1. Introduction

In 2003, the government of the Republic of Niger put into law a ten-year plan for the development of education (referred to as PDDE from the French 
*Programme Décennal pour le Développement de l’Éducation*) in order to improve access to schooling, quality in instruction and learning as well as capacity development in schools by the year 2013 (MEBA, 2003). This ten-year plan emerged from the 1998 Education Policy known as the Nigerien Education System Reform Law (referred to as LOSEN from the French 
*Loi d’Orientation du Système Educatif Nigerien*), which aimed at reforming the entire educational system. The PDDE constitutes in itself a national strategy for poverty reduction and accelerated growth as mandated by resolutions of the Dakar 2000 World Summit for Education for All (EFA) that the government of Niger signed (MEN, 2008c).

Four years after the implementation of measures to improve the first two of the PDDE components (i.e., access and quality), a 2007 evaluation revealed that quality, as opposed to access, had improved to a much lesser scale. For this reason, the most recent government education initiatives have focused on the development of quality in basic education. These initiatives are based on three interrelated components including:

1) Improving performance in mathematics and language arts;
2) Improving pre-service teacher training in the teacher training Normal Schools (referred to as ENIs from the French 
*Ecoles Normales D’Instituteurs*) by introducing curricular changes;
3) Providing untrained and inexperienced teachers who have been hired on two-year renewable contracts with teacher training. These teachers are referred to as contractual teachers.

This paper is an account of these initiatives which focus on the development of quality in basic education and the challenges encountered at this early stage of implementation. The first part of the paper consists of a contextual overview of education in Niger. The second part deals with a detailed description of what the three initiatives entail followed by their expected outcomes while the third section exposes the challenges encountered.
2. Education System in Niger: Historical review and current state

2.1 A brief historical perspective of the Niger education system

Niger became independent from France in 1960. However, the country continues to be under the socio-political and economic domination of its former colonial master, with serious consequences on such social matters as education. As a result, the education system in Niger is better understood in the context of the French colonial education policy in Africa as a whole.

The French colonial system in Africa sought to assimilate the colonized into behaving French in manners, behaviors and ways of thinking. The colonial administrators saw school as the perfect place for accomplishing this goal. As a result, right from the beginning, at the expense of the ten official national languages, French was imposed as the only language to be used as a medium of instruction as well as a subject in all grades, and even in adult literacy. As mentioned in the 1949 school curriculum (INDRAP, 1950) that the French colonial administration designed for its African colonies, “[l]’existence des languages vernaculaires est certes un obstacle sérieux à l’apprentissage du Français [the existence of vernacular languages is certainly a serious obstacle to learning the French language]” (p. 5). It is clear that the French colonial education policy centered on the use of language in education as a means to control the local people’s thinking and lifestyles. Unfortunately, for colonies such as Niger, this resulted in limiting access to formal schooling and learning. The educational system was elitist in that it was limited to a few. Kelly (1992) argued that schooling in such contexts “was to diffuse spoken French among those who were, by birth, destined to become an [sic.] elite (p. 15).” The elites in question, on the other hand, only “needed to know […] how to communicate with the Frenchmen” for eventually becoming their interpreters.

Five decades since independence, the above claims are still relevant, with school remaining the privilege of the educated elite and their children that they now send to private schools. The rural and urban poor children, who constitute over 80% of the total child population, are left with public schools that offer limited access (school infrastructures are still not enough for all) and low-standard education quality.

2.2 The Challenge of Quality

In spite of the Niger education system’s yielding of many successful educated nationals (although the number constitutes less than 20% of the population), research has always revealed its limitations regarding the provision of equal access and quality. Diagne (1999, p. 11) reported that a pupil in Niger spent an estimated number of 11.2 years before he/she reached the last grade in primary school, when only six years were required. As a result, the average age of each primary school graduate reached about 18.4 versus the normal 13, according to the same report.

