Research article

Integrated functional adult education program and its contributions for livelihoods in Ethiopia

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1. Introduction

There is a general agreement that literacy is a precondition for development and that it enhances the ability to make choices and control one’s own and collective life. Particularly, adult literacy when smoothly linked to development activities can benefit learners to enjoy a better life through improvements of their daily activities as it enhances their capabilities (Grotlüschen et al., 2019; Robinson-Pant, 2016). Moreover, literacy skills are fundamental in making informed decisions and in increasing personal empowerment (Wurti, 2019). Particularly, functional adult literacy that is directly related to the livelihoods of individuals can potentially guide the day-to-day life of the participants. UNESCO (2019) asserted that functional literacy is a basic tool to bring development and to create well-being among the society. It can help adults to improve their social, economic, and family life (Basu et al., 2013). Furthermore, Rogers (2001) explained that functional literacy contributes to improving livelihoods as practical guidance to meet both literacy and livelihood. Concerning the functionality of the literacy programs, OECD (2012) stated that adults without literacy skills are poor in their health and less in social interactions. Rogers (2016) indicated that adults who acquire functional literacy skills are more likely to have a voice that can make a difference in their social and economic life. Having functional skills, therefore, can have a positive relationship with economic, social, and family-related outcomes. Therefore, Functional Adult Literacy is the ability to engage in all activities in which literacy is required for the effective functioning of the individual, group, or community. According to Adediran and Odunuga (2013), the integration of literacy skills with livelihood can potentially support adult learners to overcome their daily life challenges.

Functional adult literacy (FAL) program that has been commenced in Ethiopia is known as Integrated Functional Adult Education (IFAE). It is a two-year training program that is implemented in collaboration with agriculture, health, education, and social affairs sectors for the target groups ranging from 15–60 years old (MoE, 2010). According to Isa (2019), an integrated literacy program can improve adult learners’ capacity to engage in productive activities and meet their objectives in life. Besides, Sywelem (2015) noted that IFAL improves the innovative and creative skills of adult learners in transforming their local contexts. UNESCO (2015) pointed out that the IFAL is the starting point for basic education but it is not sufficient unless it is linked with local livelihoods.

In developing countries like Ethiopia, adult education programs need to be tailored to address the socio-economic life of the local needs (Robinson-Pant, 2016). One of the local circumstances that engage adults in adult education is the utility and relevance of the programs to the local context’s needs. Thus, connecting the program to the needs of learners could make literacy programs meaningful (MoE, 2016).

To make an adult education program relevant to learners, designing the program in a way that addresses their needs and can earnestly contribute to their lives is very important. According to the ministry of education of Ethiopia, MoE (2010), adult education program has to follow a practical approach to the specific needs of the local community.

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Depending on the needs of the country, an adult education program that upholds the livelihood of the poor has been planned. Blunch (2017) recommended that the literacy program delivered in a given country is expected to address the livelihoods gap of target group. Ethiopia whose most adults are illiterate is experiencing poverty. To alleviate this widespread poverty, accessing educational opportunities to deprived citizens is the major means (MoE, 2010). Consequently, renewing adult education with a specific focus on functional adult literacy is one of the strategies that has been used (MoE, 2016). In doing so, different programs like Adult Basic Education (ABE), Integrated Functional Adult Literacy (IFAL), and currently Integrated Functional Adult Education (IFAE) have been delivered (MoE, 2016). To mitigate the problem of illiteracy and improve the livelihood of the community, the IFAE program has been being implemented in the country. The purpose of the program is to make participants acquire literacy skills that help them use to improve their livelihoods.

2. The adult education program in Ethiopia

2.1. Historical background of literacy in Ethiopia

The concept of adult literacy’s functionality was introduced into Ethiopia in the mid-of twenty century. In 1968, a ‘work-oriented adult literacy program’ which was a donor-driven experimental program was commenced (Sandbaas, 2009). Since it was an externally motivated program and run during the political instability of the country, it was not successfully implemented (Fisseha, 2001). As Weldemichael (2018) stated, the work-oriented literacy program of 1968 failed because of two reasons: the first one was the problem of language. One language (Amharic language) which was the central government working language was used in all nations and nationalities irrespective of their needs. The program overlooked the multinational and multilingual issues. The other reason was the problem of the program’s centrality. The facilitators of the program were trained by staff of UNESCO who were considered as ‘specialists’. Local facilitators who most likely had good rapport with local community did not participate.

