



RELATIONSHIP BETWEEN TEACHERS' FACTORS AND LEVEL OF CURRICULUM IMPLEMENTATION IN NON-FORMAL EDUCATION INSTITUTIONS IN NAIROBI COUNTY, KENYA

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Abstract:

Effective curriculum implementation depends on internal institutional factors. This study aimed to assess the relationship between teachers' factors on the level of curriculum implementation in non-formal education institutions. This study employed Knowles's theory of andragogy. The study used a descriptive research design. The target population in this study comprised 178 learning institutions, 2,200 youths and adults, 90 teachers and 120 managers/heads of non-formal education institutions in Nairobi County. The sample size for the study was 327 learners and 90 instructors/teachers. Sixteen managers were included as key informants for the study. The study adopted a questionnaire for learners and teachers/instructors and an interview schedule for managers. An observation schedule was used to check on the facilities in the non-formal education institutions. The study conducted a pilot study to pre-test the research instruments to ascertain their reliability and validity. The relationship between the dependent and independent variables was tested using the Chi-Square test for independence. On the relationship between teacher factors and curriculum implementation, the findings show that training/qualification of teachers ($\chi^2_{df=6} = 16.188$; p-value=0.013), number of teachers ($\chi^2_{df=6} = 32.303$; p-value<0.0001), teachers' ability ($\chi^2_{df=6} = 20.471$; p-value=0.002), interaction at classroom level ($\chi^2_{df=6} = 23.789$; p-value=0.001), teachers' attitude ($\chi^2_{df=8} = 75.653$; p-value<0.0001) and turnover of teachers ($\chi^2_{df=8} = 53.050$; p-value<0.0001) have a significant relationship with curriculum implementation. The study recommends that the Ministry of Education and relevant stakeholders should establish targeted training and professional development programs for teachers in NFE institutions, with emphasis on pedagogical methods suitable for out-of-school learners.

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1. Introduction

As an empowerment tool, education is integral in uplifting the social and economic lives of marginalized out-of-school (OOS) youths. Youths can use education to lift themselves out of poverty and obtain the means to participate fully in development in their communities. This is because education has an important role in imparting and equipping adults and youths with the knowledge and skills necessary for production and survival (Poole *et al.*, 2013). Given the importance placed on the role of education in a country's growth and development, the government of Kenya has over time put enormous efforts and resources towards the education of its citizens since independence.

These efforts are exemplified by the continued huge budgetary allocations to the education sector. Kenya has committed to education of its citizens as provided for by policies such as the 1964 Kenya Education Commission, the Sessional Paper No. 10 of 1965, 1966 National Conference on Education and Rural Development (Kericho Report), The Board of Adult Education Act (revised 1967), the 1978 Presidential Directive on Fight Against Illiteracy, Sessional Paper No. 6 of 1988, the 1989 United Nations Convention on the Rights of the Child (CRC), Jomtien Declaration of Education for All (1990), the Dakar Framework for Action (2000) the 1990 African Charter on the Rights and Welfare of the Child, the 2000 Millennium Development Goals (MDGs) (2000), the 2003 Free Primary Education Decree and the Sessional Paper No. 5 of 2005 among others are indicators of commitment to provide education (National Policy Guidelines on Non-Formal Education (NFE) for Out of School Youth and Adults, 2005). The issue of basic adult education was not addressed by the Millennium Development Goals (MDGs). It indicates that there are almost 800 million illiterate adults worldwide.

The 2019 Population and Housing Census revealed that 3.5% of the Kenyan population had a university degree as their highest educational level. The most recent data suggests that approximately 7.8 million Kenyan adults are illiterate, representing 38.5% of the adult population. At the same time, education statistics for 2019 indicated that the completion rate at the primary level stood at 82%, while the transition rate from primary to secondary was 87.1% (Ministry of Education, Kenya, 2020). These figures imply that a significant proportion of learners either drop out before completing primary education or fail to progress to higher levels of learning. Consequently, large numbers of school-age children and young adults are left without the foundational skills necessary for further education and employment. This gap highlights the critical role of non-formal education (NFE) institutions, which provide a second chance for literacy, numeracy, and skills training to out-of-school youth and adults excluded by the limitations of the formal education system.