To respond to the situation, the government of Niger signed into law a national education reform policy (LOSEN) in 1998 and in 2001, which led to an offshoot policy document, known as the PDDE, a ten-year plan for the development of education. Four years through the implementation of the PDDE resolutions (2003-2007), results regarding access to schooling and
coverage of primary education in the country improved significantly. The national rate of access to primary education increased nationally from 51% to 65%, a 14-percentage-point gain, while the gross schooling rate experienced a 12-percentage-point increase (MEN, 2008c).

Quality, on the other hand, did not experience much improvement. According to the same report, to ensure that one single student finished primary education with his/her middle-school entrance certificate (known as the CFEPD), the government needed to enroll two pupils in first grade. This means that only half of the students recruited in first grade reached and passed sixth grade to enter middle school. Furthermore, out of a thousand pupils enrolled in first grade, only 360 (36%) earned their diploma at the end of sixth grade out of whom only 241 (24%) earned it without ever repeating a year. MEN (2008c) reported that an evaluative study of students’ learning in elementary schools revealed that their performance was low in all subjects regardless of grade.

Clearly, quality in education in Niger has not significantly improved since independence. Much earlier reports pointed out that only 18% of the pupils enrolled in schools completed primary school (Alidou, 1997 quoting Kaba, 1986) and that only 38.6% of primary school student graduates went to junior high school in 1997 (Diagne, 1999, citing the Education Ministry).

These statistics urged the government to seek solutions to the problem through the three initiatives that are discussed in this paper. The problem was further exacerbated by recent measures that were taken prior to 2007 to ensure better access to schooling and wider school coverage including:

- The decrease in number of years of training in pre-service teacher training schools (ENIs) from two years to one year to increase the teacher population;
- The system of contracts as a means to hire more teaching personnel, which increases the job insecurity of the teaching staff who constantly left teaching for better or more stable jobs;
- The unilateral government retirement plan urging teachers with a minimum of 30 years in service to retire, even when they are still young and capable of pursuing their teaching career to satisfy the financial need for expanding the education system;
- The specialization of the teacher initial training programs, which led to the cancellation of courses in such general education subjects as language arts and mathematics. Interestingly, this coincides with the lowering of the pre-service teachers’ competence in French and mathematics as revealed in the results of teacher-training school entrance tests.

Other factors according to another government report (MEN, 2008a) include a) the haste through which academic years are finished in trying to make up for work days lost during recurrent teacher strikes, thus jeopardizing the students’ mastery of the subject matter; b) the repeated teacher strikes; c) the scarcity, inadaptability and out-datedness of the textbooks and
teaching materials; d) the delay in building the temporary thatched classrooms in poverty-stricken school districts; and e) the below-standard quality in teacher training, which impedes learning.


3.1 Improving quality through language arts and mathematics initiatives

In 2005, a Ministry-of-Education-led evaluative study of primary schools revealed that only 6.4% of the sixth grade students reached the required competence in French (as the medium of instruction and a subject) while only 5% performed as required in mathematics. This percentage worsened by the year 2007 to only 2% in French and 1.9% in mathematics (MEN, 2008b).

The language arts and mathematics initiative for quality improvement in schools was formulated to address this situation. Its main objective is “to contribute to the improvement of the internal efficacy of teaching in basic education through the mastery of basic competence in language and mathematics” (MEN, 2008b, p. 4). In addition, the initiative is to contribute to mobilizing teachers, school administrators, members of the Committee for Management of Schools (referred to as COGES from the French Comité de Gestion des Etablissements Scolaires) as well as education partners around the school, making them responsible for students’ success.

To determine and measure outcomes of the initiative and advise remediation where necessary, the Ministry of Education expected a success rate of 100% among all students. A success rate ranging between 75% and 100% in mathematics and language arts signals positive trends of successful outcomes of the initiative. Should any student pass less than 25% of the test items in mathematics or language arts, he/she is considered to have “extremely serious” difficulties and not to be effectively learning. He/she needs to re-take all the subjects from the beginning to prevent dropping out of school due to frustration. A score between 25 and 50%, on the other hand, still signals “averagely serious” difficulties that require massive remediation measures. A score ranging from 50 to 75% reveals “less serious” difficulties that require minor remediation measures.

