved. It is of course always possible to impose a reform, but if the main stakeholders are not willing supporters, all sorts of difficulties are likely to arise in the course of implementation that will endanger the reform.

3.1.1. Partnership between the political authorities and established organizations

24. Contrary to appearances, the notion of a partnership is complex. Who should be brought into a partnership and, above all, when? A partnership exists at various levels. It is, for example, essential to establish a partnership between the political authorities and established organizations whose main task is to work on educational quality. It is also important to develop a partnership with those responsible for any reform, including the inspectors, school heads, trade unions, teachers, parents and civil society as a whole – in a word, with anyone likely to be affected by the reform. It will undoubtedly be important at one point or another to have their full cooperation to ensure that a given reform is implemented properly. If these people are not there when and where their presence and participation are needed, or if they do not cooperate as expected, the “investments” made at the onset risk being transformed into “expenses”, if not a pure loss.

25. Transparency is key to the quality of partnerships between these people and the authorities. Each group of partners constitutes a specific interest group. Those responsible for the reform must keep them up to date about the ins and outs of the process at strategic moments, based on the role that they will need to play and on any changes they will have to make in their usual behavior or the ways they approach things. Examples of transparency include the awareness-raising and communications campaign planned for the curriculum in Senegal, as well as the regional development committees (CRD) in which the Ministry of Education, the Ministry responsible for training, and the national coordinator of the PDEF (10-year education and training program) felt compelled to participate. This leads to a situation in which everyone feels that they are involved and their interests upheld. A lack of communications is, on the contrary, a breeding ground for misunderstanding and distrust, which occasionally leads to expensive delays and can substantially undermine the effectiveness of any action taken, despite the best intentions. With regard to reform, the quality desired and even the quality achieved will not suffice if they do not correspond to the way they are perceived.

3.1.2. Partnership between the formal and non-formal sectors

26. It is common to find two clearly identified sectors in basic education: the formal sector and, due to lack of a better term, what in contrast is called the non-formal sector. Experience has proven that if sufficient care is not taken, competition and rivalry can develop between these two sectors even within a single country. This kind of competition may be found at the political level or within work teams in a given sector or quite simply between people belonging to one sector or the other. Since any reform involves building synergy, such rivalries risk dispersing the reformers' efforts, causing delays or even building up a sentiment of rejection in a sector, based on people feeling undervalued in comparison with the other sector. It is essential in the course of carrying out a national curriculum reform for those responsible politically to take the time needed to make it clear that everyone is involved in a common undertaking for the good of all, and that all necessary measures will be taken to ensure that resources are shared properly between the sectors concerned. In Senegal, the SNPC saw to the integration of the two sectors as part of its mission of coordinating all curriculum-related activities.

3.1.3. Partnership between cycles

27. Of everyone who could be affected by a curriculum reform, it is the pupils who are the ones who will benefit or suffer the most. It sometimes happens that people or work teams labor in isolation while developing a curriculum. This is the situation when a curriculum is developed without taking into account requirements of the lower or higher cycles. In this situation, it is necessary to verify whether the curriculum flows through the cycles naturally, without impediment and in a complementary way, while taking into account gradations in difficulty and in the complexity of educational content. A lack of continuity between cycles could lead to major learning difficulties for the pupils, which conflicts with the *raison d'être* of a reform. In Senegal, the 10-year education and training program (PDEF) helps to encourage this kind of complementarity. This program is based on a systemic approach that includes all the sub-systems in the sector, from early childhood to higher education, and including non-formal basic education for adults and young people as well as technical and vocational training. Its holistic approach is concretized in practice in a sector-based approach to education.

3.1.4. Partnership with national evaluation officials

28. Taking this element into account is a logical consequence of the preceding point and is probably explicable for the same reasons. In situations where pupils must take a national exam to proceed from one level to another, there could be a problem of coordination between the knowledge taught and that actually evaluated. This is especially likely if there is not close coordination between the curriculum developers and the division or department in charge of conducting the national exams. This kind of situation could significantly undermine a reform in various ways, in particular by not taking proper stock of pupil's learning, by sending teachers an ambiguous message with regard to the academic content to be taught and by worrying parents about the appropriateness of the reform. In these circumstances, it is wise to ensure that the body responsible for the national exams is familiar with the new curriculum or the new program. Better yet, it would be useful for this body to be a participant throughout the development of the reform.

3.1.5. Donor synergy – in partnership with the political authorities, or the risk of curriculum fragmentation

29. The developing countries and development cooperation are the subjects of an international process that is often discussed during the large international conferences that deal with issues considered to be strategic. With regard to education, the Jomtien Conference and the Dakar Education Forum have already been mentioned. Other events of significance to the international community include the Earth Summit, the Summit on Sustainable Development and the Conference on Social Development. During these events, education for young people is frequently treated as a force for social change. A curriculum reform is an ideal opportunity to introduce into the educational program the knowledge, behavior and values that are important to the future of a society.

30. It is not rare to see a donor take initiatives to assist a country in the context of a curriculum reform to respond to needs that it considers urgent. “Special” projects are developed and funds are “released” to develop them. In countries where there are many different donors, it is impossible not to notice the lack of coordination between the development partners themselves as well as with those responsible for the national curriculum. Each seems to take a particular slant and specific approach to “its” curriculum. One takes into account healthcare, another instruction in native languages, another equal access for young girls to school, another a particular pedagogical approach, and yet another teacher training, while each wants “its” curriculum then integrated into the national curriculum, as if this were completely obvious. Many people believe that a great deal of energy is being lost due to a lack of synergy between donors. During the construction of a complex entity, an airport, for example, it is common to see one partner assume the construction or purchase of airplanes, while another specializes in building the runways for them to land, and yet another takes on the task of erecting the buildings intended for passengers or to repair airplanes. Each works in a complementary way with the others, knowing that all the work is of equal importance for the final completion of the project.

