

Effects of Instructional Materials used at the Community Learning Resource Centers on Adult Learners' Participation in Community Development Activities in Nyamira North Sub-county Kenya

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ABSTRACT

This research sought to investigate the effects of instructional materials used at community resource centers on adult literacy learners in community development activities with a specific focus on Nyamira North Sub-County, Kenya. The study was guided by the constructivism theory of learning. It employed the descriptive survey design where a sample of 254 learners was drawn from a population of 492 adult learners in the study area using the stratified random sampling method. Questionnaires were administered to elicit information from the respondents. The collected data were analyzed using descriptive statistical methods. From the findings, there was a clear indication that textbooks and sewing machines were more available and adequately utilized. Other resources like computers, projectors, ovens, banana ripening chambers, and videos were least available and inadequate. Results further showed that most of the adult learners were involved in small-scale farming as their main economic activity with most of their products was selling them to the market in raw form. Some learners were also involved in natural resource management activities with the majority of them planting trees, water resources management, bridges, and path construction. The study recommended that to diversify the livelihoods of the communities in the study area, the Directorate of Adult Education should provide diverse instructional materials such as ICT facilities and equipment that which will impart value addition skills to the learners.

Key words: Instructional Materials, Community Development, Adult Learners, Resource Centers

INTRODUCTION

Nations with the inferior literacy rates attract higher poverty returns, and the poorer the social condition (UNESCO, 2008), the less likely the people's participation in adult education and community activities. A recent report by UNESCO (2012) on adult illiteracy, intelligence design, and empowerment of the poor for example discovered that great deficiency levels have contrary effects on the well-being of the underprivileged and this leads to deprivation of basic needs directly resulting in wastage or lack of participation in adult literacy programs by many adults.

In Kenya, there are 7.8 million adults who need literacy programs while 61.5 % of the population had attained minimum masterly levels while only 29.8% of the adults had the required masterly levels. This calls for the expansion of the adult literacy program by the government of Kenya and makes it easy for the learners to access the programs offered. Kenya National Adult Literacy Survey (2007) also discovered that only 61.5% of the adult people had met the

lowest literacy level, thus having a figure of 38.5% (7.8 million) of uneducated adults. It also exposed that only 29.6% of the Kenyan adult population had acquired preferred literacy proficiency. Approximately, 29.9% of the youth aged 15 to 19 years and 49% of adults aged 45 to 49 years don't know how to read, write, and compute simple math for their survival.

According to the Kenya National Bureau of Statistics (2007), the adult literacy level in the current Nyamira County is 66.4% for males and 78% for females. Even though the literacy levels are as shown, adult education participation nationally stands at 19.9% for males and 15% for females, while in Nyamira the participation rate for those of ages 15 and above who left school and never attended at all stands at 2.5%. Many adult education participants are beneficiaries of the program, and those who actively participate in community development activities that are funded by the government, NGOs, and donors across Kenya. Such activities get some degree of success due to the involvement of different

stakeholders drawn from the local community in their formulation, implementation, monitoring, evaluation, and sustainability. Yet, we don't know the factors contributing to their participation in community development activities emanating from the community learning resource centers.

Literacy is strongly associated with the development of communities and nations. According to Yeoh and Chu (2012), literacy skills give people access to better job opportunities, enable them to enjoy high standards of living, and give them the capacity to learn high order skills. Lakstian (2016) also opines that literacy skills enable individuals to function effectively within their communities. Consequently, many countries have invested in programs aimed at improving adult literacy skills. According to Richmond et al. (2008), the global adult literacy rate (literacy rate among individuals above 15 years) rose from 76% to 83.6% between 1988 and 2008. Although the adult literacy rate in developing countries is lower than the global average, the increase in literacy rate within the two decades was much sharper; from 68% to 79% (Richmond et al., 2008). These statistics, however, indicate that developing countries still have great literacy needs as almost one in every five adults is illiterate.

Community learning resource centers were founded by many emerging nations to offer learning ventures for youth and adults who missed out on education in primary and secondary formal education and require modern literacies (UNESCO, 2008). In Bangladesh and Nepal, the focus was on literacy, post-literacy, and life skills. In China, Japan, and the Republic of Korea, lifelong learning (LLL) is founded on Confucian culture in which learning throughout life and different dimensions of life is rooted in people's way of Community-Based Lifelong Learning and adult education where the role of Community learning centers is seen as an enabler of lifelong learning (Sokolovsky, 2015).

In instituting lifelong learning through CLRCs in modern times, many countries have provided a mixture of programs for learners from different age groups to involve in learning that will advantage their lives and humanity at large (Srisawang, 2015). In China, Thailand, and Vietnam, lifelong learning is functional and embraced in national development policies and practices. Lifelong learning has also been promoted in education for all (EFA) and the millennium development goals (MDGs), especially in ensuring gender equality in education to address the literacy of women in Asia-Pacific and the lesser proportion of women in higher levels of education (Govinda, 2017).

