

## The Implementation of the Learning Framework for Early Childhood Development (3–6 Years) in Pre-Schools in Uganda

Deborah R. K. Magera, Bernadette K. Nambi, Annet K. Nnakalyowa

National Curriculum Development Centre

### Abstract

*The purpose of the needs assessment study was to find out if there are any gaps in the Learning Framework (LFW) for children of 3–6 years in Uganda and determine how these can be integrated. This was done through the objectives of the study that included soliciting views and perceptions from various stakeholders on the factors affecting the implementation of the Early Childhood Education (ECD) Learning Framework 3–6 years and possible solutions; establishing the local and global emerging issues in ECD education that need to be integrated into the Learning Framework for 3–6 year-old-children; and identifying gaps and best practices relating to the design, learning outcomes, competencies, development activities, teaching methods and assessment modalities of the LFW. The study adopted the cross-sectional research design, and was also descriptive in nature. To prevent the bias inherent in each method, the study included both qualitative and quantitative components. The study employed both probability and non-probability sampling designs using random sampling, as well as convenient and purposive sampling techniques, respectively. The sample size for the survey was 378 respondents, and 58 districts were selected using the Krejcie and Morgan (1970) and Yamane (1967) approaches. Quantifiable data from the survey was sorted, coded and then entered in Statistical Package for the Social Sciences (SPSS) version 22.0. The data was presented using tables, charts and bar graphs. Data was further analysed using descriptive statistics, tables with percentages and corresponding mean values. Qualitative data from document review, observation and interviews were sorted and compiled into response categories and sub-categories. The data was thematically coded by clustering similar responses together.*

It was concluded that the sampled teachers/caregivers have regularly been equipped with skills to implement the ECD LFW. However, guidance from the District Inspectors of Schools, DEOs and Coordinating Centre Tutors (CCTs) was inadequate to support the teachers/caregivers in using the LFW. The teachers/caregivers are not provided with ICT equipment (computers, smart TVs, smartphones, tablets) to use during the teaching and learning process, thus affecting the implementation of the LFW. The survey indicated that the LFW did not merge emerging issues like climate change into its content. The survey indicated that regarding the aspect of the teacher using the LFW, the design of the LFW does not provide clear guidance to the teacher. The survey indicated that there was limited focus on the competences of learners with special needs. The researchers, therefore, recommended that curriculum developers need to ensure that the needs of learners with special needs are catered for in the same proportions as those of normal learners to ensure inclusion. Using the LFW did not provide clear guidance to the teacher. This, therefore, needs to be catered for during the review, and there should be more emphasis on integrating ICT in the LFW. The researchers recommended that it is necessary to design the LFW in such a way that it is continuously responsive to emerging issues at all levels. The lack of information on emerging issues should be intentionally integrated into the LFW to enable the learners to access it. The researchers further recommended that the LFW should support teachers in understanding and implementing appropriate practices for these learners. The researchers finally recommended that there is need to create a curriculum framework as a source guide for the LFW.

**Keywords:** competencies, development activities, learning framework, learning outcome

### Introduction

The National Curriculum Development Centre (NCDC) is responsible for developing and reviewing curricula for various levels of education in Uganda, including pre-primary, primary, secondary, and some tertiary levels. NCDC conducts research on curriculum-related matters as stipulated in the NCDC Act of 1973, Cap. 135 of the laws of Uganda. NCDC supports the government's commitment to improve the quality of education for all people in Uganda through its mandate. To guide instruction at the early childhood level, NCDC developed the early childhood development (ECD) nursery teaching syllabus in 1993, which was later reviewed and renamed the Learning Framework (LFW) for ECD (3–6 years). The LFW was launched in 2005. In an effort to identify gaps in the LFW that may warrant its review, a needs assessment study was conducted to assess societal expectations of the LFW (3–6 years). Investing in quality ECD is recognised as a key factor in human capital development and socioeconomic transformation (World Health Organisation, 2018; UNESCO, 2021). In Uganda, the government acknowledges the significance of quality ECD in developing human resources for sustainable development. The LFW for ECD 3–6 years was developed by NCDC and rolled out in 2005 to guide the foundational level of learning. Despite its strengths, the LFW has been criticised for being difficult to interpret and there are indications of increased use of alternative ECD curricula by private proprietors (Cambridge Education, 2017; Kyazze, 2018).

Evidence shows that literacy and numeracy levels at the ECD level are still wanting, indicating a gap in either the content, learning experiences, pedagogy or assessment modalities. Therefore, a needs assessment was conducted to establish gaps in the LFW, which has been in use since 2005. Changes in policy, pedagogy and technology, as well as emerging dynamics such as e-learning and online classes, community-based learning, and play pedagogies for learners at this level, have occurred since the LFW was rolled out, necessitating a needs assessment. The occurrence of global upheavals, for instance pandemics like Covid-19, has also given rise to homeschooling as a critical approach to learning, which shifted instruction, especially of 3–6-year-olds, to parents and guardians who may not necessarily have the skills to teach learners at that age.

### **Problem Statement**

Since the start of the implementation of the LFW in 2005, Uganda has subscribed to local and international policy frameworks which advance emerging issues, including environmental issues such as climate change, risk and disaster management, gender issues, inclusion in education, and pandemics like Covid-19 (UNESCO, 2021). Furthermore, changes in local and global societal demands and pedagogical practices have occurred, with an increased emphasis on 21st-century skills and Science, Technology, Engineering and Innovation (STEI), which need to be nurtured in learners from a young age (UNESCO, 2014). Moreover, trends in education such as home learning, online learning, e-learning, community-based learning, and play-based pedagogies have been adopted by teachers and caregivers (UNESCO, 2021). Studies have indicated that the LFW is difficult to interpret and is sometimes mistaken for a curriculum. There is also increased use of alternative curricula by private proprietors (UNESCO, 2021). These issues call for curriculum developers to rethink pedagogies and development activities that are appropriate for learners at the ECD level in the current world. Therefore, there is a need to ascertain whether the LFW aligns with the emerging learning dynamics and policy direction nationally and internationally, and whether it is in alignment with the national and global trends in education in terms of content, pedagogies, materials and resources (UNESCO, 2015). Although UNESCO prescribes that a curriculum should be reviewed every five years, a needs assessment of the LFW for 3–6-year-olds is necessary to identify gaps that may necessitate a review (Donaldson & Franck, 2016). The aim of the needs assessment is to collect information that can be used to plan how to meet the identified needs.

## Research Objectives and Questions

The purpose of the needs assessment study was to find out if there are any gaps in the LFW for children of 3–6 years in Uganda and determine how these can be narrowed. The objectives of the needs assessment for ECD for 3–6 years, therefore, were:

1. To solicit views and perceptions from various stakeholders on the factors affecting the implementation of the ECD Learning Framework 3–6 years and possible solutions.
2. To establish the local and global emerging issues in ECD education that need to be integrated into the Learning Framework for 3–6 years.
3. To identify gaps and best practices relating to the design, learning outcomes, competencies, development activities, teaching methods and assessment modalities of the LFW 3–6 years.

## Research Questions

This study was guided by the following key research questions:

1. Is the ECD Learning Framework (3–6 years) aligned to the existing policy documents of Uganda, that came into force after its implementation?
2. What factors affect the implementation of the ECD Learning Framework for 3–6 years and what are the possible solutions?
3. What local and global emerging issues in ECD education need to be integrated into the Learning Framework for 3–6 years?
4. Which gaps and best practices that are related to the design, learning outcomes, competencies, development activities, teaching methods and assessment modalities exist in the LFW 3–6 years?

## Literature Review

The purpose of the study was to conduct a needs assessment of the LFW for children aged 3–6 years in Uganda and determine if there were any gaps in the framework. In order to achieve this, a literature review was conducted to gain an in-depth understanding of the needs assessment, the factors affecting curriculum implementation, emerging issues, and best practices relating to design, learning outcomes, competencies, pedagogies and assessment modalities used in the contemporary world.