The language arts and mathematics initiative consists of three main phases: The diagnostic test phase, the intervention phase and the evaluation phase. Before any intervention measure is carried out, a diagnostic test utilizing simple tools is to be given at the beginning of every academic year to second through sixth grade students in language arts and mathematics to assess individual competence. The test is administered by the school teachers and the results are communicated to the COGES and the upper level education administrators.

Once the test is administered and levels of students’ competence in mathematics and language arts determined, the phase of remediation actions begins. The rationale behind this phase is, according to the Ministry of Education, that “the improvement of the quality of students’ learning can only take place at the school level, in the classrooms and by students
through actions that target them” (MEN, 2008b). It is expected that no student is to be left behind or forced to drop out of school for not learning.

The major practical action taken at the school level is the de-congestioning of the curriculum particularly in the first, second and third grades so as to allow emphasis on the attainment of reading skills and basic mathematics competence. Relevant curricular and pedagogical tools are provided and teachers are trained anew in order to reach this goal. Moreover, extra-curricular activities to support the remediation actions are organized by teachers, former school drop-outs, higher-grade students, local NGOs and COGES members. Resulting pedagogical materials are made available to all stakeholders for potential (re)use.

Once the remediation phase is complete, the third and last phase of the initiative, evaluation, begins with instruments that are ready for use. One entrance and exit test booklet per grade level and subject (language arts and mathematics) and its accompanying teacher guide for every subject are designed for this purpose. Table 1 shows the types of booklets available per subject and their individual contents (MEN, 2008b, p. 5).

Table 1: Language and mathematics initiative implementation booklets and their individual contents

<table>
<thead>
<tr>
<th>Student Booklet for first and second grades (i.e., CI &amp; CP in French), which constitute the first level of primary school</th>
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<tbody>
<tr>
<td>CI-Exit test</td>
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<tr>
<td>CP-Entrance test</td>
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<tr>
<td>CP-Exit test</td>
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<tr>
<td>CE2-Exit test</td>
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</tbody>
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<tr>
<th>Student Booklet for the third and fourth grade (i.e, CE1 &amp; CE2 in French), which form the second level of primary school</th>
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<tbody>
<tr>
<td>CE1-Entrance test</td>
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<tr>
<td>CE1-Exit test</td>
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<tr>
<td>CE2-Entrance test</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Student Booklet for the fifth and sixth grade (i.e, CM1 &amp; CM2 in French), which form the third level of primary school</th>
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</thead>
<tbody>
<tr>
<td>CM1-Entrance test</td>
</tr>
<tr>
<td>CM1-Exit test</td>
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<tr>
<td>CM2-Entrance test</td>
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The two teacher’s guides contain the diagnostic and evaluative tests, their answer keys, the forms to be used to determine the level of the students depending on their test scores and suggestions for remedial interventions. The following diagram sums up the three components of the language arts and mathematics quality improvement initiative by collapsing them into two intertwined phases.
The top represents the diagnostic/entrance/exit tests and final evaluation while the bottom part constitutes the intervention/remedial actions. The top phase takes into consideration the expected students’ performance after intervention or remedial actions. It also takes into account the final year evaluation and continuous assessment made by teachers during the teaching process to ensure that learning is occurring and if not to guarantee remediation or strategies to make it happen. The bottom phase, on the other hand, takes care of students’ needs for intervention/remedial operations resulting from final evaluations after interventions or remedial measures. The school context comes at the center since every action that occurs is administered by teachers to the students at the school level. This creates a bottom-up initiative as far as its implementation is concerned.