Adult education plays a key role in human development through its contribution to the enhancement of people's capabilities, functioning leading to empowerment in three dimensions of imagination, senses, thought, and quality of life (Ahmed, 2010). This contributes to economic growth, longer life expectancy, higher educational attainment, and higher adjusted real income (Weldemichael, 2018). In his article, Mabuza (2019) indicates that adult education contributes to poverty alleviation and empowers members of the public to be aware of their role in development activities abounding in their local communities.

According to Awgichew and Seyoum (2017), in Ethiopia, the government has tried to organize the resources and developed the networks essential to sustain adult education programs geared to convey knowledge and skills in income generation, environment protection, cultural education, health, civic education, skills in agriculture and enable them to read and write through functional literacy programs. Similarly, Weldemichael (2018) affirms that the programs have achieved high rates of success in empowering communities. In the Lango region of Uganda, women have acquired knowledge and skills through adult literacy enabling them to participate in income-generating activities and bringing out individual and collective social capital leading to community development (Bolton, 2017).

Since independence, Kenya has committed herself to the provision of adult education. Adult education in Kenya is said to include all forms of organized education and training that meet the basic learning needs of adults (Nyatuka et al., 2015). In Kenya, the obligation to provide adult education and life-long learning is placed in the Directorate of Adult and Continuing Education (DACE) and it is enshrined in law through an act of parliament (National Adult and Continuing Education policy, 2010). According to Ngaruiya (2012), the Learning Resource Center is an idea that was introduced in Kenya in the mid-seventies as a way of improving the educational system. However, it was in 2002 when the idea was picked by the Directorate of Adult Education to leverage the gains of the post-literacy program hence serve as a One-Stop-Shop offering a variety of adult education services to the local communities, through the functional adult literacy program. This saw the introduction of 300 community resource centers across the country.

In Nyamira County, there are 10 community learning resource centers, 3 community learning resource centers, and 22 basic adult education centers with an enrollment of 1,728 male, 4,002 female learners, totaling to 5,730 learners. In Nyamira North Sub-County there are four communities learning resource centers, 18 functional adult learning centers, and 22 basic adult education centers with an enrollment of 773 male and 1287 female learners cumulatively, adding up to 1,287 learners (Nyamira County Adult and Continuing Education Office, 2019). The learning activities at the centers comprise of book and non-book materials, information communication technology material sets, and modern training facilities to provide capacity building opportunities in areas identified by the learners. The in-class training is complemented by practical learning on the adjacent Farmer Field Schools (Model Farm) which encompasses a Greenhouses, Tree Nursery and Poultry Farms that provide practical examples of modern farming practices to training participants home economics extension services; primary and preventive health care; HIV/AIDS; nutrition; family life education; environmental education, cooperative education, gender education, business management, and entrepreneurship skills training programs, among others.

Despite the commitment of these learning resources and materials, few systematic studies have been conducted to examine the effect that these resources have had on the

livelihood of the adult literacy learners and their communities. As such, it is important to understand the effect of the instructional materials used at the resource centers on adult literacy learners' participation in community development activities. This knowledge would go a long way in enhancing the efficiency of the adult community resource centers by determining the kind of instructional resources that have the greatest learning effect on learners in participating in community activities. It was also envisioned that the study will identify instructional materials deficiencies leading to future improvement.

Research Objectives

1. To assess the instructional materials used in the community learning center in Nyamira North Sub-County.
2. To determine the community development activities in which learners in community learning resource centers in Nyamira North Sub-County are involved.
3. To examine the effect of instructional materials in community learning resource centers on community development activities of the learners.

Research Question

1. What instructional materials are used in the community learning resource centers in Nyamira North Sub-County?
2. What are the community development activities that learners in community learning resource centers are involved in?
3. How have the instructional materials in community learning resource centers contributed to the community development activities of the learners?

Operational Definition of Terms

Instructional Materials: Refers to tools and equipment that instructors in community learning resource centers use to deliver instructions or aid instructional activities to adult literacy learners.

Community Development Activities: Refers to undertakings aimed at improving the living standards or the general well-being of a community.

LITERATURE REVIEW

Theoretical Framework

This study was guided by the constructivism theory of learning. This is a philosophy that asserts that the best way to promote learning is by engaging learners with problems and materials (Dagar & Yadav, 2016). It perceives learning as an active process and a social activity that is dependent on the context in which it takes place. The underlying concept within the constructivism learning theory is the role that experiences-or connection with the adjoining atmosphere-play in student education (Gunduz & Hursen, 2014). Learning as an interaction of learners into a knowledge community that

supports collaborative, assimilation, and accommodation of new information, where motivation is both intrinsic and extrinsic. Learning goals and motives are determined by both the learners and the external rewards provided by the knowledge world.

The constructivism learning theory asserts that people generate knowledge and outline significance based upon their day to day interactions (Thomas et al., 2014). Adult learners visualize a meticulous approach in which the humankind functions. When things do not work within the anticipated parameters and circumstances, adult learners have got to accept by altering the opportunities accordingly within their context. Constructivism theory of learning also takes away the focal point role in learning from the educator and bestows it upon the learner and their acquisition of new knowledge, skills, and perceptions leading to change of behavior in the environment they live in (Gunduz & Hursen, 2014). For behavioral change to take place, instructional practices require a very different tact from conventional learning processes. Instead of reciting, the instructors have got to begin questioning and interrogating their learners (Thomas et al., 2014). Instead of responding to issues that only bring into line their syllabus, the facilitator in this scenario must make the whole learning process learner-centered and make sure the learners come to the conclusions on their own as an alternative to being lead to form opinions.