After two decades, adult literacy entered into a new phase in Ethiopia as a result of regime replacement. In the late twenty century, a socialist government declared a literacy campaign at the national level (Kenea, 2014). The campaign reached every corner of the country and knocked on almost every door. It was aimed at eradicating adult illiteracy and tackling poverty. Although a significant number of adults, 22 million, reached through the campaign, illiteracy relapsed as the campaign was top-down and politically motivated (Kenea, 2014; Weldemichael, 2018). During the campaign, adult literacy was used for indoctrination.

In 1991, the socialist government system was replaced by a new government system known as, “EPDRF”. For almost a decade, no initiative from the new government was taken on adult education as the new leaders wanted to dismantle the institutional memories of the previous adult literacy effort (Kenea, 2014). During that time, the educational and training policy of the country and the Educational Sector Development Programs (ESDPs 1 & II) 1997–2005 did not address adult education and adult literacy, however, some NGOs were providing it outside of the general policy context (Weldemichael, 2018). Unlike the first Education Sector Developments Programs (ESDPs), in the third ESDPs (2005/6–2009/10), a Functional adult literacy program was included (MoE, 2010).

Adult illiteracy and poverty rates remain high in Ethiopia though the country embarked on an adult education program in integrated form since 2010 (MoE, 2010). IFAE program has targeted people whose ages range from 15 to 60 and who have not got a chance of formal education due to poverty, lack of inclusion equity, and access to the education system. The modality of the program has been in integration form in which different sectors were assumed to work together on seven thematic areas: agriculture, health, income generation, ethics and civics, education, environmental protection, gender and life skills (MoE, 2016). To address the issues of these themes, literacy skills are used as a tool to make them successful.

2.2. The socio-economic and adult education in Ethiopian context

Literacy has a multi-purpose and it has to be integrated with the socio-economic lives of participants and social activities situated in the context of livelihoods. Literacy as social activity enables adult learners to engage in improving their conditions, which in turn gives meaning to literacy (Kenea, 2014). However, in the Ethiopian context, multilingualism, ideological perspectives, high illiteracy rate, and lack of livelihoods diversification have been the barrier to literacy progress to contribute to livelihoods improvement (Alidou and Glanz, 2015). Furthermore, the participatory approach, which is the appropriate framework for adult education program design, is ignored. In Ethiopia, the program is developed without proper consideration of target groups’ needs; it depends on centrally imposed ideas irrespective of adult education program principles. It fails to mediate and balance the literacy and livelihood integration for rural, urban and semi-urban contexts of participants. This overlooked approach of designing and developing adult education program, however, it is the means of harmonizing methods and contents in a way that contributes to livelihoods (Ianinska et al., 2012).

The attempt made during the socialist government was not free from challenges as the influences of ideology dominated the professional views. Besides, it was not participatory. Needs and experiences of learners were overlooked. The program was planned centrally irrespective of local needs, language, culture, and livelihoods. The decision in using own language in literacy was considered as undue regard. Hence, the misfit of the Integrated Functional Adult Education with livelihoods of participants’ situation might have been brought about by wrong ideology of adult education.

Different researches were conducted on Integrated Functional Adult Education. For instance, Awigchew and Seyoum (2017) explored the practices and challenges of Integrated Functional Adult Education program implementation, Weldemichael (2018) Integrated Functional Adult Education for empowerment and sustainable development, and Gizaw et al. (2019) explored facilitators’ roles in IFAE. Wirtu (2019) conducted its comparative perspectives. These researches primarily focus on the historical, comparative, and policy frameworks of adult education programs. The researchers did not emphasize the functionality of programs in improving the livelihoods of adult learners. This implies that contributions of IFAE program to improve the livelihoods of the participants needs assessment.