31. It is much more rare to see such coordination in the case of developing a basic education curriculum involving various components, including a program composed of academic content that has been decided in advance and presented in accordance with a specific pedagogical approach, teaching materials and manuals based on that approach, schools built to correspond to the goals of the new curriculum, in particular with greater accessibility for girls and boys, a training program for teachers adapted to the new curriculum, etc. The donors should not be the source of the political goals, plans and targets of the country, but the inverse. Given the emphasis today on effectiveness and efficiency, it would be worthwhile for the various donors to develop mechanisms for sharing and collaboration that avoid wedding them to visions that, however good, sometimes differ from the curriculum to be reformed. In this way all the donors would be able to work together and participate in complementary ways towards a single goal, a single curriculum program, the one the country wants. By way of example, the sector-based coordination tables that already exist in Senegal, Mali and Burkina Faso, to name but these countries, reflect this approach and will help promote the dialogue being discussed here between the partners themselves and between the donors and the government.

3.1.6. Partnership with experts from various academic disciplines

32. During the course of preparing a reform, it is not unusual to ask experts from various disciplines to take part in creating the programs that will be part of the new

curriculum. These experts are often allocated amongst work groups or commissions based on their respective disciplines. In this approach, each produces their own program based on the quantity of content to be covered and the dynamics involved in learning this content. While this approach has the merit of ensuring the curriculum will have the rigor appropriate to each discipline, it is in turn limited by creating groups that work in isolation. By proceeding in this way, the teachers wind up with as many programs as there are disciplines, with each “program” having specific development rules and operational procedures. This is bound to increase their workload and make it more difficult to adapt to the new curriculum. The best way to prevent this is to develop an effective partnership between the work teams, based on sharing and collaboration, in order to develop a single curriculum in which all the disciplines function in harmony.

3.1.7. Partnership with those responsible for scientific support, or the risk of replacing the decision-makers

33. The people who have been mandated to carry out a curriculum reform often call on “scientific support” to guide them in their work. The specialists that play this role are in general foreigners, who have in-depth experience and knowledge of the subject. While acknowledging that the role of this kind of “scientific” support is important, or even essential, we also note that there are certain limits to this strategy:

- The “support specialist” or “external specialist” assumes no risk with regard to the recommendations that he or she formulates, even if ultimately these lead to appalling results. In any case, any risks run are minimal in comparison with those borne by the political decision-makers or still more by those responsible for implementing the reform in question.
- The specialist is involved in a one-off, short-lived collaboration. It is difficult to imagine any situation in which they have been endowed with scientific knowledge that would enable them in their brief sojourn to solve problems that people with experience in the country have not been capable of solving before they arrived. It is up to those who are responsible for the operation to take the decisions that, in a given situation, seem most likely to bring success.

34. The “external specialist” in turn plays a role of support and partnership with regard to the national decision-makers and the other key actors. Their task is to help the decision-makers and key actors to ensure that a given reform is prepared and implemented in a harmonious, rigorous and effective way. This means, depending on the situation, a detailed plan for the operation, training for personnel, assembling pedagogical material that corresponds to the proposed reform, grassroots sampling during the testing of a reform, the development of survey tools and tools to collect, process and analyze data, etc. In this respect, the national heads of a reform must take the necessary precautions to ensure the credibility, competence and cooperative spirit of any “external specialists” who help them.

3.2. A realistic schedule and expectations

3.2.1. A realistic level of expectations

35. It is completely legitimate for those responsible for a reform to encourage a high level of expectation with regard to the reform that they intend to carry out in their environment. It is, however, not unusual to note that those conducting a reform as well as those who are involved with it in various ways occasionally aspire to an idealized level of quality or a level that can only be reached with difficulty or through successive

approximations. It is also not unusual to see hopes for rapid results comparable to those seen in countries with greater resources. Quality and resources are thus two factors that come together to influence the level of expectations of the decision-makers.

36. The quality referred to is often vague and rarely defined. One good way to approach this issue is, at the beginning, to pose questions likely to make it more concrete. In particular, how can the reform be carried out in a way that adequately meets the needs of the country in terms of education and training? What limits will be set so that the reform envisaged corresponds to our resources? What operating rules are going to be set to ensure its consistency? What measures should be taken to ensure that it is effective, sustainable, efficient and flexible? Finally, what precautions need to be taken to avoid the occurrence of undesirable side effects during the reform which could undermine its implementation or its generalization to the country as a whole?

37. While at the beginning a reform is a highly political operation, every reform is also a working hypothesis. This hypothesis does not fit very well with the degree of certainty sometimes displayed. Up to now nothing has established that there is only one way to carry out a reform or only one proper way to develop it among pupils and teachers. Our repeated experience in developing a curriculum shows that the method of conducting a reform is based to a large extent on probabilities or on the search for what is best in a given situation. What this means is that a curriculum is a “product” that is difficult to export or import between countries. The well-known anecdote about a program where African pupils are heard to speak of “their ancestors, the Gauls”, clearly illustrates the risk of transposition. An excellent curriculum in a given country, or a method of implementing a reform that is promising in one place, will not necessarily have the same impact elsewhere. Hence the danger of raising expectations to the level of those in other countries that may be more favorable, or in any case are different. That said, it should not be concluded that countries that are less well off than others can only hope for limited results when reforming their curriculum. Between the modest and spectacular there is ample room for realism based on careful observation, wise judgment, enlightened decision-making and improvements that can take root and blossom.