3.2 Improving quality through curricular and institutional reforms of the pre-service teacher training schools

Experts in the Ministry of Education believe that improving quality also requires reforming the pre-service teacher training institutions known as the *Ecole Normale d’Instituteurs* (ENIs). Ironically, the lowering of quality in basic education in Niger resulted from the government measures for improving access in the first phase of the PDDE, which focused on access (2003-2007). It was only after an evaluative study of the first phase of the PDDE in 2007 that the ministry came to realize that indeed access was being achieved but at the expense of quality while, according to the PDDE, the two components were to be mutually inclusive. Consequently, there was a need for action to tackle the problem, and thus the introduction of the ENIs curricular and institutional reform initiative. The first measure of the initiative concerns an increase in the period of pre-service teacher training which went from two years to one year. It
was argued that pre-service teachers received less time in training than they needed for accomplishing their job efficiently.

Following this measure was the adoption and enforcement of a competence-based pedagogical approach that acknowledges a teaching context that centers on the socio-cultural realities of the country. The reformed teacher training curricula were to enable the pre-service teachers to develop required sets of competence that will allow their future students to attain knowledge and values that promote autonomy of action. Five general principles are needed to achieve this goal:

**a) The need for teacher-training to be professional.**

This entails providing pre-service teachers with necessary competence to teach efficiently. A pre-service teacher is trained to exercise various types of functions and roles in his/her career. At this level, the interdisciplinary approach to teaching is required since all subjects taught converge towards the single objective of allowing the trainee to be competent in his/her teaching. Competence in this case is defined as “power to act, to succeed and progress that allows for the efficient realization of the tasks and activities at one’s work place and that is based on an organized set of acquisitions (knowledge, skills in various domains, perceptions, attitudes, etc.” (MEN, 2008c, p. 5).

**b) Pre-service teacher-training needs to prepare for intelligible practice.**

In this case, the pre-service teacher is supposed to continuously analyze and evaluate his/her teaching activities and the students’ learning process so as to improve them as needed. He/she needs to be trained to constantly reflect critically on issues discussed and question his/her teaching practices.

**c) Pre-service teacher training needs to encourage mastery of content that is taught in the primary schools.**

Evaluative reports on the education system in Niger have identified low performance in language arts and mathematics as the one factor hindering students’ success and achievement in elementary grades. Consequently, the Ministry of Education has decided to include these two subjects in the initial training of teachers, i.e., the general education courses taught to the pre-service teachers, to ensure competence. In addition, pre-service teachers who are in the last year of their training are to submit a thesis at the end of their two-year training. This will allow them to master written language and attain research and presentational skills.

**d) Pre-service teacher training needs to prepare for self and continuous training**

Training given to pre-service teachers will not suffice for them to face all the potential challenges in the field. Therefore, there is a need for training at the ENIs to focus on competence that is based on research, treatment and utilization of data for solving problems.
e) Pre-service teacher training needs to help develop skills of evaluation

Evaluation is at the center of the teaching/learning process. Skills of evaluation will allow pre-service teachers to evaluate and determine whether students have the prerequisite knowledge before beginning new learning. These skills will also allow teachers to identify difficulties and apply necessary remedial interventions to tackle them. Endowed with skills of evaluation, pre-service teachers can continuously evaluate students’ progress during the teaching/learning process, identify difficulties and suggest improvements, taking into account every student’s needs for remedial actions.

Training/learning that aims for the achievement of competence necessitates a different pedagogical approach than usual. As a result, the socio-constructivist paradigm is selected as the most suitable pedagogical approach in this case. It implies that “every acquisition of skills relies on a process of construction in which the principal actor is the learner and underscores the importance of social interactions that influence the process” (MEN, 2008c, p. 8). This definition implies that the learner is at the center of knowledge building in his/her determined social context. Teachers need to constantly stimulate the students so as to encourage them to construct knowledge and develop sets of competence.

At the end of the training the pre-service teacher is supposed to have achieved the following competencies including a) competence in the teaching field b) competence in school administration and management and c) competence in mastering content that is taught in elementary schools. Pedagogically speaking, although the overarching approach is based on competence, a mix of methods are recommended by the initiative including an interdisciplinary and socio-constructivist approach to take into account the holistic nature of the students’ socio-cultural context in seeking to improve learning.