This study is, therefore, intended to contribute to the gaps that exist in the IFAE program. Hence, the purpose of this research was to assess the contribution of the Integrated Functional Adult Education program in improving the livelihood of participants. To this end, the researchers intended to answer the following basic research questions:

- What are the contributions of the IFAE program in enhancing the family life, economic status, and social interactions of adult learners? and
- What are the views of participants toward the IFAE program to make it more effective in contributing to their livelihoods?

3. Method

The study was aimed at assessing the roles of the IFAE program in enhancing the livelihoods of adult learners. In doing so, embedded mixed method design in which the quantitative data were mainly used and qualitative data substantiate the quantitative data were applied. This design helps one data set provides a supportive base for primary data (Creswell and Creswell, 2017). This study was approved by the research ethical committee (Committees’ names- Bonsa Tola; Feyisa Mulisa and Tesfaye Gemechu) of the Institute of Educational and Behavioral Sciences.
The confidentiality was guaranteed by informed consent. All the participants agreed with the informed consent to guarantee and protect their confidentiality. As the participants of the study were semi-literate and could not fully understand the written texts, the researchers used oral consent and they reached a common consensus on the objectivity of the research.

3.1. Research context

To minimize the number of illiterate citizens and to alleviate poverty, various programs were launched. ABE (Adult Basic Education), FAL (Functional Adult Literacy), IFAL (Integrated Functional Adult Literacy) have been designed and implemented in the country subsequently one after the others (MoE, 2016). Nowadays, evolved program known as Integrated Functional Adult Education (IFAE) programs is running to enhance adult literacy and to bring development (MoE, 2016). In this program, the literacy-led approach of integrating agriculture, health, income generation, ethics and civics, education, environmental protection, gender, and life skills are followed. The target groups of the program were people whose ages ranged from 15 to 60 and who had no chance of education due to lack of access to schooling and/or family responsibilities.

3.2. Sampling

The multistage sampling technique was used as the research was conducted in a Zone with 6 Woredas (medium administrative unity that is similar to district). Each of Woreda consists of several literacy centers. To this end, three Woredas were selected by simple random sampling. Then, from each Woreda, 4 literacy centers which accounted for twelve centers were included. Finally, 235 participants were selected by simple random sampling out of 621 population who attend the IFAE program for two years. The sample size was determined depending on the sample determination box given by Cohen et al. (2007). Furthermore, 24 adult learners who had better performance, and relatively had better attendance were purposefully included for semi-structured interviews.

3.3. Data collection

Data were gathered both quantitatively and qualitatively for this study. The quantitative data were collected through structured interviews that have five-point Likert Scale items ranging from strongly disagree to strongly agree. The rationale for the use of the structured interview for the study was that participants could not fully capture the theme of the questions if it was provided in the self-administered approach. These questions that could capture the roles of the IFAE program towards the livelihood of the participants were developed by researchers to gather data about the roles of the IFAE program on the family life, economic aspects, and social life of the target groups. The assistant data collectors interviewed the interviewees with the immediate follow-up of the researchers. Furthermore, a semi-structured interview was conducted to assess the views of adult learners on the aspects that could make the program contribute more to the improvement of their livelihoods.

The researchers employed the semi-structured interview for purpose of one-to-one encounters in which the interviewers used a semi-structured set of issues that guided the discussion to explore and uncover issues in the life of the participants of the study subsequently.

3.4. Pilot test

The data gathering tools were tested for the reliability of the finding using a pilot test. Before actual data collection, the structured interview was administered for 50 participants of the pilot study apart from the actual research participants. Pilot test for 50 Integrated Functional Adult Education participants (25 males and 25 females) that they were not parts of the study to measure the validity and reliability of the data gathering tools. The Cronbach Alpha coefficient of reliability and consistency is used to measure the internal consistency of the scales. Accordingly, reliability of Cronbach alpha 0.856, 0.882, and 0.873 for family life, economic issues, and social life were respectively obtained.