3.2.2. A realistic schedule: The challenge of political urgency

38. A curriculum reform offers a special opportunity for a country to consider the quality of its educational system and to take the measures needed to improve it. Given the political impact this kind of reform can have, both with regard to elected officials as well as those responsible for implementing it, it is common to hear talk of a desire to move quickly. However, experience with many different curriculum reforms has taught us that pressure and haste are not conducive to thoughtful reflection. It is essential to take time to prepare a reform. It is also important to ensure that people whose cooperation is essential do not hesitate to play a serious role in the reform. To this end, time must be taken to prepare a proper toolbox (pedagogical tools, learning evaluation tools, data collection tools, etc.) in order to head off any possible negative reaction from teachers and parents. Moreover, the necessary time must also be taken to input and analyze the information collected during the process properly.

39. Finally, while it is true that it might be possible to draft or re-write a curriculum relatively rapidly, it must be acknowledged that implementing it will inevitably proceed more slowly. Changing the work habits of the different parties who are involved, their habits, skills and experience, will take place at a pace that is very different from that involved in writing a text.

40. There should be no sense of political urgency, or at least of immediacy, with regard to a curriculum reform. Furthermore, the schedule for a reform will be better

served if it is based on a sense of perspective that accords with the historical development of the country in which it is being implemented. In this respect, there is no magic formula or ready-made recipe. In view of the experience of a number of countries with setting up a new curriculum, it is clear that any problems arising from the duration of the operation are due more to the short deadlines that tend to be set than to the actual time such an operation requires. This was undoubtedly what Richelieu, the 17th century Cardinal of Paris had in mind when he observed, with regard to undertaking a complex project, that it is not so much with regard to the goals that one errs as with regard to the schedule.

41. Moreover, the people who constitute the living material in a program rarely prove able to change as quickly as the text of a program. Indeed, this amounts to a truism, but it is one that is sometimes forgotten when drawing up the schedule for a reform. In this case it would not really be off to consider that a reform that ultimately amounts merely to a change in the description of a program is more like window dressing than a genuine change. Reform implies, above all, a change in mentality and a change in the work habits and behavior of all the educators, including the teachers, the authors of textbooks, the inspectors and school heads, the politicians and the parents. To achieve this kind of change requires the kind of patience and strategy that the famous fabulist so wisely formulated as “make haste slowly”.

4. LESSONS RELEVANT TO SETTING UP A NEW CURRICULUM

42. In most countries that are undertaking curriculum reform, the strategy for change used most commonly is based on a pedagogical approach called the “skills-based approach”. To give but a few examples, this is the approach used in Tunisia, in the provinces of Québec and Ontario in Canada, and also in Senegal. There are undoubtedly many motivations for a curriculum reform, but the most frequent seems to be dissatisfaction with what is called the “goals-based” pedagogical approach. This approach is criticized for leading teachers to “atomize” the knowledge that their pupils need to acquire to such an extent that they have great difficulty in making use of their learning in everyday life. Some even go so far as to speak of a “deviation” on the part of teachers to explain this problem. This explanation assumes teaching that is overly focused on the achievement of specific goals, to the detriment of learning that is more integrated and oriented to putting to use knowledge and life skills to solve the problems that pupils and adults face in their everyday lives.

43. To the extent that this conclusion is accepted, what are the risks that must be guarded against in current curriculum reform if one wants to avoid yet again falling into the kind of deviation identified by education specialists? In light of numerous efforts underway to develop a new curriculum, we have identified nine types of possible risk.

4.1. The risk of confusing “being busy” with “working” when those responsible for a curriculum reform are not clearly identified

44. In certain cases, a failure to clearly identify those responsible for implementing a reform, or ambiguity in this regard, could cause three types of problem: the emergence of unofficial leadership among people who have no official mandate to assume responsibility for the work to be performed; improvisation at the time the work teams go into action; and a lack of stability of personnel in the work teams.

45. If those in charge are not clearly identified, the curriculum reform being implemented is the responsibility of “everyone”, and thus of “no one”. Many people will seek to develop a favorable position, as partners or rivals, in one respect or another, sometimes seeking to privatize the profit and socialize the risk, while officially having no actual decision-making power. It is as if at times on board a ship there were only captains, and no sailors, while at other times there were only sailors and no captain. Both situations could witness a flurry of activity and even output. The counterpart of this, however, is a great deal of improvisation and dysfunctionality. It then becomes difficult to ensure overall consistency and continuity in production.

46. A lack of stability with regard to work team personnel is in fact a natural extension of the lack of a clear identification of those responsible for a curriculum reform. This kind of lack of stability will lead to difficulties and delays that are costly in terms of time, money, effectiveness and motivation. When those who are involved in workshops and training activities do not know clearly who is officially responsible for taking a decision, it undermines their confidence and motivation. This feeds a feeling among inspectors, directors, teachers and parents that this is not the kind of undertaking that deserves the serious efforts required. It seems obvious – and experience has proven – that to ensure that there is a reasonable prospect of actually meeting a work schedule set up

for implementing the kind of curriculum desired, the political authorities need to draw up clear guidelines that ensure stability in the membership of the training teams and work teams.

4.2. Special interests and the risk to the interest of the countries and work schedule

47. As was already mentioned, the Ministries often call on international cooperation agencies for technical and financial assistance in carrying out curriculum reform.

48. The activities generated during the period of assistance generally develop within a “project approach” framework and dynamic. The entire development assistance community, including the Ministries themselves, the donors and the cooperation agencies, now acknowledge that there are certain limitations to this approach. Some of the limitations that are acknowledged broadly include: 1) the danger of a fragmented approach that is poorly or inadequately integrated into a country’s overall policy, and thus activities that are often considered by Ministry personnel to be marginal to the “normal” operations and activities of the given Ministry; 2) a use of personnel who consider that the “projects” of a donor demand additional work of them for which they should be paid extra compensation.

