INTEGRATING MOBILE LEARNING TO ACHIEVE EFFECTIVE IMPLEMENTATION OF NOMADIC

EDUCATION PROGRAMME IN NIGERIA

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Dr. U. A. Ajidagba,

Dr. A. Yusuf,

Department of Arts and Social Sciences Education

&

Dr. C. O. Olumorin

Department of Science Education

University of Ilorin, Nigeria

Introduction

Nomads are found in at least 20 different countries across the continent. According to Akinpelu (1993), the nomads constitute about 6% of the African population and they are categorised into three major groups based on their mobile lifestyle namely, the hunter/food gatherers, itinerant fishermen, and pastoralists or herdsmen. The nomadic population in Nigeria, the Fulani (with population of 5.3 million) the Shuwa (with population of 1.0 million), the Buduman (with population of 35,001), the Kwayam (with population of 20,000) the Badawi (with population yet to be established) and the fisherman (with population of 2.8 million), accounts for 9.0 million people, including 3.1 million school –age children.

The majority of them are pastoralists (7 million), while others are migrant fisher folks and farmers. Akinpelu (1993) stated that 'nomadism' refers to any type of existence characterized by the absence of a fixed domicile. Delivery of education services to the children of all nomadic groups has tended to follow the lines of the

formal school system. Special attention was paid tended to follow the line of the formal school system. Special attention was paid to these groups by the Nigeria Government when it set-up the National Commission for Nomadic Education by Decree 41 of 12 December 1989 (Federal Government of Nigeria, 1989).

Of the estimated 9.3 million people that currently comprise Nigeria's nomadic groups, approximately one third, that is 3.1 million are to school and pre fishermen, in terms of access to education primarily because they are more itinerant. As a result, the literacy rate of pastoral nomads is only 0.28 percent, while that of the migrant fishermen is about 20 percent (FME, 2000). The basic responsibility of the Commission for Nomadic Education, among others, is to provide primary education to the children of pastoralist nomads- a responsibility shared with the States and Local governments.

A multifaceted strategy has been adopted by the Commission to provide education to its nomads, this includes on –site school, the 'shift system', schools system in the strictest sense remains sparingly used, primarily due to the enormity of problems associated with this model. Some mobile schools, however, are in operation in the River Benue area of Taraba, Benue, Adamawa, Nassarawa, Borno, and Yobe States.

By the beginning of the 1995/1996 school session, there were 890 nomadic schools in 296 Local Government Areas of 25 States of the Federation catering for the education needs of the children of pastoral nomads alone. Of these, 608 schools are owned and controlled by States, 130 by Local Government, and 152 by Local Communities. Together they serve 88,871 pupils of the estimated population of the 3.1 million nomadic school-age children. Of this number, 55,177 (62%) were boys

and 33,694 (38%) were girls. There were 2,561 teachers, a majority of whom 1,326 or 51 percent were teacher-aides, who are unqualified and in need of upgrading. This has been the usual practice because of the nature of characteristics of the nomadic populace.

As at 1993, 661schools has been built for pastoral nomads, out of which 24% (n=165) had permanent classrooms and 46 % (n=293) had temporary classrooms built of grass, mats, canvas, tarpaulins, et cetera. Subsequently, mobile, collapsible classrooms were procured. Altogether, the schools had an enrolment of 46,982 children taught by 1896 teachers. This number, however, only scratches the surface of the problem, as it only serves an estimated 3.1 million primary school age nomadic children. The Comprehensive Education Analysis Project, (Aderioye, 2007) provides the enrolment figures in the 1990s in Table 1.

Table 1	. Enrolment	of Pastoral	Nomads in	the 1990s
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Pastoral Nomads	
1993	46,982
1994	49,617
1995	64,459
1997	118,776
1998	116,944
1999	122,517

Source: ESA (2000)

Note that between 1993 (n=46,982 students were enrolled) and 1999 (n=122,517 student were enrolled), there has been an increase of 260.8 %. Considering that

there are an estimated 3.1 million pastoral nomads in Nigeria, however, there is still a long way to go.

Table 2. Enrolment of Migrant Fishermen, 1998-99

1998	38,842	With 860 Teachers
1999	40,826	With 847 Teachers

Source: ESA (2000)

In spite of these efforts, access to education is still a major problem affecting Nigeria's pastoral nomadic people and migrant fishermen (see Table 1 and 2).