3.5. Data analysis

The responses to the structured interviews were analyzed quantitatively. Grand Mean and standard deviation were computed to describe the roles of the IFAE program on the family life, economic aspects, and social life of the participants. To check whether the program has significant differences in contributing to various types of livelihoods (i.e., daily laborer, farming, and non-farming activities) One Way ANOVA (Analysis of Variances) was run. The items were classified into different tables according to similarities of the issue raised in the structured interview.

Concerning the qualitative method, the recorded data from the interview were initially transcribed, and then, the core concepts were categorized containing themes, and then thematic analysis was employed. Finally, the major findings under each topic and sub-topic were analyzed by organizing, summarizing & interpreting.

4. Findings

In this section, two major themes were initially identified. Then, firstly, the roles of the IFAE program were explored in which the contribution of the IFAE program on family life, economic status, and social cohesion of adult learners were assessed. Then, the views of respondents toward better ways of implementing the program to improve their livelihood were addressed.

4.1. The roles of the IFAE program in enhancing the livelihood of adult learners

4.1.1. The contribution of the IFAE program for the family life of participants

Sampled respondents were requested to rate a list of items that indicate the roles of the IFAE program for the improvement of family lives. The following Table 1 shows the result of their responses.

Table 1 is the first ANOVA output that provides descriptive statistics. Accordingly, the mean and standard deviation values for casual labor, farming, and non-farming are 3.84 (.39), 3.82 (.42), and 3.75 (.45) respectively. From these results, it is possible to conclude that the IFAE program has contributed to enhancing family-related issues of all the three types of livelihoods. To see a significant difference among the means, F-table was portrayed below.

A One Way ANOVA was run to test if there is a significant difference in the family life of IFAE program participants because of the livelihood of the participants (casual labor, farming, and non-farming). The result of ANOVA shows that significant difference across different types of livelihoods is not observed because of the IFAE program (F2, 232 = .668, P = .519).

The data gathered through interviews supported the data gathered through quantitative data. Most of the interviewees reflected that the program made them treat their family cases in a wiser approach. For instance, one of the interviewees stated that as a result of the program she began trying to feed her children a variety of foods. Another interviewee added, “I am awaked from backwardness. I begin keeping my personal and environmental sanitation. I have a dug toilet ditch to use.” Still another interviewee witnessed that the program helped her apply family planning. The following is a quote from one of the respondents:
After acquiring literacy skills, I got exposure to share different life experiences. When I tell my husband that we should start family planning methods depending on my exposure, he tells me that he is ready to have as many children as we can, but I repeatedly persuaded him that family planning is important to rear our children properly. Finally, he admitted and we have decided to have a few number of children.

The ability to read and write also helped them to communicate effectively at the hospital. An interviewee expressed the benefit of the program as follow:

When I was non-literate, I used to face problems regularly. One day, I took my child to the hospital for treatment. They ordered me to give a sample of the blood by calling the number of the room, but I could not find the laboratory room as I was unable to read numbers from the paper they gave me. On that day I had decided to attend the literacy program. Now, after attending the program, getting services in hospitals and clinics is easier for me as I can identify numbers.

4.1.2. The contribution of the IFAE program in improving the economy of the participants

Several questions were posed to respondents to find out the roles of the IFAE program in enhancing their economy. The mean and standard deviation of the responses have been displayed below.

Table 1. Group statistics on the contribution of IFAE program for family life.

| N     | mean  | SD  |
|-------|-------|-----|
| Casual labor | 39    | 3.84| .39 |
| Farming     | 144   | 3.82| .42 |
| Non-farming | 52    | 3.75| .45 |
| Total       | 235   | 3.81| .42 |

Another participant expressed the benefit of the program as follow:

"Literacy skills enhanced my skills in income generation. I used to think that literacy was merely to read and write. Now, I recognized that it could potentially change my day-to-day life if I can use it. Though I am not effectively applying it in my daily life, I began benefiting from it. For example, I can calculate income, expenses and also I begin keeping records."