49. The main method that has been used to try to offset the limitations of the “project approach”, whose basic limitations have been outlined above, is the use of the “program approach”. This emphasizes relying on the leadership of the country and its national education policy and on the support of the partners for the country’s development, its strategic approach to the sector and its plan for educational development. The program approach is also based on harmonization among the donors regarding their procedures, in particular as concerns compliance with existing regulations and guidelines in a given country.

50. It goes without saying that the principles underlying the effectiveness of aid will have a direct impact on the mechanisms used to implement activities during the course of a curriculum reform. Among these is the budget procedure, which in fact opens up new possibilities. The program approach should also have an impact on the factors motivating the personnel and the civil servants selected to take part in various curriculum activities. Clear guidelines, normally those already in use in a country, should be familiar and applied by all the development partners in order to avoid, on the one hand, one-upsmanship among donors, and on the other, disturbing the work climate and schedule.

4.3. Quality: The risk that the siren’s song will drown out the pupils’ song

51. A curriculum reform is a cruise ship where everyone, from the captain and sailors to the passengers, politicians and donors, wants to have their say about which way the vessel should be steered. This is not conducive to the culture of coordination that those in charge of the reform want to foster. Our observations in the field indicate that both the concept of quality and its cousin, “improving quality”, are of value as catalysts of coordination that help rally around them every group that is concerned by the curriculum. If one pays close attention to the numerous discussions of this subject, it becomes apparent that the main reason for this irresistible attraction towards quality is its promise of a better curriculum for the pupils. There is no end to repetition of the phrase that quality is not so much a destination as a voyage. While at first glance this appears

laudable, there is some reason to be concerned about this approach if it is taken to mean that there is no need to define the destination, that is, the quality curriculum that is desired.

4.3.1. Quality

52. Quality's capacity to rally is also due in large part to the fact that, as this term is universally familiar, everyone has the feeling of knowing what is under discussion. The simple act of questioning exactly what is meant by quality is enough to evoke dumbfounded looks from other educators. Yet the responses people give are often very surprising: "quality means effectiveness"; "it means doing better what you're already doing"; "it means turning in a good performance"; "it means providing broader access to education"; "it refers to equality between boys and girls"; "it involves training better teachers"; "it means having enough teaching materials"; "it means having a textbook for every pupil"; etc.

53. While it is reasonable to think that quality does encompass all these and many other elements, it is also worth remembering that by improving one component it is possible to undermine another part of the same system. In carrying out an operation that is as complex as a basic education curriculum reform, where one component can become the enemy of another, it is vital to pay close attention to what is happening in the schools and classrooms. Otherwise, there is a real risk that however elegant a roundtable discussion about improving quality and efficiency may seem, in reality this becomes a siren song that could only too easily lure us onto the rocks.

4.3.2. Improving quality

54. This is truly one of the most frequently heard expressions on the lips of the people in charge of curriculum reforms. This expression assumes first, that one knows the level of quality of the educational system in question, and second, that the flexibility and resources needed to improve it are available.

55. It is difficult here to avoid the question of knowing what quality is, and still more, of being able to define the desired quality. In this respect, publications specializing in the evaluation of quality tell us that it is the term "compliance" that goes best with quality. Being of good quality, these publications inform us, means being "in compliance" with something, in particular standards, norms, values, etc.

56. Those in charge of a curriculum reform find themselves facing an alternative: improving the quality of a curriculum, or improving a curriculum so that it is of high quality. The first option does not necessarily entail defining the quality desired, because it is possible in practice to improve the quality of an object without knowing its norms, standards, values, etc. On the other hand, since the object can then be compared only with itself, it is quite possible that although the quality of this object is indeed improved, it does not correspond to the quality of the object desired. For instance, one can make improvements to the quality of a chair – its color, form, solidity, and so forth – almost infinitely, even though the "improved chair" might still not enable people with some particular need to sit in it. In this case, it is not really the quality of the chair that needs to be improved, but rather the chair itself needs to comply with certain specific characteristics that are defined in advance.

57. So the first risk run by failing to define a target quality is to improve a set of components in a given curriculum without obtaining a curriculum that has certain desired characteristics. The second risk is disappointing those who are most concerned, above all

the teachers, pupils and parents, as the improvements made fail to correspond to what they want.

4.3.3. Harmony between the desired quality, the quality achieved and the quality perceived

58. Declarations are not enough, people need convincing. With regard to curriculum quality, it is generally acknowledged today that it is necessary to ensure the desired quality, the quality achieved and the quality perceived. The quality desired can be seen clearly in the new programs being developed. With regard to the quality achieved, it is necessary to wait until the moment that we can see the results of the new programs in terms of the teachers and especially the pupils. In terms of the quality perceived, precautions should be taken beforehand in order to avoid the development of any new deviations. The road to hell is paved with good intentions, and it is indeed the case that what is wanted will not suffice in itself to ensure what is achieved. At the point when the reform becomes operational and established nationwide, its success will depend on numerous factors, including in particular whether the teachers are ready to play their role and are informed and sufficiently trained so that they do not view the new programs negatively, and also, for very different but equally necessary reasons, whether the parents view the new programs positively.

4.3.4. The “quality/effectiveness” couple

59. These two terms are often taken to be synonymous. Effectiveness is, of course, a very important reference point for quality. But there are other, equally important references as well. The specialist literature in this field proposes eight other points: relevance, consistency, aptness, effectiveness, sustainability, efficiency, synergy, impact and flexibility.¹ Together with effectiveness, these reference points are termed “transversal qualities”, because they are related to the rationale of the main elements that constitute a curriculum.

