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Effective Literacy Programs

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Learner centered processes and approaches: The connection between non-formal education and creating a literate environment

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Acronyms and abbreviations

- **ARED** Associates in Research and Education for Development
- **ARP** Association for the Renaissance of Pulaar
- **IEC** Information, Education or Communication
- MARP Méthode Active de Recherche Participative
- NGO Non Gouvernemental Organization
- **PRA** Participatory Rural Appraisal

REFFLECT REgenerating Freirian Literacy through Empowering Community Techniques

- 1. This study is based on 20 years of experience in creating and designing adult education and literacy approaches in African languages in francophone West Africa. In the past years, the thinking about literacy has transcended the desire to simply eradicate illiteracy. Rather, educators seek to create a literate environment based on the principle of life-long learning and the creation of learning societies. This paper addresses this fundamental aspect, often drawing from the experiences of one language community, Fulfulde (Pulaar) speakers in Senegal, who have willingly participated in literacy programs as a way of reinforcing both their language and their culture. However the article takes into account the general context of francophone West Africa, especially through discussions of the programs of "faire-faire" which have been adopted in most countries.
- 2. Non-formal education programs are complex, and it is not easy to draw a simple definition. Are we talking about literacy programs or adult education? Are these programs in the mother tongue, or in the official language of the country? Are we talking about young children, adolescents, or adults? Are we talking about non-formal education, formal education, or "just" literacy? These are the issues which are addressed in this paper, including how education can be used for qualitative change ("progress") in a community, indeed if non-formal education gets trapped in the concept of only teaching basic literacy skills, the enormous potential for combining education with individual and social transformation will be missed.
- 3. In general, it advocates for non-formal education approaches for adults (anyone over fifteen years old who is not currently, or has never been, in a formal school program). While many today would like to see a decrease in the distinction between "formal" and "non-formal" education, we nevertheless feel that non-formal education has a fundamental and irreplaceable role to play with working adults who cannot follow the constraints of a formal school program, but who nevertheless want and need to learn.

2. EXECUTIVE SUMMARY

- 4. This article is based on twenty years of experience in developing relevant, innovative, participatory education modules in African languages. As such, it is largely based on experience in the field, which in general is francophone West Africa, with its policy of "faire-faire". Furthermore, many of the experiences and examples are drawn from the Fulfulde-speaking community in Senegal, with which the author has particular experience. We wish to demonstrate how learner-centered education can contribute to the transformation of the individual as well as playing an important part in creating a literate environment in African languages.
- 5. The first point in the article is to demonstrate how woefully inadequate the formal school system has been in reaching the *Education For All* objectives set in 1990, in spite of increased funding and efforts. If formal schooling is failing to reach the majority of West African students, and if those students who are part of the system have very low levels of achievement, what else can be done?
- 6. We go on to claim that non-formal education programs have a great deal to offer to the educational sector in West Africa. We initially discuss the meaning of "non-formal education", which is often considered to simply be a literacy class for adults. We identify the defining elements to consider when looking at non-formal learner-centered education, those being:

the language of instruction, the length of time of the program, the age group for which the program relevant, where the objectives of the curriculum come from, how the program is funded.

- 7. Since many think that non-formal education is a literacy program, it is worth looking into the methods used to teach both literacy and numeracy, which are the primary components of any literacy program. Some of these methods are based on the concept of simply transferring knowledge or a skill. Other methods, such as those of REFLECT, are designed to bring about a transformational change in the participants. The paper presents numerous examples ("testimonies") from participants who have seen their lives change through a non-formal education program.
- 8. Of the strengths of non-formal programs, there are three that stand out. Firstly, there is a higher degree of community control over the educational system. Secondly, there is the use of local languages which dominate the system. And third, there is the great flexibility in timing which is essential if anyone not in school at the age of fifteen or older will be able to participate in an education program. As an example, the article points out that a "basic education" in the formal system equals 7200 hours in the classroom, over a six year period. Within non-formal programs (in francophone West Africa), a "basic education" is considered complete after only 300 to 400 hours of study, spread out over a two year period. While we all know that 400 hours is not enough time to complete an educational cycle, we also admire this system which achieves so much in so little time.
- 9. In order for non-formal systems to be effective, there is a crushing need for good books and well trained teachers. These are often missing.
- 10. The paper makes the distinction between functional books and books with which the reader can identify. Too many literacy programs are caught in the concept of conveying information or a message to the participants/readers. While we do not dispute the value of well done books which share new information, we nevertheless make a strong argument that culturally grounded materials (literature, fiction, local knowledge systems, etc.) are the types of books which help create fluent and avid readers. Learning the new skill of reading should not only be associated with learning new information. It should first be associated with self-discovery.

- The connection between non-formal education and creating a literate environment 11. Often there is the assumption that non-formal programs should lead to entry into formal programs. Because most of the participants in non-formal programs are fifteen years or older, this is an unlikely agenda. Furthermore, the goals of many participants in non-formal programs is not to enter the formal system (either school or the work force) by having obtained a degree, but rather to have adequate educational skills to be able to better manage the activities which are already part of their daily lives. While we support those few students who manage to make the leap between nonformal to formal systems, we nevertheless emphasize the importance of developing good nonformal programs which respond to real needs.
- 12. Creating a literate environment has many aspects, and can only be achieved over time. One aspect is to provide published materials (books, newspapers, magazines) to which new literates have access. But a fundamental step in creating a literate environment is the uses that new literates put to *writing*, not reading. This can include writing personal letters or keeping records of money owed to a shop keeper. It also includes all the literacy skills necessary in the management of a local association. New literates are often called in to participate in local associations (the women's group, sports for youth, running the millet grinding machine, managing the borehole, etc.) because their skills are necessary for the association. In turn, members of associations often turn to literacy classes to give them the new skills which they need in order to fully participate in the development of their communities.
- 13. Evaluation of non-formal programs should first take place at the level of the programs themselves. Because we are all learning how to provide new skills and information to community members, our programs should be the first to be evaluated. This includes looking at objectives, rates of completion, uses in the future, cost, etc.
- 14. Participants in programs rarely evaluate the program in terms of achievement of academic levels. Rather, they evaluate literacy programs by the impact these programs have on their lives. Even if they still read and write slowly, make spelling errors, etc., they usually see participation in a literacy class as having had a profound impact on their psychological self-perceptions and the role they can now play in the community.
- 15. **Recommendations**: based on years of observation, experimentation, and evaluation, we strongly make three recommendations:
 - 1. Non-formal programs should be recognized for the value they add to the educational sector, and that means to support this sector should be found,
 - 2. African languages should be fully developed in order to be effectively used in this sector,
 - 3. local culture and knowledge should be a fundamental part of any educational program.

3. INTRODUCTION: THE PLACE OF FORMAL EDUCATION IN WEST AFRICA

- 16. After the *Education for All* Conference in Jomtien in 1990, francophone West Africa adopted a plan to improve basic education. More than ten years later, this plan includes at least three systems of education. In undisputed first place comes the formal elementary school system in French, designed for children between the ages of seven to twelve. However, there is also renewed interest in developing an educational system in African languages which has taken two forms. The first and largest, is that of providing non-formal adult education in African languages for participants between the ages of fifteen and fifty. Furthermore, there is an experimental program of schooling for young adolescents between the ages of nine and fifteen who were not able to start in the formal French system, or who dropped out within the first few years.
- 17. This paper largely addresses the field of non-formal education in African languages for those over the age of fifteen. However, before turning to that, it is worthwhile noting the results of formal education. Here we focus on the results achieved in Senegal.
- 18. Given the most recent estimates in Senegal (statistics are taken from Momar Sow, 2000, "Sénégal : Rapport National du Bilan de l'Education Pour Tous en l'an 2000", which was carried out to prepare for the *Education For All* meeting, held in Dakar in 2000), 70% of school age children begin in the formal system, a steadily growing percentage because of the efforts being made to get more children, especially girls, into school. However, at the end of primary school only 75% of this group is still in school meaning that only 50% of twelve year olds are in school.
- 19. And if we look at the educational results of those who are in school, we get very dismal picture. In 1998-99, ministries of education throughout francophone Africa designed a standardized test to be given to 5th year elementary students in order to present statistics to the *Education For All* meeting held in Dakar in 2000. This included testing reading and writing skills in French, levels in math, and "life skills" (basic knowledge about health, science and the environment). When scores from these three fields of knowledge were averaged for Senegalese students, only 30% of them had reached the "minimal level" of mastery. Worse, only 0.2% had achieved the "desired level" in all three areas. As the study pointed out: "apparently school results are at the absolute minimum in Senegal. It is not even evident that students in the 5th year of their studies will not fall back into 'illiteracy' once they leave school..." (Sow, 2000, p. 42).
- 20. If we try to give a more human face to these numbers, imagine 1000 seven year olds who should be starting school. Of them, 700 will begin and 500 will still be in school in sixth grade, according to current statistics. Based on the results of the standardized test, only 164 of them will have reached the "minimal level" of mastery in the three areas tested. Worse, only one student one child out of the original one thousand would have achieved the "desired level" in those three fields.
- 21. These are the results of the formal educational system which dominates government resources given to education but which provides very weak returns, both in terms of numbers of students enrolled and in terms of levels of learning. It is in face of these poor results, plus the fact that formal schooling cannot meet the needs of all those who would like to either begin or continue their education, that non-formal education steps in to play a vital role. What defines the difference between "formal" and "non-formal" education will be discussed below. And hopefully the argument will be forcefully made that so-called non-formal education plays a critical role in improving the offer of education in francophone West Africa.
- 22. This article is based on experience in the field carried out by *Associates in Research and Education for Development* (ARED) a non-profit organization which specializes in developing and testing new training modules in African languages. Every module is accompanied by a published book, and we train teachers in other organizations to use them in their communities.

- 23. The context for this work is francophone West Africa, which is significant because of the policy of "faire-faire" which encourages decentralized decision-making in literacy programs. Within this context, we can work on innovative and creative ways of teaching literacy, as well as develop programs for continuing education. Furthermore, we specialize in the Fulfulde (Pulaar) language which has a particularly active grassroots movement for literacy. Levels of literacy are extremely high, participants buy books, people volunteer to teach classes.
- 24. The context, both politically and culturally, create an environment which allows for experimentation in learner-centered methodologies. While we use theoretical and academic research to inspire the work we do, the results presented in this article come from years of work with local communities and local literacy classes.