The data obtained from the interview confirmed that the participants' income generation and saving skills were improved as of acquiring literacy skills. They also attested that the general awareness about the economy changed and they began diversifying their livelihood. One of the participants stated that:

"My livelihood entirely used to depend on agriculture alone and I had not tried any other means of livelihood. After attending the IFAE program, I tried other means of living. Now, I have begun keeping bees though I have not yet benefited from it. I am waiting for the benefit and I hope there will be a positive effect."

4.1.3. The contributions of the IFAE program in enhancing the social life of participants

Various questions were posed to respondents to find out the roles of the IFAE program on their social life. The responses of the respondents have been displayed in Table 3 below.

Table 2. Group statistics on the contribution of the IFAE program in improving economy.

| N     | Mean  | SD  |
|-------|-------|-----|
| casual labor | 39    | 4.20| .38 |
| Farming     | 144   | 4.10| .44 |
| non-farm activity | 52    | 4.12| .40 |
| Total       | 235   | 4.12| .42 |

Another participant expressed the benefit of the program as follow:

"I am a Christian religious follower and I wished to read Bible verses, but I could not. After attending the IFAE program, however, I can read the verses for myself and groups as well. Even, I can stand in front of the congregation to address biblical messages."

The ANOVA result suggests that there is no significant difference in the economic productivity of IFAE program participants because of their livelihood categories (casual laborers, farming, and non-farming activities). The ANOVA result shows that significance difference across different types of livelihoods is not observed (F2, 232 = .937, P = .393).

The qualitative data also showed that the participants have benefited economically as they attended the program. As one of the interviewees said, before acquiring literacy skills she was engaged in less productive activities. However, after engaging in literacy, she stated that she began to use modern farming technology. She reported that:

Before I began attending the program, I did not know about fattening animals. Now, the program encouraged me to start new things that I have not tried before and I began cattle fattening. I am successful in doing so.

Table 1. One Way ANOVA for family issues.

| Sum of Square | df | Mean Square | F    | Sig. |
|---------------|----|-------------|------|------|
| Between groups | .232 | 2   | .12  | .668 | .519 |
| Within Groups  | 40.80 | 232 | .18  |      |      |
| Total          | 41.04 | 234 |      |      |      |

The mean difference is significant at the .05 alpha level.

Table 2. One Way ANOVA for economic issues.

| Sum of Square | df | Mean Square | F    | Sig. |
|---------------|----|-------------|------|------|
| Between groups | .337 | 2   | .168 | .937 | .393 |
| Within Groups  | 41.67 | 232 | .180 |      |      |
| Total          | 42.006 | 234 |      |      |      |

The mean difference is significant at the .05 alpha level.
Besides, the views expressed during the interview showed that the IFAE program helped them reduce conflict in their family. They reflected that problem-solving skills were acquired as a result of the program. Hence, IFAE participants can handle differences and avoid disagreement. One of the participants stated the role of the IFAE program as follows:

I did have poor tolerance skills to my family’s ideas. Most of the time, when a member of a family disagreed with my ideas, I used to feel very annoyed. Now, I understand that there could be various ideas.

Feeling inferiority because of a lack of literacy skills was one of the challenges that the participants solved. The ability to read and write in the community was taken as betterment and a person who had these skills feel secure in social interaction. One of the participants stated that:

I used to avoid going to a place where skills of writing are required. I sent my son or daughter and I alienated myself from such places as those who have skills of writing undermine me. Thanks be to the IFAE program. Now, I can write my name and sig.

Most of the respondents stated that their social interactions, solving conflict, and ability to interact with their neighbors enhanced because of the program.

4.2. Views of participants toward the IFAE program in making it effective in contributing to their livelihood

The second objective of this paper was to assess the views of participants on how the IFAE program become effective. The respondents have reflected their views depending on the questions forwarded to them.

For the better contribution of the Program for their livelihood, the respondents pointed out that the roles of facilitators as one of the very important components. The way they approach adult learners and their maturity in handling their needs affect the success of the program. The following excerpts are one of the views of learners toward facilitators:

The problem I observe as an adult learner is that the newly assigned facilitators are not well prepared to facilitate and guide us. During facilitation, they do not listen to our ideas. Our views are not entertained. They want to pass on their idea to us. Their action is to show that they are more knowledgeable than us. So, if they listen and value adult learners’ ideas and help us accordingly, we can learn and benefit more from the program.