## Factors Affecting Implementation of the Learning Framework/Curriculum

According to Viennet and Point (2017), the process of curriculum implementation involves putting ideas and materials into practice. The successful implementation of a curriculum has both short- and long-term benefits for children and society. However, the implementation of a curriculum framework is complex and occurs over time and through many mechanisms. The lack of political will, inadequate resources, and poor training of educators have been identified as challenges in implementing the curriculum successfully (Offorma, 2015). In addition, according to Saleema (2019), the low quality of teachers due to poor training in ECD, lack of resources, and inadequate involvement of parents in their children's education have also been identified as challenges to ECD provisioning. To ensure effective ECD provisioning, qualified educators with accredited qualifications are needed. Parents also play a crucial role in the ECD provisioning, but many are not aware of their role in their children's education, which affects the quality of ECD provisioning.

Curriculum implementation is influenced by professional factors such as job satisfaction, professional growth, parent involvement and the resources and facilities available to teachers (Ndijuye & Tandika, 2020).

Adequate training of teachers is crucial in effective curriculum implementation as it influences learners' achievement. Successful curriculum implementation requires a change of habit and often involves changes in beliefs and values, which can be challenging to implement. Coherence among various departments and agencies is essential for successful curriculum implementation. Evaluation of policies is also critical, but it is often neglected owing to lack of funds, ignorance and illiteracy in some communities. Teachers play a significant role in evaluating curriculum changes and should use examination results to improve curriculum at school level (Bush, 2008). The literature by Hussein (2005) discusses various factors affecting the implementation of the curriculum in Uganda's education sector. These include the need for continuous review of staffing levels, decentralisation of recruitment, ensuring staff stability and equity, providing relief teachers, and emphasis on practical skills development. Newstrom and Davis (2002) also highlights the importance of teacher development, in-service training, and school infrastructure. The role of management in curriculum implementation is emphasised, and the literature suggests that effective implementation requires adequate facilities, staffing, and the involvement of stakeholders. The Ministry of Education and Sports is responsible for ensuring adherence to education policies and guidelines. Overall, the literature emphasises the need for continuous improvement and the involvement of all stakeholders in matters regarding education.

### **Local and global emerging issues to be integrated into the Learning Framework**

Wilkinson (2021) discusses the global interest in providing Early Childhood Education and Care (ECEC) services and the international sharing of ideas on ECEC, facilitated by technology and funding schemes. However, there are concerns that the global discourses on ECEC could result in homogenising desirable ECEC attributes and the potential consequences of this in local contexts for theory, research and practice. Moss (2015) emphasises the importance of recognising the historical and cultural context for shaping both the structure and conceptualisations of ECEC services. The dominance of Anglo-American theories in ECEC facilitated by the use of the English language could prescribe particular understandings of ECEC services. Moreover, the relevance of such theories in different contexts needs to be considered. The literature also highlights the benefits of investing ECEC and ensuring universal access to quality services, which is one of the most effective ways to reduce inequities and one of the most efficient investments (European Commission, 2014). The paragraph discusses challenges facing the implementation of the LFW in Uganda. The first challenge, according to Salawu (2011), is inadequate funding, which has resulted in corruption and nepotism. The second challenge is the quality and quantity of teachers, where there is a shortage of qualified teachers, and some teachers lack the required qualifications (Altinyelken, 2010). Thirdly, Hannon (2013) points out that there is a lack of textbooks, teachers' guides and functional libraries to support effective teaching and learning. Zirra and Mambula (2020) discuss the poor reward system for teachers, which has led to an unhappy workforce, which can affect the implementation of the LFW. Finally, there is inadequate supervision of schools due to a lack of coordination among different quality assurance agencies, and unqualified personnel carrying out school supervisory duties.

### **Gaps and best practices relating to the design, learning outcomes, competencies, development activities, teaching methods and assessment modalities of the curriculum**

The success of curriculum implementation depends on teachers as they are the ones who adopt and implement the ideas and aspirations of the designers (Allais, 2012). In addition, teachers' beliefs, practices and attitudes are important in understanding and improving educational processes. However, an appropriate supply of trained teachers is a challenge. Learners, resource materials and facilities, the school environment, culture and ideology, instructional supervision, and assessment are some of the factors that influence curriculum implementation (Elize Du Plessis, 2022).

Curriculum frameworks guide the regulation, implementation and evaluation of curricula, but the development of curricula and expected learning outcomes is a dynamic cyclical process requiring reassessment and adaptation over time. However, cultural differences, examinations and interest groups may hinder or facilitate curriculum implementation. Policy formulation should take into consideration the implications of various factors influencing curriculum implementation (Kingdon et al., 2014).

The literature also discusses challenges in implementing the curricula: dissemination and teacher professional development. Dissemination involves creating specific plans to inform educators of the new curricula and expected learning outcomes, as well as aligning textbooks and other materials. Teacher professional development is important to ensure that educators have the necessary knowledge, competence and confidence to implement new curricula, and to develop formative assessments that can inform classroom practices. However, there are gaps in these areas, such as the need for interactive professional development and revised pre-service teacher training systems to reflect new curriculum frameworks. Additionally, the literature highlights the importance of considering teacher perspectives in the curriculum development process and developing curricular literacy at the district, school and individual teacher level (Allais, 2012).

The current education system is based on a Western model that replaced indigenous forms of education and socialisation, and it is important to provide opportunities for minority populations to participate in creating curricula. Gender inclusivity and support for special needs learners are also important considerations in curriculum development. As societies face new challenges, such as environmental and economic changes, several countries have reviewed their curricula to equip students with the necessary skills and competencies needed for the future (Persson, 2016). Curriculum reform is influenced by global and local factors, including societal needs, and must be relevant and responsive to changes. In Uganda, Vision 2040 places emphasis on making Science, Technology, Engineering and Innovation (STEI), the main driver of economic growth and key pillar of competition, which requires a change in the approach to education. Early Childhood Care and Education (ECEC) is critical in a child's development, and curriculum development begins with a needs assessment. Benchmarking is essential in reviewing and developing curricula, and curriculum development should involve stakeholder participation (Seman, Yusoff & Embong, 2017).

## **Research Methodology**

The study used a cross-sectional research design, combining both qualitative and quantitative components to conduct a needs assessment study for early childhood development in Uganda. The study employed probability and non-probability sampling designs, including random, convenient and purposive sampling techniques. The population of the study consisted of key stakeholders in early childhood care and education, such as teachers, caregivers, policymakers and development partners. The sample size for the study was 650 respondents, with 378 respondents being ECD teachers/caregivers, and 58 districts selected using the Yamane (1967) and Krejcie and Morgan (1970) approaches. The study used saturation levels to determine the sample size for categories from which qualitative data was collected. The aim of the study was to identify gaps in the LWF for 3–6-year-olds in Uganda.

The study was conducted in Uganda on the factors affecting the implementation of the ECD Learning Framework and used four data collection methods, including a questionnaire survey, interviews, document review, and observation. The study ensured an even distribution of respondents from both rural and urban ECD centers to obtain balanced views across different settings in the same district. Ethical considerations were observed, and the validity and reliability of the data collection instruments were ensured. Quantifiable data from the survey was presented using tables, charts and bar graphs and further analysed using descriptive statistics by a SPSS version 22.0.

Qualitative data from the documents reviewed, the observations made and the interviews conducted were thematically coded and clustered to establish similarities and differences in the collected data. The research assistants were trained on ethical and professional conduct during the data collection exercise and observed Covid-19 Standard Operating Procedures (SOPs). Respondents were assured of anonymity and confidentiality of the information they provided.

## Results

This section presents and analyses the findings in line with the study objectives.