An important principle of constructivism learning theory is the incorporation of relevant instructional materials that attract learners by capturing their interest (Dagar & Yadav, 2016). This means that the instructional materials must match the interests of the learners. The learning materials must be capable of imparting knowledge and skills that are relevant to the learners' real-world problems, responsibilities, and tasks (Cholewinski, 2009). The theory also asserts that learning materials should be designed to deliver what a learner is ready to learn and acquire skills that they can put to immediate use in solving their challenges (Thomas et al., 2014).

Empirical Literature Review

Learning materials are the vehicles through which the contents of a learning curriculum are delivered to learners (Nkiru, 2015). Therefore, to ensure quality delivery of the adult learning curriculum, it is crucial to design and develop learning materials that correspond to the knowledge and skills that the curriculum intends to impart to the learners. In their study, Castle et al. (2019) observed that the use of hands-on learning method was instrumental in promoting learning among youths and adults in a community learning set-up. The findings reinforce the need to have instructional materials that support hands-on, experiential learning within community learning resource centers. Berry et al. (2017) also noted that since adult literacy learners are goal-oriented, self-directed, and reliant on relevant, it is important to involve them in the design and development of learning materials. It is essential to solicit feedback from the learners to improve existing materials.

Németh (2015) classify adult basic education as an education that targets those who are considered by the social order

to which they fit in, to advance their procedural or proficient requirement, further increase their abilities, supplement their knowledge with the purpose to complete their formal education or to acquire knowledge, skills, and competencies in a new vocation, to invigorate or to keep informed and update their competence in a particular field. It is targeted and provided to people aged 15 years and over and who are not engaged in formal schooling or higher education and who have an education level of less than grade 9. In Kenya, adult basic education is aimed at learners who have dropped out of school before acquiring adequate literacy and numeracy skills and for those learners who have never attended school nor received formal educational training (Gabriel et al., 2016).

In his study on the post-literacy project in Homa Bay district, Okemwa (2012) emphasized that income-generating activities act as an incentive for the learners to participate in center activities because they help them learn new skills crucial in initiating their projects in their homes. According to Connolly (2013), there are four main avenues through which adult learners are provided with learning opportunities; that is formal adult education, basic education, liberal adult education, technical and in-service training. The developmental potential of adult education has been well summarized by UNESCO (2013) as empowering individuals because it opens avenues of communication that would otherwise be closed, expands personal choice and controls to one's environment. Adult Basic Education gives learners access to information through both print and electronic media, equips them with skills to enable cope better with work and family responsibilities, and strengthens their self-confidence to participate in community affairs and influence on political issues (Connolly, 2013).

UNESCO (2013) highlighted a clear tendency to under-fund in ACE programs the world over, for example, governments give grants to individual learners who are limited to formal education or occupational training and give less to adult learning, this shows that adult education will substantially be declining thus significant learning and initiating their projects becomes a fallacy. Orodho (2016) in their study carried out in Murang' a South Sub-County, Murang' a County, Kenya, concluded that financial constraints were the most obvious hindrances in adult literacy that had been identified by all the respondents in the study, on top of that there is want in, infrastructural and teaching and learning aids in public-owned adult education learning centers.

In her study of an adult literacy program in Bungoma County, Munialo (2017) has highlighted that teaching and learning resources are important tools either in hardware or software form intended to be used by an instructor to simplify and enhance what is being taught in the center. She identified textbooks, reference books, chalk, and blackboards in addition to audio-visual aids such as computers and other technology aids as crucial instructional and learning resources.

According to Gabriel et al. (2016), inadequacy in capitation grants for instructional materials are other major challenges facing adult literacy programs in Kenya. Thus, there is need for the government to direct adequate funds to purchase appropriate as well as adequate instructional

resources. Furthermore, training programs need to be expanded to enable the concerned instructors to manage adult literacy and learning centers both skillfully and successfully.

RESEARCH METHODOLOGY

A descriptive research design was employed. The target population comprised 492 adult learners (210 males and 282 females) in community learning resource centers. From this population, a sample of 254 adult learners was selected using the stratified random sampling technique. The CLRCs were treated as strata and respondents were randomly selected from each. The study employed self-completion questionnaires to solicit information from adult education learners with the support of instructors and the researcher. Purposive sampling was used to select four instructors as they were believed to give the sought information. Questionnaires were divided into three sections: A, B, and C. Section A captured the demographic characteristics of respondents while sections B and C dwelled on the main research questions of the study.