3.3 Improving quality through continuous training of the contractual teachers

One of the government measures for improving access to schooling that contributed to the worsening of quality in education was the hiring of former secondary school drop-outs and professional school and university graduates with no prior teacher training on contracts. As part of the improvement of quality initiatives, the government donor partners have provided contractual teachers with relevant teacher training. As a result, UNICEF (United Nations Children’s Fund) has provided training in the Tahoua/Agadez, Maradi, and Zinder/Diffa regions. These training sessions have been held from fifteen days to a month depending on whether they occur during a school break or during the longer summer vacation.

However, the regions of Dosso and Tillabery have been left out of these training sessions although they possess the highest number of untrained contractual teachers in the nation. On a positive note though, the Cooperation Suisse (Swiss Cooperation) is planning to start training in these two regions beginning during the Easter Break of 2010 for a period of fifteen days and in the summer of 2010 for thirty to forty-five days.
4. Expected outcomes and results of the initiatives

The three initiatives are expected to have a positive impact on the quality of learning through the improvement of students’ performance in the key subjects of language arts and mathematics. Competence in these two subjects is expected to lead to competence in the rest of the subjects. In particular, the language arts and mathematics initiative aims at students’ mastery of these two subjects. Similarly, from the reformed ENIs, trained pre-service teachers are expected to exit with a) competence in general education subjects such as language and mathematics, and b) competencies in content area studies, in teaching methodology, in skills of the socio-constructivist approach to building knowledge and in abilities to continuously assess the process of teaching and learning. Endowed with these competencies, pre-service teacher trainees can easily help students to reach the required learning competence.

The three initiatives are in implementation across the country. Booklets have been distributed and used in all schools especially the Capital City school districts. Evaluative studies are yet to be made to tell us exactly what the results of these measures are. However, all experts who have had the opportunity to observe classrooms where the language and mathematics initiative is implemented agree that positive impacts can already be noticed (MEN, n.d.).

A recent government report after a visit of experts to the ENIs and observing the teaching/learning activities in these institutions, mentions that “[a]t this time of a midway analysis of outcomes, it would be excessive to affirm that the implementation of the new programs [in the ENIs] through the competence-based approach is fully achieved. However, notable progress has, in such a little time [of implementation], been recorded due to the collaborative efforts of all concerned stakeholders and partners” (MEN, n.d., p. 3). Another positive effect of the initiatives that is easily noticeable is the excitement and enthusiasm of the stakeholders, in particular the Ministry of Education officials, regarding the initiated changes. This shows their determination to ensure effective implementation and positive outcomes.

To sum up, although no evaluation data is available regarding the efficiency of these initiatives, their implementation is seen as being effective. Booklets resulting from the first initiative are being used in schools especially in the capital city school districts while the competence-based approach is at practice in the ENIs where the period of training has become two years instead of one year. Also, UNICEF has been active in providing contractual teachers with the training they need in 5 of the 7 regions whereas the Cooperation Suisse is soon beginning to train contractual teachers in the Dosso and Tillabery regions. This implementation, nevertheless, raises a number of challenges, which are worth describing.

5. Challenges of the initiatives for improving quality in Niger basic education

Niger is a country with limited resources whereby almost all education funding comes from foreign donors. This results in delaying the implementation of any government policy or initiative even when there is a general consensus among stakeholders around its creation.
delay often leads to unforeseeable challenges that hinder the normal course of implementation as in the case of the three initiatives that constitute the objects of discussion in this paper.

One such challenge regards the coordination of activities related to these initiatives in spite of the existence of offices in charge of these matters. It seems very interesting to discover that the Office of Curricula and Pedagogical Innovations (referred to as DCIP from the French Direction des Curricula et des Innovations Pédagogiques) has no data regarding the content of training UNICEF offers teachers. Yet, UNICEF is expected to submit the schedule, agenda, training modules and the entire list of experts to lead the training sessions that they sponsor. Either, they are unaware of this expectation or they are disregarding the official demands of the Ministry.