### Factors Affecting the Effective Implementation of the ECD Learning Framework (3–6 Years)

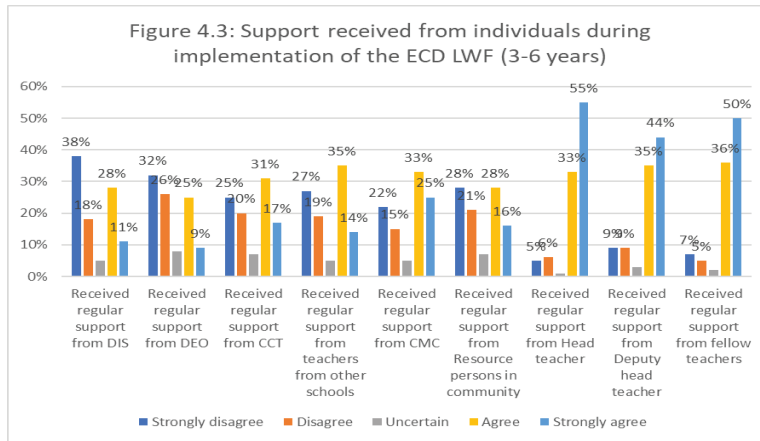


Figure 1: Support received from individuals during implementation of the ECD LFW

Source: Field data, 2022

The findings of a study on the implementation of the ECD Learning Framework in Uganda show that a majority of teachers and caregivers did not receive regular support from district officials in implementing the framework. Specifically, 56% of the respondents disagreed to receiving regular support from District Inspectors of Schools (DISs), while 59% disagreed to receiving regular support from District Education Officers (DEOs). However, a majority of respondents received regular support from Coordinating Centre Tutors (CCTs), Centre Management Committee (CMC) members, head teachers, deputy head teachers, and fellow teachers. The study also revealed that there was minimal supervision and monitoring of ECD by district officials, and a lack of a clear system for supporting ECD at the district level.

Table 1: Kind of support received while implementing the ECD Learning Framework

Code	Kind of support received while implementing of the ECD Learning Framework;	N	Mean	Std. Deviation
B(A)2i	I have regularly received training on methodologies to be used in the classroom while implementing the ECD learning framework	377	3.7	1.368
B(A)2ii	I have regularly received support on interpreting the learning framework while implementing the ECD learning framework	377	3.57	1.429

Code	Kind of support received while implementing of the ECD Learning Framework;	N	Mean	Std. Deviation
B(A)2iii	I have regularly received support on addressing implementation challenges while implementing the ECD learning framework	377	3.33	1.356
B(A)2iv	I have regularly received support on equipping me with skills to effectively implement the ECD learning framework	377	3.67	1.296

**Source:** Field data 2022

A general analysis of the mean scores of Section B2 items revealed an overall mean score of 3.57, indicating that teachers/caregivers generally agreed to receiving regular support during the implementation of the ECD Learning Framework. The highest mean score of 3.70 was obtained by item B2i, implying that most teachers/caregivers agreed to receiving regular training on methodologies used in the classroom. However, item B2iii had a mean score of 3.33, indicating that most respondents were unsure of having received support on addressing implementation challenges of the ECD Learning Framework. The standard deviation indicated that there was a narrow spread of results among the respondents’ perceptions about the support received. The mean scores for items B2i, B2ii and B2iv were above 3.5, showing that the respondents agreed to receiving the support mentioned. This general agreement to receiving support implies that teachers/caregivers receive regular support on the training methodologies used in the classroom, interpreting the learning framework, and equipping them with skills to implement the LFW. The uncertainty around item B2iii could suggest that the respondents did not receive such support; otherwise, they would be sure.

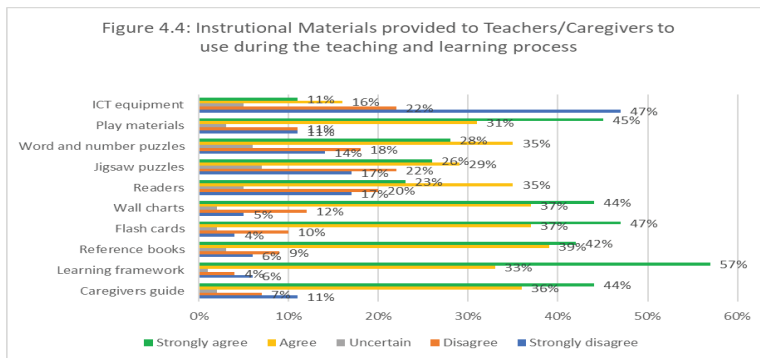


Figure 2: Instructional materials provided

**Source:** Field data, 2022

The study examined the availability of ICT equipment, play materials, puzzles, readers, wall charts, flash cards, the ECD Learning Framework and the Caregivers’ Guide to the Learning Framework among teachers and caregivers in ECD centres in Uganda. From Figure 2, it was observed that a majority of teachers/caregivers were not provided with ICT equipment, with only 16% and 11% strongly agreeing and agreeing, respectively, that they were provided with it. The study found that a majority of teachers/caregivers were provided with play materials, puzzles, readers, wall charts, flash cards, the ECD Learning Framework, and the Caregivers’ Guide to the Learning Framework. The study also highlighted the challenges some teachers/caregivers face in using ICT equipment to deliver lessons.

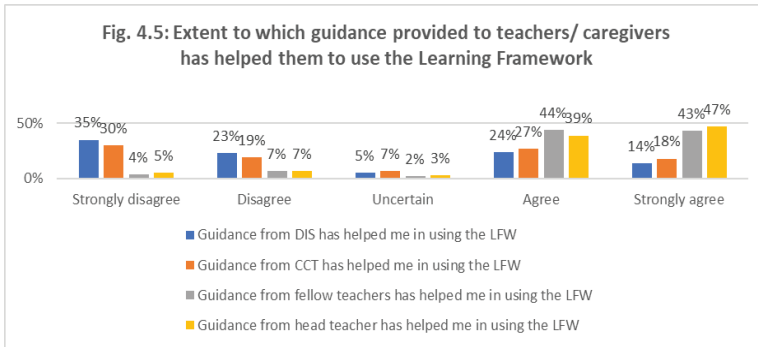


Figure 3: Guidance provided to teachers/caregivers

Source: Field data, 2022

The results of a survey with 377 respondents showed that guidance from the DISs did not help the majority of teachers/caregivers (58%) in using the LFW, while a fair number of teachers/caregivers were helped by the guidance from the CCTs (45%). However, the majority of teachers/caregivers (87%) were helped by guidance from fellow teachers and the head teacher in using the LFW.

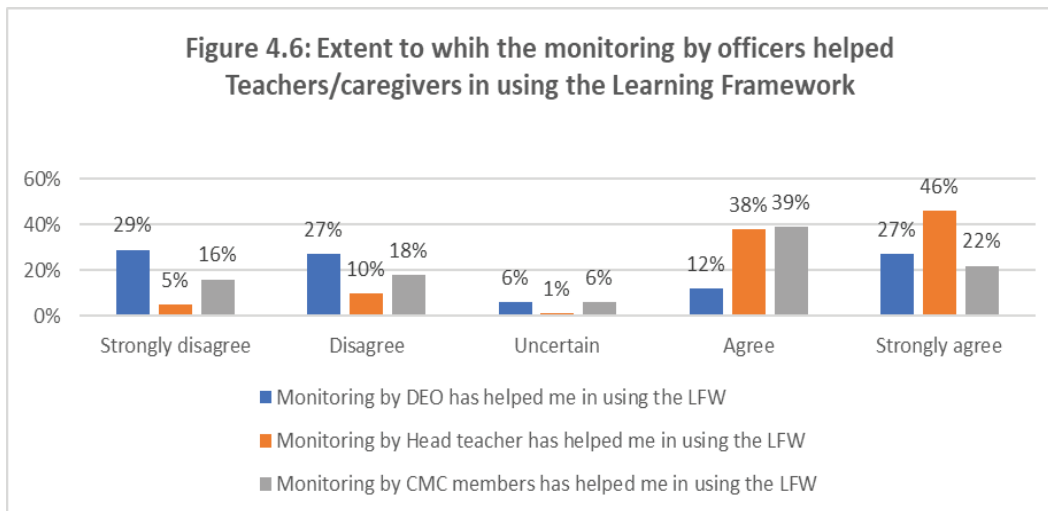


Figure 4: Monitoring by officers

Source: Field data, 2022

The results from Figure 4 indicate that out of 377 respondents, the majority of teachers/caregivers were not monitored by the District Education Officer (DEO) while using the LFW, with 29% strongly disagreeing and 27% disagreeing about whether monitoring by the DEO helped them use the LFW. Only 12% strongly agreed and 27% agreed that monitoring by the DEO helped them use the LFW, while 6% were uncertain. In contrast, the majority of teachers/caregivers were monitored by the head teacher and CMC members while using the LFW. Regarding monitoring by the head teacher, 46% strongly agreed and 38% agreed that it helped them use the LFW, with only 5% strongly disagreeing and 10% disagreeing. Only 1% were uncertain. Similarly, regarding monitoring by CMC members, 22% strongly agreed and 39% agreed that it helped them use the LFW, with 16% strongly disagreeing and 18% disagreeing.