The number of youths and adults that remain un-served or underserved by the formal education system remains high (RoK, 2005b). The results of the Kenya National

Adult Literacy Survey (KNLS, 2020) revealed a national adult literacy rate of 61.5% and a numeracy rate of 64.5%, indicating more Kenyans were knowledgeable in computation than reading. Notably, 38.5% (7.8 million) of the adult population was illiterate. The survey showed disparities with women and rural areas exhibiting lower literacy rates than men and urban areas. The adult literacy rate is the percentage of people ages 15 and above who cannot read and write (Mol & Bus, 2011). This group accesses education through informal channels (Al-Fuwaires, 2011). The number of OOS youth and adults in the country is estimated at over one million, which is substantial and is attested to by their presence in large numbers on the streets, in informal settlements, and around rural and urban trading centers during school hours. The inadequacies of formal education relative to the needs and circumstances of its clientele constitute a source of justification for non-formal education and adult basic education (Al-Fuwaires, 2011).

To ensure quality assurance, the mandate of registering and regulating NFE institutions lies with the Ministry of Education through the Directorate of Basic Education. This is in line with the Basic Education Act (2013). Institutions are expected to be registered with the government to operate legally. However, many remain unregistered, particularly in urban informal settlements, which makes supervision and standardization difficult (Lanyasunya, 2024). Non-formal education seeks to ensure the total eradication of illiteracy and promotion of lifelong learning among the OOS youth and adults to equip them with skills and knowledge for making informed decisions, becoming self-reliant, and improving their livelihood. This is made possible by providing the OOS youths with basic communication and numeracy skills (Mbili, 2019).

Non-formal education aims to give a second opportunity to education for youth and adults who might have missed out due to diverse reasons and circumstances in accessing education. NFE avails opportunities for those willing to pursue continued education to improve their life and to be able to contribute effectively to national development. NFE offers content applicable to solving problems affecting those studying for different courses. The teaching methods are flexible for those wishing to progress with education in these non-formal education institutions (Yasunaga, 2014). The curriculum and organizational approaches include alternative modes to basic education, which have contributed to increased access to learning opportunities for OOS children, youths, and adults (Simac *et al.*, 2021). Learning is facilitated by volunteers and primary school teachers who have undergone training by development agencies such as ActionAid Kenya, and volunteer teachers who have just completed school. Non-formal education constitutes several programs, among them the basic literacy program (Handa *et al.*, 2009). The program aims at transmitting basic literacy, numeracy, and communication skills, targeting the 7.8 million illiterate Kenyans. It also helps in appraising adults with life skills, knowledge, and attitudes necessary for the improvement of their life and work performance (Team, 2008).

Assessment for placement or promotion to the next level is done by the teacher based on competencies at given levels. Some linkages and equivalences allow learners to link up with further education or join mainstream formal education and training (Ohashi

& Abid, 2019). They provide 'catch up' activities that enable the learner to be at par with their counterpart in mainstream formal education. After joining mainstream formal education, they can go up to the highest levels of education. The current scenario is such that institutions for OOS youth and adults offer any of the three curricula, namely the NFEC-KIE curriculum, the official curriculum for the 8-4-4 system of education, schools, or an institution-based curriculum (Aluvisia, 2016). Adult literacy and post-literacy classes use curriculum and materials developed by the Department of Adult Education (DAE) (Muiru & Mukuria, 2005). There is variability in the curricula offered across the NFE institutions. Non-formal education institutions operate under several curricula developed by different institutions, including the formal education curriculum and institution-based curricula. Teachers in NFE institutions are inadequate in numbers, not properly trained in content and delivery, and are poorly remunerated (Okemwa, 2012).