Before actual data collection, a pilot study in the neighboring Borabu Sub- County using different learners in six community learning resource centers was done with 40 respondents. The purpose of the pilot study was to ascertain the validity and reliability of the research instrument and familiarize the researchers with the administration of the data collection instrument. An average of 0.74 reliability was obtained and considered to fulfill the required degree of consistency. Mugenda and Mugenda (2003) posit that a reliability coefficient of above +0.60 is adequate. The questionnaires were administered to the respondents in their various CLRS. Data analysis was mainly descriptive statistics in the form of frequency counts and percentages.

To triangulate the data collected using a questionnaire and gain deeper insight regarding the study issues, five instructors from the community learning centers were interviewed. The interviews were conducted with sessions lasting for 30 to 45 minutes. Data were captured through note-taking and analyzed using the thematic content analysis technique.

RESULTS

Out of the 254 questionnaires that were distributed, 193 were returned to the researchers having been duly completed. This figure marked a response rate of 76.0%. Most of the learners were aged between 15 and 80 years with most of them being in the age bracket of 36 to 40 years at 17.6 %, followed by 41-45 years at 15.5%, 46-50 years at 13.5%. The findings indicate that the majority of adult learners in the study area are middle-aged. According to Mabuza (2019), the quest for education among such mature learners is largely driven by their need to improve their participation in community affairs rather than gain credentials. The majority (59.2%) were female while 40.8% were male. The majority of the respondents were involved in small scale farming at 53.6%, 17.14% were farmhands, 14.28% are casual workers, with 10% being involved in other economic activities such as motorcycle riding, drivers, mechanics, and sweater knitting.

Instructional Materials used at Community Resource Centers in the Study Area

The availability of several learning material was assessed as shown in Table 1.

Results in Table 1 indicate that textbooks were fairly available in the CLRCs in Nyamira North Sub-County, with 75% indicating that the textbooks were available in the centers. The findings are consistent with the study by Ahmad and Paul (2017), who found that textbooks were critical instructional materials that were used to tender learning opportunities in the Indian adult education setup in both structured and unstructured situations. Structured situations referred to organized learning with the use of graded materials and appropriately designed supplemental reading materials. On the other hand, unstructured situations implied the provision of a wide range of materials such as newspapers, local art forms, and ungraded books. Fenandez et al. (2017) observed that access to instructional materials such as textbooks adds value to the adult learning process as it improves the reading and writing skills of adult learners. These skills have become essential in many of the modern-day transactions such as taking orders in a restaurant and conducting banking transactions and are consequently important in adult literacy learning programs.

Similarly, 75% of the respondents indicated that sewing and knitting machines were available in their centers. This finding implies that sewing and knitting is a popular learning program at the centers and thus it is expected that the adult literacy graduates would engage in economic activities aligned with this program. This finding is congruent with a study conducted in the neighboring country, Tanzania by Mollle et al. (2019), who found that apart from imparting basic literacy skills such as reading and writing, most community learning resource centers in the country focus on equipping learners with practical skills that they can use to earn a living. One of the main courses offered in the Tanzania centers was sewing and dress-making because this skill is easy to learn and starting a venture in this line of business does not require much in terms of capital.

Results in Table 1 also show that only 20% of the respondents indicated that ICT facilities were available in their centers. In this item, respondents were given several examples of ICT facilities including projectors, television sets, and computers. Findings suggest that these facilities are not available at the centers. They raise a question regarding the centers' capability to equip adult learners with ICT skills that will enable them to manage a task that requires ICT

knowledge. It also raises a question regarding the centers' capability to integrate ICT in the delivery of instructions to learners. As Fenandez et al. (2017) pointed out, ICT facilities have become an integral part of learning in the 21st Century as they support learner's access to information as well as improve the delivery of content by integrating audio and visual medium of information. The Covid-19 Pandemic has further elevated the need for ICT facilities in community learning resource centers for adult literacy learners. The absence of ICT facilities in the study area has denied the adult learners the opportunity to continue learning during the pandemic period where physical class attendance is difficult to setup. Obiozor and Aniemeka (2019) noted that the integration of ICT in community learning centers in Sub-Saharan Africa cannot be realized by just availing equipment such as computers and projectors. Instructors in these centers must also be trained on how to use ICT infrastructure in performing various tasks including in the development and delivery of instructions.

Results in Table 1 further show that only 25% of the respondents indicated that ovens were available in their center. The findings indicate that most centers are not equipped to offer baking skills to learners, which could easily provide an easy avenue for self-employment. The absence of this facility hampers the community's effort to add value to their agricultural produce, which decreases their earning. Lack of backing facilities at the centers also goes against the concept of authentic learning that has become vital in adult education. As Iucu and Marin (2014) explain, the concept of authentic learning is founded on the rationale that learners are more likely to be prepared and motivated to learn when the education programs addressing topics and issues that are relevant and applicable to their lives outside academics. Adults are more likely to learn when they know that the skills that they will get will be meaningful and useful in their day-to-day life.

Similarly, only 25% of the respondents confirmed the availability of banana ripening chambers at the centers. This is also an unfortunate scenario given that banana is a popularly grown crop in the study area. It is also not congruent with the concepts of authentic and constructivist learning that assert that they need to engage learners in activities that are meaningful and relevant to their settings and building on their preexisting skills and knowledge (Cholewinski, 2009). Equipping learners with knowledge of banana production, preservation, and value addition could have a significant impact on their quality of life. Currently, most community members sell their agricultural produce in the raw form, which significantly reduces their earnings.