### Challenges faced during use of the LFW

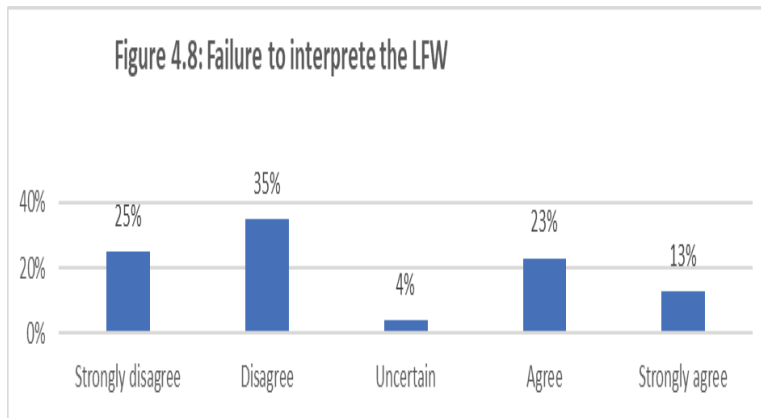


Figure 5: Failure to interpret the LFW

**Source:** Field data, 2022

The results from Figure 5 show that out of 377 respondents, 94 (25%) strongly disagreed and 131(35%) disagreed as to whether they had failed to interpret the LFW while 48(13%) strongly agreed and 88(23%) agreed that they had failed to interpret the LFW. This means that the majority of the teachers/caregivers do not face a challenge of failure to interpret the LFW. However, there is a gap between the survey results and the experiences of some CCTs and NGO officials. One CCT said that many caregivers had difficulty in understanding how to integrate personal/emotional/social/behaviour aspects into the different areas of learning, while an NGO official reported that many teachers did not know what some of the suggested resources are, such as jigsaws, and did not have any knowledge of what some of the activities mean, such as rubbing.

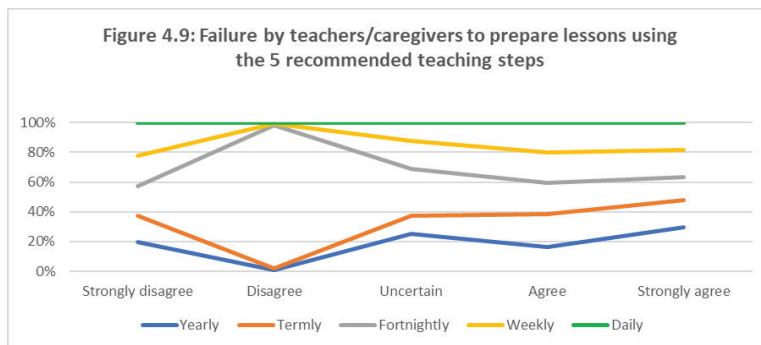


Figure 6: Failure by teachers/caregivers to prepare lessons using the 5 recommended teaching steps

**Source:** Field data, 2022

According to Figure 6, a majority of teachers/caregivers did not face failure in preparing lessons using the yearly plan (70% agreed or strongly agreed) and other planning periods including termly, fortnightly, weekly and daily plans (ranging from 74% to 81% agreed or strongly agreed). Only a small percentage were uncertain (2-5%) and a minority disagreed or strongly disagreed (19-34%).

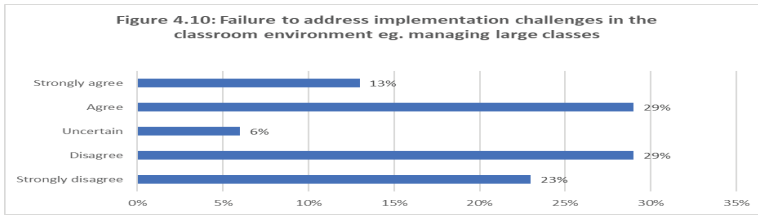


Figure 7: Failure to address implementation challenges in the classroom environment

Source: Field data, 2022

Based on the results from Figure 7, out of 377 respondents, 86(23%) of the teachers/caregivers strongly disagreed and 108 (29%) disagreed as to whether they had faced failure to address implementation challenges in the classroom environment, for example, managing large classes; while 50(13%) strongly agreed and 110(29%) agreed that they had faced failure to address implementation challenges in the classroom environment. Only 23(6%) were uncertain. This means that the majority of the teachers/caregivers had faced failure to address implementation challenges in the classroom environment.

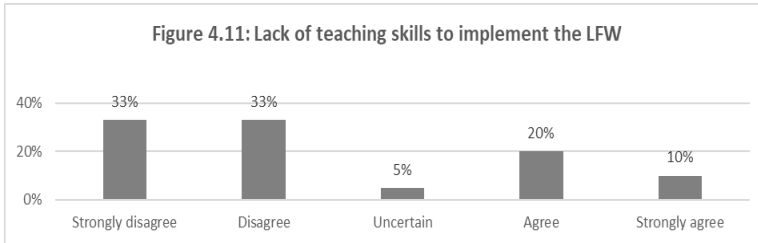


Figure 8: Lack of teaching skills to implement the LF

Source: Field data, 2022

According to the results shown in Figure 8, out of 377 respondents, 33% strongly disagreed and 33% disagreed that they lacked teaching skills to implement the ECD Learning Framework (3–6 years). However, only 10% strongly agreed and 20% agreed that they lacked teaching skills, with 5% being uncertain. This indicates that the majority of the teacher/caregivers did not lack teaching skills to implement the ECD Learning Framework (3–6 years).

Table 2: Challenges faced in using the LFW

Code	Challenges faced in using the LFW	N	Mean	Std. Deviation
B5/5i	I have failed to interpret the LFW	377	2.64	1.402
B5/5iia	I have failed to prepare lessons based on the yearly plan	377	2.59	1.454
B5/5iib	I have failed to prepare lessons based on the termly plan	377	2.56	1.413
B5/5iic	I have failed to prepare lessons based on the fortnightly plan	377	2.46	1.364

Code	Challenges faced in using the LFW	N	Mean	Std. Deviation
B5/5iid	I have failed to prepare lessons based on the weekly plan	377	2.49	1.426
B5/5iie	I have failed to prepare lessons based on the daily plan	377	2.52	1.489
B5/5iii	I have failed to address implementation challenges in the classroom environment e.g. managing large classes	377	2.81	1.411
B5/5iv	I lack teaching skills to implement the LFW	377	2.41	1.377

**Source:** Field Data

The results from Section B5/5 indicate that, on a 5-point Likert scale, the mean scores for all items ranged between 2.5 and 3.0, suggesting that the majority of teachers/caregivers were uncertain about the extent to which the listed challenges affected their use of the LFW. This uncertainty may be due to a lack of knowledge of the LFW, failure to prepare lessons, implementation challenges, or a lack of teaching skills. The standard deviation for the responses was low, ranging from 1.364 to 1.489, indicating little variability among the respondents. However, a gap in the data is that the specific challenges that the respondents were uncertain about are not listed.