2. Literature Review

2.1 Teachers' Factors and the Level of Curriculum Implementation in Non-Formal Education Institutions

Teachers are central agents in the implementation of any curriculum. Their competencies, attitudes, professional preparedness, motivation, and workload directly influence the fidelity and success of curriculum implementation (Pabriaga, 2025). In non-formal institutions, where learners may have interrupted schooling or diverse backgrounds, teacher-related factors are even more critical. Key teacher-related factors that affect curriculum implementation include academic qualifications, pedagogical training, teaching experience, teacher motivation, attitudes toward curriculum reforms, and ongoing professional development (Nyagah & Gathumbi, 2017). These elements collectively influence how effectively a curriculum is translated into learning experiences in the classroom. In non-formal educational settings, which are often under-resourced and located in marginalized urban and rural areas, teacher factors become even more crucial. This is due to the unique challenges involved in instructing learners who may have previously dropped out or never accessed formal education (Elihami & Ibrahim, 2019).

Non-formal institutions often rely on a mix of formally trained and informally recruited teachers. This creates disparities in curriculum understanding, instructional quality, and learner engagement. Teachers who are well-trained and motivated tend to adopt learner-centered strategies, accommodate diverse learning needs, and engage with the curriculum more effectively. Conversely, inadequately trained or demotivated teachers often exhibit low instructional quality, limited creativity, and resistance to new curriculum initiatives (Regel & Pitz, 2019). To help achieve an effective curriculum, teachers have a major role in actualizing this through the proper curriculum implementation. Teachers actualize what has been planned in the curriculum to actual behavior change of the learners (Burden, 2020). Teachers interpret and dispense what is planned in the curriculum. They translate curriculum intentions into classroom practices

(Lambert & Penney, 2020). As Moore *et al.* (2023) mention, they not only control the rate but also the degree of change of any curriculum.

Martinez (2022) argues that effective curriculum implementation includes staff development strategies, as teachers need to be equipped to adjust their classroom instruction according to the requirements of the new curriculum. The teacher, as an integral person in the curriculum implementation process, must be highly skilled and have the necessary knowledge, expertise, and competencies (Sulaiman & Ismail, 2020). Teachers are central to any curriculum implementation effort. No matter what philosophical belief the education system is based on, there is no denying that teachers influence students' learning. They determine what is to be learned, how it is to be learned, and the best time to learn it. They translate and actualize the curriculum content through the learners. Better teachers foster better learning and thus greater achievement for the learners. Therefore, proper training can enable the teacher to better teaching practice. Teachers are most knowledgeable about the teaching practice and are responsible for disseminating curriculum content in the classroom. Kneen *et al.* (2023) identify the teacher as the agent in the curriculum implementation process through the argument that implementation is how the teachers select learning strategies and activities to mix the various aspects of knowledge contained in a curriculum document or syllabus and deliver it to the learners.

There are at least three important dimensions of teaching that influence learners' literacy acquisition directly or indirectly: (1) the classroom environment teachers create, (2) teachers' warmth and responsiveness to their students, and (3) the amount and type of instruction they provide (Wang *et al.*, 2022). Woods (2021) argues that there are three elements of teaching: (i) frame, (ii) form, and (iii) act. The core acts of teaching are tasks, activities, interaction, and judgments framed by classroom organization called 'space', pupil organization, time and curriculum, and classroom routines, rules, and rituals. If the teacher is to be able to translate curriculum intentions into reality, the teacher must understand the curriculum document or syllabus well to implement it effectively. In the context of classroom interaction, transmission, facilitation, and acceleration are very important components of effective learning (Zachary & Fain, 2022). However, scholars have identified other teacher variables as being important for the quality of instruction that is received in a classroom. These include the attitude of the teacher (Burić & Kim, 2020), the knowledge base, and mastery of subject knowledge by the teacher (Osakwe, 2020), and the socio-cultural context (Osakwe, 2020). These scholars are in consensus that a substantial proportion of student achievement is attributable to the characteristics and performance of the teachers in their respective schools.

