Evaluation of Facilitators’ Skills in Assessing the Achievement of in Literacy Programme in Vihiga

By

Audi Oluoch
Ayodo T.M.O.
Simatwa Enose
Othuon L.A.
Evaluation of Facilitators’ Skills in Assessing the Achievement of in Literacy Programme in Vihiga

*Audi Oluoch, **Ayodo T.M.O., ***Simatwa Enose and ****Othuon L.A.

1Department of Education Foundation and Management, Maseno University, P.O. Box 42264 Code 00100 NAIROBi, Kenya.
2Faculty of Education, Theology and Arts, Kabarak University, Kenya.
3Department of Education Foundation and Management, Maseno University.
4Faculty of Education, Maseno University, Kenya.

*Corresponding Author’s Email: audioluoch@yahoo.com

ABSTRACT

Participation in education and learning processes like in the adult literacy programme helps learners to acquire skills and knowledge that facilitate community development including mitigation and adaptation to climate change. A study conducted in Vihiga County, Kenya therefore tried to assess whether the methods of evaluating the learners’ achievement were adequate in establishing the impact of the programme. The study established that the programme faced a number of problems, owing to the inadequate capacity of the facilitators. The method in the evaluation may therefore not help in establishing the actual impact of the programme on learners’ lives and how they used the skills acquired to mitigate and adapt to climate change.

Keywords: Evaluation, achievements, literacy, programme, climate change, facilitators.

INTRODUCTION AND BACKGROUND

In the adult education sub-sector, adult literacy programme (ALP) provides basic literacy skills of reading, writing and numeracy. It is seen as important in facilitating the acquisition of relevant knowledge and skills that can facilitate the adaptation of new technologies and production skills. The programme therefore, helps adult learners to acquire sustainable literacy skills that enable them to fully participate in socio-economic development activities. To facilitate the acquisition of literacy skills, the Kenyan government has produced curricula and learning materials which are designed to address the learning needs of learners in the adult literacy programme and to improve and deepen their knowledge and understanding on various issues including skills for adaptation and mitigation of the effects of climate change (Republic of Kenya, 2012).

Although climate change poses one of the most serious challenges to reducing global poverty for the international community, according to Anderson (2010), the education sector, including the adult literacy programme offers an untapped opportunity to combat it and its effects. As the education sector and ALP can be engaged in the dialogue on how to expand the climate change agenda, adult literacy can be used as a tool in adaptation and mitigation strategies and to mobilize the communities to promote sustainable development including mitigation and adaptation to climate change. This is especially important where climate change has resulted into drastic effects such as soil erosion.

The Kenyan Constitution (National Council for Law Reporting, 2010) also provides every person with the right to a clean and healthy environment. The ALP has therefore to contribute towards ensuring sustainable management of the environment and natural resources. The programme should therefore provide skills in creative thinking and action, communication, interpretation and use of printed materials associated with varied contexts including climate change to help the beneficiaries fit in the changing dynamics of community life as a result of their education (UNESCO, 2005).

The programme is also credited with promoting the acquisition of relevant knowledge, positive attitudes and skills among learners. It can therefore be used to promote adaptation to new technologies and production skills as well as the development of economic opportunities through improved entrepreneurship and production skills (Republic of Kenya, 2003a). When properly implemented, adult literacy programme should provide necessary knowledge and practical skills to equip the learners with appropriate capacity (Puttnam, 2009). The use of these skills...
can therefore have restraining effects on environmental destruction when the beneficiaries involve in activities that sustainably reduce the effects of climate change (Opiyo, 2009).

The strategy to use the adult literacy programme to facilitate mitigation and adaptation to the effects of climate change is founded on the evidence that, those who had benefitted from the literacy programme have in the past made gains in socio-economic development. This proves the far-reaching impact of the programme as its beneficiaries easily learn new ideas and increase their knowledge, skills and self-confidence to live better in changing circumstances (Republic of Kenya, 2003b).