*Table 6: Failure by parents to support the teaching/learning process*

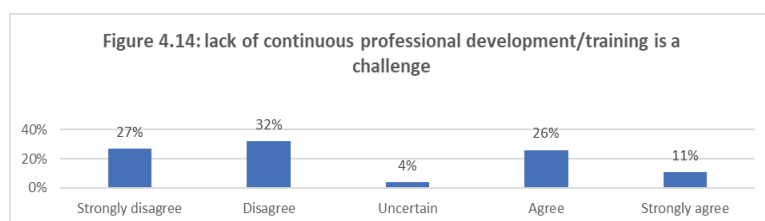
	Particular	SD	D	U	A	SA
B5/5va	I have faced failure by parents to support the teaching/learning process in the centre extracurricular activities	28% (104)	32% (119)	6% (22)	25% (94)	10% (38)
B5/5vb	I have faced failure by parents to support the teaching/learning process in acting as resource persons	21% (78)	31% (117)	7% (28)	29% (109)	12% (45)
B5/5vc	I have faced failure by parents to support the teaching/learning process in supporting learners in homework and storytelling	21% (82)	29% (111)	6% (23)	26% (96)	17% (65)
B5/5vd	I have faced failure by parents to support the teaching/learning process in provision of play materials	20% (77)	31% (116)	3% (12)	29% (111)	16% (61)
B5/5ve	I have faced failure by parents to support the teaching/learning process in feeding their children	21% (78)	29% (111)	4% (16)	29% (108)	17% (64)

	Particular	SD	D	U	A	SA
B5/5vf	I have faced failure by parents to support the teaching/learning process in paying school fees for their children	20% (77)	34% (129)	3% (13)	23% (88)	19% (70)
B5/5vg	I have faced failure by parents to support the teaching/learning process in participating in the nature walk	20% (77)	32% (122)	9% (34)	25% (93)	14% (51)
B5/5vh	I have faced failure by parents to support the teaching/learning process in providing scholastic materials	25% (95)	30% (115)	4% (15)	26% (98)	14% (54)
B5/5vi	I have faced failure by parents to support the teaching/learning process in escorting their children to school	22% (83)	34% (127)	2% (8)	23% (85)	20% (74)

**Source:** Field data, 2022

The study asked 377 teachers/caregivers whether they had faced failure by parents to support the teaching/learning process in various aspects of education. The majority of teachers/caregivers had not faced failure in extracurricular activities, acting as resource persons, supporting learners in homework and storytelling, providing scholastic materials, and participating in nature walks. However, about half of the teachers/caregivers had faced failure in the provision of play materials, feeding their children, and paying school fees for their children. Parents were not supportive of escorting their children to school, according to a small number of teachers/caregivers.

Figure 9: Inadequate continuous professional development/training



**Source:** Field data, 2022

A survey of 377 respondents in Uganda showed that 27% strongly disagreed and 32% disagreed about lacking continuous professional development or training. Only 11% strongly agreed and 26% agreed that they lacked continuous professional development or training, while 4% were uncertain. The majority of teachers/caregivers had not lacked continuous professional development or training. However, some caregivers were not trained, which posed challenges with implementation. Additionally, implementation seemed to be a challenge for some caregivers who had received training. Therefore, although the majority of teachers/caregivers were trained, there were many more who had not received continuous professional development or training in Uganda.

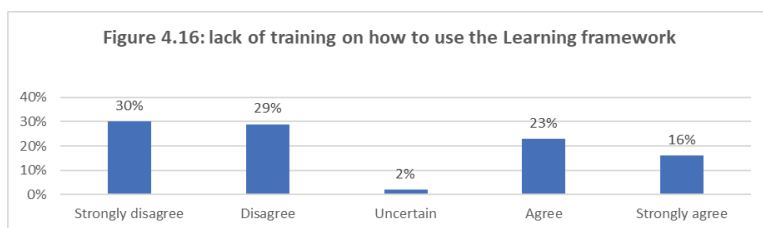


Figure 10: Lack of training on how to use the learning framework

Source: Field data, 2022

The results from Figure 10 indicate that out of 377 respondents, 219 (58%) of the teachers/caregivers disagreed or strongly disagreed that they lacked training on how to use the learning framework, while only 147 (39%) agreed or strongly agreed that they lacked such training. Only 11 (3%) were uncertain. This suggests that the majority of the teachers/caregivers did not lack training on how to use the learning framework.

Table 7: The LFW helps learners to develop

Code	The LFW helps learners to develop	N	Mean	Std. Deviation
C1i	literacy skills	377	4.2	0.983
C1ii	numeracy skills	377	4.24	0.981
C1iii	life skills	377	4.14	1.004
C1iv	social skills	377	4.2	0.997
C1v	ICT skills	377	2.79	1.482
C1vi	communication skills	377	4.16	1.05
C1vii	critical thinking skills	377	4.05	1.064
C1viii	creativity and innovation	377	4.11	0.995
C1ix	collaboration	377	3.96	1.117

Source: Field data, 2022

A majority of respondents agreed that the learning framework helped learners develop literacy, numeracy, life skills, social skills, communication, critical thinking, creativity and innovation, as shown by an aggregate mean of 3.98 in Section C1. However, the respondents disagreed that the LFW helped develop ICT skills, with a mean score of 2.79, indicating that it does not emphasise ICT skills. This finding confirms earlier responses in Section B4, where respondents disagreed about using ICT. As ICT is an emerging issue and one of the 21st-century skills, there is a need to integrate it into the LFW for Ugandan learners to cope with the demands of the world today.

## Emerging Approaches

Table 8: Emerging approaches to learning

	Emerging approaches to learning	SD	D	U	A	SA
C2i	The LFW promotes the use of homeschooling	13% (47)	10% (36)	5% (18)	47% (177)	26% (99)
C2ii	The LFW promotes the use remote schooling	19% (71)	17% (64)	11% (42)	35% (130)	19% (70)
C2iii	The LFW promotes the use of online study	34% (128)	17% (65)	13% (47)	26% (99)	10% (38)
C2iv	The LFW promotes the use of community-based learning	10% (39)	9% (34)	9% (33)	45% (171)	27% (100)
C2v	The LFW promotes the use of self-study	18% (66)	13% (49)	6% (24)	39% (146)	24% (92)

Source: Field data, 2022

Table 8 presents the results of the respondents' views on whether the Learning Framework (LFW) for Uganda promotes different types of learning. A majority of the teachers/caregivers agreed and strongly agreed that the LFW promotes the use of homeschooling (73%), remote schooling (54%), community-based learning (69%), and self-study (73%). However, only a minority agreed that the LFW promotes the use of online study (36%). Strong disagreement was highest regarding the promotion of online study (34%) and lowest regarding the promotion of self-study (19%).

## Emerging Cross-Cutting Issues

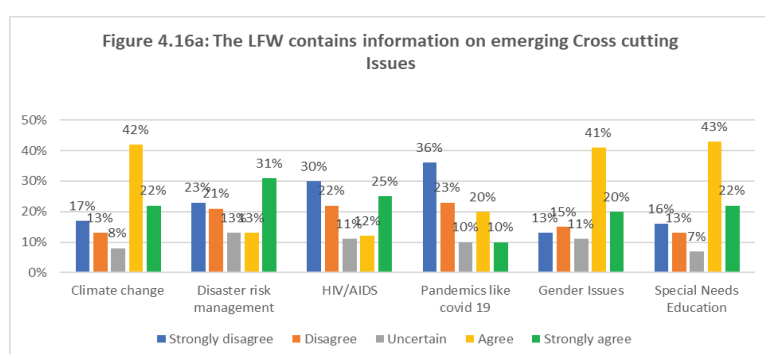


Figure 11: The LFW contains information on emerging cross-cutting issues

Source: Field data, 2022

A study surveyed 377 teachers/caregivers to determine whether the LFW contains information on climate change, disaster risk management, HIV/AIDS, pandemics like COVID-19, gender issues, and special needs education. The results showed that a majority of the respondents agreed that the LFW contains information on climate change, disaster risk management, gender issues, and special needs education, while a majority of the respondents disagreed that the LFW contains information on HIV/AIDS and pandemics like COVID-19. However, in interviews with some CCTs and a District Inspector of Schools, weaknesses in the LFW were identified, including inadequate content for special needs learners and lack of coverage on issues of special needs education.