Bieg *et al.* (2022) observed that professional teachers affect the students' performance positively more than unprofessional teachers. Lawn and Ozga (2021) remarked that the success of any educational enterprise depends largely on the availability of professional teachers. This is possible because the trained teachers have been taught (trained) the technical know-how for effective learning to take place in learners. Liu and Phelps (2020) stated that teachers with long years of teaching experience

were able to have a greater impact on the students than teachers with short years of teaching experience. Teacher factors such as attitude towards the curriculum, teachers' training in NFE teaching, and their work conditions will have an impact on how the curriculum will be implemented. Because of the nature of the learners and the shortage of facilities and resources, forcing teachers to use different methods like the multi-grade and the multi-shifts, teachers find it difficult to teach in the NFE institutions because they lack the know-how of such method of teaching, which in turn affects the effective curriculum implementation. Kenya does not train teachers in the NFE curriculum. Teachers at the NFE centers are largely those who have been trained in formal Teachers Training Colleges (TTCs) training or those who have not gone through any kind of training and are volunteer teachers (Irima, 2023). Such teachers lack training for non-formal schools, and may find it challenging to teach in NFE centers. When they are therefore taken as teachers in the centers, they will employ the backstreet teaching methodologies that they possess or methodologies learned at TTCs, which are not appropriate for NFE, which implies that they are not able to effectively implement the non-formal curriculum.

1.1 Objective of the Study

- To establish the relationship between teachers' factors and the level of curriculum implementation in non-formal education institutions in Nairobi County, Kenya.

1.2 Research Hypothesis

- There is no statistically significant relationship between teachers' factors and the level of curriculum implementation in non-formal education institutions in Nairobi County, Kenya.

2. Methodology

The study used a descriptive research design. The target population in this study comprised of 178 learning institutions, 2,200 youths and adults, 90 teachers and 120 managers/heads of non-formal education institutions in Nairobi County. The sample size for the study was 327 learners and 90 instructors/teachers. Sixteen managers were included as key informants for the study. The study adopted a questionnaire for learners and teachers/instructors and an interview schedule for managers. An observation schedule was used to check on the facilities in the non-formal education institutions. The study conducted a pilot study to pre-test the research instruments to ascertain their reliability and validity. The relationship between the dependent and independent variables was tested using the Chi-Square test for independence.

3. Findings and Discussions

3.1 Relationship between Teachers' Factors and the Level of Curriculum Implementation in Non-Formal Education Institutions in Nairobi County, Kenya

The study evaluated the relationship between teachers' factors such as training/qualification, number of teachers, availability throughout the day/lesson time, teachers' ability, interaction at the classroom level, teachers' attitude, and turnover of teachers, on the level of curriculum implementation in non-formal education institutions in Nairobi County, Kenya. Learners were asked to indicate the adequacy of the listed teachers' factors, and the results are as indicated in Table 1.

Table 1: Adequacy of Select Teachers' Factors

	Quite inadequate	Inadequate	Adequate	Quite adequate
Training/qualification	41 (15.3%)	93 (34.7%)	51 (19.0%)	83 (31.0%)
Number of teachers	37 (13.8%)	112 (41.8%)	56 (20.9%)	63 (23.5%)
Availability throughout the day/ lesson time	30 (11.2%)	107 (39.9%)	41 (15.3%)	90 (33.6%)
Teachers' ability	13 (4.9%)	131 (48.9%)	52 (19.4%)	72 (26.9%)
Interaction at the classroom level	33 (12.3%)	104 (38.8%)	72 (26.9%)	59 (22.0%)

