

Using World Space Radio to improve quality of primary education in Kenya at distance

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Abstract

Since the introduction of Free Primary Education (FPE) in Kenya when the Narc government of president Kibaki came to power in 2003, many primary schools have experienced large enrolment of pupils in classes one to eight such that in some schools there are over 100 pupils per class with only one teacher. Such increased enrolment influenced by the removal of tuition fees, and provision of free learning materials. Some schools have not been doing well due to lack of teachers and relevant resources, while others have managed to perform well. The large number of students who join school continue to be so large that the impact is for reaching and causing a lot of concern due to inadequate physical facilities, teaching and learning resources and qualified teachers.

In order to meet the challenges of free primary education, the Kenya Government recently introduced world space radio broadcasts to schools to supplement improve classroom teachers work and the quality of education at distance. The biggest change that faces free primary education is more on access to quality learning rather than quantity. With such observation and criticism of free primary education, a study was undertaken to bring into light the contribution of world space radio improve the quality of teaching and learning at distance in primary schools in Kenya. A semi-structured interview was used to collect data from headteachers and classroom teachers.

The overall findings showed that students learn from radio lessons and teachers also benefited from well researched programmes that helps to improve their teaching.

Key words: World Space Radio, Free Primary Education, Quality, Quantity, Physical Facilities, Resources and Teach

The systematic development and utilization of radio broadcast for school began in Kenya in the 1960 as a national strategy for improving the standards of education, to widen access to education, to improve teachers' qualification and to extend educational opportunities beyond the school through distance learning and teaching so that large number of people both young and old in rural as well as urban could take part. It was also recommended to be used in schools where no alternatives for education exist, and to motivate students to learn so that the probability of students dropping out could be reduced.

For many years radio programme have been used in Kenyan schools for distance learning with full support of the Kenyan Government. However, in 1995, schools broadcast was discontinued due to the high cost of radio production and transmission problems that was faced by the Government.

In recent years, however, interest in radio was revived, and in order to improve the information base in radio's potential in education and development, the world bank funded World Space Radio so that relatively isolated rural population that have had limited or no previous education could be reached to overcome the handicaps by offering distance education.

Currently radio lessons are broadcasted during normal school hours by World Space Radio in conjunction with Kenya institute of Education.

World Space Radio in Education and Development

World space satellite radio was envisioned created by Noah Samara in 1990. His goal

was to "create a new form of electronic media" using satellite to broadcast directly to people across the globe. It is based upon the proprietary World Space satellite technology, content programming and content delivery method.

World space satellite Radio has created a new way for people across the world to listen to radio by 100% digital quality with an ability to be heard clearly all over the world.

The year 2003 saw World Space Radio adopting new consumer media in Africa. It brought about satellite radio to the world, created satellite radio "Boom boxes" and portable receivers from Hitachi, Panasonic, JVC and others.

World Space Radio also delivers multimedia education, video, audio, PowerPoint, website and email via a satellite radio to computers without the need phone or cable connectivity. It is currently being used by military around the world to bring troops their favourite music and stations "wherever they are stationed."

World Space Radio has been the first to create multimedia education programmes via satellite radio in Kenya, Pakistan and countries around the world and to demonstrate and test satellite radio in Europe.

World Space Radio uses its two satellites, Afristar and Asiastar, to broadcast more than 100 digital quality audio channels to people around the world. Each satellite has three beams directly to portable in car and per receivers.

Also, each world space receiver is equipped with a data part that transforms it into a wireless modem. Thus, the world space receiver can also broadcast multimedia content.

The World Space Radio digital satellite signal means no fading, noise or interference. The system delivers crystal clear digital quality sound in a coverage area of 14 million square Kilometres. As long as you are in line of sight with the satellite, you will never use the World Space Radio high quality sound.

One can listen to regional dance music, Jazz, pop, country or classical music. One can hear news, financial information, and even weather reports. In African World Space Radio offers programming not just in English, French and German but Hindu, Urdu, and Swahili too. In Asia, languages include English or French, Japanese, Tamil and Malayalan.