4. RECOGNIZING THE IMPORTANCE OF NON-FORMAL EDUCATION, AND ITS ROLE IN WEST AFRICA

- 25. There is a discussion today about the role of non-formal education as opposed to the formal sector. Many claim that the differences between the two systems are either diminishing, or should disappear altogether. If this means providing governmental funding for non-formal programs, formalized recognition of the results achieved by participants, we are in full agreement. But if this means reducing the relevancy of programs to individual learners by creating a more standardized system without taking the needs of learners who are often adults when they enter the system into account, then there are many major issues which need to be discussed.
- 26. This paper will discuss the major issues concerning non-formal education, the strengths and weaknesses of such programs, and hopefully persuade readers that this is an important piece in the educational map in Africa today, well worth supporting even if other formal options might be slowly put in place for the future. While many people remain focused on improving quality and increasing numbers of students in the formal sector, this effort ignores the needs and ambitions of a *huge* percentage of the population, fifteen years and older, who have not had, nor ever will have, access to formal schools. This article focuses on that sector and those needs.
- 27. Furthermore, we hope to underline the crucial role of a policy and funding agreement known as "faire-faire" (defined below) which decentralizes education in very innovative ways.

4.1. A focus on the word "education"

- 28. In reading the literature about non-formal education, one is often tempted to draw the conclusion that "non-formal education" equals "literacy classes", i.e. the content of non-formal education is to teach basic literacy and numeracy skills. Therefore, the first part of our paper will focus on pedagogical methods for teaching this very important skill.
- 29. However, literacy is a skill to acquire, not a program of education. One can be illiterate, yet very well educated. And the converse is true being literate does not guaranty an educated individual. Therefore, literacy as a skill needs to be considered in the larger context of education in general.
- 30. Every educational program has at least some of the following goals in mind:

to develop the individual learner so that he or she can fully achieve their individual goals and potential in life,

to teach basic skills such as literacy and numeracy (which are "neutral" in terms of content, but which inevitably carry a strong social and cultural charge),

The connection between non-formal education and creating a literate environment to transmit a fixed body of knowledge and information which is deemed important by the community (as in the example of religious education),

to help individuals learn the skills and information they need to play an active role in local social issues in order to help in the development of their community (such as managing a budget for a group activity, or learning to lobby for local interests),

to work towards the preservation and adaptation of local knowledge and the culture of the community,

to work towards the creation of new knowledge by empowering individual learners to explore, putting old and new information together in a creative manner.

31. At its best, non-formal education does all of the above. In what follows, we will look at all these aspects:

teaching basic skills (literacy and numeracy), developing the individual in his or her community, and, the transmission, creation and development of knowledge.

32. If non-formal education gets trapped in the concept of only teaching basic literacy skills, the enormous potential for combining education with individual and social transformation is missed. So one of the aspects of this article will be on how education can be used for qualitative change ("progress") in a community.

4.2. A focus on the concept of "non-formal"

- 33. As we said above, often non-formal education is considered to be literacy classes. But the role of non-formal education can be much more dynamic and transformational if it is viewed in it's larger context. Before arriving at that context (most eloquently expressed in section 6 of this article, where learners in non-formal programs express the impact of education on their lives), we can look at some of the attributes which underlie and contribute towards non-formal education programs.
- 34. First, we pose a series of questions which should help to define the concept of non-formal education in francophone West Africa:

What is the language of instruction? To their credit, most non-formal education programs have been based on teaching and learning in African languages (at best, the mother tongue of the learner, or at least in a language which the learner uses in daily communication). This is quite different from teaching in the official European language of the country, or perhaps in Arabic. Nothing is more fundamental than understanding the difference between *learning in a language one speaks* and *learning a foreign language*. Learning in a language one speaks is a central pillar in most non-formal education programs in West Africa and it radically changes the pedagogical approach, the required length of time for study, the need for books and other written materials, etc. It also increases the burden on the providers who can't simply buy books off the shelves, but must often invest in the development of materials and the training of teachers before classes can even be started.

35. What is the length of time of the program? Formal basic education is theoretically based on roughly 1200 hours per year spent in the classroom, during a minimum of six years to complete a primary education. This totals 7200 hours of study for those students who enter and remain in the formal system. Students therefore must spend several hours every day over several months and years in the classroom. Non-formal programs tend to be much, *much* shorter; some as few as 200 hours per year for a maximum of two to three years. Classes take place after normal work hours and/or during seasons of the year when people are the most available. This flexibility is essential for reaching adult learners (those over fifteen years of age) who cannot spend the majority of their time in the classroom because they are already gainfully employed elsewhere. But it also means designing books and curricula which can be covered meaningfully within the given time frame, so that both participants and programs arrive at their desired goals.

- 36. What age group is the program designed for? In West Africa there has been an implicit understanding that education for children is formal education (even though there are more and more experiences in beginning formal education through African languages; and even though there are non-governmental organizations (NGOs) that develop alternative programs for children). Next, there has been the assumption that non-formal education is geared towards "adults", usually participants between the ages of fifteen to fifty. A new type of non-formal education is recently being developed for young adolescents (between the ages of nine to fifteen) who have not entered the formal system, but still might be able to do so through a non-formal program. Clearly identifying these three age groups is central to the development of a good program. What is appropriate for a seven year old is not interesting for someone who is fifteen. Literacy books which have been developed for adults over the age of twenty are often used in first grade classes. A non-formal program can only work well if the people designing the program know the age group for whom it is destined. Many programs start with the concept that the participants are not literate, and that this common fact is enough to bring them all together. But in fact, the psychological, social, physical and emotion development of each age group requires different materials if the program is to be effective. Simply the fact of all starting by being illiterate is not enough to make a program work.
- 37. What/who makes up the curriculum? If the word "non-formal" has any clear meaning, it is in the concept of designing the curriculum (including the number of hours of study, books to be used, methods of evaluation, etc.). Is the program based on the curriculum which has been defined for the formal school system (subjects to be taught, levels to achieve, number of hours to invest, etc.), or is it truly a "NOT-formal" system which allows for innovations, adaptations, community dialogue and social action? For example, non-governmental organizations can come up with very interesting programs based on a total of 600 hours of study, including basic literacy and numeracy skills, plus practical information about tailoring, or gardening, or animal husbandry, etc. They can do this because their program is not geared to meeting the demands and restraints of a formal school program, but instead is based on teaching relevant skills to a well defined local group. On the other hand, so-called non-formal curriculum for adolescents (delivered through what are known as "écoles communautaires de base" in Senegal) is often based entirely on the formal school system. The objective is to reach the skill level to take the crucial exams in the official language (usually at the end of primary school), so that students can pass into the formal system. This is a system of translating school into local languages, adding the official language as a subject, and hoping that students will be competitive within the formal system. Is the objective of the curriculum to be able to conjugate French verbs and use the metric system? Or is it to prepare someone to use literacy skills in their work as a local birth attendant, or auxiliary veterinarian; or to carry out normal daily activities of farming, herding, fishing, etc. with the addition of literacy skills plus continuing access to new information?
- 38. Where does the funding come from? By definition, non-formal classes in West Africa are rarely funded from national education budgets. Because of this, civil society organizations such as local associations and non-governmental organizations often play a greater role in funding non-formal education than does the government. In these cases, there is often funding at the start-up phase of a program, but little for long-term recurrent costs. Often there is money to open classes, but little to train teachers or develop books and materials. This uncertainty obviously plays a role in how sustainable non-formal programs can be.
- 39. These issues and questions are not minor ones. They help us identify the core strengths and weaknesses of non-formal education. Based on an understanding that non-formal education almost always includes literacy skills but isn't necessarily limited to that, we can look for more effective ways of developing programs. These questions will be explored from a variety of angles in what follows.

4.3. The concept and role of "faire-faire"

40. Many West African countries today (Senegal, Guinea, Mali, Burkina Faso, Niger, Ivory Coast, etc.) have adopted a process for supporting non-formal (literacy) education known as "faire-faire".

The connection between non-formal education and creating a literate environment The major concept behind this process is the decentralization of decision-making, helping local communities receive funding for local "educational entrepreneurs" who, at a minimum, set up literacy classes, and perhaps adult education classes on a variety of topics.

41. For francophone West Africa, which has always operated with a very centralized and "top-down" system of education, this innovation is a major break-through. It not only allows for local innovations, but it also encourages local people to take on many of the tasks in education by providing funding to them. This concept will be discussed in more detail below. But for the time being, it is crucial to keep in mind that francophone West Africa is in the process of developing a very flexible, decentralized system of non-formal education which meets the educational needs of local communities.

5. NON-FORMAL EDUCATION AS A LITERACY PROGRAM

42. In the early years non-formal education defined itself around the concept of imparting reading, writing, and numeracy skills. Because of this, it is well worth looking at ways of achieving these skills - even though we do not consider these skills to constitute an education, and even though we know participants come away from the experience in literacy classes with many aptitudes which far surpass simple reading and writing.

5.1. Methods of teaching reading

43. Worldwide, for languages using the "Latin" alphabet, there are two primary ways of teaching reading. One method is known as the *alphabetic* one, which starts with the letters of the alphabet, teaching combinations of letters until one arrives at words, and eventually sentences. The other, commonly known as the *global method*, starts with real text of some sort and teaches to read by the global recognition of words and sentences. Each method has strengths and weaknesses, and each can influence the development of reading and writing in different ways.

5.1.1. The alphabetic method

- 44. The method of teaching reading most widely used in francophone Africa today is the alphabetic method. In fact, it is so widely used that we call it the "classic" method. Based on a syllabaire (primer)¹, the method starts with the smallest element in the written language, the individual letter. The number of lessons in many syllabaires is calculated around the number of letters in any given language.
- 45. Since the 60s across francophone Africa, a method of teaching basic literacy skills has been used based on the following progression:

classroom discussion around a theme of interest or importance (designated by the program designers),

identification of a "key sentence" from that discussion,

identification of a "key word" within the sentence,

isolation of the "key syllable" in which the new letter appears,

and finally, identification of the "letter of the day" which appears in the key syllable and word.

46. This method has been widely used, as well as improved upon. It is the basis for most of the syllabaires for adults in use in francophone West Africa today. In fact, in the early days this

¹ Throughout this article, we will use the French word "syllabaire" to refer to the basic book for teaching reading and writing, which is based on progression through the alphabet.

The connection between non-formal education and creating a literate environment method didn't even require books, which were not yet published in African languages. Teachers elicited a sentence or a phrase based on a classroom discussion, wrote the phrase on the blackboard, and then proceeded towards identifying the letter of the day.