Another interviewee added:

All the facilitators are from our locality; I know them well. They become facilitators, as they want to serve their community for free. But, they lack skills for facilitating; they prefer dominating learners rather than listening.

The contents incorporated in the learning materials need improvement for the success of the program. The respondents during the interview expressed that some content they attend during the literacy program was unrelated to their daily life. They explained that the contents of the literacy program need modification to make it more applicable to life. One of the respondents explained the nature of the contents as follow:

Some of the contents of the literacy program are not related to our day-to-day life experience. Some contents talk about things that do not exist in our locality although we spend our time dealing with those contents. For instance, in our locality, there is no fishing activity, yet it is included in the learning materials. In my view, such contents should be replaced with the contents that are related to our life, for instance, beekeeping.

Concerning the relevancies of contents, the majority of interview respondents disclosed that their needs were not assessed during the development of learning materials. One of the respondents who were the leader of the community stated that:

I am Aba Gada (indigenous religion leader). My people expect me I know many things that focus on our community. But, I neither participated in any needs assessment nor heard that other community representatives participated in any program that wants to know our community’s needs. If the government comes to our locality and asks what we need, we can inform them of many things that would be included in the learning materials.

Although the respondents did not refute that they were benefiting from the program, they insisted on explaining that their needs should be known by the material developer to address them. For better usage, however, they had recommended that if their needs were considered during learning materials preparation, they benefit a lot from the program.

The knowledge of material developers about the needs of the local people can make the material more effective. The respondents mentioned some of the skills that they want to acquire from the literacy program. They said that if the literacy learning materials prepare them to utilize technologies such as mobile phone usage, bank account running, and joining various enterprises, literacy skills will contribute a lot to the enhancement of the livelihood of the participants. One of the respondents expressed the importance of technology as follow:

Although I am a farmer, I want to use the internet. My daughter is in Europe and she wants to talk with me by using the internet system. But, I do not know how to use that. I only call her on a thorough cell phone. If the program trains us on how to use computers and the internet, it will be a good program for us.

The respondents stated that the program have two levels (level 1 and Level 2) and they said that after completing level 2, there are no other means of continuous learning. To make the program effective in changing the livelihood of participants, according to the views of the respondents, its continuity is crucial. One of the respondents stated that:

Establishing a system that ensures continuity of the program is one of the means that motivate us. The government should adjust the program so that it allows us to study further.

According to respondents’ views, the continuation of the program encourages them to pursue the program as it gives them more opportunities for learning.

5. Discussion

Research suggests that adult literacy is indispensable for socio-economic development. Lind (2008) asserted that literacy, whether acquired in school or adult literacy programs, has an affirmative influence on development. Similarly, Robinson-Pant (2010) and Rogers (2016) expressed that adult literacy helps learners to improve their living. This study explored the roles of the IFAE program in enhancing the livelihood.
of adult learners as well as their views toward a better means of implementing the program.

The results of the study have shown that the IFAE program has considerably taken part in enhancing the livelihood of participants. It was found out that participants’ family life conditions were improved because of the program regardless of the livelihood they engaged in. Their knowledge of using family planning, working for well being of their family condition, keeping their personal and environmental hygiene, and managing their household had got better by the program. These findings agree with Robinson-Pant (2016). The author claimed that literate people could meaningfully contribute to the well-being of their families. Hartley and Home (2006) also expressed that literacy has a direct contribution to upholding the family’s condition.

The program also brought change to the economy of the participants. The finding showed that the program enhanced their earning capabilities, knowledge of utilizing resources, and the ability to manage their income. It has also improved their skills in managing their income and expense. This finding considerably consistent with the verdict of Hassaan (2014) which stresses that acquiring literacy skills can improve the culture of saving, keeping records of daily contributions, and dealing with financial activities. The program has helped them to have the capability skills of budgeting their time and resources, which are indicators of their livelihood enhancement.