60. For instance, relevance is defined as the degree to which the target goals correspond to the needs that must be addressed. From this viewpoint, the only rationale or justification for the goals targeted in a curriculum are the needs of the pupils, teachers, community and society that need to be fulfilled. To take another example, aptness is defined as the extent to which the curriculum corresponds to the constraints to which it is subjected. This includes the availability of financial resources, which invariably means that it is not possible to meet every need, so that choices have to be made, as well as the characteristics of the available teaching personnel, the values that are to be promoted or upheld, the types of pupils, the types of parents, etc.

61. Considering these eight qualities as a whole shows how relative the ideal of quality, which is so frequently invoked, actually is. A program can thus be relevant and consistent but not at all suited to the pupils. Or from another angle, a program could be very effective without being relevant or taking into consideration whether the pupils who attend a school derive any enjoyment from it.

62. The “quality/effectiveness” pair is thus a good illustration of just how relative curriculum quality is. Promoting effectiveness is desirable in so far as this characteristic does not come into conflict with another characteristic that is also desirable, for instance relevance or aptness. Consider the non-fictional case of an education system

¹ See in this regard the article by Bouchard and Plante published in the Cahiers du Service de pédagogie expérimentale nos. 11 and 12 by Liège University, 2002, pp. 219-36.

that is classified as one of the most effective or efficient, but which is based on an ideal of elitism and unbridled competition between the pupils. In this kind of system, to have any chance of succeeding and entering the so-called schools of excellence the pupils must take private lessons six days a week, which is expensive for the parents. This system leaves the majority of pupils by the wayside. While effectiveness is a highly desirable quality, the question remains, for whom is it effective, and in whose eyes, for it is not automatically synonymous with the quality desired. It could even turn into its opposite if it is pursued blindly and ignores that ultimately quality means quality of and for the pupils, so that they become effective agents of change in their communities and in society at large.

63. It seems reasonable to believe that to hear the “song of the pupils”, the upstream qualities must be targeted first (relevance, consistency, aptness) in order for the qualities situated further downstream (effectiveness, sustainability, efficiency, synergy) to be harmonized and serve as added value for a basic education curriculum.

4.4. The risk of terminological confusion

64. A skills-based approach is undoubtedly the cornerstone of most educational reforms being undertaken today. The argument is that the effectiveness of pre-existing programs has been compromised by the fact that teachers have come to “atomize” the knowledge being passed on to the pupils. This occurs to such an extent, we are told, that the children are no longer capable of integrating this knowledge in significant units. Blame has been placed on the goals, or more precisely, on the goals-based approach recommended in previous official programs.

65. In order to get the programs back on track, education specialists and the political authorities have thus turned to a skills-based approach, a new approach that is still in a trial phase in many countries. This approach is considered, undoubtedly with reason, to be the best working hypothesis we have today to help pupils integrate the knowledge taught and to make use of their resources to enable them to solve the problems posed by the teacher.

66. Skill thus becomes the organizing principle and the integrator of knowledge in these programs. In some places the preceding program has been literally wiped out to make way for a completely new program based on new concepts and new pedagogical approaches. Elsewhere the designers have not completely destroyed the former program, the principle being that when a house is renovated it is not advisable to tear down all the walls or the roof might cave in. The result of this latter strategy has been that initially the teachers have noticed a concept with which they are familiar, “specific goals”, in the new skills-based programs. They go on to observe that consistent sets of specific goals can be capped by a skill, the function of which is to help the pupils to integrate the knowledge, know-how and life skills that they have learned so as to be capable of solving familiar problems. In short, the hope is that the teachers will understand that in this new pedagogical approach they need to go beyond the vision that they had of goals in order to take up a new viewpoint, which is centered on the pupils’ mastery of a skill.

67. That said, the occasionally somewhat concocted nature of the terminology used in the programs could undermine the logic of thinking and action that the teacher needs to acquire. This difficulty can be attenuated to a large extent by simplifying the language used. This means first of all clarifying and simplifying the concept of “skill” to make it more accessible and more concrete for the teachers. It has to be acknowledged that while the concept is broadly familiar, it is not at all understood in the same way by all teachers and sometimes not even by the people responsible for training them in the use of the new curriculum. Thus to deal with the problems caused by the ambiguity of various

concepts related to the curriculum and the skills-based approach, Senegal developed its own “official glossary” in order to ensure a common understanding of the vocabulary that is commonly used, or to be used. This glossary was given to all the main people concerned, and constitutes the sole terminological reference acceptable for use with regard to the country’s new curriculum.

4.5. The risk of confusing the tool with the tool’s user

68. We have indicated previously that the criticism directed at the atomization of knowledge directly calls into question the “goals-based approach” contained in the official program. It should be recalled that the latter responded to three basic and still relevant questions: what is to be done? How is it to be done? How is it possible to be sure that what is being done really corresponds to what is desired? The answer to the first question was given by formulating goals. These could be either in the realm of knowledge (cognitive goals), life skills (affective goals) or know-how (psychomotor goals). In each case, the goals could vary along a continuum from a general to a specific nature, meaning that the general goals integrated the particulars that they encompass.

69. According to many education and teaching specialists, it has been very widely observed that integration is not achieved by pupils using the goals-based approach. It is of course possible to believe that the approach itself is not the only explanatory variable. Declaring a goal does not necessarily have any other result than to state what the pupil should be or do or learn after a certain period of instruction. The declaration becomes “pedagogical” only at the point when the teacher integrates it into their teaching.

70. In this context, the declaration of a goal is a tool that a program makes available to a teacher, who could then be said to have to “rendered it pedagogical”. Here everything depends on the pedagogical capacities possessed by the teacher. In this sense, a declaration has no more value than that of the person putting it to use. Just as the word “dog” has never bitten anyone, declarations of goals and of the skills contained in a program have never taught pupils.