Table 1. Percentage of respondents who indicated that material is available

Instruction Material	% of Respondents
Textbooks	75
Sewing and Knitting Machines	75
ICT facilities	20
Ovens	25
Banana ripening chambers	25

Participation in Community Development Activities

The researchers sought to find out from the respondents whether, during the time they have been at the CLRC, they have been involved in any of the following activities in the community. Table 2 shows the results.

Results in Table 2 illustrates that most of the adult learners (57.1%) in the study area were involved in small scale farming as their main economic activity. Popularity of this

Table 2. Participation in community development activities

Community Activities	Involvement	
	<i>f</i>	%
Agricultural activities		
i. Crop farming and/or Livestock Keeping	80	57.1
ii. Crop and/or Livestock marketing	65	46.4
iii. Value addition (for example in Baking, flour making)	0	0.0
Non-Agricultural entrepreneurship activities		
i. Shop Keeping	75	53.6
ii. Selling of <i>Mitumba/malimali</i>	45	32.1
iii. Groceries	64	45.7
iv. Garages for Motorcycles, motor vehicles	29	20.7
Natural Resources management		
i. Member of local Water Resource Users Association	12	8.6
ii. Member of Forest/River Management Committee	9	6.4
iii. Tree Planting	87	62.1
iv. Bridge/Path Construction	70	50.0
v. Roadside bush clearing and trench making	48	34.3
Involvement in Community Groups/Associations/Committees		
i. Agricultural groups/Committee/Association/Cooperatives	42	30.0
ii. Table Banking	81	57.9
iii. Member of a political party	53	37.9
iv. Frequently attend community barazas/ chief meetings	69	49.3
v. Member of school management committee/BOG	12	8.6
vi. Member of a church leadership committee	34	24.3
vii. Member of the local Hospital Management Committee	5	3.6
viii. Community/Clan Elder	4	2.9

activity could be as a result of the area being an agricultural rich zone rather than due to participation in the community learning centers. However, the learners participation in the program led to improved agricultural practices with a significant portion of the respondents (46.4%) reporting being involved in agricultural related business activities like marketing of livestock and crop, and value addition on their farm products. Interview data collected from the instructor revealed that improvements in agricultural activities have largely been brought about by the text materials used in the community learning centers. When asked to describe the content that is predominant in the textbooks available at the centers, the instructors affirmed that agriculture was one of main topic. One of the instructors stated that most tests focus on improving agricultural practices by teaching modern ways of farming and keeping animals as well as marketing products. Another instructors explained that the texts in their center focused on training farmers on how to manage farm records.

This finding is congruent with Awgichew and Seyoum (2017), who found that participation in adult literacy program was associated with increased usage of agricultural technologies and optimization of agricultural productivity in a sample of 302 adult learners from Eastern Ethiopia. From these findings, it is evident that adult literacy

programs can play a central role in improving the livelihoods of agricultural communities by switching people mindsets from viewing agriculture as a subsistence activity to viewing it as a commercial activity that can improve their living standards. The findings also creates a business case for equipping the adult learning centers with instructional materials and equipment aimed at equipping learners with the skills that they need to improve their agricultural practices. Earlier findings indicated that the centers within the study area lacked basic equipment that could help farmers add value to the activities such as baking equipments and banana ripening machines.

Results show that non-agricultural entrepreneurial activities such as shop keeping (53.6%), selling of mitumba or malimali (32.1%), groceries (45.7%) and garages for motorcycle and vehicles (20.7%) were also popular among the learners. These findings can be interpreted to mean that there is a notable level of livelihood diversification among the learners and that although agriculture is the main agricultural activity in the area, most learners are not completely depended on agriculture to make ends meet. The finding is consistent with the study by Akello, Rukundo, and Musiimenta (2017), who observed that participation in adult literacy classes led to improved income generation capacity among women in Lango Subregion in Northern Uganda

by helping them diversify from agriculture to other income generating activities.

Results also shows that a good number of learners were involved in natural resource management activities with majority planting trees (62.1%) and another 50% engaging in bridge or path construction. This finding is consistent with the study by Norris and Osayande (2017), who found that 57.3% of women in adult literacy education classes in Edo State of Nigeria had a positive attitude towards environmental conservation and often partook activities that conserve the environment. From these findings, it is evident that improved literacy enhances adults appreciation of the environment leading to sustainable behaviours. The findings also highlight the importance of integrating conservation content in adult education curriculum and incorporating instruction materials that seek to train learners on how to sustainably exploit environmental resources. Participation in conservation activities can be linked to the text materials available at the centers. The interview data revealed that sustainability and environmental conservation is one of the topics covered by the texts available in the centers. One of the instructors described that their centers has text that seek to train farmers how to practice organic agriculture in order to improve their earning. Another instructor recounted that there are text materials in their centers that teach on tree planting, prevention of soil erosion, and water harvesting and conversation. Thus knowledge, skills and positive attitudes gained on these essential environmental issues bound to have an impact on the learners participation in conservation activities.