- 47. The advantage to such an approach is that participants are taught to sound out new words based on the sound value of each letter. Given this focus on individual letters in new contexts, students are prepared to figure out how to read new words (which are limitless) through sounding out the individual letters (which are limited in number).
- 48. The major disadvantage of this approach is that learners start with the most abstract part of written language, the sound-symbol relationship. The letter "r" for example is not an easy concept to grasp by itself as a sound, which makes it difficult to grasp as a written symbol. We have seen syllabaires which teach all the vowels first, including the subtle distinctions between accented vowels such as "à" and "á" before proceeding to consonants. Often learners stop after the third lesson, thinking they are stupid because they can't grasp the difference in the sound value of these symbols in isolation.
- 49. Secondly, this approach usually teaches syllables again in an abstract fashion. Rather than teaching how words are made up of units called syllables, there is a tendency to use the "syllable tree" ("ba", "bi", "be", "bo", "bu", etc.). These combinations of sounds (consonant plus vowel) don't necessarily have any meaningful relationship to real words in the language. They are simply the potential combination of all the vowels in a given language with each new consonant. Furthermore, this approach tends to completely ignore the concept of a syllable which starts with a vowel ("ab", "ib", "eb", "ob", "ub"...), which is often confusing to new readers.
- 50. The habit (skill) of reading becomes one of deciphering from the smallest unit (the letter) up to the more meaningful ones (words, sentences, paragraphs). Reading in this style doesn't give students practice in fluent reading skills, i.e. reading for meaning. When students learn to read in a language they don't speak (French, English, Arabic, etc.), they learn to "chant" a phrase rather than reading it with intonation and understanding. We have observed high school students who still read using their finger to guide their eye, reading every word on the page, breaking each word into its smallest parts, and completely ignoring punctuation which would give them a clue as to how to read the entire sentence.
- 51. These habits were often taught in school systems based on teaching in a foreign language. But these practices also persist in programs taught in a local language if this is the primary model of reading which students and teachers have experienced elsewhere, and if there is no new and engaging material for them to read. Even in their own language, participants don't necessarily expect to understand the text they are reading, and it is always a bit of a surprise when they figure out that reading is meaningful. A common evaluation tool in any program is to ask students to read a text out aloud. And conversely, reading silently and answering questions on the content is rarely used as teaching technique or for evaluation.

5.1.2. The global method

52. In contrast, the global method starts with words and whole sentences - even a short paragraph - based on the assumption that it is easier and more stimulating to learn to read something meaningful than abstract symbols and sounds.² It puts the focus on reading for meaning, not deciphering letters. To read fluently, a person needs to have built up a stock of words known as

 $^{^2}$ The global method is particularly useful in languages such as English or French which have such complex orthographies (spelling systems) that it is very difficult to teach students to read by sounding out individual letters. In languages with a well developed publishing sector, teachers often take "real text" from newspapers, posters, etc. in order to inspire their students to think about reading as a meaningful activity in everyday life, not just a process of deciphering to be used in school.

The connection between non-formal education and creating a literate environment "sight-words" which are recognized immediately and effortlessly. Learners only hesitate over new words, but not the ones they have already mastered.

- 53. The major drawback is in teaching to write, and also in finding a way of teaching how to read new words which have not been explicitly taught. In the early stages, the sound/symbol (speech/written letter) relationship is not explicitly taught, and therefore students might be completely unprepared for the process of sounding out words, either familiar or new. Students might work more from memory and previously acquired knowledge rather than from an ability to apply their skills to new contexts.
- 54. Furthermore, while reading by students who have learned this way is usually much better (meaningful) than students who learned with the alphabetic method, their writing skills (spelling) is often a real problem. They haven't acquired the necessary information and skills to help them make choices as they write new words. They rely on memory rather than knowing how to use the sound/symbol relationship to write words in an acceptable fashion. Sounding out words is at a disadvantage when teaching students how to read. But it has a relative advantage when teaching them how to write.

5.1.3. Combining the alphabetic and global methods

- 55. Many programs worldwide today are based on combining these two systems, using the strengths of each to provide a comprehensive program for the teaching of basic reading and writing skills.
- 56. Within our own organization,ARED³, we have developed a published syllabaire which is based on the "classic" alphabetic method, but then tried to expand the method to also capitalize on the advantages of the global method. Our first syllabaire was developed in this way for the simple reason that the vast majority of literacy teachers have been trained in the alphabetic method, either in school as children or in teacher training programs as new literacy teachers. Given the fact that literacy teachers rarely receive more than a few weeks of training in most programs, we felt it was prudent to start with something already familiar to them, lead them through an analysis of the strengths and weaknesses of the method, and then add new features.
- 57. The primary aspects which we have changed are:

the key sentence is not just used as a device to arrive at the key letter, but rather, all the words in the sentence are taught globally so that students start to build up a reading vocabulary of instantly recognizable sight-words,

real words (using only the letters taught so far) are broken down into real syllables (i.e., "*deb-bo*", "*laa-wol*") so that students practice reading (deciphering) and writing new vocabulary through syllable recognition rather than just chanting the syllable tree,

we introduce two new letters per lesson so that the process can be accomplished as quickly as possible, leading students to become independent readers,

there is meaningful text which can be read from the very first lesson, using the words learned globally from the key sentences plus combining letters which have already been learned to form new words.

58. As a method, this puts teachers and students at ease, because it feels familiar. Furthermore, it uses the strengths of both the alphabetic method and the global method. Because the teaching methodology is repeated in each lesson, students often find ways to continue learning at their own pace. As soon as they have identified the new letters of each lesson, plus read the key sentence, they can work on their own, at their own pace. If they are learning more quickly than the others, they can learn independently. If they need more time and repetition, they can do it for themselves because they know the structure of each lesson. Plus, new literates can quickly become a literacy teacher for their communities because the methodology is so predictable.

³ Here we refer to the non-governmental organization known as ARED (*Associates in Research and Education for Development*), which has specialized in creating and testing new pedagogical approaches in African languages since the mid 80s.

- 59. The major disadvantage remains the fact that the class proceeds around the learning of individual letters of the alphabet, rather than interesting and compelling text. Lesson plans, while easy for literacy teachers to master, can also become boring and monotonous if the literacy teacher doesn't add creatively to it.
- 60. On the other hand, one must remember that this process takes only 100 to 200 hours. One hundred hours divided by six (the normal classroom day) is only sixteen days in the classroom. Doubled, it is still only thirty-three days in the classroom. This economy in time is an element which needs serious consideration by those who develop books, methodologies, and curricula. Some participants willingly sit through 100 hours of rather monotonous teaching-learning because the end result is an exciting new skill in literacy. Others don't see the interest, or think that they are stupid because they don't understand, and drop out of the program at this point.

5.2. Literacy skills for transformation

61. The focus above has been on the mechanical process of learning how to read and write. Hopefully the discussion has helped readers of this article to gain skills in identifying the methods being used in their programs, the strengths and weaknesses of each, and perhaps even some ideas on how to improve the mechanical teaching of literacy. However, literacy skills without meaning — whether words, books, or social context — end very quickly. Therefore, every literacy program tries to define the content and meaning to give to each lesson.

5.2.1. The place of content in the "classic" syllabaire

- 62. One of the dilemmas which face every literacy program is how to combine the desired content of the program with the teaching of the skill of literacy. A program might identify health as the topic of interest, or legal rights, or protecting the environment, or HIV and AIDS. These topics become the content of the key sentences, either elicited from a classroom discussion or written in the published syllabaire. Most literacy teachers are expected to animate a classroom discussion on a given topic in order to both teach content and to arrive at an understanding of the key sentence. And the vast majority of syllabaires today assume that there will be a discussion around the key sentence of each lesson.
- 63. There are at least four major problems when a literacy program is designed around the content of key sentences:

most of the content of what might have been a rich discussion is boiled down into the key sentence, which becomes a very simplistic "slogan" ("Wash your hands before eating", "We should be concerned about the environment", "AIDS is a problem in our community", etc.) rather than being stimulating as a subject for reading by a mature learner,

many people teaching literacy today are new literates themselves, and while they can quickly be taught to teach literacy skills, they are not necessarily capable of conducting meaningful discussions around health, the environment, etc. especially to their peers — or elders! — from the community,

therefore the program might need a second person who has more training and expertise to guide the discussion about the content,

as editors develop books meant to reach a larger audience, they cannot custom-design basic literacy books to meet the special interests of a specific program, but need to publish books with a wide appeal in order to keep publication costs down by increasing the print-run of an individual book.

64. We find that emphasis on the theme or content of the key sentences, which is often a requirement of a literacy program, is a poor place to put time and energy. Rather, participants can normally arrive at relatively fluent reading skills in roughly 150 hours of classroom time. *Teach them to read quickly so that they can then use reading to learn.*

65. If a two-hour class uses one hour to talk in very general terms about hygiene, which may or may not interest the adult participants, time has been lost around the literacy skill. However, once participants are capable of reading, books should be provided around a variety of topics, and with a level of sophistication worthy of the adult learner, so that reading becomes an fundamental requirement in the process of continuous and life-long learning.

5.2.2. Innovations in teaching literacy

- 66. Newer programs have started combining the teaching of literacy skills with the use of both more visual and more active participatory techniques.⁴ Based on the Freirian principle that literacy is a transformational tool, both at an individual and at a community level, the classroom becomes a center for truly meaningful discussions, with literacy skills as a support to a topic which is important to the participants. In these approaches, classroom discussions are not simply designed to elicit a key sentence ("slogan"). Rather, classroom discussions are totally open and encourage participants to analyze their environment and community, to share knowledge and opinions, to visualize this knowledge before arriving at reading, to argue and disagree, to arrive at a consensus, and to bring this whole social process into the development of texts (starting with the global method) which have been created by the participants, and therefore have meaning for them.
- 67. It is an empowering process to be able to discuss and share ideas, and then use these discussions as a basis for creating real text of interest. In an evaluation of a literacy program in northern Senegal⁵, participants told us that they learned "how to hold meetings" by going to literacy class. They had been taught reading and writing using the classic, alphabetic method. Nevertheless, they quickly saw the implications of becoming literate for their lives. When asked about the connection between literacy classes and holding meetings, they replied:

we learned to prepare an agenda before the meeting, similar to a lesson plan, everyone can take notes, so there are fewer disagreements about decisions, we take turns expressing ourselves in a meeting, just as we did in literacy class, everyone is encouraged to participate, including shy students, women, etc., final decisions can be signed by everybody, there are final minutes written about the meeting.

- 68. Obviously, becoming literate is not the most important skill being taught in this literacy program. The fundamental skill is learning to share opinions and viewpoints in a public space, arrive at a decision, and record the process for future needs.
- 69. One of the techniques effectively used in this context are the Participatory Rural Appraisal (PRA) tools.⁶ These tools offer a way of visualizing a discussion, including the viewpoints of everyone in the process, before writing out the ideas in text form. Different Participatory Rural Appraisal tools help to visualize space, time, social relationships, priorities, etc. These tools were originally developed for and by academic researchers who were convinced that questionnaires were not the best way of getting to know about a community. But these tools have since been developed to be used as part of a literacy process, offering a way for both literate and illiterate members of a community to share information and opinions, in a manner that can be committed to "writing" which everyone can understand.
- 70. In our practice at ARED, there are three fundamental steps in carrying out a Participatory Rural Appraisal activity as a support to a literacy class:

First, the participants trace or design their viewpoint on the ground (i.e. "in the sand"). This has the tremendous advantage of giving people the freedom to trace, erase and change

⁴ The REFLECT model is one of the first and biggest. ARED's experimentation with these methods will also be examined in detail here.