The aim of World Space Radio is to broadcast on the African learning channel that is reaching an actual audience of six million people with education and information on critical subjects such as HIV/AIDS along with structured programme for women on Micro-enterprise.

Using world space Radio in teaching and learning

World Space Radio receivers have been deployed in every school in Kenya with the Kenya Institute of Education continuously train teachers and supplement the daily education of the large number of Primary pupils. The deployment was completed in May 2005 to allow those projects to reach 11 million Kenyan students every day.

After school hours, in the afternoon, World Space Radio receivers are used to deliver audio-drama, entertainment and education to adults and professionals. The radio lessons are accompanied by printed material sent out to schools in advance in order for the students and teachers to know the time and date of the lesson and teachers also get notes on how to use the radio lesson.

The role of the headteacher in the use of radio broadcasts

The scope and mode of using radio in the school also relies heavily on the headteacher. The part played by the headteacher in the whole exercise helps to determine the effectiveness, efficiency and shapes the manner in which radio broadcasts are used in the school. The headteacher in a primary school is the one responsible for providing teachers with media responsibility. Headteachers in Kenya have been advised to ensure that:

- There are working radios in the school
- There is a school radio time table
- Every teacher whose subjects are covered by radio has a class timetable indicating programmes.
- There is a school time table showing all the radio programme
- All the teachers' guide notes are available and given to the teachers concerned
- Teachers schemes of work include radio programmes
- Teachers incorporate radio programmes in their lesson preparation
- The necessary assistance and supervisory work are provided
- A teacher has been appointed to be in charge of all media materials and broadcasts programme in the school.

The headteachers have been encouraged to try to assist teachers by providing the necessary facilities for effective utilization of resources.

The role of the teacher in the use of radio programme

From experience, teaching with any medium requires careful planning. If world space radio programmes are to be used effectively the teachers' role must be spelt out clearly. Proper utilization of radio programmes in the classroom involves many things. Some of these requirements are based on teachers' attitude and others depend on the classroom environment, weather condition, the number of students in the class and the availability of media resources.

To make effective use of radio programmes teachers need to encourage the students by motivating them to learn effectively from radio programmes. They need to help students to benefit from listening to radio broadcasts. The quality of the programmes also contributes to their effectiveness in meeting the learning need of the students. Experience reveals that the role of teacher is very important in the effective utilisation of radio programmes. The classroom needs to be organized to provide the optimum conditions for listening.

Teachers in Kenya have been advised about the problems of unorganised classes during broadcasts. This creates confusion and should be avoided.

Teachers have been encouraged to:

- Have a class time table indicating radio programmes
- Appoint one student to be incharge of collecting the radio set from the store / office
- To remind the students about the coming programmes by writing the programmes title on the chalkboard in advance
- To prepare for the programmes and to improve materials where necessary.
- To take part in the listening exercise with students.

The presence of the teacher in the class during broadcasts is also important. Taking part in the listening process with the students motivates them. For instance, it enables the teacher to identify those with hearing difficulties so as to sit them near the radio. The teacher can also encourage the students to respond to radio presenters. Being in the class with a student helps to maintain classroom discipline during broadcasts. Effective preparation for using radio lessons will of course vary according to the subject, the nature of the programme, and the level of the class. But the listening situation should be pleasant, comfortable and orderly. Teachers should refer to students' experience relating to the subject of the broadcast, to add to what is covered by the radio. To be able to use the programmes effectively, teachers in Kenya have guide notes to refer to before the broadcast. However, if World Space Radio programmes are seen as an integral part of the whole learning situation contributing to its success, then teachers needs support to perform this role effectively. By using the appropriate materials, skills and classroom techniques. Radio programmes can be used efficiently and easily by both teacher and learner.

Advantages of world space radio broadcast lessons

The objective of educational radio broadcasts in Kenya is to transmit and distribute to

schools and the general public educational information over the radio or television, thus improving and enriching education in a distinct and specialized way.