Furthermore, the findings have demonstrated that the IFAE program positively influenced the social life of the participants. The program helped the participants develop their social interaction, social inclusions, information exchanges, and the ability to understand one another. The finding attuned with Rogers and Street (2011) views. According to these scholars, literacy is not seen only as an activity that takes place of decode but also engagement in a variety of social activities place in day-to-day life, family, and in the marketplace. Street (2016) also pointed out that literacy skills serve as social skills intervention and interaction. For Akram (2011), a goal-oriented literacy program can be applied in the different practical fields in which society benefit from it to uphold its well-being.

The second leading question was posed to assess the views of respondents on a better way of improving the implementation of the program of IFAE. The result of the analysis illustrated that a well-trained facilitator, consideration of the needs of learners, and future directive of the program were found as a base for improvement of the program. According to the views of the respondents, if facilitators of the program have better skills of listening and understanding adult learners’ needs, adult learners would be more motivated to attend the program and the program would benefit more. The theory of adult learning states that someone who wants to help adult learners need to acknowledge their needs (Rogers and Horrocks, 2010). Since they know about themselves more, adult learners are not ready to accept decisions made without their consent (Loeng, 2018).

Understanding the needs of adult learners is crucial means to approach them and this was recommended by learners that the contents of learning materials should focus on the areas where they immediately get a benefit. Knowles (1990) & Blondy (2007) strongly assert that adult learners need to participate in deciding what they learn and how they learn. When decisions are made in participatory, adult learners develop ownership feeling toward the program (Nuckles, 2000).

Continuity of the program to the next level was also recommended by participants. They desired to assure that their learning can be continuous. If the programs merely end at level 2, they stated that they would be demotivated to attend the programs. One of the adult learning principles stated that adults want to know what and why they learn (Blondy, 2007). So, if the goal of the program is clear and vivid their interest to learn significantly increases.

6. Conclusions

The researchers acknowledge that this research has limitations. The result depends on participants’ saying to conclude about the contribution of literacy on livelihood and it also did not control other factors that could influence the result of the study. Therefore, a more advanced analysis that also considers diverse contexts needs to be conducted for generalization.

When literacy skills are integrated with the livelihood of adult learners, they positively influence their livelihood regardless of their livelihood types. Therefore, delivering literacy skills seem to play a considerable role in adult learners life in making them healthier, more economically productive and more socially engaged. To help recipients benefit more from literacy skills, presenting in an integrated approach tends to help them. Furthermore, the skills and knowledge the facilitators possess appear to influence the functionality of literacy skills in enhancing the livelihoods of participants. For the success of the program, the needs of attendants of adult education programs ought to be assessed in line with its integration. The contents of learning need to be derived from learners’ needs. The system that has a qualification framework and transfer directives that motivate learners can be the approach that leads the program for future implementation.

Declarations

Author contribution statement

Temesgen Oljira: Conceived and designed the experiments; Analyzed and interpreted the data; Wrote the paper.

Muleta Hailu: Performed the experiments; Contributed reagents, materials, analysis tools or data.

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The authors declare no conflict of interest.

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References

Abedirin, A.A., Oduhuwa, J.O., 2013. Refocusing adult literacy, non-formal education and long life learning education for multiliteracies in Africa. In: A Paper Presented at the 57th World Assembly of the International Council of Education for Teaching (ICET 2013) at Sukhothai Thammathirat Open University in Thailand, Akram, M., 2011. Adult Literacy in National Commission for Human Development, Pakistan, Alidou, H., Glanz, C., 2015. Action research to improve youth and adult literacy: Empowering learners in a multilingual world. UNESCO.

Awigichew, S., Seyoum, Y., 2017. Integrated functional adult literacy: existing practices and challenges in Eastern Ethiopia. Int. J. Educ. Literacy Stud. 5 (4), 86–97.

Basu, K., Maddox, B., Robinson-Pant, A. (Eds.), 2013. Interdisciplinary Approaches to Literacy and Development. Routledge.

Blondy, L.C., 2007. Evaluation and application of andragogical assumptions to the adult online learning environment. J. Interact. Online Learn. 6 (2), 116–130.