⁵ Notes taken by the author in 1996 in Namarel, Senegal during an evaluation of literacy classes.

⁶ known as "Méthode Active de Recherche Participative", MARP, in French

The connection between non-formal education and creating a literate environment things, again and again in the sand, without hesitation, until they arrive at a common understanding or consensus.

Secondly, big pieces of paper are used to recreate the final image. This fixes the final decisions in a way that the participants agree upon. But by being supported on large pieces of paper, rather than in the sand, the discussion can be shared later on and elsewhere, across time and space, even with people who were not present at the original meeting.

And finally, a written text summarizing the discussions - perhaps mentioning divergent points of view - can serve as a second type of written record of the discussion.

- 71. This combination of real discussions based on local knowledge and perceptions, a visualized representation, and a written text are very powerful tools to share with local communities. They even become a way of bringing together the elders (who often hold the local knowledge without being literate) and the younger generation (who are acquiring literacy skills but don't necessarily know the background and history of their communities).
- 72. REFLECT has undoubtedly done the most to develop and promote this method of teaching literacy skills by seeing literacy classes as a tool for social transformation. One of the premises of the REFLECT program is to deliberately not have a pre-designed book for the participants, but rather to encourage the class (known as a "circle") to freely chose the questions of interest for discussion. The teachers have a training guide, which gives them a multitude of ideas about how to conduct a group discussion, using a visual tool, eventually arriving at a shared written text.
- 73. ARED has also worked for more than ten years using Participatory Rural Appraisal tools as a means of sharing knowledge, increasing social interaction, and keeping "written" records (both visual and textual) of the exchanges. In many circumstances, our activities have nothing to do with literacy classes, but are a means of getting people to discuss local issues, resolve conflict, address environmental protection, react to laws, etc. These discussions bring together elders, locally elected officials, representatives of local associations, experts on the topic, representatives of the central government, etc., as well as participants of local literacy classes.
- 74. However, for use in a literacy program, we decided to standardize this process in one important way. That is, every member of the literacy class should have a book of his own, in spite of the highly original discussions which go on. We took this decision for three primary reasons:

First, most new literates have far too few examples of written text, and therefore it was important that they have a book which could add to their process of learning to read and write, giving them a model for writing correctly (for us, writing "correctly" does not imply writing without mistakes in spelling. It does mean that when one person writes a message or text, another person can read it with sufficient understanding and without an exhausting effort) and to practice reading fluently.

Secondly, many literacy teachers today are poorly trained or barely trained, or are often new literates themselves. We were not certain to be able to find people of the required level to carry out both Participatory Rural Appraisal activities and teach literacy.

Finally, we did not want participants to be at the mercy of a literacy teacher who would give them no idea of how the process was evolving. Literacy teachers with too little education and training can often employ an autocratic and arbitrary method for organizing classes. Books in the hands of adult participants often help to equalize the power in the classroom.

- 75. We therefore decided to develop a standardized literacy book for this process. To do this, we are developing separate books for different groups of participants (mobile herders, urban women, farmers, young adolescents). In each lesson, there is an introductory Participatory Rural Appraisal activity with a pre-designed visual and with key vocabulary, so that we are certain to have a common stock of words to use in developing model texts later on. The second lesson, which is on the identical theme, allows the participants to use the skills (words) already learned, and apply them to their own environment.
- 76. For example, one of our first lessons was based on doing a map of a herding zone. The key question was "what infrastructures exist in your zone?" and we introduced seven key words which

The connection between non-formal education and creating a literate environment we knew would be part of any map done by any herder anywhere in Senegal ("well", "borehole", "pasture", "school", etc.). The second part of the lesson was left blank, and the question was to draw a map of the important infrastructures in the participants' own zone, so that they could create a map which more closely resembled their real environment. In our first experimentation with this method, the class came up with *sixty-two words* (nothing near our original seven words!) to identify and describe important aspects of their environment.

- 77. Next, after doing standardized lessons on basic grammar to improve their reading and writing, they are presented a text to read using only what they have already learned in the book. And finally they are given a page where they write their own text, using the new vocabulary which they have provided from their own maps.
- 78. In this way, we combine using PRA tools with teaching literacy. We also combine some level of standardization with local originality. Both the book *and* the students are sources of written text, so they get practice in reading the text of an outside author and being the authors of their own texts.

5.2.3. A remark on teaching grammar

- 79. Literacy programs often develop a basic syllabaire, and perhaps reading books on themes of interest to the program. However, there is often too little attention given to teaching the fundamentals of grammar in the language. For example, many new literates do not use punctuation when they write because they were never taught about the use of periods, commas, question marks, capital letters, etc., and these writing conventions are rarely demonstrated in syllabaires, which tend to focus on letters and words in isolation.
- 80. Obviously, a theoretical linguistic course on the grammar of a given language is not what is needed. However, each program should reflect on two questions for each language:

What grammatical information would help students develop fluent reading skills?

What grammatical information would help them write with more ease, with written texts being more easily exchanged between writers and readers?

- 81. These issues need to be addressed at two levels: word formation (morphology), and sentence formation (syntax).
- 82. We have already given the example of new literates who read without voice intonation or write without punctuation, because they don't have a basic understanding of how sentences are represented on the written page. It can often be quite a challenge to read an otherwise well-formulated text because the author didn't use periods or commas, and therefore the reader has to guess where one idea stops and another starts.
- 83. Another example, this time concerning word formation, is to address the fact that no standardized language in the world is written exactly as each individual pronounces each word. For the sake of wider communication, in order to be able to develop dictionaries, etc., each language moves towards greater degrees of standardization in written language. A major advantage for the orthographies of most African languages is that the sound/letter connection is relatively straightforward. Rarely are several letters used for one sound or for a grammatical function. Rarely are there silent letters. Rarely is the same letter pronounced in two different ways.
- 84. However literacy classes usually teach reading based on sounding out words letter by letter; and conversely, new literates usually write exactly as they pronounce the words. It takes exposure to written text, and some basic grammatical explanations, to help people develop more sophisticated (standardized) skills.
- 85. In a book developed by ARED on these questions, we start with two basic premises:

Every speaker already knows the grammar of his or her language. The objective of the book is therefore to help them discover what they already know as it applies to the written form of the language.

Most literacy teachers are not prepared to teach such a topic. Therefore the method must allow students to work independently.

- 86. Based on these two principles, we developed a book where students work together in small groups, reading and answering a series of questions until they can arrive at a grammatical "rule". Elsewhere in the book, the formal linguistic explanation is given, and they can compare their discovery with "what the linguists say". At the end of the session, the literacy teacher helps each small group present their findings to the whole class, thereby reinforcing what students have learned.
- 87. While we find that doing these types of exercises might be either too boring or too difficult for individuals, in small groups, people become very passionate about their process of discovery. Most are amazed to discover that their language is grammatically complex, and yet can be presented in a systematic fashion. One participant announced that now that he knew the grammar of his language, he could go on to "...build an airplane". This is obviously an exaggeration in skill level. However it gives a sense of how learning the fundamental of a language is not necessarily boring, but rather can provide a great sense of empowerment. Learning grammar can be a process of discovering, analyzing, and categorizing what one already knows, rather than passively receiving knowledge from the "expert".
- 88. This should be the strong point of all lessons around the grammar of a language. The students already know the content, but need to carry out analytical activities so that they can arrive at a generalization. This process of analyzing, discovering, categorizing, deriving rules, applying generalizations to real contexts, etc. is an essential and liberating part of the process of learning which is essential to non-formal classes. All learners learn better by testing and applying their knowledge. Within a literacy class, the grammar of their language is a logical place to start this process for new literates.

5.2.4. Writing of texts at the classroom and personal level

- 89. This discussion wouldn't be complete without considering an approach to teaching reading where participants themselves write their own text. REFLECT has managed to integrate this approach in the teaching of African languages, which is a special challenge.
- 90. The appeal is obvious. Learners become active participants in the process rather than passive recipients: their own knowledge and worldview are valorized. Reading and writing are motivated by personal and internal standards, not those set by outside evaluators. In any program, this teaching technique can and should be integrated as a part of the overall methodology.
- 91. The problems for using this method in Africa are important ones to think about however. The first and most obvious is that few teachers have been taught in this way, and they probably would need additional training not only on using the method, but on giving up a certain degree of control over the classroom and the program. Texts produced by classroom participants are unpredictable, and many teachers (who still believe in memorization and recitation) are ill equipped to encourage creativity over rote memory. Part of this process requires letting students write "incorrectly". That is, instead of checking for spelling errors, the teacher needs to focus on the intrinsic interest and value of the text, assuming that orthography is a process which is learned over time, but is no reason to reject a text coming from a participant.
- 92. Another major issue for participants in Africa is having written examples of writing and texts to inspire them. When this method is used in western countries, almost all children arriving at school have had books read to them by their parents, seen posters and magazines and newspapers all around them, have watched child-centered television programs where reading and writing are part of the decor. In contrast, we have worked in villages where there is almost no sample of writing to

The connection between non-formal education and creating a literate environment be found in the immediate environment. In many cases, an adult who conducts business on a daily basis is not able to recognize his or her name when written down. In several experimental classes, we found that adults did not recognize the words "Nescafe" or "Maggi", even though they bought these two products several times a week, each with large print labels of these words.

93. These are extreme, but not unique, examples of the role of writing in many communities. In order to integrate classroom and personal texts into a teaching process, a teacher must keep this larger environment in mind, and find creative ways to overcome the limitations. With some groups this might be starting with oral narratives. In other cases, it could be creatively using Participatory Rural Appraisal visualizations to help participants think about how to explain what they know. In every case, once participants start writing, the teacher needs to keep quiet about spelling and punctuation at the beginning, so as not to stifle the process. It is perhaps at the moment when individual texts are shared with the whole group that the teacher can bring some "standardization" to the text. The text — and therefore the participant — has been valorized by being shared with the others. Pointing out how standardized spelling can help a writer share his or her vision with the rest of the class is simply integrated into the process.