Regarding the involvement in community activities, the largest segment (57.9%) reported involvement in table banking, which is an informal financial scheme where individuals form groups often having 10 to 20 members where they contribute money on a regular basis for saving and investment purposes. The fund could also be used to advance credit to members who repay at low interest rates. Such groups provide individuals in the rural parts of Kenya, most of whom are excluded from mainstream financial services, access to financial services such as savings and credit services. These findings indicate that the majority of the learners in the study setting have a high level of financial literacy because they understand and value the need to save, invest, and access other financial services such as credit. They have also devised ways of accessing these financial services albeit using informal platforms. The finding is congruent with the study by Taylor et al. (2010), who found that adult education was associated with improved financial literacy and financial management a nationwide sample of adult education participants in the United States of America. Numeracy skills for adult literacy learners are highly emphasized in the community learning resource centers, thus most centers have text materials aimed at imparting these skills. One instructor explained that most of the numeracy text focus on imparting financial literacy skills such as how to count money, convert currency, and compute interest rates. Consequently, participation in financial scheme may be connected to the availability of these instructional materials.

Close to half of the respondents (49.3) reported that they attend community "barazas" and chief meetings on a frequent basis. Community barazas and chief meetings are essential governance platforms where citizen discuss issues affecting their communities with national government administrators. These findings are congruent with the study by Lovren and Popovic (2017), who found that increased adult literacy through adult education increases civil engagement leading to political and social transformation of communities. Interview data also revealed that civic issues are also popular topics covered by the text material available in the community learning centers. One instructor asserted that there are text that cover issues of human rights and law, peaceful coexistence, and gender and equality. Another instructor mentioned that there centers have text materials that concern sexual education and family planning. Such materials are bound to impart greater civic and social consciousness among the adult literacy learners leading to increased participation in civic duties. All the instructors concurred that when the relevant instructional materials are available at the CLRCs, teaching and learning becomes easy thus assisting the literacy learners to acquire the information sought faster. It was also clear that even though there were 254 literacy learners who were sampled with a return a rate of 140 in number, most of them did cut- across various community development activities hence surpassed the initial sampled population enabling them to acquire multifarious skills making them to participate in various community development activities. Nkiru (2015), concurs with these findings, and also portends that learning materials are the vehicles through which the contents of a learning curriculum are delivered to learners

CONCLUSIONS AND RECOMMENDATIONS

The research concluded that the learners were involved in community development economic activities which were majorly small scale farming, value addition on their farm products, crop and livestock marketing, these were agricultural activities. Nyamira north was largely an agricultural area, so the effect was more of environmental; this dictated the type of instructional materials available, used and the type of skills to be learnt, therefore addressing their specific needs will lead to the acquisition of better skills which they will later use in participating in community development activities. Other than agriculture, it was also established that some owned shops and garages for motorcycles and vehicles; others were involved in the knitting sweaters, dressmaking for sales, selling of mitumba clothes and Mali Mali; and still others owned eateries and hotels, livestock and crop marketing. These entrepreneurial skills were developed and enhanced as a result of their enrolment into the community learning resource centers with compatible instructional materials, and so in a way it/they/ the resources influenced/ encouraged their participation in class and consequently in the economic development of the community.

On the management of natural resources, the study concludes that the learners became more aware of the need

for environmental conservation as most of the learners got involved in tree planting, bridges/path construction, road-side clearing, and trench construction. Regarding community leadership and associations, the study concludes that the learners' participation in the community learning resource centers empowered them to take up activities which are more community based such as, agricultural groups, table banking groups, some were members of school management boards others were church leaders, it was however noted that most of them shied away from politics with only a few of them being community or clan leaders.

The study concludes that the learning resource centers mostly used textbooks, and sewing machines for learning tailoring skills and dressmaking, however, computers, ovens, banana ripening chambers, projectors, knitting machines, videos, and TVs were inadequate. Inadequacy of resources hampered diversification of skills leading to the development of general skill not as per the need of the learner. Lack of a tailor-made curriculum to fit into the specific needs of the learners also hindered the development of specific potentials of the learners.

Based on the findings, it is recommended that more community learning resource centers be constructed and equipped with better instructional materials to accommodate more adult literacy learners and diversity of their learning needs. More funding to the CLRCs is needed to improve on the state of the equipment available as there is a need for more state of the art instructional facilities to meet the needs of modern technology for the achievement of the development agenda by the Government of Kenya, substitute face to face learning and be a platform for digital literacy thus making learning accessible to adult learners in far to reach and remote areas.

These findings do demonstrate that the use of ICT is not fully utilized in areas of financial literacy, e-marketing, e-learning, thus facilitators and educators should be trained to develop curricula that are tailored to the contemporary market needs and with the specific needs of their learners and not majorly rely on adult education and basic functional literacy curricula, this will render it to be used as community learning resource.