The participation of the nomads in existing formal and non-formal education programmes used to be extremely low, with the population's literacy rate ranging from 0.2% to 2.0% in 1988. National education systems have generally failed the nomadic communities. All the education indicators have revealed that the nomadic groups are at the bottom of the table in national; statistics pertaining to enrolment rates, participation, classroom performance, gender balance, achievement, progression to the next level of education and training.

Problems facing the Nomads' Participation in Formal and Non-Formal Education

Clearly, achieving the right to education for all is one of the biggest challenges of our times. The 'Millennium Development Goal' addresses this challenged through the provision of universal primary education in all countries by 2015. From the foregoing, it is clear that any nation looking for a lasting economic success must raise the literacy level of its citizens. While proportionally small, Nigeria's nomadic people represent a sizable population that needs access to basic educational provisions to acquire literacy skills. Education is widely considered as an authentic and necessary tool for national development. Every segment of Nigerian society must therefore have access to education, including Nigeria's relatively small nomadic population.

Nigeria's nomadic people are typically described in terms of what they do not have. They do not have access to adequate food, clean water, health care, clothes, or shelter. They do not possess basic literacy skills. Their children do not have access to basic education. Young female nomads do not have the cultural freedom to marry who they want to marry. Nigeria's nomads, therefore, arguably need a better understanding of their socio-cultural predicament, which many consider as less developed.

Educating Nigeria's nomadic populations via distance education (and using mobile –learning methods), can be viewed as a positive step towards effective implementation of the provision of Nigeria's National Policy on Education (NPE) on equal access and brighter opportunities for all its citizens regardless of where they live. The establishment of nomadic schools in Nigeria, however, has failed to produce the desired results because of the non integration of mobile learning technologies. It has been identified that mobile learning consists of any service that supplies a learner with general electronic information and educational content that aids in acquisition of knowledge regardless of location and time (Lehner & Nosekabel, 2002).

In recent years, Nigerian has witnessed a steady growth in mobile telephone infrastructure and a concomitant acquisition and use of mobile telephones amongst Nigerians. Increasing rates of accessibility throughout Nigeria is encouraging more

and more people to have access to, or to purchase, mobile phone. Service providers in Nigeria are also on the increase to meet this growing demand, and over time, interconnectivity is projected to be both easier and more affordable, especially for Nigeria's nomadic population.

According to Aderinoye, Ojokheta and Olojede (2007), current education provision aimed at Nigeria's Nomadic People includes 'Literacy by Radio'. 'Literacy by Radio' is an educational programme that has been implemented throughout the country. Indeed, radio currently provides instructions and relays messages to Nigeria's nomads, who are typically on the move while grazing their cattles. The provision of tele-centres that provide Nigeria's rural and nomadic peoples with practical skills acquisition are currently being used to teach topics such as health and socio-economic issues that affects their daily lives. According to Kinshuk (2003), mobile learning facilitates provision of educational opportunities. In the Nigerian context, Kinshuk's (2003) work can be expanded to include the integration of mobile learning into nomadic educational contexts and programmes.

Mobile learning refers to the use of any mobile or wireless device for learning on the move. Aderioye (2007) noted that it is any service of facility that supplies a learner with general electronic information and educational content that aids their acquisition of knowledge, regardless of location and time. Kinshuk (2003) opined that learning is mobile in terms of space, in different areas of life and with respect to time. This means that mobile learning systems should be capable of delivering educational content to learners anytime and anywhere it is required.

Sharples (2000) observed that mobile learning encouraging flexibility; students do not need to be a specific age, gender, or member of a specific group or

geography, to participate in learning opportunities. In other words, time, space and place barriers have been eliminated.

Mobile technologies enables students to become more adaptable to flexible and contextual lifelong learning, a situation defined by Sharples (2000) as the "knowledge and skills" people need to prosper throughout their lifetime. Clearly, these activities are not confined to specified times and places; however, they are very difficult to achieve through traditional education channels. Put simply, mobile technologies fulfill the basic requirements needed to support contextual, life-long learning by virtue of its being highly portable, unobtrusive, and adaptable to the context of leaning and the learners' evolving skills and knowledge (Sharples 2000).