In Kenya, there has been an increased attention to adult literacy to boost its effects, particularly due to its influence in promoting increased access to improved healthcare, education and socio-economic development. It has also been established that high literacy levels, like found in Vihiga County have a positive impact on social development, earnings and economic growth (Republic of Kenya, 2012). The drive to improve the literacy levels in Kenya was invigorated in 1979 when the Government started a nationwide programme to provide basic literacy skills to adults and out-of-school youths who lacked literacy skills. Earlier, adult literacy had been provided especially by the Non-Governmental organizations like the National Council for Christian Churches in Kenya (NCCK). As noted in the study on the functioning effects of adult literacy in Kenya, this was preceded by the colonial missionaries who only gave basic literacy skills in selected church-owned schools to enable the beneficiaries read the Bible and to provide interpretation services between them and the Africans (Carron, Mwiria & Righa, 1989).

Vihiga has a predominantly rural population of 554,622 with a density of 985.12 km² (Republic of Kenya, 2009) that was putting increasing pressures on land and that contributed to high level of degradation of forests on the hills around Maseno, Mahanga and in areas bordering the Kakamega forest which is the home to a National Reserve and hundreds of indigenous bird species in Kenya as the people cut down the trees to create farmlands and for economic purposes (Republic of Kenya, 2009).

Since the population of Vihiga is also highly literate (73.3%), several textbooks with environmental and technological content that had been distributed for use in the adult literacy centres should have provided knowledge and skills for sound environmental management which was incidentally not the case (Republic of Kenya, 2007). Coupled with increased funding, this increased input, according to Puttnam (2009), should naturally lead to drastic local measures being taken by the beneficiaries of the programme to address the effects of climate change. The problem here was therefore using appropriate assessment strategies to establish the impact of the programme as far as mitigation and adaptation to climate change was concerned.

The Objective of the study was therefore to evaluate the strategies and methods used by the facilitators to assess the actual utilization of knowledge and skills acquired from the programme in mitigating and adapting to the effects of climate change.

It was to confirm that as expected of the programme, the skills assessed were not be limited to written and printed materials, but covered also the level of cognitive complexity of literacy tasks and operations, how adults use information to function in society and the economy (OECD, 2011). According to Easton (1997), an evaluation of the achievements should also aim at establishing the relationship between adult literacy skills and valued economic and social outcomes and determining what the learners are capable of doing and not be abstract.

RESEARCH METHODOLOGY

Research Design

In this study, descriptive survey research design was used to establish the actual activities that the learners were engaged in, and which were related to mitigation and adaptation to climate change as a consequence of their participation in the programme. The design, according to Borg and Gall (2007), can help in accurately determining the status and nature of the situation as it existed. It could also help in explaining and describing the phenomena based on opinions of the learners being studied (Mugenda & Mugenda, 1999). The design was qualitative in nature, with less use of numerical data. It also helped in the collection of detailed data on accounts, experiences and activities of participants and how they were being assessed. The design was also preferred because, according to Kathuri and Pals (2005), it can effectively be used to get the opinions, attitudes, preferences and perceptions of groups of people which were of interest to the researcher.

Area of Study

Vihiga County is comprised of Vihiga, Hamisi, Emuhaya and Sabatia districts and lies along the Equator between 34°30mins E and 35°00min E and 0°15mins N and 0°5mins S. in the western part of Kenya. According to the 2009 Kenya Population and Housing Census the population of the County at 554,622 with 262,716 (47%) being male and
291,906 (53%) being female with a poverty level of 62% (Republic of Kenya, 2009). The County also had a literacy level of 73.3%. The females had higher literacy rate at 79.3% than the males who were 67.3% by 2006 when a comprehensive national literacy survey was conducted (Republic of Kenya, 2007). It also had 55 adult literacy centres with an enrolment of 8,598 learners whereby men were 2,087 with women being 6,511.

Sample

*Simple random sampling* technique was used to select 37 out of 55 facilitators by the use of a formula: \( n = \frac{n}{1 + \frac{n}{N}} \) to calculate the sample size (Mugenda & Mugenda, 1999).