### The recommendations and tools that help teachers/caregivers to use the LFW

Table 6: Recommendations and tools helping the teachers/caregivers in using the Learning Framework

	Particular	SD	D	U	A	SA
C4i	The use of thematic approach to teaching and learning has helped me in using the LFW	9% (35)	7% (27)	5% (20)	54% (205)	24% (90)
C4ii	The language policy has helped me in using the LFW	9% (32)	7% (26)	4% (15)	53% (201)	27% (103)
C4iii	The class teacher system (one teacher per class) has helped me in using the LFW	14% (53)	22% (82)	5% (20)	42% (159)	17% (63)
C4iv	The use of no cost/low-cost instructional materials has helped me in using the LFW	6% (23)	10% (36)	6% (22)	49% (185)	29% (111)
C4v	Continuous assessment has helped me in using the LFW	7% (25)	5% (19)	3% (13)	52% (198)	32% (122)
C4vi	ICT policy has helped me in using the LFW	37% (140)	20% (75)	8% (29)	27% (100)	9% (33)

**Source:** Field data, 2022

The study findings showed that the majority of respondents agreed that the thematic approach to teaching and learning, language policy, class teacher system, the use of no-cost/low-cost instructional materials, and continuous assessment have helped teachers/caregivers in using the local first language. However, remarks from the interviews indicated some discrepancies. Some teachers and officials raised concerns about the implementation of the language policy, the effectiveness of the class teacher system, and the use of low-cost instructional materials. These findings imply that while certain approaches have been useful, there is still room for improvement in the implementation and effectiveness of some of these strategies.

## Gaps and best practices relating to the design, learning outcomes, competences, developmental activities, teaching methods and assessment modalities of the LFW of Uganda

Table 10: Gaps and best practices in the design of the LFW

	Particulars	SD	D	U	A	SA
D1i	Use of the learning area approach to arrange the developmental activities (content) is easy to follow	7% (27)	13% (48)	3% (12)	47% (178)	30% (112)
D1ii	Leaving out guidance to the teacher in the LFW has no effect on its teaching	20% (74)	26% (99)	6% (21)	36% (134)	13% (49)
D1iii	The way the development activities (content) are presented in the learning framework facilitates teaching	6% (24)	14% (52)	4% (16)	50% (190)	25% (95)
D1iv	The structure of the LFW is clear and easy to understand	10% (37)	14% (51)	4% (14)	45% (169)	28% (106)
D1v	The developmental activities (content) are presented according to different age groups	4% (15)	7% (27)	2% (6)	53% (200)	34% (129)
D1vi	The way the developmental activities (content) are presented according to different age group makes it easy to teach the LFW	5% (19)	10% (37)	3% (11)	51% (192)	31% (118)

**Source:** Field data, 2022

The study reports the findings on the ease of use of the learning area approach and the Learning Framework (LFW) for teachers/caregivers in arranging developmental activities. The majority of the respondents agreed that the learning area approach to arrange developmental activities is easy to follow (47% agreed and 30% strongly agreed). Similarly, the majority of the respondents agreed that the way the developmental activities are presented in the LFW facilitates teaching (50% agreed and 25% strongly agreed) and that the structure of the LFW is clear and easy to understand (45% agreed and 28% strongly agreed). However, less than half of the respondents agreed that leaving out guidance to the teacher in the LFW has no effect on its teaching (36% agreed and 13% strongly agreed). Additionally, while the majority of the respondents agreed that the developmental activities are presented according to different age groups (53% agreed and 34% strongly agreed), fewer agreed that the way the developmental activities are presented according to different age groups makes it easy to teach the LFW (51% agreed and 31% strongly agreed).

Table 11: Competences

	Particular	SD	D	U	A	SA
D3i	All the competences in the LFW help to achieve the learning outcomes	2% (7)	4% (13)	5% (17)	53% (200)	37% (139)
D3ii	All the competences in the LFW are clear and well-stated	3% (10)	9% (34)	4% (16)	49% (186)	35% (131)



	Particular	SD	D	U	A	SA
D3iii	All the competences in the LFW are easy to interpret	3% (13)	11% (43)	6% (21)	50% (187)	30% (113)
D3iv	All the competences in the LFW promote holistic development of the learner	3% (11)	5% (17)	6% (23)	54% (205)	32% (121)
D3v	All the competences in the LFW promote learner centered learning	2% (7)	5% (20)	4% (14)	53% (201)	36% (135)
D3vi	All the competences in the LFW cater for learners with special educational needs	13% (49)	12% (45)	9% (35)	43% (162)	23% (86)
D3vii	All the competences in the LFW promote gender equity	3% (11)	6% (23)	7% (27)	57% (214)	27% (102)
D3viii	All the competences in the LFW promote development of moral values	1% (4)	3% (12)	2% (9)	61% (231)	32% (121)
D3ix	All the competences in the LFW develop a positive attitude in learners	2% (6)	4% (15)	2% (7)	58% (225)	33% (124)

**Source:** Field data, 2022

The study evaluated teachers'/caregivers' perceptions of the effectiveness of the Life Skills-Based Family Education (LSBFE) programme in promoting learning outcomes and holistic development of learners. The majority of respondents agreed that all the competencies in the LSBFE programme help achieve learning outcomes, are clear and well-stated, easy to interpret, promote holistic development of the learner, promote learner-centred learning, cater for learners with special educational needs, promote gender equity, promote the development of moral values, and develop a positive attitude in learners. However, there were some gaps in the results, as a small percentage of respondents strongly disagreed or were uncertain about some of the competencies.

### Teaching methods

Table 9: Teaching methods

	The learning methods in the LFW:	SD	D	U	A	SA
D5i	Are relevant in achieving the learning outcomes	3% (10)	4% (15)	5% (18)	58% (217)	31% (117)
D5ii	Allow the use other methods of teaching other than those in the framework	5% (17)	5% (20)	6% (24)	59% (222)	25% (94)
D5iii	Guide on how to structure the development activities	2% (6)	3% (13)	5% (20)	59% (225)	30% (113)

	The learning methods in the LFW:	SD	D	U	A	SA
D5iv	Are easy to use	3% (10)	7% (26)	4% (15)	53% (202)	33% (124)
D5v	Are age-appropriate	2% (6)	3% (11)	3% (11)	54% (205)	38% (144)

**Source:** Field data, 2022

The findings from Table 9 indicate that the majority of teachers/caregivers agree that the learning methods in the LFW are relevant to achieving learning outcomes, allow the use of other teaching methods, guide on how to structure development activities, and are age-appropriate. Specifically, 58% agreed and 31% strongly agreed that the learning methods are relevant in achieving learning outcomes, 59% agreed and 25% strongly agreed that the methods allow the use of other teaching methods, 59% agreed and 30% strongly agreed that the methods guide on how to structure development activities, and 54% agreed and 38% strongly agreed that the methods are age-appropriate.

### Assessment modalities

Table 10: Modalities

	Particular	SD	D	U	A	SA
<b>D6i</b>	The LFW clearly explains how to assess learner	7% (26)	12% (46)	3% (12)	53% (201)	24% (92)
<b>D6ii</b>	The LFW promotes monitoring the learners' achievement	3% (13)	10% (37)	1% (5)	57% (213)	29% (109)
<b>D6iii</b>	The LFW clearly explains how I assess before I teach	6% (24)	11% (40)	1% (5)	56% (211)	26% (97)
<b>D6iv</b>	The LFW clearly explains how I assess during teaching learning process	6% (21)	11% (41)	3% (11)	52% (196)	29% (108)
<b>D6v</b>	The LFW clearly explains how I assess at the end of teaching	6% (21)	9% (35)	3% (13)	54% (205)	27% (103)
<b>D6vi</b>	The LFW guides me on how to use the results of assessment to improve learning	6% (24)	13% (49)	2% (8)	51% (192)	28% (104)
<b>D6vii</b>	The LFW guides me on how to use to record learner's achievement	6% (23)	11% (43)	3% (13)	50% (188)	29% (110)
<b>D6viii</b>	The LFW guides me on how to give feedback to learners, parents and administration	7% (25)	11% (42)	4% (15)	48% (182)	30% (113)
<b>D6ix</b>	The LFW promotes achievement of the competences	4% (16)	8% (29)	3% (12)	52% (197)	33% (123)

**Source:** Field data, 2022

A study was conducted to investigate the perceptions of teachers/caregivers about how the Learning for Well-being (LFW) framework explains the assessment of learners. A total of 377 respondents participated in the study, and the findings suggest that the majority of the respondents agreed that the LFW clearly explains how to assess learners, promotes monitoring of learners' achievement, guides on how to assess before, during, and at the end of teaching, guides on how to use the results of assessment to improve learning, guides on how to record learners' achievement, guides on how to give feedback to learners, parents, and administration, and promotes the achievement of competences. However, a small percentage of respondents disagreed or strongly disagreed with some of the statements, indicating the need for further exploration and clarification in those areas into simplified topics.