5.3. Numeracy skills

- 94. It is more difficult to comment on teaching numeracy skills than on teaching literacy skills, because each math operation needs to be approached and taught in a different fashion. However, one general remark can be made. That is, most participants in non-formal classes are older, usually being at least fifteen years old. They are already capable of carrying out many math operations in their daily lives, and teaching methodologies should keep this in mind.
- 95. On the other hand, we have usually found that even adults who run a small business are eager to learn how to keep written records, and how to more efficiently carry out calculations. And while many people can add and subtract in their heads, plus make change at the store, they probably cannot calculate percentages, figure out fractions, use the metric system (which is imposed on them), etc. Therefore, there is a need to both discover local systems of doing calculations, and introduce ways of doing calculations which is used universally.
- 96. At the very least, it would be very encouraging to see much more fundamental research carried out on what people already know, what is useful to learn, and how to creatively teach each operation. Entering the question of becoming literate through numeracy skills has a promising potential. Often adult learners initially see an interest in being able to keep financial records, for example, so this may be a way of getting them involved in the larger process of becoming literate. By doing this, many programs could use numeracy as a way into literacy, rather than literacy as a way into learning numeracy skills. The importance and value of numeracy skills are often immediately apparent to adult learners, and these skills in written form can often be taught in relatively short periods of time. So it is a good way to initiate education in a community.
- 97. Once again, if the objective of the programs, such as those for out-of-school children, is to help the children later integrate the formal school program, the content and the method of teaching must follow the same principles as the formal program. In that case, one of the fundamental issues for a non-formal program in African languages might be to develop the vocabulary for concepts which aren't usually expressed in the students' maternal language ("addition with carry-over", "centimeter", "square cube", "trapezoid", "fraction", "decimal point", etc.).
- 98. However, if the program is more focused on identifying the practical math skills that their participants need, they can be freer to explore fun and interesting ways of teaching and learning. As an example, ARED has changed three fundamental approaches in the teaching of numbers and the primary four math operations (addition, subtraction, multiplication and division):

In teaching to read and write numbers, we start with the concept of base 10 (which is the base system used in all formal schools in sub-Saharan Africa). That is, we demonstrate why suddenly two digits are used when one gets to the number 10; why three digits are used when arriving at 100; why four digits are used at 1000, etc. In order to do this, students manipulate

The connection between non-formal education and creating a literate environment real objects (in this case, small sacks filled with beans) to understand the underlying principle of the writing of numbers. Instead of mechanically memorizing how to write 105, they can use deductive reasoning to come to their own conclusions.

For teaching addition and subtraction (especially with carry-over and borrowing), we use the same principles learned in writing numbers. Starting with the sacks of beans, they first diagram how these sacks have been manipulated, and then arrive at writing the numbers. The process moves from concrete manipulation of real objects, to visual representation, to the writing of abstract numbers.

For multiplication and division, we base the process on the Pythagorean table rather than memorizing the multiplication tables. Students learn the relationship between addition and multiplication through creating the Pythagorean table themselves; and then the relationship between multiplying and dividing by reading the table in the reverse direction.

- 99. Obviously in this paper, it is not appropriate to go into the details of how these operations are taught or carried out; we simply suggest that there can be more variety in teaching methods. Basing a program on what is generally taught in a formal school program is probably a very poor way of imagining how math can be taught in a non-formal program.
- 100. Also, we have found that the majority of adults (fifteen years old and above) can learn to read and write numbers (to one million and more), plus do all four operations (including adding, subtracting, multiplying and dividing multiple numbers by multiple numbers) in roughly 150 hours. Most formal programs allow a much longer period of time. The major difference is that many formal programs rely on memorization, while other methods are based on understanding the principles behind the operation and sharing those principles with the participants in an active and participatory fashion. We support any system which teaches the principles and leaves memorization to the side. But whether or not this can be done depends on the flexibility of the program.

6. THE STRENGTHS OF NON-FORMAL EDUCATION PROGRAMS

101. The success or failure of non-formal programs depends on a variety of underlying factors which go far beyond the teaching methodologies for literacy discussed above. These factors are largely about social mobilization, individual and community transformation, power sharing, consensus building, reinforcement of local culture and knowledge. In any community, a non-formal education program probably affects all of these issues, even if the program is limited to the mechanical teaching of literacy skills. In what follows, we will try to examine some of the factors which distinguish non-formal education, and which help to make it a good response to community educational needs.

6.1. Community involvement

- 102. Most non-formal programs need and depend on a high level of community involvement. While funding and decisions for formal education are usually made at a centralized level, non-formal education is often dependant on local agreement and participation. At the minimum, this empowers the community to be involved in education. And at best, it adds local concerns to the curriculum.
- 103. Community involvement in education can take two forms. One, communities take part in the logistical organization and management of the local classes. This is fundamental. But secondly, communities can also play a role in defining the content, especially culturally interesting content, in what is being taught. This is a more complex issue, but also one of the greatest strengths of non-formal programs.

6.1.1. Local control over logistical questions

- 104. Without a doubt, one of the very strong points of non-formal programs has to do with community involvement in and control over local classes. Until now, formal schooling in West Africa has always been designed and implemented from the top down, from some centralized place of authority which develops the curriculum, the books, trains the teachers, pays for infrastructure and recurring costs, etc. Although parents are often asked to buy books and supplies, the choice of which books are required is still made at a centralized level.
- 105. Non-formal programs usually begin with a sometimes lengthy process of negotiation with local communities. They ask who would be interested in classes and for what reasons. They want to know when participants would be able to attend classes, and for how long, and at what season during the year. They often require community participation in choosing or building an appropriate space (which often might be an open-air "tent" with four poles holding up some sort of roofing made of grasses and branches). They may insist on the selection of a local management committee who will help in the running of the classes even though many of the persons chosen are not literate themselves, their status in the community gives them a say in how any community program should be managed. And teachers are often chosen from the community itself, meaning that they have a moral and social commitment towards their new responsibilities but also, that they might be totally unprepared for their new role.
- 106. In our experience, the more that decision-making power is put in the hands of local leaders, the better the educational program can respond to local needs. This is part of the process of decentralization of educational needs and provisions. However, it is rare to find a neat division between financing and decision-making. Both ends of the continuum inevitably need to work together to find a solution which suits everyone.
- 107. Furthermore, while local leaders can help to define the local needs for a program, there must also be a larger perspective which can envision new educational content and skills which should be included in the program. The local community may not be aware of new and important skills or information to teach and learn. Therefore, it seems logical that there be an extended dialogue between providers of education and the participants in non-formal programs.

6.1.2. Cultural content for self-discovery

- 108. Most often programs are designed with the idea that the educational system has the content and message which they should provide to the learners. These messages can be related to hygiene, HIV and AIDS, environmental protection, new agricultural techniques, recent laws, citizenship, etc. However, our experience has been that new readers are very interested in reading from their own cultural heritage, whether in the form of a novel, poetry, history, epics, and tales. While adding knowledge from a global source is of course welcome, it is not often (even rarely) the motivation for reading a 100 page book for the first time. It is a sense of personal recognition on the written page, good storytelling with gripping narratives, characters, and verbal style which catch the attention of readers who still read slowly, haltingly.
- 109. The fact that learner-centered programs do not only *teach*, but also provide lots of room for *self-discovery and affirmation* is too often ignored in the planning for both formal and non-formal programs. If texts are always that texts designed to teach a specific content, the desire to read for the pleasure of the story, which leads to fluent reading skills, is too often lost. Reading becomes work, not pleasure including the pleasure of learning something new which might be difficult to understand at first.
- 110. One of the most interesting programs in literacy in Senegal is that of the Association for the Renaissance of Pulaar (ARP). This association has made a significant mark on non-formal education programs by demonstrating a strong link between: culture, language,

literacy.

- 111. They identified the obvious link between culture and language, something which scholars and educators have long remarked upon. But it is interesting to note that they have taken the connection one step further, identifying a link between language and literacy. Becoming literate in one's own language is a way to promote and preserve the language. And literacy therefore promotes and preserves culture.
- 112. In many programs (both formal and non-formal) education leads participants *away* from their culture and *out of* their communities. This problem is symbolized by the fact that most communities cannot provide a formal education for more than three to six years. In many rural communities, any type of formal education ends after just three years. Therefore, anyone who succeeds in school during the early years must make the heart-wrenching decision to move away from home, and move to a larger town which can provide a school. That is, education implies a departure (escape?) from family and community on a physical level.
- 113. It also implies a psychological rupture by introducing new ideas, forms of thought, information, which might often be in contradiction with the community. While a psychological rupture might be important to introduce over certain issues (the value of local governance and decentralization, the role of women, win-win conflict resolution, etc.), one still needs a firm basis of learner-centered education before moving into areas which, by their nature, can cause a break within the community.
- 114. The unique aspect of non-formal programs developed by associations or non-profit organizations is that education and literacy do not necessarily assume this rupture. Being literate supports the development of language which is the underpinning of culture and society. Suddenly education does not separate individuals from their family, community and culture, but is seen as a way of reinforcing these linkages, whether the individual remains physically present or not.
- 115. As long as education is a "distractive" activity, taking students away from their families and communities, education (especially for girls) will be a subject of controversy. Instead, education can (and should) be a process of self-discovery, combined with a larger vision of the world. This self-discovery can be a novel, a poem, a book on local knowledge and practices, history, etc. It can be designed in the form of a book to be read alone by an individual, or it can be designed as a teaching aid to encourage group discussion and exchange of knowledge and ideas.

6.1.3. The fundamental importance of *faire-faire*

116. An initiative known as *faire-faire* has been put in place since the early 90s in Senegal, and progressively in other West African francophone countries. A very crude translation of the concept might simply be "out-sourcing". In more elegant terms, it is a bureaucratic concept which has a fundamental link with *local empowerment*. In faire-faire, education ministries contract out for work to be done by local communities, represented by a local entrepreneur in education. Instead of doing the actual work of organizing non-formal (literacy) classes, the ministry provides:

funding (which comes from an outside source but channeled through the ministry), a clear procedural manual for applying for the funding, standards which local educational entrepreneurs need to meet, supervision, evaluation.

117. Local entrepreneurs are free to choose the books they want to use, and can pay for training of teachers. However, they must meet centralized — though not always standardized — criteria for subject matter, number of hours, number of participants per class, percentages of girls and women in the class, levels of achievement, etc. The concept of faire-faire is operational because of outside funding, and has given local communities the opportunity to fully participate in the logistics of running a local literacy class. It has also given control over the choice of books and teachers to the community.

- 118. The issues which remain to consider are: what is the objective of this education, and how flexible it is to meeting local needs as opposed to fitting the non-formal system into the formal one.
- **119.** Standards and content often reflect that of the formal school system, without taking into account that number of hours is usually shorter, books are missing, and teachers are not usually very well trained, often receiving only two weeks of teacher training before beginning their classes. Some teachers even need to learn to read and write in the language they will be teaching in. If these classes were to be evaluated in a similar manner as formal education, everyone would be disappointed with the final results. Rather, we need to identify the potential of this system, find appropriate tools for evaluation, and see how these programs add to the general sector of education in Africa.