Reliability of the tools

As reliability is an essential pre-requisite for validity of a research, the data collection instruments were pre-tested on 12 facilitators who were not involved later in the main study. They were selected through simple random sampling technique in Vihiga. To avoid interactions between those involved in the pre-test and the actual respondents in the main study, those used in pre-testing were cautioned not to share any information with others. This, according to van Teijlingen & Hundley (2001), is recommended to avoid interactions that can contaminate the research process. During the pre-test, there was test-retest method with a two-week break in-between followed by the determination of the *correlation coefficient* using reliability analysis scale (*alpha*) at values ranging from -1 through 0 to +1. The results from the two tests were then correlated using *Spearman's Rank Correlation Coefficient* formula (Royal Geographical Society, 2013) in which the relationship between the two tests was established. The \( r \) value of \( r=0.82 \) obtained confirmed the positive relationship between the two tests since 0.5 is the minimum reliability coefficient value to judge an instrument as reliable; hence, the instruments were consistent and reliable enough to be used to collect dependable data because they remained the same after the administration of the second test.

Data was collected using questionnaires and observation schedules. Data collection therefore involved noting down the responses from the learners and facilitators on how the achievements in the programme were evaluated. This also involved taking photographs of the activities that the learners were involved in.

As most of the data was qualitative in nature, data analysis, as recommended by Morril (2000) started from the beginning by putting together inter related aspects. *Quantitative* data was analyzed by coding the responses and summarizing the prevalence of codes and discussing similarities in related codes across distinct contexts. This involved using descriptive statistics in form of frequency distribution and percentages to allow for the emergence of the picture of the emerging data. Pearson’s *Correlation* was also used to establish the relationship between the curriculum and text books which were two distinct variables, producing an \( r \) value of -0.287 as the curriculum contained more information on climate change than the text books. This showed that if the learners were using the text books to acquire skills in adaptation and mitigation to climate change, not much could therefore be expected from them.

RESULTS AND DISCUSSION

Methods of assessment

The study established from the facilitators that, they used methods such as written tests (28.6%) oral questioning by asking the learners what they were using the skills acquired for (35.7%); home visits (21.4%); reading and writing (4.8) and engaging the learners in practical work of making fireless cookers and energy-saving stoves (9.5%). These were the methods used to assess the achievements by the learners in the adult literacy programme. Particular skills for adapting to climate change and mitigation were therefore not properly evaluated as they could only be evaluated through learners’ activities in their homes and in the community.

The results established that, the achievements in the literacy programme were not properly evaluated. This is because the facilitators do not evaluate the impact “downstream” as only 21.4% and 9.5% of the facilitators engaged the learners in home visits and practical work of making fireless cookers and energy-saving stoves respectively. Downstream evaluation is the only way of establishing how the beneficiaries were manifesting the new levels of literacy and technical skills at various stages of an instructional programme that are directly attributable to the instructional intervention (Easton, 1997).
According to OECD (2011), an assessment in adult literacy should target how the adults use the skills and information gained from the programme to function better in society and the economy. Using mainly oral questioning (35.7%) and written tests (28.6%) is therefore testing only theoretical knowledge and not the use of the skills.

This is because assessment in ALP should be reproached from the angle of problem-solving which is a goal-directed thinking and action in situations for which no routine procedure is available. It has to establish the link between adult skills and valued economic and social outcomes as more skilled persons can easily engage in income-generating activities like those ones for solving problems related to climate change.

The most frequent methods of assessment, oral questioning and written tests was further proof of the dominant method used in facilitating adult learning. While the method of facilitating adult learning should be andragogy which is premised on adult learners’ self-concept, experience, motivation, readiness to learn and orientation to learning, the facilitators used pedagogy which is a method used for teaching or instructing children who have no previous knowledge of the subject matter and hence instructed and motivated by external influences (Findsen & Formosa, 2011). The use of andragogy in the programme should have oriented the learners to the solution of the problems in society. This could have enabled the facilitators to more easily assess the practical utilization of the skills acquired to solve such problems in society as even those related to climate change. Lack of proper evaluation method used may be due to the inadequate training among the facilitators.

Evaluation of achievement is an important aspect in an educational programme (Easton, 1997). This is because it is one thing to enroll and keep learners in class but what they learn is another matter altogether, hence the need to gather new evidence about the effectiveness of literacy programmes. Adult education learning centres have the aim of ensuring that the learners acquire at least basic literacy and numeracy skills but it is also important to measure how much they have learnt and what their levels of achievements have been.