The programme highlights difficult areas of the curriculum by getting professionals to produce good materials to supplement and reinforce teacher's work.

The use of world space radio lessons provide equal opportunities for school's access to learning resources so as to increase students performance in school work. Programmes such as those dealing with History and Science can supply up to date information on recent inventions, scientific advances the history of tribes world leaders and current affairs.

Moreover, through the use of music, drama, and special techniques radio brings more interest and if a thorough follow up is made, more learning may be achieved. Further more, an expert presenting a radio programme in foreign language such as English or French, German or Kiswahili to Kenyan students provide a standard for spoken language for students, teachers and the public to emulate.

During broadcasts, students are given the opportunity to construct a mental picture of event. This way helps to sharpen their imaginations and creativity. A radio programme may have an emotional impact on students in the class because it does not offer visual events like the television. Programmes can sustain interest by employing vivid narration and dialogues. Radio lessons helps to break the monotony of the regular classroom teacher's voice. A part from the regular school broadcast there is other non-formal programmes dealing with topics such as programmes enrich and supplement teaching.

Radio programmes assist teachers in taking unfamiliar topics through the way in which the curriculum content is presented. Some teachers find the programmes useful to revise what they have taught and to introduce new topics at certain times. In some schools, teachers use radio programmes to overcome the shortage or lack of reference books, classroom textbooks and other conventional instructional materials. However, all of these instructional radio advantages are possible only if the programmes are professionally prepared and pre-tested at all levels to ensure that they achieve the goals of teaching and learning.

Radio broadcast lessons are well researched, planned and presented effectively hence interesting and incorporating up to date thinking in the field of education. They act as a catalyst for learning among students at the same time help to stimulate education to reconsider methods of teaching.

Disadvantages of radio programmes

World space radio poses great challenges as a medium of instruction. Though radio as a tool is relatively cheap and affordable for many schools and broadcasts are transmitted to all parts of Kenya, it has some short comings which hinder its full potential as an effective medium of instruction in the school:

- Radio cannot offer personal contact unlike the classroom teacher.
- Some teachers who are not keen often leave the students to listen to the programmes on their own.
- Others use the medium only as a source of information and ideas, listening to the programmes on their own and then using these materials for teaching later on.
- Radio lessons cannot account for the presence of the listeners (as with books) or whether the listening or not. It does not even cater for individual differences in the class. The broadcasts assume that every pupil has some understanding or is at a certain level to be able to understand everything (including slow learners and the hearing impaired).
- Further more, there is also lack of immediate feedback which is normally enjoyed in a classroom where there is face to face discussion.

However, whatever the negative aspects of the medium, world space radio provide multi lingual support, teach pronunciation, enhance meaning for images and

accommodate non-readers and weak readers (Feinrich, 1997).

World space radio materials can effectively guide learning for students with poor reading abilities in several ways e.g. use of audio tape recording which learners can use at their own time.

Research method

The study adopted a survey research design. A semi-structured interview was used to each in boys, girls and mixed primary schools. The items of the interviews are summarized as shown in the data analysis section.

Area of study

This study was carried out in Primary schools in Nyando District, Nyanza Province. Nyando District is located within western sides of Kenya, where it forms an important part of Nyanza Province, Kenya. It shows boundaries with Kericho, Nandi, Kisii and Kisumu Districts. It covers an area of 1168 Km with a population density of 257 persons per Km and 200 Primary schools.

Sample

The sample consisted of 30 headteachers and 180 Primary school teachers using World Space Radio, drawn from Rural, Urban and Suburban areas.

Results

According to the headteachers, all teachers in the schools were trained teachers. The headteachers from rural areas felt that the teachers were not enough to cater adequately for the large classes in Primary schools and there was a problem with discipline during listening period. Most of the headteachers reported that the radio sets were in good order and available for use by the teachers during broadcast time. While a group indicated that teachers were keen to use radio in teaching and learning.