4.6. The risk of confusing “training” and “information”

71. Special attention must therefore be given to teachers, including their training and continuing education, in order to avoid a situation where pupils are incapable of putting their learning to use to deal with problems.

72. While it is reasonable to believe that the quality of the new programs will be able to fill in the “pedagogical gaps” attributed to the goals-based approach, we also need to understand that the results expected of pupils in the new programs will never be better than the teachers who use the programs. It is impossible to give too much emphasis to the importance of ensuring that the teachers and their supervisors receive proper training, meaning training given by experienced trainers that amounts to more than simply one or two days of information dispensed in large groups. Consideration should be given to the possibility of developing training and refresher programs for teachers that are conducted simultaneously with the implementation of a new curriculum. The costs of a teacher training program will be minimal compared with the resources invested in the reform. Taking this precaution, which is elementary in many ways but nevertheless crucial,

should provide the best guarantee that both novice and veteran teachers will be on track when the new reform is officially implemented.

4.7. The risk of forgetting to speak in the language of the other

73. The curriculum is a communications tool *par excellence* for entering into contact with teachers and showing them the direction in which they are to lead the pupil. There are three conflicting logics here. First is the “logic of the specialists”, who want to ensure that the academic content is broken down in accordance with its intrinsic logic. Then there is the “logic of the teachers” who, given the constraints they face, want to organize the content to be taught. Finally there is the “logic of the pupils”, who must integrate the range of content they have been taught by mastering the target skills.

74. Each of these logics has a specific language, which must not come into conflict. Each logic also originates in a different viewpoint, which needs to be accepted and understood. From the viewpoint of a cabbage, for instance, the wolf is a peaceful animal and the goat a ferocious beast. So the specialists working to develop a curriculum being given to teachers need to translate their specialized jargon into the language of the teachers, and the latter must in turn translate the curriculum jargon into the language of the pupils. When this series proceeds fluidly, it shows that a pedagogical program has been achieved. The challenge is even greater in the case of textbooks, as the specialists must speak directly to the pupils.

75. A review of the programs developed up to now shows that their pedagogical fluidity leaves room for improvement. Specialists need to be able to develop a curriculum in such a way that when they are finished the teachers do not need them in order to understand it clearly. To achieve this, they need to pay special attention to the type of language used to address the teachers, particularly those who have received less training. If the latter understand what the specialists are trying to say, then those who are better trained will also understand. This does not mean a lowest common denominator approach. It means thinking first and above all of the repercussions for the pupils and any difficulties the teacher may have in understanding the program. Teaching is easy ... so long as one isn't too worried about whether the pupils understand. Following this same logic upstream, developing a program is also relatively easy, so long as one isn't too worried about whether the teachers understand. The simpler a language is and the more closely it is related to teachers' daily concerns, the more capable they will be of translating it into the language of the pupils themselves and of creating conditions that will make it easy for them to master the target skills and put their learning to use effectively.

4.8. The risk of forgetting that one cannot add anything to a full glass

4.8.1. The curriculum

76. Everyone, from donors to Ministry of Education personnel and content specialists as well, sometimes, in fact only too often, tends to abstract the reality of the classroom when drawing up a curriculum. One crucial rule tends to be forgotten: the volume of the content to be included in a curriculum cannot exceed the number of classroom hours the teacher has available each day. Likewise, the pedagogical exercises

and the various ways that learning is to be evaluated must be able to be covered in a teacher's daily schedule.

77. In order to help ensure that guidelines for teachers are realistic, it would perhaps be useful if the content designers who draw up the programs avoid using the expression "the pupil". This term in fact ignores classroom reality. Using it only too often leads curriculum designers to forget that the five minutes, or even two minutes, required for the program methods or activities aimed at the teachers must be multiplied by the number of pupils actually in a given class.

78. A curriculum occupies a finite space, meaning that the quantity and type of academic content that can be included is limited. Not everything can be included in a program. It is necessary to choose which elements of math, language or natural sciences are to be included based on the available time. The same logic holds for the various other activities teachers are asked to perform, including in particular pedagogical projects that cover important themes that have often been developed under the auspices of independent donors who want to see the results of their efforts included in the new curriculum.

79. The real problem facing experts designing a curriculum is not to know what to add so much as to decide what must be cut, keeping in mind the notion of basic education defined at Jomtien and confirmed in Dakar in 2000.

4.8.2. The teachers

80. The teacher is no more an infinitely compressible reality than are the programs. If the arrival of a new program makes teaching significantly more complex and burdensome, then the teacher will tend to reject the new curriculum.

81. This has been proven in practice. While the strategy of mobilizing teachers to take an active part in developing a new curriculum seems desirable and appropriate in theory, and even if arrangements for this seem realistic, experience in schools and in the classroom has demonstrated that the teachers, while ready to make a contribution, want first of all to be given a complete program that includes a description of the relevant skills, learning activities, academic content and assessment procedures. In addition, teachers want to be given instructional material adapted to the skills-based approach on which the curriculum is based, in particular textbooks and the teacher's guide.

82. In short, what teachers, together with school directors and inspectors, would like is to be able to have at hand teaching material that would facilitate the application of the new curriculum in their classrooms in order to be able to cooperate more fully with those in charge of developing the new curriculum. In light of the desire of these key forces in curriculum development, Senegal asked the expert teams in academic content to work first in a closed system to prepare the essential curriculum texts and then solicited the participation of the teachers to finalize it.