One difficulty of commenting on achievement is that, there is a paucity of hard evidence as examinations are hard to use because they rarely produce evidence of what learners can do. This was why, in order to assess the learners’ achievement, the facilitators had to go out of their way to make visits to the learners’ homes in order to check whether they had improved on their performances in such areas as tending the tree nurseries, goat keeping, poultry, making of fireless cookers, horticulture, knitting and table banking, among others. However, this was rarely the case as shown by the results which indicated that written tests and oral questioning dominated the methods of assessing the learners’ achievements.

### Literacy assessments

In Kenya, providers of ALP practice evaluation of their own programmes but the scope is not uniform as each organization designs its own mechanism (DAE, 2005). The evaluation system is also understood in the narrow scope of the learners’ assessment undertaken by the facilitators as confirmed by the results from Vihiga. Literacy assessments should therefore focus basically on the assessment of the literacy graduates on reading, writing, calculation, functional knowledge and the uses to which the knowledge and skills acquired have been put on. This is because adult learning is not for the sake of it, but for meeting the various needs of the learners in society (Oluoch & Othuon, 2008). The establishment of the usefulness of literacy, according to the World Bank (2001), helps to combine literacy instruction with actual application in the projects identified by the learners to generate income.
It should also be noted that, resources go into education and as a consequence, there are effects but none of these is easy to assess or measure. Although the analogy with the production function is easy to draw, the measurement of labour, capital in education and effects are quite difficult to measure as most of the inputs are not raw materials but living parts of the education process (Vaizey, 2011).

As educational programmes are conducted to bring about change and make the beneficiaries to function better, it should be recognized that, although the skills acquired in the literacy programme are generally useful in different ways, there are many other learning opportunities provided by various agencies that contribute to functional knowledge, skills and practices and the literacy programme cannot be said to be the sole agent (Oluoch & Othuon, 2008).

**Capacity building of facilitators**

To evaluate achievement in the adult literacy programme, the facilitator need to be properly capacity-built through focused training and must be very conversant with the concept of literacy. This is because literacy is no longer seen as a simple skill or competency, but as a process of using the skill acquired for specific social purpose (Archer & Nottingham, 1996). Evaluation of literacy should therefore emphasize the creative and active involvement of the participant in specific activities that are geared towards solving individual or a problem affecting the society such as soil erosion, environmental problems or such problems that may be due to climate change among others.

In assessing the achievement of the learners, the facilitators must be sufficiently trained for them to understand the motives for learning and the needs of the clientele, as well as why evaluation is necessary. They should also be able to take into consideration “Education for All Goals 3 and 6” coined at Dakar, Senegal in 2000 (UNESCO, 2006). These were the Goals for “Ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life-skills programmes (Goal 3), and “Improving all aspects of the quality education and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills (Goal 6)”. When this is done, the learners' social rates of return will be assured, although quantifying such rates is quite difficult as Cost Benefit Analysis tends to concentrate on the economic benefits of education (Mutua & Sunal, 2004).

The facilitators also need to understand that the underlying purpose of learning assessment is twofold: to get a sense of the actual capabilities that people have acquired through their study or to motivate teachers and learners to assess their own level of accomplishment and to draw lessons from their successes and mistakes (Easton, 1997). They also need to avoid the testing and assessment procedures copied from primary or secondary schooling that involve administration of examinations and grading of results on a standard scale as this does not bring out the real competence that any particular performance represents. It also alienates and reminds adults of bad memories of previous schooling experiences of fears regarding how they measure up in academic setting.

**CONCLUSION**

Adult literacy programme should no-longer be seen as a simple skill or competency in using 3Rs, but as a process of using the skills to function better in society. It should provide individuals with literacy skills and more direct opportunities for success as there is direct link between literacy and socio-economic development. The programme should be more practical-oriented and be able to provide the learners with skills for immediate application to solve problems that they face in society. This is when they can involve in practical activities that the facilitators may be able to assess during an evaluation process. The ALP facilitators have also been found to lack necessary capacity to effectively assess the practical application of knowledge and skills by the learners so as to associate what they do on the ground with the skills acquired from the programme. The facilitators therefore need to be sufficiently trained to acquire necessary competency to enable them effectively evaluate the achievements in the adult literacy programme. As the programme lacks efficient monitoring and evaluation and assessment method that take account of the initiatives and functional uses of adult literacy skills in the society, educational planners should review the curriculum and training programme to put the programme in its rightful place where the beneficiaries acquire.

**REFERENCES**