6.2. Using African languages

- 120. Without question, the major strength of most non-formal programs in francophone West Africa is the fact that learning takes place in a language which the learner already speaks. When it comes to learning basic literacy skills, as well as absorbing new information, this is obviously crucial to the content and the pacing of the classroom. Another factor to consider however is the fact that the current orthographies of most African languages are much simpler to learn than those of European languages such as English or French.
- 121. For example, consider the impact of the silent "e" at the end of the word *made*, compared with the word *mad* in English. Both the pronunciation of the initial "a", and the meaning of the words, change by simply adding this silent letter. Or look at the two words: *taught* and *thought*. Both have letters which are not pronounced ("gh"). Furthermore, the "au" in *taught* is pronounced identically to the "ou" in *thought*. Or the "s" sound in "silence" can be written first by an "s" and then by a "c" followed by another silent "e". These orthographic irregularities are normal in the spelling of words in English, and require both intentional teaching and lots of practice with reading.
- 122. These are just a few of the problems which languages such as English and French inherit and must take into account when developing a method for teaching reading and writing. The orthographies of these languages are often based on learning grammatical rules as one learns to read. For example, first graders using French need to recognize that a verb is being conjugated in the third person plural in order to know how to pronounce the "-aient" suffix, as in the third person plural form of the verb "venaient". And written words often show the Latin or Greek origins of words, rather than today's pronunciation.
- 123. However, for most African languages, the orthography is still relatively recent and straightforward:

most written letters correspond to only one sound value, few sounds combine two or more letters for the sound, there are almost no silent letters, etc.

124. Both teachers and students can rejoice in the simplicity of this system. But for educators, one can also start to measure the enormous savings in time which goes into teaching reading and writing in a language where the sound/symbol relationship is so clear. Eventually there is a need to teach the basics of grammar of any language, so that spellings can be standardized, so that dictionaries can be developed. But in the early stages of teaching reading and writing, there is a phenomenal gain to be made which is not always efficiently used in programs which base themselves on French or English syllabaires and primers, rather than starting from the originality of the language in front of them.

6.3. Calendar and timing

- 125. We have suggested an amount of time for learning basic literacy (100-150 hours) and learning basic math (100-150 hours), based both on our own experience and the normal practice of most faire-faire programs. We are not trying to force participants into a box where they must complete a course in a preset number of hours. Rather, we want to demonstrate that the time commitment of the formal school system (1200 hours per year over six years) and the time commitment of non-formal programs (usually less than 400 hours) are very different in terms of numbers of hours, periods in the day/week, seasons of the year, etc. when classroom teaching goes on. These are basic factors to consider in the development of programs. And this flexibility in time gives non-formal education a tremendous advantage when working with adults who have many other pressing obligations in their days. After all, many fourteen year old girls are already married; and most twelve year old boys have been working with their parents for years. This group of learners does not have the luxury of spending extended periods of time in the classroom. They need an educational system which addresses their needs in a flexible and creative fashion.
- 126. In the 1999 study by Wiegelmann and Naumann of educational systems in Senegal, they found low test results in non-formal national language programs. They wrote: "the results of our testing of adults who have participated in a literacy class in national languages show the same tendency ... poor performance of new literates in reading, writing and math..." However, they go on to add a crucial piece of information: that this evaluation took place after only 150 hours of class time, and that nevertheless the results were "... comparable to the level of knowledge in French for students after three years of study (the level of 4^{ième})", (Wiegelmann and Naumann, 1999, p. 23).
- 127. For reasons of comparison, if one calculates the number of hours a student has been in school after three years, we come to roughly 3600 hours. Obviously, many factors need to be taken into account before we can rightfully compare three "years" of study in French for children and one "year" of study in a maternal language for adults. Nevertheless, one is forced to remark that the so-called poor results in the performance of new literates correlates with a very short investment of time in the learning process. The concept of evaluation must change if one wants to measure results achieved after just a few hundred hours of class time.
- 128. The average literacy program in francophone West Africa works on the assumption that only 300-400 hours will be invested in teaching and learning. In such a program, time for reflection, for integration of new knowledge, for repetition, for review, for application to real life situations, is extremely rare. The question then becomes how can we best utilize this time, which manages to produce results in spite of its short duration.
- 129. In fact, in our own experience, this short amount of time can be used very productively. Based on training over 8000 people in more than 400 intensive trainings, we have discovered just how much can be taught and learned in a mere two-week intensive training (roughly 90 hours) if the material is good, the teachers are adequate, the style is appropriate, and the participants attend on a regular basis. We have numerous examples of potential literacy teachers who started our basic training barely able to read words in isolation, unable to legibly copy a paragraph not to mention write original ideas, and incapable of even writing numbers, much less do any of the four basic math operations. In the two-week time period of intensive study, they were able to master all of these skills in an entirely acceptable fashion (i.e. those of us back in the office could read and understand the letters that they wrote to us, in spite of spelling errors).
- 130. But given this tremendous difference in allotted time, evaluations can no longer be based on evaluating correct spelling. If after just 300 hours of study, participants show the capacity to put their ideas down on paper in a way that can be communicated to others, they have already made an enormous leap. With further practice they will hopefully improve their spelling. But this can't be the crucial or only factor in evaluating their progress.

7. KEY FACTORS FOR THE NON-FORMAL SECTOR TO BE SUCCESSFUL

131. Education always depends on support systems. In many cases, these systems are invisible or simply taken for granted. But there are a few primary points to take into consideration from the beginning.

7.1. Books in the classroom

- 132. In any form, education everywhere is usually dependent on books, whether for the learners or for the teachers. Quality, availability, themes, etc. are all part of defining a literate environment where books can play an important role as essential pedagogical materials, and also as good reading materials.
- 133. Many literacy programs today operate without books. Shocking as this statement may seem, it is a fact. "Without" might mean that there are an inadequate number of *copies* for the number of participants, or it may mean that there are an inadequate number of *titles* to draw from. Teachers often learn about some given subject, a text is put on the blackboard, and the teacher copies from the blackboard into his or her notebook. This then becomes the content of what he or she will soon be teaching.
- 134. And beyond the straightforward quantitative deficiencies, there are also serious qualitative issues. Those books which do exist tend to be of poor quality in both content and design, since there are very few national language editors to labor over texts in order to make them better, more readable, and more appealing.

7.1.1. Functional books

135. One of the fundamental issues is that books for educational purposes are most often written to teach new information rather than being based on personal and cultural knowledge and self-discovery. This means that the process of learning to read puts the learner through two steps :

one, deciphering the written code, and two, trying to understand new and extraverted information.

- 136. Any of us who are fluent readers today can be completely confused if presented with, for example, the new land tenure law. Not because we can't read, but because the subject matter requires a great deal of instruction to master both the vocabulary and the content. Furthermore, what would any of us prefer to read: a good novel or a manual on car repair; local history or a book on sexually transmitted diseases? The manual on car repair or sexually transmitted diseases obviously have their place when one needs to know that information. But developing fluent reading skills comes first, so that reading new information is not a challenge at all levels.
- 137. A second problem is that often books are simply translations from the official language. Meaning that both the content and the style of writing can be inappropriate to the group. Even at the level of the syllabaire, we have seen a multitude of translations from a French syllabaire into African languages. None of the issues of teaching to read are the same between these languages. First, the orthographic rules of the two languages are completely different. Secondly, learning to read in a language one speaks is totally different from learning to read in a foreign language. Third, the linguistic style of sharing ideas is often very different. In one language it might be perfectly clear to write: "he said to her that he would come by later this evening." Another language might express this idea differently: "He talked with her. He plans to visit her this evening. He told her this was his intention." Some of this is due to different styles within each language. Some of it is due to the fact that a language with a long written tradition, such as French or English, has developed a "written grammar". People don't necessarily speak like that; but everyone who reads knows how to put the ideas together. To simply translate a text from a

language with a long written tradition into a language where the rules of writing are being created is not a good idea.

138. Finally, there is often a tendency in functional books to simply tell readers what to do, rather than giving complete background information, explaining options, examining consequences. Adult readers need full information so that they can make choices about new technologies, fully understand the impact of new laws on their lives, etc. Writing good functional materials requires both good authors and good editors so that a maximum amount of information is given in a clear and pedagogic manner.

7.1.2. Books with which readers can identify

- 139. Many programs make the assumption that literacy is only interesting to participants if there is an economic incentive or a new skill to be learned. However, literacy in Senegalese languages does not always prove that assumption to be correct. We have often found that the reason people chose to become literate in their own first language has to do with cultural identity and pride; as well as the possibility of being able to play a role in local associations which respond to needs identified by the community.
- 140. One of the most popular books which we sell to individual book buyers is a novel, *Ndikkiri Joom Moolo*. Readers both laugh and cry at different parts of the text, and once they start reading, they don't want to put it down. The following is an excerpt from the thesis of an ARED editor who learned to read in his own first language at the age of 20 by reading this novel. So that his roommates could sleep, he found himself sitting on the sidewalk outside his room at three in the morning, while he read and laughed his way through his first novel in Pulaar:
- 141. "I would sit on the sidewalk reading from *Ndikkiri*. With each page, I could barely keep from laughing out loud as I sat alone in the street. Each time this would happen to me, I would get up and look around to make sure no one had noticed me, fearing that someone would think I was crazy. The next day, I would entertain my friends with stories from *Ndikkiri* while we drank tea together. In the end, all of my friends who were literate in Pulaar could hardly wait for this book to be published", (Ly, 1997, p. 13).
- 142. Obviously, an educational system includes new information. However, we do want to make two cautionary remarks:

That new "scientific" or "functional" information is not what creates avid and fluent readers, and

If one is going to write functional manuals for adults, one should not confuse being illiterate with not understanding the world. The books need to be of a high quality, with good and sufficient information so that the reader goes away satisfied that he or she has truly understood something new, not just been told what to do or not do.

7.2. Training of basic literacy teachers

- 143. Teacher-training in the formal sector is already undergoing many modifications in order to have enough "qualified" teachers for existing classrooms. This means employing potential teachers who do not have the levels which were required in the past. It means paying them on a different salary scale. In Senegal, this system is known as the system of "voluntary" teachers.
- 144. The non-formal sector has its own pool of potential teachers, and equally non-formal ways of recruiting them. The big problem is in training them and in supervising them. Training as an activity requires several steps:

imparting the philosophy of the program, which is usually quite different from the philosophy of formal education,

sharing ideas about how to involve learners, especially adults and adolescents, in the process, providing the mechanical skills of how to teach literacy and numeracy,

if content is important to the program, giving the necessary background so that this information is both shared and fully understood, establishing the criteria for future evaluation.

- 145. These functions are the basis of any solid teacher training. It is complicated by the fact that often teacher trainings focus on teaching how to read and write in the African language, rather than assuming that potential teachers have this ability, and now need to learn more participatory and learner-centered ways of organizing a classroom.
- 146. Developing more adequate teacher training programs, including in-service training and refresher courses, is an essential element. Furthermore, teachers and facilitators need to learn more than just teaching reading and writing and math. As books become available, teachers need to learn how to use them effectively in a classroom.