Based on the findings in Table 1 on adequacy of select teachers' factors, it is evident that 34.7% (93) and 15.3% (41) of the teachers cited training/qualification of teachers in non-formal education institutions to be inadequate and quite inadequate respectively; another 31.0% (83) and 19.0% (51) cited training/qualification to be quite adequate and adequate respectively. Also shown by the results is that 41.8% (112) and 13.8% (37) of the respondents cited the number of teachers to be inadequate and quite inadequate, respectively; 23.5% (63) and 20.9% (56) indicated the number of teachers as quite adequate and adequate, respectively. From the results, 33.9% (107) of the respondents cited inadequacy in terms of availability of teachers throughout the day/lesson time; 33.6% (90) and 15.3% (41) indicated availability of teachers throughout the day or lesson as quite adequate and adequate, respectively. It is also shown that 48.9% (131) of the respondents demonstrated that teachers' ability was inadequate, while 26.9% (72) and 19.4% (52) indicated quite adequate and adequate teachers' ability, respectively. Lastly, 38.8% (104) of the respondents indicated that interactions at the classroom level with teachers in non-formal education institutions were inadequate, while 26.9% (72) and 22.0% (59) indicated classroom level interactions as adequate and quite adequate, respectively.

The study further assessed the learners' opinions on the attitude of teachers towards teaching and learners in non-formal education institutions. From the findings as reported in Table 2, it can be seen that 40.3% (108) of the respondents are of the opinion

that teachers' attitude towards teaching and learners in non-formal education institutions is moderately positive; 23.5% (63) indicated the attitude as very positive, while 19.0% (51) indicated the attitude as positive.

Table 2: Attitude of Teachers

		Frequency	Percent (%)
What would you say about the attitude of teachers towards non-formal education teaching and learners?	Very negative	16	6.0%
	Negative	30	11.2%
	Moderately positive	108	40.3%
	Positive	51	19.0%
	Very positive	63	23.5%

The study further assessed the turnover of teachers in non-formal education institutions by requiring the respondents to indicate how often teachers are changed in their respective institutions. As indicated in Table 3, it is evident that 44.0% (118) of the respondents were of the opinion that teachers are often changed; 20.9% (56) indicated that changing of teachers was very often, while 17.9% (48) indicated that teachers are sometimes changed.

Table 3: Turnover of Teachers

		Frequency	Percent (%)
How often would you say teachers in this institution are changed?	Not at all	15	5.6%
	Rarely	31	11.6%
	Sometimes	48	17.9%
	Often	118	44.0%
	Very often	56	20.9%

Through the questionnaires, respondents were also required to indicate their level of agreement/disagreement on Likert statements on the influence of teachers' factors on curriculum implementation in non-formal education institutions. The results are shown in Table 4.

Table 4: Likert Scale Responses on the Influence of Teachers' Factors on Curriculum Implementation

Statement	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
My learning is greatly affected by the teachers' competences and confidence in the delivery of knowledge	11 (4.1%)	5 (1.9%)	34 (12.7%)	102 (38.1%)	116 (43.3%)
Teachers' qualifications especially specialties like vocational and technical subjects affect our learning in those subjects	8 (3.0%)	4 (1.5%)	48 (17.9%)	104 (38.8%)	104 (38.8%)
Teachers' adequacy affects smooth learning in our institution	15 (5.6%)	9 (3.4%)	41 (15.3%)	67 (25.0%)	136 (50.7%)

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The attitude of teachers affects learners' education continuity through contributing to occurrences such as drop-outs	16 (6.0%)	24 (9.0%)	98 (36.6%)	63 (23.5%)	67 (25.0%)
Turnover of teachers interferes with learning in this institution	42 (15.7%)	29 (10.8%)	56 (20.9%)	64 (23.9%)	77 (28.7%)
Teachers' attitudes affect the ability of students to receive messages from the subjects that they teach, leading to a wrong interpretation of concepts	23 (8.6%)	21 (7.8%)	71 (26.5%)	65 (24.3%)	88 (32.8%)