Approaches to Nomadic Education in Nigeria

To improve the literacy rate of Nigeria's nomads, the National Commission for Nomadic Education employed various approaches such as on-site schools, the 'shift system', schools with alternative intake, and Islamiyya (Islamic) schools to provide literacy education to the nomads. The nomadic education programme has a multifaceted schooling arrangement designed of 5.3million. in Nigeria, the government set up different agencies to implement education for the nomads; these agencies include the Federal Ministry of Education; School Management Board; National Commission for Nomadic Education; Agency for Mass Literacy, and the Scholarship Board Together, they offer a mobile school system wherein the schools and the teachers move with the Fulani Children.

Mobile Schools

Mobile schools use collapsible classrooms that can be assembled or disassembled with 30minutes and carried conveniently by pack animals. While a whole classroom and its furniture can be hauled by only four pack animals, motor caravans are replacing pack animals to move the classrooms. A typical mobile unit consists of three classrooms, each with spaces to serve 15 to 20 children. Some classrooms are equipped with audio-visual teaching aids.

Radio and Television Education

In a study jointly carried out by the Federal Government of Nigeria and UNESCO in 2004, "Improving Community Education and Literacy, Using Radio and Television in Nigeria, "it was established that 37.0% of Nigerians owned only radio set, while 1.3 percent owned only TV sets. 47.8% owned both radio and TV set, while 13.9% had neither. Findings from the study revealed that radios are easily affordable, accessible, and often more handy to use tan TV. Those without TV and radio, however, still have access to the media through socialization in their local communities.

The pastoral Fulani as a captive audience for radio and television programmes have radios, which they carry along during herding. The literate world can, thus, reach itinerants Fulani without disrupting their nomadic life or livelihood. To improve literacy, especially in the rural areas, the Nigeria Government has introduced radio and television educational programmes. The government supplies hardware such as radio, television, and electric generators, and builds viewing rooms for pubic use.

Although the Nigerian Government has spent large amount of money to support its nomadic education programme, literacy level among the Fulani remains

low, and the quality of education among them is mediocre at best. The current form of nomadic education, therefore, is yet to lift the literacy and living standards of the Fulani people as children of farmers rather than Fulanis, constitute up to 80% of the pupils in nomadic schools. In Plateau State, for example, only six of 100 children in the Mozat Ropp nomadic school are Fulani (Iro, 2006)

How Mobile learning can be used in Nomadic Education

In a recent Mobile Telecommunication Nigerian (MTN) advertisement, a Fulani pastoralist is depicted making a call and telling other Fulani friends that MTN network was now available, even in the remotest regions. This advertisement portrays the fact the pastoralist-like other Nigerians-can also use mobile telephones wherever and for whatever reason. In terms of using mobile technologies to teach basic literacy skills to Nigeria's nomadic pastoralist, one of the most practice mobile technologies currently available are mobile telepho

Mobile learning system, to a great extent, are capable of delivery educational content anytime and anywhere learners need it. In this regard, there are many benefits that Nigeria's nomadic populations can draw upon if mobile learning is integrated into Nigeria's current nomadic education programme. Some project benefits are:

Mobile learning will afford Nigeria's nomadic people the opportunity to acquire literacy skills with little disruption to their nomadic lifestyles and livelihoods.

The establishment of nomadic schools, in fixed locations, appears to be a misguided educational policy. Indeed, the inherent nature of Niger's nomads as group of wandering people was not taken into consideration during the formulation

of this policy. Therefore, one viable option available for these wandering people is to learn through a mobile learning system.

One major problems usually faced by Nigera's nomads in their wandering activities, is that they lack 'interactional' and 'transactional' skills through the mobile learning system will, to a large extent, equip them with valuable interactional and transactional skills needed to enhance their relationships with the people they meet.

Lastly, the modern world is knocking on their door; nomads need to develop a sense of belonging to the larger, modern world wherein learning is a key commodity for survival.

The Challenges of Mobile Learning in Nomadic Programmes in Nigeria

Of course, other, perhaps hidden, challenges still must be faced in the integration of mobile learning into nomadic education programmes in Nigeria. Some apparent challenges are:

- 1. Nigeria's nomads may not wish or be willing to embrace mobile learning
- The sheer cost of procuring enough mobile phones for distribution among Nigeria's nomads and literacy facilitators may be seen by some as too costly an endeavor to undertake.
- Effective monitoring and evaluation of mobile learning in the nomadic education programme in Nigeria, as in most developing and underdeveloped countries, remains a big challenge.

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