7.3. Curriculum development

- 147. Non-formal adult education usually combines a curriculum of reading and writing skills, plus basic math. These two topics form the core of any program. Besides simply having a method for teaching these skills, and trained teachers, it is important to consider the overall curriculum, so that a good balance is reached between the objectives of the participants, the time in classroom, the time which the methodology requires, and the objectives of the program.
- 148. There needs to be considerable thought brought into the relative importance of literacy as a skill, and the importance of having illiterate local experts or decision-makers as part of any community educational program. One does not need to be literate in order to participate in discussions about citizenship, or to learn new techniques in health care, etc. If a program has a curriculum that should reach the community in general, or those members who are active in local development, being or becoming literate is just one aspect of the role that non-formal education can and should play.

7.4. The relationship between the formal and non-formal sectors

- 149. There is often an underlying assumption that non-formal education could and should lead to a formal one, as in the case of the *écoles communautaires de base* in Senegal for young people between nine and fifteen. And that without a certificate or diploma from the formal school system, education doesn't have much value.
- 150. But we should also consider two facts. Firstly, a large number of students who get a master's degree at the university are not certain to find a job afterwards. Secondly, the number of students who make it through primary school, through high school, and eventually university, are an infinitesimal number of people who could or should have received an education. In a word, the formal system is failing to meet both quantitative and qualitative needs.
- 151. So what can a good non-formal education provide if it does not lead into a formal program or a recognized diploma? As we all know, the vast majority of people in West Africa today earn their living without having gone to school or by having a diploma. Whether a farmer or herder or fisherman or car mechanic, chances are that formal schooling has not been the road which has led to their daily survival and subsistence. While we all admire those rare individuals who both make it through the entire school process, and then proceed to get a salaried job at the end of the process, these individuals are rare. As such, they deserve special recognition. But their pathway is not one which everyone either can or should follow.
- 152. Most individuals base their survival on the heritage (knowledge, resources and skills) which their parents left them. The question is not how to integrate these individuals into a formal educational system where the rate of failure remains shockingly high. Rather, it is how can an educational system be developed which helps them better carry out the tasks which are part of

The connection between non-formal education and creating a literate environment their daily lives, so that they can live better based on what they already know how to do, but with that added educational plus which gives them an edge.

153. The objective of non-formal education is not necessarily to lead to diplomas, or salaried jobs, or entry into the formal sector (either at school or in the work force). Rather, a successful non-formal education program valorizes people and their knowledge wherever they are,; and helps them add to their skills and information so that they become more competent in the sectors which are already providing a living to their families. It is a wonderful challenge to think not about how to achieve a pre-determined diploma (often pre-determined in another country and in another language), but how to integrate various forms of knowledge with practical life skills so that *education becomes a basis for better living*.

7.5. Creating and sustaining a literate environment

154. Developing a literate environment becomes relevant when there is a use for being literate. Programs often make the assumption that reading and books are the core to creating such an environment. While we definitely support the need to have a choice of good books and newspapers to read, we also want to stress the importance that writing has for new learners. This is not writing in the sense of wanting to become an author - although this happens with more and more frequency - but writing for daily needs, personal business, and community participation. We will look at all of these issues below.

The connection between non-formal education and creating a literate environment

7.5.1. Authors and editors, books and newspapers

- 155. The obvious sign of a rich literate environment is having access to a wide variety of books and newspapers which are well done and available at an affordable price. But obviously, this is an elusive goal for African languages, although it merits serious planning and investment.
- 156. Newspapers have the advantage of touching on current issues of interest, and of being sold at an affordable price. However, there are many problems for editors to contend with. One needs a number of trained reporters who are informed about both their public and their sources, who can ask good questions and report the answers well, who can write clearly about their own opinions, who can write just the right number of words (given the space in the column). And they need to be paid in a regular fashion, either monthly or by article. The layout of a newspaper is complicated and requires good computers (preferably with large screens), the latest software, and again, trained professionals. And finally, if a newspaper is to be relevant, it needs to be distributed and sold quickly. A newspaper editor needs to have paid special attention to his or her distribution system before starting the paper. In spite of all these problems, newspapers worldwide play a crucial role in creating a literate environment.
- 157. Magazines are another option, which can have some of the advantages of newspapers and books. They can have a specialty focus which draws a particular reader, they can be printed at longer time intervals, and they have a cover which makes them easier to keep for longer periods.
- 158. Finally, books on a wide range of topics must be part of a literate environment. Manuscripts can be transcriptions of oral traditions, be translations from other languages, be fiction written by the author, requested by an editor, project, donor, even a government ministry, which knows what it wants to produce. Some books are meant to be taught in a classroom situation while others are for the pleasure of reading. Each type of manuscript requires authors with a minimum of training so that they can produce manuscripts which editors can work with. Training authors would be an important step in creating a literate environment.
- 159. What is important to understand in the situation of African language books is that often the role of the editor is ignored or misunderstood. For each book to be its best, trained and experienced editors are crucial. For the print run to be distributed, editors are crucial. Many confuse the role of the computer person who does page layout with the role of the editor who has a vision of the entire project, an idea of how much it will cost, who knows the audience, who finds the authors and illustrators, coordinates the team, and has a distribution plan.
- 160. Editors in African languages tend to be in one of two groups: either a private editor or a nonprofit organization. Each has different strengths and weaknesses when it comes to publishing in African languages. Private editors usually have professionally trained staff, and know all of the steps in the editorial chain to produce attractive books at the lowest cost. However, they often do not publish in African languages unless it is school textbooks which have been requested by the education ministry; and these books are often translations from the official language. They do not necessarily know independent authors in these languages, nor do they have a distribution system which reaches individual book buyers, nor do they know much about the taste and levels of readers. Their strong point is in working with education systems which need textbooks in African languages.
- 161. Non-profit editors have the opposite weaknesses. Technically they often do not have the materials (computers and software) or personnel to produce attractive books. Many of the people who work on books have never been trained, often having started out as literacy teachers. However, non-profit editors are often in close contact with their public often actually teaching the literacy classes which use their books. They understand well the two ends of the editorial chain, authors and readers/buyers.
- 162. In order to develop and support a literate environment through printed materials, training programs, which address the needs of both authors and editors should be developed.

7.5.2. Samples of and uses for writing in the environment

- 163. For African languages, there is an in-built handicap since these languages are rarely used in written form in the administration, banking, health care systems, street signs, bus numbers and destinations, posters, written text on television, etc. These would be logical contexts in which it is necessary to use the written language. Furthermore, these uses are functional ones, tied to achieving necessary tasks on a daily basis, and every encouragement should be given to promoting these uses of written language.
- 164. However, we should also point out that people literate in their own language have acquired skills that help them navigate written text in any language. As one participant once told us: "Now I pick up any scrap of paper I might find on the ground, and try to see if there is anything on it which I can read." Another told us that she was happy to be now able to read the numbers on the buses and her digital watch without needing to ask for help.
- 165. Without doubt it would be preferable to find more uses of African languages in public spaces. Things such as health care posters in African languages already appear in more and more places. In the meantime, someone who reads and writes in one language can be taught, for example, how to fill in bank forms in French or English if this is a task he or she needs to do on a regular basis. Just being able to sign one's name is often a big step in participating in public literacy venues.

7.5.3. Personal uses for writing

- 166. Many participants in literacy programs find personal satisfaction in using their literacy skills, which in turn contribute to creating a literate environment. In every evaluation of the importance of literacy programs, one answer stands out: "now I can keep my secrets to myself." As Michelle Kuenzi wrote in her evaluation of an ARED program:
- 167. "Overall, the respondents seemed to feel empowered by their experience with literacy. That is, in general, literacy training appeared to augment people's feelings that they could effectively handle the situations with which they were confronted in daily life. Many of the respondents' replies pertained to issues of personal efficacy and independence. Numerous respondents noted that, after literacy training, they were able to read and write their own letters. Many respondents stressed that being able to do so allow them to keep their secrets. While some might dismiss these remarks as rather trivial in light of the magnitude of the problems facing villagers and their communities, one would be in error to do so. The sheer frequency with which respondents recounted this new found ability indicates that it represents something important to people. Indeed, being able to read and write one's own letters appears to be associated with the idea of being able to protect one's interests, keep one's personal business to oneself and thereby maintain control over oneself. Throughout all of the topics discussed with respondents who participated in a literacy program, the theme of *no longer needing an intermediary* was emphasized.
- 168. The idea of guarding one's interests was also reflected in many of the examples pertaining to economic transactions. One woman gave the example of keeping a record of what she owes to a shop owner. She notes that if one writes down what she has paid and what she owes, it is impossible for the shop owner to make her pay more than she actually owe," (Kuenzi, 1996, p. 10).
- 169. These personal uses of literacy have an impact in many communities which are more important than having access to published materials which don't exist in any case. Individuals doing small business activities definitely benefit from this skill.
- 170. Furthermore, more and more projects look for literate individuals in a community to train as a local midwife, or auxiliary veterinarian, or as a literacy teacher. These become opportunities for individuals to excel, gaining a small income from the fact that they are literate. In one of our

The connection between non-formal education and creating a literate environment programs,⁷ more than 80% of the participants who want to become literacy teachers are women. Ten years ago they just started in the process of becoming literate, whereas today they can receive a salary as a literacy teacher. These personal stories have a strong impact on the community, and support the process of creating a literate environment which is created by the community itself.

7.5.4. Literacy as a way of becoming involved in community development

- 171. Another major use of literacy skills is in the creation and management of local associations and community-based groups. Women's associations, sports groups, associations interested in protecting the environment, lobbyists for better health care, associations dedicated to talking about HIV and AIDS all draw on new literates who can play a decisive role in creating and managing these community-based associations. These people both have ideas about management, and the ability to draw on a relatively large number of resources to get information. Usually such associations bring together people who have had a few years of formal education, new literates in the local language, and volunteers who cannot read and write but want to be part of the association's activities. Often work in an association encourages someone to start attending literacy classes; once literate he is encouraged to put this skill to use in the community.
- 172. Furthermore, with the arrival of structural adjustment throughout the Sahel in the 80s and 90s, local communities have been forced to take on many managerial roles which were once funded by the government and run by salaried "outsiders" who were trained for the job they did. Today, their function is often taken on by locally elected management committees. Management committees are often a combination of powerful local individuals, respected elders whom everyone trusts, and new literates who have some of the practical skills which the committee needs.⁸ Amongst the most important skills of new literates is keeping records, doing a budget, getting signatures for money in and money out, adding and subtracting.
- 173. A common example of a management committee in the Sahel is the management of boreholes (250 meter deep sources of water which require a complex operational technology). Boreholes used to be managed by salaried civil servants, but today this function is largely turned over to local committees. The work itself is complex because it requires billing users and keeping records of their contributions, developing a budget for needs, maintenance of machines, contracting with technicians, buying sufficient quantities of oil and fuel, projecting the need to buy new equipment, etc. In the early years, these committees were almost exclusively made up of illiterate elders who were voted upon by their communities. But today there is often a good mix on committees of respected elders who cannot read or write and younger people who have these skills.
- 174. New literates can do everything from running a millet-grinding machine, a local dispensary, a community garden project or a cereal bank. Each of these activities is helpful to the development of the community, and each activity provides a satisfying reason for people to use their literacy skills, and keep these skills active.
- 175. Finally, because many management activities bring together people who are literate and those who are not, it is also possible to imagine advanced trainings ("post-literacy" trainings) which bring this mix of people together in training sessions, so that individuals who will work together in the future can have the opportunity to learn from each other, and to learn each other's strengths and weaknesses. Some people have local knowledge, some can read and write, some know who to contact and how to approach them, etc. Running any type of management committee is complex, and a community needs a variety of people with different skills. Literacy is a major part, but not the only one.
- 176. What seems apparent is that books and reading play a large part in creating a literate environment. But local needs and uses for writing also play a major role in creating a context for

 $^{^7}$ Work with the Association for the Renaissance of Pulaar in the Region of Saint-Louis.