## **Discussion, Conclusions and Recommendations**

This section summarises the discussion, conclusions, and recommendations based on the findings presented in the previous section. The discussions were structured around the research questions, and the conclusions were drawn from the survey data. Finally, recommendations were provided based on the findings.

### **Discussion**

The first objective of the study was to identify the factors that affect the implementation of the Early Childhood Development (ECD) Learning Framework (LFW) for children aged 3–6 years and to suggest possible solutions. The findings showed that while teachers/caregivers had regular training on the LFW, the training was mostly theoretical and lacked practical elements. Additionally, the teachers/caregivers did not receive regular support from District Inspectors of Schools and did not have access to ICT equipment, which affected the implementation of the LFW. The teachers/caregivers had difficulty in integrating personal/emotional/social/behaviour aspects into the different areas of learning. However, parents were supportive of the teaching/learning process through participation in co-curricular activities, acting as resource persons, supporting learners in homework, providing play materials, and participating in feeding their children. The literature cited in the study highlights the need for political and financial support, administrative strategies, and parental involvement for effective implementation of ECD policies. Gaps in the study include the lack of information on the specific challenges faced by teachers/caregivers in integrating personal/emotional/social/behaviour aspects into the different areas of learning and the absence of information on the specific practical elements missing in the teachers'/caregivers' training.

The second objective of the study was to identify emerging issues in early childhood education that need to be integrated into the Learning Framework for 3–6-year-olds. The literature review revealed that early childhood education and care is gaining global interest, and there is a need to address emerging issues such as ICT skills, learners with special needs, disaster risk management, HIV/AIDS, pandemics, Science, Technology and Innovation (STI), and global citizenship education. The findings showed that the current framework promotes homeschooling, remote schooling, community-based learning and self-study, but does not adequately address the aforementioned emerging issues. The study also found that the lack of consideration for emerging issues and slow review of curriculum policies can hinder effective implementation of the framework.

The third objective aimed to identify gaps and best practices in the Learning Framework (LFW) for 3–6-year-olds in Uganda. The findings revealed that the LFW is easy to follow and promotes cognitive, psychomotor and affective development. However, the LFW needs improvement in terms of providing guidance to teachers, catering to learners with special needs, and fostering local culture. The study recommended involving teachers in the curriculum development process and providing the required resources for extensive deliberation. The LFW is still relevant to the needs of society and in line with national policies, but challenges in ECD provisioning still exist owing to inadequate resource structures and high costs.

## Conclusions

The study found that regular training and support are necessary for teachers/caregivers to effectively implement the Early Childhood Development (ECD) Learning Framework. While teachers/caregivers were equipped with the framework and teaching skills, they still required regular support from District Inspectors of Schools, DEOs and CCTs in implementing the framework. Additionally, support from other teachers and parents is crucial for effective implementation. The study highlighted the importance of involving caregivers in children's learning from the age of three, which can be empowering for parents. While teachers/caregivers had the necessary materials and teaching skills, they needed further support in integrating personal/emotional/social/behavioural aspects into the different learning areas and addressing implementation challenges in the classroom environment.

The study found that the LFW promotes various learning approaches, including homeschooling, remote schooling, community-based learning and self-study. It also highlighted the need for the LFW to include information on emerging issues, such as ICT, disaster risk management, HIV/AIDS, pandemics, Science, Technology and Innovation (STI) and global citizenship education. The study further emphasised the role of ICT in teaching and learning as well as in administration. Additionally, the study identified that the language policy, continuous assessment, and thematic approach to teaching and learning had helped teachers/caregivers use the LFW. However, the study pointed out that teachers/caregivers need to be more mindful of emerging issues at the regional and global levels when implementing the LFW.

The study found that the developmental activities in the LFW were presented according to different age groups, making them easy to teach, and that the learning outcomes were relevant to the needs of society in Uganda. The study also showed that the competencies were clear and well-stated, easy to interpret, promoted holistic development, and developed a positive attitude in learners. However, the study discovered a limited focus on the competencies of learners with special needs. The development activities in the LFW were found to be flexible and to leave room for teachers' creativity and innovation. The learning methods in the LFW were relevant in achieving the learning outcomes, and the LFW clearly explained how to assess learners and promote monitoring of their achievements. The LFW also guided teachers/caregivers on how to use the results of assessment to improve learning and give feedback to learners, parents and the administration, promoting the achievement of competencies. However, there is a need to cater for the guidance to teachers in the LFW on teaching learners.

## Recommendations

The study aimed to identify gaps in the Learning Framework for children aged 3–6 years in Uganda and make recommendations for its improvement. The researchers recommended instant review of the framework, as it has not been updated for 17 years. They also suggested increasing regular support and improving the skills of teachers and caregivers in implementing the framework, as well as providing them with ICT equipment and increasing guidance and monitoring from CCTs and DEOs. Additionally, there is a need to increase the frequency of professional development training for teachers and caregivers and to maintain the usage of the framework while improving the guides to its implementation. Furthermore, teachers and caregivers should be trained on how to integrate personal, emotional, social and behavioural aspects into the different areas of learning. Lastly, they should be given more opportunities to attend conferences, exchange visits, seminars and workshops on ECD that can be helpful in using the Learning Framework. These recommendations aim to provide constructive insights to the National Curriculum Development Centre as well as the Ministry of Education and Sports.

The findings suggest that curriculum developers should ensure that learners with special needs are included in the curriculum.

They also recommend the provision of digitalised materials and a competence indicators framework to support teachers and learners. Additionally, the study emphasises the importance of using local languages to engage learners and promote an interactive learner-centred approach. Starting school in a new language can lead to passiveness and inhibit creativity and expression. Additionally, the LFW should provide clear guidance to teachers, and curricula should support teachers in understanding and implementing appropriate practices for learners.

## References

- Agbagbla, F. (2018). *A professional development programme for Ghanaian kindergarten teachers to implement an indigenous play-based pedagogy* (Doctoral dissertation, University of Pretoria).
- Amin, M. (2005). *Social science research: Conception, methodology and analysis*. Kampala: Makerere University Press.
- Anwaar, A. G. (2021). *Need analysis for curriculum - Educare ~ We Educate, We Care* (educarepk.com). Accessed on 2/12/2021 at <https://www.educarepk.com/needs-analysis-for-curriculum.html>
- Asmawati, L. (2021, September). Technology pedagogy content knowledge skills of early childhood education teachers. In *ICLIQE 2021: Proceedings of The 5th International Conference on Learning Innovation and Quality Education* (pp. 1–7).
- Aziz, S., Mahmood, M., & Rehman, Z. (2018). Implementation of CIPP model for quality evaluation at school. *Journal of Education and Educational Development*, 189–206.
- Baker-Henningham, H., Scott, Y., Bowers, M., & Francis, T. (2019). Evaluation of a violence-prevention programme with Jamaican primary school teachers: a cluster randomised trial. *International Journal of Environmental Research and Public Health*, 16(15), 2797.
- Balyejjusa, S. M. (2015). Uganda's Vision 2040 and human needs promotion. *Africa Development*, 40(4), 61–90.
- Bautista, A., Ng, S. C., Múñez, D., & Bull, R. (2016). Learning areas for holistic education: Kindergarten teachers' curriculum priorities, professional development needs, and beliefs. *International Journal of Child Care and Education Policy*, 10(1), 1–18.
- Bergsmann, E., Schultes, M. T., Winter, P., Schober, B., & Spiel, C. (2015). Evaluation of competence-based teaching in higher education: From theory to practice. *Evaluation and Program Planning*, 52, 1–9.
- Berger, N., & Fisher, P. (2013). A well-educated workforce is key to state prosperity. *Economic Policy Institute*, 22(1), 1-14.
- Berwick, R. (1989). Needs assessment in language programming: From theory to practice. In R. K. Johnson (ed.), *The second language curriculum [M]*. Cambridge University Press.
- Bharvad, A. J. (2010). Curriculum evaluation. *International Research Journal*, 72–74.
- Boonk, L., Gijssels, H. J., Ritzen, H., & Brand-Gruwel, S. (2018). A review of the relationship between parental involvement indicators and academic achievement. *Educational Research Review*, 24, 10–30.
- Bourne, P. A. (2019). Mathematics performance in Jamaica. *International Journal of History and Scientific Studies*, 1(4), 8–31.