The results in Table 5 indicate that 43.3% (116) and 38.1% (102) of the respondents strongly agreed and agreed, respectively, that their learning is greatly affected by the teachers' competences and confidence in the delivery of knowledge. The findings further showed that 38.8% (104) and another 38.8% (104) of the respondents strongly agreed and agreed that teachers' qualifications, especially specialties like vocational and technical subjects, affect our learning in those subjects. From the responses, 50.7% (136) of the respondents strongly agreed that teachers' adequacy affects smooth learning in our institution; 25.0% (67) and 15.3% (41) agreed, and neither agreed nor disagreed, respectively. Table 5 also shows that 36.6% (98) of the respondents neither agreed nor disagreed that the attitude of teachers affects learners' education continuity through contributing to occurrences such as drop-outs; 25.0% (67) strongly agreed, and 23.5% (63) agreed. Also evident is that 28.7% (77) and 23.9% (64) of the respondents strongly agreed and agreed that turnover of teachers interferes with learning in this institution. Lastly, 32.8% (88) of the respondents strongly agreed that teachers' attitudes affect the ability of students to receive messages from the subjects that they teach, leading to wrong interpretation of concepts; 26.5% (71) neither agreed nor disagreed, while 24.3% (65) agreed.

Chi-Square test statistics were used to assess the relationship between teachers' factors and curriculum implementation in non-formal education institutions in Nairobi County, Kenya. The results are as illustrated in Table 6.

Table 6: Chi-Square Results on the Relationship between
 Teachers' Factors and Curriculum Implementation

		Overall extent of curriculum implementation			Chi-Square, χ^2 (p-value)
		Low extent	Moderate extent	Great extent	
Training/ Qualification	Quite inadequate	6	23	12	$\chi^2_{df=6} = 16.188$ (p-value=0.013)
	Inadequate	33	34	26	
	Adequate	16	25	10	
	Quite adequate	38	23	22	
Number of teachers	Quite inadequate	14	15	8	$\chi^2_{df=6} = 32.303$ (p-value<0.0001)
	Inadequate	49	34	29	
	Adequate	4	38	14	

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	Quite adequate	26	18	19	
Availability throughout the day/lesson time	Quite inadequate	14	15	1	$\chi^2_{df=6} = 11.536$ (p-value=0.073)
	Inadequate	37	36	34	
	Adequate	11	19	11	
	Quite adequate	31	35	24	
Teachers' ability	Quite inadequate	5	8	0	$\chi^2_{df=6} = 20.471$ (p-value=0.002)
	Inadequate	46	47	38	
	Adequate	13	30	9	
	Quite adequate	29	20	23	
Interaction at classroom level	Quite inadequate	13	16	4	$\chi^2_{df=6} = 23.789$ (p-value=0.001)
	Inadequate	30	36	38	
	Adequate	26	38	8	
	Quite adequate	24	15	20	
Teachers' attitude	Very negative	3	10	3	$\chi^2_{df=8} = 75.653$ (p-value<0.0001)
	Negative	9	9	12	
	Moderately positive	45	58	5	
	Positive	25	7	19	
	Very positive	11	21	31	
Turnover of teachers	Not at all	5	10	0	$\chi^2_{df=8} = 53.050$ (p-value<0.0001)
	Rarely	15	16	0	
	Sometimes	12	15	21	
	Often	42	53	23	
	Very often	19	11	26	

Table 6 shows that training/qualification of teachers ($\chi^2_{(df=6)}=16.188$; p-value=0.013), number of teachers ($\chi^2_{(df=6)}=32.303$; p-value<0.0001), teachers' ability ($\chi^2_{(df=6)}=20.471$; p-value=0.002), interaction at classroom level ($\chi^2_{(df=6)}=23.789$; p-value=0.001), teachers' attitude ($\chi^2_{(df=8)}=75.653$; p-value<0.0001) and turnover of teachers ($\chi^2_{(df=8)}=53.050$; p-value<0.0001) had a significant relationship with curriculum implementation. Teachers' availability throughout the day or lesson time ($\chi^2_{(df=6)}=11.536$; p-value=0.073) did not have a significant relationship with curriculum implementation in non-formal education institutions in Nairobi County, Kenya. Teachers' availability throughout the day or lesson time did not have a significant relationship with curriculum implementation in non-formal education institutions in Nairobi County, Kenya. according to Nyagah and Gathumbi (2017), key teacher-related factors that affect curriculum implementation include academic qualifications, pedagogical training, teaching experience, teacher motivation, attitudes toward curriculum reforms, and ongoing professional development (Nyagah & Gathumbi, 2017). This is because these elements influence the translation of curriculum into learning experiences in the classroom and become more pronounced in NFE settings, which are under-resourced and located in marginalized areas (Elihami & Ibrahim, 2019). In a Kenyan study by Peters (2022), a survey on NFE institutions revealed that none of the teachers were trained on artisan courses, which was a barrier to effective implementation of the curriculum.