Blunch, N.H., 2017. Adult literacy programs in developing countries. IZA World of Labor.

Creswell, J.W., Creswell, J.D., 2017. Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. Sage publications.

Cohen, L., Manion, L., Morrison, K., 2007. Research methods in education. In: Research Methods in Education. Routledge, London and New York.

Fisseha, A., 2001. Education and the Formation of the Modern Ethiopian State, 1896-1974 (PhD dissertation).
Gizaw, A.M., Rogers, A., Warkineh, T.Z., 2019. Leaving the job half done? An analysis of mid-term withdrawals by facilitators in some adult literacy learning programmes. Int. J. Educ. Dev. 65, 194–206.

Grotlüschen, A., Buddenberg, K., Redmer, A., Ansen, H., Dannath, J., 2019. Vulnerable subgroups and numeracy practices: how poverty, debt, and unemployment relate to everyday numeracy practices. Adult Educ. Q. 69 (4), 251–270.

Hartley, R., Horne, J., 2006. Social and Economic Benefits of Improved Adult Literacy: towards a Better Understanding. National Centre for Vocational Education Research.

Hassan, M.A., 2014. Literacy education and attainment of sustainable livelihood in the informal sector of the Nigeria economy. J. Educ. Soc. Res. 4 (3), 209.

Isa, A., 2019. Exploring the efficacy of functional literacy in adult literacy centres in Kano state, Nigeria. ATBU J. Sci. Technol. Educ. 7 (2), 91–98.

Kenea, A., 2014. Adult basic literacy“initiatives” in Ethiopia: change and continuity. J. Crit. Educ. Pol. Stud. 12 (1).

Knowles, M., 1990. The Adult Learner: A Neglected Species, fourth ed. Gulf Publishing, Houston.

Lind, A., 2008. Literacy for All: Making a Difference. UNESCO.

Loeng, S., 2018. Various Ways of Understanding the Concept of Andragogy. International & comparative education.

Ministry of Education, 2010. National Adult Education Strategy IV. Addis Ababa: Ministry of Education.

Ministry of Education, 2016. Education Sector Development Program V. Ministry of Education, Addis Ababa.

Nuckles, C.R., 2000. Student-centered teaching: making it work. Adult Learn. 11 (4), 5–6.

OECD, 2012. Better Skills, Better Jobs, Better Lives: A Strategic Approach to Skills Policies. Organisation for Economic Co-operation and Development.

Robinson-Pant, A., 2010. Changing discourses: literacy and development in Nepal. Int. J. Educ. Dev. 30 (2), 136–144.

Robinson-Pant, A., 2016. Learning Knowledge and Skills for Agriculture to Improve Rural Livelihood. UNESCO, Paris.

Rogers, A., 2001. Some contemporary trends in adult literacy from an international perspective. Adult Educ. Dev. 56, 21–32.

Rogers, A., 2016. Sustaining literacy in Africa: developing a literate environment, Compare. J. Comp. Int. Educ.

Rogers, A., Street, B., 2016. Literacy as Social Practice; Implications for International Policy in Symposium on “Education and the Sustainable Development Goals in the Commonwealth and beyond: Shifting the Discourse”. The Ramphal Instituteand Education International, London.

Sywelem, M.M.G., 2015. Literacy and adult education in Egypt: achievements and challenges. Am. J. Educ. Res. 3 (7), 793–799.

UNESCO, 2015. Adult and Youth Literacy: UIS Fact Sheet. Institute for Statistics, Paris (32).

UNESCO, 2019. 4th Global Report on Adult Learning and Education: Leave No One behind: Participation, Equity and Inclusion. UNESCO, Hamburg.

Weldemichael, F.A., 2018. Integrated Functional Adult Literacy Education for Empowerment and Sustainable Development in Ethiopia. A Comparative Study of Tigray and Amhara Regions (PhD dissertation).

Wiru, D., 2019. Adult education in Germany and Ethiopia: a comparative perspective. Ethiop. J. Educ. 39 (1), 117–148.