The study also recommends that adequate resources should be made available, enhanced and proper utilization of the available resources should be practiced. More community learning resource centers should be established nearer to the community members instead of sharing sparsely distributed resource centers across the entire region. Besides, the study also recommends that exchange programs be encouraged between the community learning resource centers where learners from a center are taken to another one for a specified period to learn different skills and interact with other community members to learn other activities that may be beneficial to their community.

The Directorate of Adult and Continuing Education should invest more in the acquisition of ICT instructional facilities within the centers in the study area to improve learning. The ICT facilities will also improve the digital literacy of community members enabling them to perform tasks

that require these skills such as digital banking, e-learning, e-marketing, and e-commerce among others.

The study recommends that similar studies should be conducted in other sub-counties across the country to support or derive diversity or generalization of results. Other factors than the effect of instructional materials on learners' participation in development activities can affect learners' enrolment into such centers and eventual utilization of the available resources and skills can also be investigated in future studies.

It is hoped that this study will provide adult literacy learners and instructors an opportunity to express ideas on the quality of instructional materials compatible with their learning needs, share opinions on their participation in community development activities, and which type of functional adult literacy program is crucial as an approach to leverage their participation in community development activities. The findings will also inform the government of the adult learners' perceptions of community development activities, likewise help the Ministry of Education and researchers to develop policies and take the necessary action based on the findings to help the country to achieve the goals and aspirations of the big four agenda and vision 2030 on Sustainable Development Goals.

REFERENCES

- Ahmad, F., & Paul, M. (2017). Learning strategies and audio-visual aids used in adult education in India: A historical overview. *Transcience*, 8(2). https://www2.hu-berlin.de/transcience/Vol8_No2_11_39.pdf.
- Ahmed, M. (2010). Education as Transformation—Education for transformation. *Development*, 53(4), 511-517.
- Akello, J., Rukundo, E., & Musiimenta, P. (2017). Functional adult literacy: An alternative gateway to grassroots women's improved income generation in Lango Sub-region, Northern Uganda. *Adult Education Quarterly*, 67(2), 79-96. <https://doi.org/10.1177/0741713616685143>.
- Awgichew, S., & Seyoum, Y. (2017). Integrated functional adult literacy: Existing practices and challenges in Eastern Ethiopia. *International Journal of Education & Literacy Studies*, 5(4), 86-97. <http://dx.doi.org/10.7575/aiac.ijels.v.5n.4p.86>.
- Awgichew, S., & Seyoum, Y. (2017). Integrated functional adult literacy: existing practices and challenges in Eastern Ethiopia. *International Journal of Education and Literacy Studies*, 5(4), 86-97.
- Berry, J., Billings, H., Ernste, L., Soto, M., Frimannsdottir, K.... & Patten, C. (2017). Development of a self-directed, online-learning curriculum to increase community-engaged research in clinical and translational science. *Journal of Clinical and Translational Science*, 1, 135-139. <https://doi.org/10.1017/cts.2016.19>.
- Bolton, L (2017). *Effective adult education. K4D Helpdesk Report*. Brighton, UK: Institute of Development Studies.
- Castle, L., Colby, S., Kattelman, K., Olfert, M., Mathews, D....& White, A. (2019). Development of the iCook 4-H curriculum for youth and adults: Cooking, eating, and playing together for childhood obesity