4.8.3. The teacher/new curriculum symbiosis

83. The quality of the teacher-new curriculum interface also influences the view of whether or not to do more in the same amount of time. The skills-based approach is the cornerstone of most educational reform today, in Senegal in particular. This approach demands that teachers not only support the new curriculum, but also and even especially make significant changes in the way they teach, in particular with regard to problems and other family situations that the pupils are being encouraged to mobilize their abilities to help solve. It is natural that there should be cases of strong resistance from teachers, especially more senior ones who have over the years developed work habits with which

they have grown comfortable. To get an idea of how much effort is required to deal with this resistance, imagine how difficult it is to eliminate an irksome fold on the corner of a book page. Even if you use an iron, the fold will still be visible. How easy is it going to be then to do away with the folds or habits built up over the years by veteran teachers? This cannot be done unless they are willing to make an ongoing effort.

84. The curriculum and its core documents constitute an initial foundation stone in the teacher-new curriculum symbiosis. The goal of any program is of course to bring together all the academic content that needs to be taught. But it bears repeating that it also involves facilitating the task of the teacher, who must rise to the challenge of teaching a group of pupils on a daily basis. If the content of a program or the burden of using it fails to help teachers to change, to put aside the former habits with which they have become comfortable, it is unlikely that they will attain the level of effort the reform requires. In the context of a reform, it is crucial to keep in mind that without the teachers, there will be no reform in the classroom, and it will remain an empty letter.

85. In order for the teachers to feel comfortable with the new curriculum, it is crucial for the skills-based approach to be incorporated properly in the documents that are given to the teachers and pupils. These documents cannot be designed in the same way as they were previously, for instance in the goals-based approach. To optimize the possibility of developing a real teacher-new curriculum symbiosis, it is vital for the specialists in academic content to reach down and apply the skills-based approach right at the textbook level. If they fail, it is not very likely that the teachers, who are already swamped with everyday tasks, will manage this themselves. This means a strong likelihood that they will fall back into their old ways.

86. A second pillar in developing the teacher-new curriculum symbiosis is the way the new curriculum is constructed. The usual practice is to do this based on a cooperative process involving various work teams. In general, each team includes experts in the same academic discipline. There will thus be as many work teams as there are academic disciplines concerned. In some situations attention is also paid to subdividing the work teams based on the presence of the formal and non-formal sectors, or on various learning levels, such as early childhood or nursery school. Each team works independently of the others, which usually results in as many programs as there are teams. It is also logical to expect the presence of some variation in the way that the teams design their respective programs, which can lead to significant time losses when the teachers have to adapt them for use.

87. In order to ensure that the curriculum is not so fragmented that the teachers feel that it will take a great deal of time to apply it, Senegal has paid attention to developing the conditions needed to reduce the adaptation time for its new curriculum. To this end, it has set up a coordination committee in order to gather all the programs produced into a single document. When it proceeds to the trial phase, the teachers will then have a single book containing all the sections, that is, the academic disciplines, which all are based on the same pedagogical principles.

4.9. The risk that the evaluation of achievement will replace the content of the new program

88. Evaluating student achievement will continue to be one of the main challenges that will be faced in the course of any reform. Given this, Senegal has linked the Department of exams with the National curriculum steering committee (CNPC).

89. In a certain sense, an exam is the moment when teaching based on the skills approach takes concrete form. In light of what has been seen in the field, it is clear that a great effort is required to ensure that nothing breaks down at this point.

90. The fundamental question we need to address in the course of setting up a reform is how to assess the mastery of a skill. How can the teacher determine whether the pupils are making an effort, and will the teacher be able to scale this effort or the greater or lesser extent to which the skills are learned?

91. It seems that for the time being those concerned by the reforms are not yet able to adequately address the problem of evaluating skills. It is increasingly clear that making this kind of assessment will also be key to the future of the new skills-based programs. This is true in large part because in order to ensure that the largest possible number of pupils succeed on the exams, teachers have a tendency to teach what is actually contained in the official or national tests. This undoubtedly lies to a great extent behind the complaints raised against teachers about the fragmentation of the subject matter they teach using the goals-based approach. The teachers atomize the pupils' learning process because what is tested is highly fragmented knowledge. If one desires to increase the chance that the teachers stick to and actually apply the skills-based approach currently being recommended, it is crucial to change testing methods and practices.

5. GENERALIZING THE CURRICULUM REFORM

92. Generally speaking, the phase of preparing the new curriculum and putting it to the test gives rise to small-scale work, occasionally work in small groups, which is conducted with teachers chosen according to predetermined criteria. The period of rolling out a new curriculum is not the final stage, but rather the beginning of a lengthy process that winds up in a national curriculum. The lessons we have learned in the field can be summarized in three points.

5.1. The importance of distinguishing evaluation from experimental research, or the risk of confounding the thermometer and the medication

93. Should a curriculum be put on trial or tested with a view to generalizing it nationwide? Specialists in evaluation have expended great efforts over a long time to understand this question, often at the cost of usefulness for countries in the process of curriculum reform. As long ago as the late 1960s, specialists in program evaluation reported that evaluation procedures suffered only too frequently from the NSD syndrome (no significant difference, the standard so cherished by researchers). Throughout this period we have been warned against abusing the use of methods said to be scientific, because based on experiment, for problems that require an evaluative approach.

94. It is clear today that it is not possible to meet the constraints intrinsic to the experimental method when implementing a reform and setting up a new curriculum. It is difficult, for example, to believe that it is possible to fully respect the criteria used to choose genuinely equivalent groups that can then be used to generate “experimental” and “control groups”. It is also difficult to speak with certainty of dependent and independent variables, control variables, the non-contamination of variables, etc. Several well-known authors have referred to the “madness” of the dominant methods, where research replaces evaluation and data takes the place of any reflection by the decision-makers, in other words, where confusion reigns between the thermometer and the medication.

95. Despite the numerous warnings about “pseudo-experimental” methods, we have seen that in the field there is a strong tendency to make use of this kind of method in order to test a new curriculum. Instead of this method, which often has a relatively low cost-benefit ratio for the decision-maker, it would be better to work in symbiosis with the local situation and use methods that emphasize the precision and quality of the information to be collected, rather than the quantity.