These findings agree with Martinez (2022), who found that effective curriculum implementation requires well-trained teachers who understand the demands of a curriculum. For effective curriculum implementation, the teacher is an integral component and should therefore be highly skilled and possess necessary knowledge, expertise and competencies (Sulaiman & Ismail, 2020). The findings that the interaction of the teacher had a significant relationship with curriculum implementation agree with Poulton (2020), who argued that the ability of the teacher to interact with the learner ensures successful implementation of a curriculum. According to Chulu (2022), unqualified teachers are a major setback in effective curriculum implementation. Curriculum implementation is contingent on the ability of teachers to create and sustain an optimal learning environment (Zhan *et al.*, 2021); thus, supporting this study's findings. According to Zachary and Fain (2022), if the teacher is able to translate curriculum intentions into reality, it is imperative that the teacher understands the curriculum, thus able to effectively implement it. According to Regel and Pitz (2019), well-trained teachers tend to adopt learner-centered strategies, accommodate diverse learning needs, and engage with the curriculum more effectively. On the other hand, inadequately trained teachers exhibit low instructional quality, limited creativity, and resistance to new curriculum initiatives.

Effective curriculum implementation was found to be affected by the attitude of the teachers. Burić and Kim (2020) identified the attitude of the teacher as an important component of the quality of instruction, which determines curriculum implementation. This is also supported by Ramzan *et al.* (2023), who established that teachers' attitudes are associated with teaching quality and learning in the classroom. Teachers possessing a negative attitude impair students' ability to receive messages in class, leading to wrong concepts' interpretation (Doyle, 2023). Turnover of teachers had a significant relationship with curriculum implementation. This coincides with Ahmad (2022) who noted that there is a dire shortage of teachers in NFE due to the transition of teachers into other sectors and formal institutions. This shortage, as a result of turnover, was a barrier to effective curriculum implementation.

The attitude of teachers had a significant association with curriculum implementation. This agreed with a Dutch study by De Paepe *et al.* (2020) who established teachers' attitude as a critical success factor in developing and implementing online L12 courses utilized in Dutch adult education. However, the findings are not in agreement with Mubashar *et al.* (2020), who conducted a study in Pakistan and established that teachers' attitudes have no significant effect on practices of teachers towards curriculum implementation in early childhood care and education centers in Pakistan. The number of teachers and their ability had a significant association with curriculum implementation in NFE institutions in Kenya's Nairobi County. This is in concurrence with Agugoesi *et al.* (2022), who studied the influence of teachers' availability and qualification on the implementation of secondary schools' curriculum in Nigeria. Agugoesi *et al.* (2022) showed the existence of a significant relationship between the availability and

qualification of teachers and the implementation of skill-based secondary school curricula in Nigeria.

4. Conclusion

The study, therefore, concludes that teachers' factors are central to effective curriculum implementation in NFE institutions. Inadequate training, shortages in teacher numbers, limited pedagogical ability, and weak classroom interactions constrain learning quality. While many teachers maintain moderately positive attitudes, high turnover undermines continuity and consistency in curriculum delivery.

5. Recommendation

The Ministry of Education and relevant stakeholders should establish targeted training and professional development programs for teachers in NFE institutions, with emphasis on pedagogical methods suitable for out-of-school learners. Further, NFE institutions should be supported to recruit adequate numbers of qualified teachers and reduce reliance on under-qualified staff or subject misallocation. Policies should be developed to improve teacher retention in NFE institutions, including fair remuneration, incentives, and career growth opportunities. Teacher mentorship and peer-support programs should be introduced to enhance classroom interaction, teaching competencies, and overall instructional quality.

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Conflict of Interest Statement

The authors declare no conflicts of interest.

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