In general, headteachers were very supportive and encouraged teachers to use radio lesson to supplement classroom teaching. Most of the classroom teachers in the study used radio twice a week. They also reported that they valued world space radio and used it for group teaching by combining streams of classes for listening to radio broadcast. 52 % of the interviewee regarded radio programmes as valuable, and they all agreed that students learn at least something from listening to world radio.

Likewise, both teachers from Rural, Urban and Suburban indicated reasons why they used radio in teaching and learning as shown in table 4. Four of the reasons given by the interviewees refer to subject content. They mentioned that the programme included good points related to the Syllabus and schemes of work, and that they developed new knowledge, listening skills and pronunciation of words. Teachers reported that programmes were well researched, that they tackled some topics which are not in the textbooks (e.g. awareness of diseases like HIV/AIDS and international education).

Teachers views about the potential of radio in teaching/learning

Improving teaching: 75% believed that radio programmes were good and that they were well researched and presented in a stimulating and interesting manner. The majority of teachers supported the use of radio programmes and acknowledged the benefits of broadcasts lessons. Some indicated that World Space Radio has helped to improve their classroom presentation and helped them tackle difficult topics. About 89% gave positive response about using radio to improve teaching methods.

Improving students learning: Most of the participants reported examples of students learning from radio programmes. A Kiswahili teacher reported that using radio helped to improve Kiswahili language. "When I came to this school the girls were not speaking in Kiswahili language because they did not know, but since we started using radio programmes they can now express themselves in Kiswahili."

Widening access to education: 63% believed that radio helps to widen access to education, because information from radio reaches everyone who listen to it. A high

proportion of teachers agreed that using radio programmes helps to introduce new ideas and improve their own teaching qualification, cost benefits. The majority of participants 67% believed that is more cost – effective to use the radio and cassette recorders in teaching them conventional methods of teaching thus recommending investment in radio technology as a suitable for distance learning. Teachers believed that radio is useful for curriculum innovation and economically because one person can teach the whole nation the same thing at the same time.

The views of teachers regarding broadcasts learning by expressing their views concerning improving learning, motivating learners, widening access, extending knowledge, improving listening skills and extending learning opportunities.

Similarly, teacher's comments about the effects of school radio programmes on students learning was very positive. The participants reported that their students were able to discuss with the teachers and even among themselves about the content of the radio programmes that they listen to.

With regard to problems affecting effective use of audio programme, the result showed that teachers rated the factors that they felt the use of radio in teaching /learning. Some of them said that they were not able to use live broadcast due to transmission breakdown and lack of adequate time. However, the overall funding of this investigation revealed that 30% had no problem but 70% reported having problem with fitting timetable with the rest of the subjects.

Summary

The study aimed at examining the contribution of world space radio to improve the quality of teaching and learning in school in Nyando District, Nyanza Province. In trying to identify the contribution of programmes the study looked at availability of radio sets, access to receivers in schools, capabilities of world space in teaching and learning at distance, the role of the teacher, headteacher in the utilization of the radio programme, benefits and limitations of radio as a medium of instruction. Based on the finding suggestions could be made to improve the use of world space radio in Primary schools.

Conclusion

The participants in both of the schools surveyed had similar views of the use of world space radio to motivate students to learn, to improve the quality of learning and classroom instruction. However, some classroom teachers expressed their problem with the use of world space radio in teaching and learning. This study also reports the benefits and limitations of using world space radio. Radio offers one of the most practical and effective means of communication to improve the quality of education at distance in a developing country such as Kenya. It is a powerful low cost medium compared to television and computers. Receptions in most part of country is generally good, and about 90% of the population can be reached through the use of radio. The study therefore, recommends that the developing countries like Kenya should invest heavily in radio technology for distance education because listening fosters imagination creativity and development in the country. Radio is affordable and the information or messages reach many people in different parts of the country at the same time, thus promoting education at distance.

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