5.2. A participatory approach: A remedy for Penelope’s syndrome

96. Experience in the field has taught us that implementing a reform depends on the good will and cooperation of those involved. Without a real partnership among these people, with a climate of mutual confidence, from the top of the hierarchy to the bottom, any genuine implementation of the reform is doomed.

97. To be sure of success, a curriculum reform must at the outset avoid shocking those involved or provoking anxiety about the way they need to behave and the privileges

they currently enjoy or the authority they have been granted or have assumed. In short, we must not forget the human factor when implementing a curriculum reform.

98. To approach the implementation of a curriculum reform otherwise would risk treating it as a purely political and administrative activity that could be handled without the genuine cooperation of everyone concerned. Even worse, it could lead to adopting a narrow, pragmatic vision that treated the implementation of a curriculum reform, which originally was conceived as a pedagogical activity that could have administrative implications, as an administrative activity that could have pedagogical implications.

99. Senegal decided to rely on a strategy to implement its new curriculum that was based on a participatory approach. The policy makers thus hoped to avoid a coercive approach that could have seen the design and implementation of the reform handled in a top-down fashion, by people relying on a heavy-handed approach to get things done and make progress.

100. Experience has shown us that a coercive approach is not the best to implement a new curriculum. This kind of approach usually leads to a pattern of resistance that makes it difficult to carry out any curriculum reform. This resistance could be of a psychological or philosophical nature, and it is likely and observable among all those affected at every level of the hierarchy. It can also take either an active or passive form. For instance, it is relatively common to observe in practice a pattern of behavior that could be described as “Penelope’s syndrome”. This syndrome can be observed especially in situations where a curriculum reform is based exclusively on a coercive approach. In this kind of situation, those involved are actually “compulsory” participants in the sense that they have no choice about whether to take part in the curriculum reform. They must participate. But in the course of actually carrying out the reform, it will inevitably be necessary to consult these people, bring them together and hold discussions with them, work with them, ask them to carry out certain actions, etc. Those compelled to take part in this way will tend to undo in the afternoon whatever they have decided to do in the morning. This is the history of Penelope being repeated. Under the pressure of her entourage, she agreed to remarry and set the date for whenever she completed weaving a shroud for her father. What history taught us was that she undid at night whatever she wove during the day.

101. The participatory approach used in Senegal is more likely to bring success in that it is designed as an approach that takes the local population into account in every way and is understood, accepted and drawn up with their involvement. It is difficult today to imagine carrying out a reform without first ensuring the voluntary cooperation of everyone involved, including at the local level where many if not most of the tasks and responsibilities will be covered in one form or another by trade union agreements.

102. These agreements are better suited to a rigorous participatory approach that is based on the cooperation of everyone concerned. This requires flexibility and time from those responsible for seeing to the nationwide implementation of the reform. The most effective style of leadership will benefit from patience, humanism and the kind of opportunism that respects a pace of change that is suited to a given population or culture. The involvement of the teachers, directors and inspectors will be needed throughout the course of a reform. They are also the ones who will have to carry out and update any decisions, and it is they who are the real force for change and who actually carry out the reform. It is preferable to envisage providing these people help to achieve goals that may occasionally require more in-depth change so long as these goals are not too distant in terms of time. Hoping for too much too fast amounts to ignoring the natural and occasionally heavy inertia that characterizes the established institutions and their

personnel. While it is possible to trace a new course on a sea chart very quickly, a transatlantic liner cannot make the change within a few meters.

5.3. Flexible monitoring

103. The arrangements for monitoring a curriculum reform need to be adapted to the country. It is not always useful to set up an extensive system that generates a great deal of information. One of the recommendations made by evaluation specialists is that it is useful to keep in mind that having too much information can make it as difficult to reach a decision as not having enough.

104. An ongoing system of observation is needed to monitor a new curriculum. Everything that could be evaluated does not need to be covered in a single operation. Since evaluation involves a value judgment, what is key is a considered approach that is not drowned in a sea of information. However precise and reliable the data may be, policymakers do not always have the time to analyze and understand it fully. The monitoring system thus needs to function at the pace of the people themselves. It is vital to keep this in mind in order to ensure that the curriculum reform that is to be implemented wins recognition and is accepted by all of civil society, and especially by the key forces in the reform, including the teachers, inspectors, school directors, teachers unions, pupils and parents.

6. CONCLUSION

The importance of a clear, determined and stable policy throughout the course of the reform

105. It may seem paradoxical to have kept silent up to now about this lesson, given how important it is to understand that a curriculum reform is an eminently political action. For a curriculum reform to have any chance of success, it is vital that everyone who will be called on to play a role, as decision-makers or in any other capacity (public relations, specialists, evaluators, etc.), feels that there is a clear, concrete, serious and practical political will to carry the reform through to the end. A clear policy means one that is understood and disseminated in the same way by everyone. A concrete policy refers to establishing a concrete infrastructure that makes an educational reform possible, viable and fruitful, and guarantees that it will have the support of competent people throughout the reform process. By serious policy is meant transparent intentions, long-term sustainable action and continuous unconditional support for those who are responsible for carrying out the curriculum reform right through to the end, and despite the often unforeseeable difficulties they might encounter. Finally, by practical policy we mean that it is essential to have a plan that corresponds to the resources the country has to carry through the reform. In the eyes of the population itself as well as the established institutions and main actors on whom the implementation of the curriculum reform depends, experience has clearly shown us that a clear, committed and up-to-date political determination to act can be the best strategy a country can have to ensure the general credibility of the actions taken to improve the curriculum. It is also the best way of ensuring widespread support for the various types of change that any reform will demand.