- prevention. *Journal of Nutrition Education and Behavior*, 51(3), S60-S68. <https://doi.org/10.1016/j.jneb.2018.11.006>.
- Cholewinski, M. (2009). An introduction to constructivism and authentic activity. *Bulletin of the Faculty of Contemporary International Studies*, 9(5), 238-316.
- Connolly, B. (2013). Adult education in times of crisis: from Trojan Horses to New Ethics. *EXPLORE The quarterly magazine from AONTAS, the National Adult Learning Organisation*, 24, 15-17.
- Dagar, V., & Yadav, A. (2016). Constructivism: A program for teaching and learning. *Arts and Social Sciences Journal*, 7(4). DOI: 10.4172/2151-6200.1000200.
- Fernandez, R., Peyton, J., & Schaezel, K. (2017). A survey of writing instruction in adult ESL programs: Are teaching practices meeting adult learner needs? *Journal of Research and Practice for Adult Literacy, Secondary, and Basic Education*, 6(2), 6-20.
- Gabriel, M. N., Mwangi, J., Ngesu, L., Muasya, I., & Vengi, A. K. (2016). *The challenges facing adult and continuing education in Kenya. The challenges facing adult and continuing education in Kenya (Unpublished masters' thesis)*. University of Nairobi, Kenya.
- Govinda, R. (2017). *The Status of Adult Learning and Education in Asia and the Pacific*. UNESCO Institute for Lifelong Learning
- Gunduz, N., & Hursen, C. (2014). Constructivism in teaching and learning: Context analysis evaluation. *Procedia-Social and Behavioral Sciences*, 191(15), 526- 533. DOI: 10.1016/j.sbspro.2015.04.640.
- Iucu, R., & Marin, E. (2014). Authentic learning in adult education. *Procedia-Social and Behavioral Sciences*, 142(14), 410- 415.
- Lakstian, V. (2016). The contributions of literacy skills to national development. *Leksema Journal*, 1(2), 111-118. DOI: 10.22515/ljbs.v1i2.101.
- Lovren, V., & Popovic, K. (2017). Lifelong learning for sustainable development: Is adult education left behind? In: Leal Filho W., Mifsud M., Pace P. (eds) *Handbook of Lifelong Learning for Sustainable Development*. World Sustainability Series. Springer, Cham. https://doi.org/10.1007/978-3-319-63534-7_1.
- Mabuza, R. V. (2019). *Perceptions of adult education teachers about their working conditions in the Adult Basic Education and Training programme in the Gauteng East Education District (Doctoral dissertation)*. University of South Africa, South Africa.
- Mollel, E., Momanyi, M., & Ateka, F. (2019). Effectiveness of adult education program in promoting development among the Maasai Community in Arusha District Council, Tanzania. *Journal of African Interdisciplinary Studies*, 3(8), 211- 229.
- Mugenda, O. M. & Mugenda, A.G. (2003). *Research Methods, Quantitative and Qualitative Approaches*. ACT, Nairobi.
- Munialo, M. J. (2017). *Paradigm shifts in access and trends in the management of education for societal development*. Retrieved 15th April 2020 from <http://erepository.kibu.ac.ke/handle/123456789/567>.
- Németh, B. (2015). Lifelong learning for all adults? A new concept for the United Nations educational, scientific and cultural organization—Limits and opportunities for a changing intergovernmental organization. In *Global perspectives on adult education and learning policy* (pp. 165-178). Palgrave Macmillan, London.
- Ngaruiya, B. N. (2012). *An analysis of the learning resource centre concept and its implication for diploma teacher training colleges in Kenya (Unpublished Thesis)*. Kenyatta University, Kenya. <https://ir-library.ku.ac.ke/handle/123456789/4836>.
- Nkiru, O. (2015). Quality assurance in the effective teaching and learning of adult education for national development and sustainability in Nigeria. *Inosr Arts and Management*, 1(1), 9-14.
- Nyatuka, B. O., Ndiku, J. M., & Kakamega, K. (2015). Adult and Continuing Education in Kenya: The Need for Transformative Leadership. *World Journal of Education*, 5(1).
- Obiozor, O., & Aniemeka, G. (2019). Strategies for repositioning instruction in adult learning centres for sustainable development of adult learners in Umuahia, Abia State. *International Journal of Educational Benchmark*, 14(1), 1-10.
- Okemwa, J. M. (2012). *Factors influencing implementation of post literacy programme in Kenya: The case of adult education centers in Homa Bay District (Doctoral dissertation)*. University of Nairobi, Kenya.
- Orodho, J. A. (2016). Financing Adult Education: How Adequate are Current Sources in Facilitating Access and Participation in Centres in Murang'a South Sub- County, Murang'a County, Kenya? *Journal of Education and Practice*, 10.
- Richmond, M., Robinson, C., & Sachs-Israel, M. (2008). *The global literacy challenge: A profile of youth and adult literacy at the mid-point of the United Nations literacy decade 2003-2012*. Paris: United Nations Educational Scientific and Cultural Organization.
- Sokolovsky, Y. V. (2015). On Lifelong Learning in China: Old Patterns and New Prospects. *Journal of Siberian Federal University. Humanities & Social Sciences*, 11(8), 2663- 2668. DOI: 10.17516/1997-1370-2015-8-11-2663-2668.
- Srisawang, L. (2015, July 6). Community Learning Centres in Thailand. Retrieved 3rd April 2020 from <https://www.dvv-international.de/en/adult-education-and-development/editions/aed-742010/experiences-from-asia/community-learning-centres-in-thailand/>.
- Taylor, E., Tisdell, E., & Sprow, K. (2010). *Financial literacy for adult learners in community-based settings: A mixed methods study*. Paper presented in the 2010 Adult Education Research Conference Proceedings, Sacramento, CA.
- Thomas, A., Menon, A., Boruff, J., Rodriguez, A., & Ahmed, S. (2014). Application of social

- constructivists learning theories in knowledge translation for healthcare professionals: A scoping review. *Implementation Science*, 9(54). <https://doi.org/10.1186/1748-5908-9-54>.
- UNESCO (2013). *Data for sustainable development goals*. Paris: UNESCO Publishing.
- UNESCO (2012). Graduate Employability in Asia. ISBN: 978-92-9223-395-2 (Electronic version), pp. 59-85. Publisher: UNESCO Bangkok
- UNESCO (2008). *Community learning centres: Country reports from Asia*. Bangkok: UNESCO Office Bangkok.
- Weldemichael, F. A. (2018). *Integrated Functional Adult Literacy Education for Empowerment and Sustainable Development in Ethiopia* (Unpublished thesis). University of Oslo.
- Yeoh, E., & Chu, K. (2012). Literacy, education and economic development in contemporary China. *China ASEAN Perspective Forum*, 2(1&2), 11-83. <http://dx.doi.org/10.2139/ssrn.2207559>.