⁸ Literacy is even opening up such positions to women. See Ndiaye, *Portraits de femmes*, IIED, 2005.

The connection between non-formal education and creating a literate environment exercising literacy skills, and for the integration of newly literate individuals into the development of their societies.

8. IMPACT AND OUTCOMES

177. If the goal of education is better living as defined by the individual participants and not just the number of students who get diplomas, we need to find more pertinent ways of creating, supporting and evaluating the programs which we propose. We find that working with adults in non-formal programs offers an unexpected and enlightened way of looking at education programs.

8.1. Evaluation of the programs

- 178. While many evaluations are focused on evaluating individual participants, in the case of nonformal education the first level of evaluation should be the programs themselves. We are all experimenting with methods and approaches which are in a state of progression. Programs and methods themselves can be evaluated by the number and percentage of participants who arrive successfully at the goals set by the program, (and the goals may vary enormously, so this needs to be taken into account).
- 179. An evaluation of a program should at least take into account: the objectives of the program, the skill level in literacy and numeracy which the program expected to achieve, the number of hours during which participants were active, the number and type of books available, the degree to which the pedagogical approach satisfied the needs and expectations of the participants, the teaching of content materials, and whether the program could satisfy this need, the training of the teachers (their level at the beginning, number of hours of training, their skill level after training, any in-service training, etc.), the cost per student and/or per classroom (subtracting developmental costs for materials which can later be used in other programs), the sources of funding for this particular program.
- 180. A question which is more long term and less easy to evaluate is the percentage of participants who could use the skills they learned in their future activities (for example, transferring into formal school programs, getting jobs as literacy teachers, better managing their family shop, etc.). In this case, it is important that the objectives of the program and what was actually taught are not confused with the dreams of the participants. But we have often been amazed at how participants in literacy programs go on to use their skills, so this would be a good follow-up activity.
- 181. In most cases of adult literacy classes in African languages, the participants aren't prepared for being evaluated at the end of the program. There seems to be an assumption that a surprise evaluation is more reliable than an evaluation which has been prepared for (although formal school systems start preparing for the seventh grade entrance exam in grade one). Therefore, evaluations of both participants and programs should be part of the initial "contract". That is, it should be clear what is being evaluated and why. That way everyone can work together to achieve those goals.
- 182. Finally, non-formal education depends on the fact that the number of hours, number of books, cost of classroom time, etc., is much, much less than the formal system. Therefore, the standards for evaluations should take this into account. Should the objective of the evaluation be to find out what participants have fully mastered? Or should it be to see if they have acquired independent learning skills which will keep them learning on their own in the future?

8.2. Evaluations by the participants

- 183. The objectives of any individual adult learner may be quite different from the objectives of a program. It is understandable that funders and administrators of programs are often looking for signs of success that can be measured by tests similar to those they have all experienced as students themselves. However, we usually find that participants have completely different criteria for evaluating their interest and progress.
- 184. Students most often express their motivations and the benefits of attending literacy classes in terms of *impact on their lives*, not in terms of *acquired academic skills*. For example, a recent ARED evaluation uncovered the impression that the presence of a literacy class had "cut down on violence in the village". Because the class proposed that young men had to check their "arms" (knives and machetes) at the door of the classroom, a lengthy discussion ensued about where and why they carried these objects, which they needed as herders, but which also were too often used in personal disputes. As a result, members of the class spontaneously responded "less violence and aggression" when asked about the impact of literacy in their community.⁹
- 185. For those of us who design programs and classes, we would be well advised to keep some of the following comments from participants in mind. They indicate that people look at becoming literate as a process of personal and social transformation and change, not just as the acquisition of academic skills. These comments come from the final evaluation of a two-week intensive training for twenty young women who wanted to become literacy teachers.¹⁰ The last day of the training, they were asked to write a letter to ARED, describing the impact of becoming literate on their lives. As we always find at the end of any literacy process, well done or not, completed or not, participants describe their gain in terms of personal change ("*Studying woke me up*") and in terms of social skills ("*I now dare work in a group*"). Amongst responses from a class in northern Senegal:¹¹
- 186. "Studying woke me up!"

Now I can take notes on all my thoughts. I now know how to listen and make a choice. It is only through education that a person can change. At first I didn't even know how to write my name. Now I know what I should do with my life! I now know my own mind, and refuse to be tricked. From now on, in everything that I do, I will stop first to think about it, and get information about whether it is a good or bad idea. Studying woke me up, gave me knowledge, and improved my behavior and patience. What has changed in my life is that now I have become a more humble and forgiving person.

187. "I now dare work in a group."

Studying gave me the courage to stand in the middle of people and speak my mind. What has changed in my life is that now I dare sit with the elders, something that I didn't dare to do before.

Whether the other person is old or young, a man or a woman, I now know how we can work together as equals.

Studying improved my social relationships.

188. We recently began an educational program in a herding village which had never had a school, an educational program nor a single literacy class. The resident representative from the Ministry of

 $^{^9}$ From an evaluation of classes in Widou Thingoly, Senegal. In fact, they even went further to say that the pen had replaced the "sword" in their village.

¹⁰ Note that this is an evaluation of the training itself (of ARED and ARED trainers), as well as an evaluation of the results obtained by the participants.

¹¹ Excerpts taken from letters addressed to ARED at the end of a training programme in Pette, Senegal.

The connection between non-formal education and creating a literate environment Animal Husbandry made the following comments on how non-formal education in the form of literacy classes had affected the village in just a few months. He remarked that:

Before, every group (lineage, social group, family) acted in its own interest, tending to exclude others. But now, they are beginning to act in concentration around community needs. This is easily observable in the changes in behavior in village meetings.

Ever since this village was founded, women have never, not once, participated in a village meeting. Today, they come in large numbers and even speak out in order to give their opinion. No one could ever work together because of political tensions and divisions. But they have finally decided to keep politics out of their work for the village. They have created an association named 'Kawral' (Unity), in order to work for the development of their community. Everywhere you go, whether in households or in public places, you see individuals and small groups of people bent over their books, like a herder who is searching the ground for signs (tracks) of one of his lost animals.

189. At both ends of the process, as we prepare the content as well as the evaluation of programs, we need to keep these kinds of motivations and impact in mind. They offer clues about which signs of success to look for.

9. RECOMMENDATIONS

- 190. Based on our experience in the field, there are three recommendations which are essential:
 - 1. Develop the role of non-formal education in it's own right,
 - 2. Use African languages as the language of instruction,
 - 3. Valorize the culture and local knowledge of participants.
- 191. The "why" and "how" of these recommendations are various.

9.1. Develop the role of non-formal education in its own right

- 192. The flexibility of decentralized non-formal programs is uniquely adapted to the needs of learners who cannot spend hours each day over several years in a classroom. This especially applies to adults and young adolescents who have heavy demands on their time. Programs can be developed in a "modular" style in which different phases of the total program are carried out at times when participants can attend. Furthermore, the content and objectives of the programs are focused on learner needs, not on a standardized and centralized exam. They are more participatory in style, often requiring community involvement in organizing and managing the classes. They can include experimentation and innovations in teaching methods.
- 193. However, in order for non-formal education to work, there are four major needs to take into account. Firstly, these classes need funding, and the government should play a role in this. In the context of "faire-faire" this is done indirectly, but often using money coming from external donors. Governments themselves need to put a much larger portion of their own budget into the operation of these classes. Secondly, adequate books need to be published. This educational sector will never develop fully if there are no good instructional materials and good reading books to support it. Thirdly, teachers need to be properly trained. This includes training in the skills (literacy) which they will teach, the content of any of the programs, and in the respectful and participatory style which is necessary when working with any participant who comes voluntarily to class. And fourthly, nationally recognized diplomas should be offered. This does not mean moving students from the non-formal system into the formal system in order to receive a diploma recognized by the formal system. It means recognizing the achievements of the non-formal sector on its own. This diploma may help a new literate get a job as a literacy teacher. Or it may simply recognize the achievement of a shop owner who has increased his or her skills for his own reasons.

¹² Excerpts from notes taken in a discussion with this technician in Younoufere, Senegal.

9.2. Use of African languages as the language of instruction

- 194. This is so obvious that it hardly seems worth mentioning. But it is so fundamental that it is worth repeating. Any information, education or communication (IEC) activity in a community should use local languages so that all community members feel comfortable in expressing their vision, viewpoints and knowledge. While literacy classes are almost automatically in African languages, often community service activities offered by civil servants, outside experts, or project personnel are not. These exchanges of information and communication are much more effective when everyone can understand and participate. In literacy classes, there is a tremendous gain in time to be made, both because the participants understand the language of instruction, and because there is usually an orthographic system in African languages which is quicker and easier to teach.
- 195. But for African languages to be effectively used in any educational program, these languages need to be developed to fully play a new and constantly evolving role. This includes encouraging research on standardizing orthography, on creating new vocabulary, on using the language in new contexts, on sharing between communities with slightly different dialects. It especially means supporting the publication of books which use these languages so that new readers begin to become familiar with all the ways that their language can be used to express both familiar and new ideas. While a literate environment in African languages is not at all limited to published materials, nevertheless these materials play an important role.

9.3. Valorize the culture and local knowledge of the participants

196. Too often education is viewed as a one-way transmission of knowledge, from the so-called experts to the so-called students. It is quite the opposite of what should normally happen in any relevant educational program. All educational systems include the teaching of new skills and new information, but the basis of the educational system should be based on community knowledge and values (even those which might eventually change due to education and new information). Culture, language, and literacy must be the three primary pillars of the system. And in non-formal education, much of the content comes from the participants themselves. For this to happen effectively, effort needs to be put into training both authors and editors in African languages. While many of their skills are similar to authors and editors in official languages, there are enough important differences to warrant a concerted effort. Included in this effort should be the support of publication of fiction and good literature; publications of local (indigenous) knowledge systems, opinions and viewpoints from new literates themselves.

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