This way of conducting business in developing countries between the donor agencies and the local government officials is common in Africa. The donor agencies tend to be left alone to do what they want. The funds that donor agencies bring into the country seem to matter the most in the eyes of local government officials. Anderson-Levitt and Alimasi (2001) had similar findings in Guinea where the relationship between the local school officials and donor agencies depended more on the former designing strategies for securing the latter’s funds, disregarding the responsibility behind their missions. It may not be the case here but there is no better way of explaining the government officials being unaware of the content of training that UNICEF sponsors for teachers.

Another challenge is the regional imbalance regarding the training of contractual teachers. Although Dosso and Tillabery have hired more untrained teachers on contract than any other region it is paradoxical that their contractual teachers have not received any training to this date. This challenge might be related to the scarcity of resources on the part of the state as testified by the many efforts and the time that the Director of Curricular Innovations confided having put into securing sponsorship of training for the teachers in these regions starting from the 2010 Easter break. However, to believe that lack of resources is the reason for this iniquitous inaction seems simplistic. One may argue a lack of will power on the part of the government as the reason why no funds were made available for a minimum of one or two training sessions for untrained teachers in these regions.

The next challenge points to the organization of the training across the heterogeneous teacher population. It seems challenging to be able to coordinate and provide the needed training to pre-service teachers, tenured teachers with training and untrained contractual teachers for a country with limited resources such as Niger. It is even more challenging to be able to reach the expected quality of education in such a context where the teaching personnel is so heterogeneous regarding the individual training they have received. It is possible and of high importance to train contractual teachers on “new” and “up-to-date” teaching approaches such as the skills of continuous evaluation/assessment, and competence-based and interdisciplinary approaches within the socio-constructivist perspective on knowledge building. However, in doing so, another challenge arises: What is to be done with tenured teachers possessing the “older” type of teaching knowledge when both types of teachers work in the same individual schools, teaching the same students? Parallel
training designed for already existing tenured teachers is needed to upgrade them as well.

If these challenges are addressed, the three initiatives are likely to yield positive outcomes given their relevance and inclusiveness of the socio-cultural realities of the teachers’ and students’ immediate environment. The bottom-up socio-constructivist approach to knowledge building seems particularly relevant to students since it gives them an opportunity to value their own knowledge that they can use as a springboard for access to more unfamiliar universal knowledge. The importance of this cannot be overemphasized as revealed by other research (Chekaraou, 2005; 2009).

6. Conclusion

This paper is a description of the three government initiatives to improve quality in education in Niger. First, the details of each of the initiatives have been delineated along with its objectives and expected outcomes. Next, the paper describes the challenges encountered during the implementation of these initiatives. It is clear that these innovations are interrelated in that one cannot by itself improve quality without the others. They are also dependent upon the lower-ranking education stakeholders at the school level (teachers and students) for their success. Policy (implementation) that focuses on lower-ranking stakeholders stands a higher chance of success as reported in Levinson and Sutton (2001) since it guarantees that these stakeholders “appropriate” it, thus, its likelihood of yielding higher and more positive outcomes. These initiatives are a long time overdue since an education system devoid of quality defeats its own purpose. However, the impact of these initiatives is yet to be known since no evaluation has yet been made on them.

One concern, however, is that there may be delay in these initiatives reaching every single basic education school in the country. It is not unlikely to see cases of innovations that remain experimental for decades in developing countries even when research points out positive trends resulting from their implementations. The case of bilingual schools in Niger which have been in experimentation for over twenty-six years and still remain as such (Herbert el al., 1999) serves as an example.

I recommend that the government takes its responsibility vis-à-vis foreign donors so that the latter carry out their foreign aid activities in collaboration with the relevant offices of the Ministry of Education. This will help avoid potential chaos born of sporadic application of official education measures and initiatives. Opportunities to secure funds in spite of the strings that are attached to them should not preclude responsibility to act efficiently vis-à-vis the donors for changes to be effective and for long-lasting outcomes in the domain.
References