- Brady, L., & Kennedy, K. (1999). *Curriculum construction*. Sydney: Prentice Hall.
- Brianna, F. (2020). *Emerging trends in early childhood education*.
- Brindley, G. P. (1989). The role of needs analysis in adult ESL programme design. In R. K. Johnson (ed.), *The second language curriculum [M]*. Cambridge University Press.
- Bugotu, F., Maeke, D., Paia, H., Ramoni, M., & Arnold, B. (1973). *Education for what? A report on the findings of the British Solomon Islands Protectorate Education Policy Review Committee*. Honiara: Government Printers.
- Burns, T., & Köster, F. (Eds.). (2016). *Governing Education in a Complex World. Educational Research and Innovation*. Paris. Retrieved from <https://dx.doi.org/10.1787/9789264255364-en>.
- Cambridge Education. (2017). *Report on the existing ECE models and implementation status of the ECD policy provisions*. Kampala: Cambridge Education.
- Caarls, K., Cebotari, V., Karamperidou, D., Alban Conto, M. C., Zapata, J., & Zhou, R. Y. (2021). *Lifting barriers to education during and after Covid-19: Improving education outcomes for migrant and refugee children in Latin America and the Caribbean*.
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. London: Sage Publications.
- Chipili, M. (2020). *The use of participatory theatre in early childhood development interventions: A focus on mother groups in Choma and Pemba, Zambia* (Doctoral dissertation, The University of Zambia).
- Coburn, C. (2006). *American Educational Research Journal*, 43(3), 343–349. Retrieved from “Framing the problem of reading instruction: Using frame analysis to uncover the micro processes of policy implementation”, *American Educational Research Journal*. <http://dx.doi.org/10.3102/00028312043003343>
- Creswell, J. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Boston, MA: Pearson.
- Creswell, J. (2009). *Research design: Qualitative, quantitative, and mixed methods approach*. Thousand Oaks, CA: Sage.
- Denboba, A. D., Sayre, R. K., Wodon, Q. T., Elder, L. K., Rawlings, L. B., & Lombardi, J. (2014). *Stepping up early childhood development: Investing in young children for high returns*.
- Diale, B. M., & Sewagegn, A. A. (2021). Early childhood care and education in Ethiopia: A quest for quality. *Journal of Early Childhood Research*, 19(4), 516–529.
- Donaldson, J. L., & Franck, K.L., (2016). *Needs assessment guide book for extension professionals*. The University of Tennessee Extension Publications. PB 1839.
- Drost, B. R., & Levine, A. C. (2015). An analysis of strategies for teaching standards-based lesson plan alignment to preservice teachers. *Journal of Education*, 195(2), 37–47.
- Dzaman, S. (2015). *Human service executives’ insights on the best interests of the child* (Doctoral dissertation, University of Saskatchewan).
- ECD LFW. (2008). *ECD LFW 3–6 years* (p. 5, Box 2). Kampala: MoGLSD.

- Edwards, M., Sanchez-Ruiz, L. M., & Sanchez-Diaz, C. (2009). *Achieving competence-based curriculum in engineering education in Spain*.
- Ejuu, G. (2012). *Status of the implementation of the ECD policy in Uganda*. Kampala: UNATCOM.
- Ejuu, G. (2021). *Rethinking the Uganda learning framework for early childhood development in light of global early years pedagogical trends*. Kampala: Kyambogo University.
- Elize Du Plessis, E. C. (2020). Factors influencing curriculum implementation in accredited private universities in Botswana. *Journal of Applied Research in Higher Education*.
- EMIS. (2017). *Education management information systems (EMIS) norms and standards for the East African Community*. Kampala: Ministry of Education and Sports.
- Ezati, B. A., Madanda, A., & Ahikire, J. (2018). Improving learning in rural lower primary school through provision of informal ECD: Lessons from an NGO model in Uganda. *Journal of Education and e-Learning Research*, 5(1), 51–59.
- Fenwick, E. W., & Kaufman, R. A. (1975). *Needs assessment: A focus for curriculum development*. Washington, DC: ERIC Clearinghouse.
- Florian, L., Black-Hawkins, K., & Rouse, M. (2016). *Achievement and inclusion in schools*. Routledge.
- Fragouli, E. (2020). Internationalising the curriculum. *International Journal of Higher Education Management*, 6(2), 18–30.
- Fukkink, R. G. & Lont, A. (2007). Does training matter? A meta-analysis and review of caregiver training studies. *Early Childhood Research Quarterly*, 22, 294–311
- Fullan, M. (2015). *The new meaning of educational change*. Teachers College Press.
- Galloway, D. (2018). *Schools, pupils and special educational needs*. Routledge.
- Garst, B. A., & McCawley, P. F. (2015). Solving problems, ensuring relevance, and facilitating change: The evolution of needs assessment within cooperative extension. *Journal of Human Sciences and Extension*, 3(2).
- Gestwicki, C. (2016). *Developmentally appropriate practice: Curriculum and development in early education*. Cengage Learning.
- Government White Paper. (1992). *Government white paper on education*. Kampala: Republic of Uganda.
- Graafland, J. H. (2018). *New technologies and 21st-century children: Recent trends and outcomes*.
- Hairon, S., & Dimmock, C. (2012). Singapore schools and professional learning communities: Teacher professional development and school leadership in an Asian hierarchical system. *Educational Review*, 64(4), 405–424.
- Hughes, M. T. (2016). *Targeted needs assessment*. In *Curriculum development for medical education: A six-step approach* (pp. 29–49). Maryland: Johns Hopkins University Press.
- Huggins, V., & Evans, D. (2018). *Early childhood education and care for sustainability. International perspectives*.
- Hutchinson, T., & Waters, A. (1987). *English for specific purposes*. Cambridge University Press.

- Jaggars, S. S., & Bickerstaff, S. (2018). Developmental education: The evolution of research and reform. *Higher education: Handbook of theory and research* (pp. 469–503). Cham: Springer,
- Kaufman, R. A., & Corrigan, R. E. (1969). A system towards educational responsiveness to society's needs – A tentative utility model. *Journal of Socio-economic Science*, 151–157.
- Kaufman, R. A. (2011). *The manager's pocket guide to mega thinking and planning*. Amherst, MA: HRD Press.
- Kaufman, R. A., & Guerra-Lopez. (2013). *Needs assessment for organisational success*. ASTD Press.
- Kaufman, R., & Stakenas, R. G. (1981). Needs assessment and holistic planning. *Educational Leadership*, 38(8), 612–616.
- Kaufman, R. A. & Guerra-Lopez, I (2013). *Needs Assessment for Organisational Success*. ASTD Press
- Kurt, M., & Benzer, S. (2022). Examining the STEM course plan preparation skills and opinions of preservice science teachers on STEM applications. *Online Submission*, 6(10), 84–107.
- Kyazze, M. D. R. (2018). *Implementing the learning framework for three to six-year-olds: Uganda, Wakiso district case*. Kampala: National Curriculum Development Centre.
- Khamis, A. (2022). Early childhood development in Uganda: Investing in human and national development– Reflections. *Education in troubled times: A global pluralist response*, p. 71.
- Khanna, P. (2021). *Move the forces uprooting us*. Simon and Schuster.
- Kisa, Z., & Correnti, R. (2015). Examining implementation fidelity in America's choice schools: A longitudinal analysis of changes in professional development associated with changes in teacher practice. *Educational Evaluation and Policy Analysis*, 437–457.
- Krejcie, R., & Morgan, D. (1970). Determining sample size for research activities. *Educational and psychological measurement*.
- Leicht, A., Heiss, J., & Byun, W. J. (2018). *Issues and trends in education for sustainable development* (vol. 5). UNESCO Publishing.
- Lehtonen, A., Salonen, A. O., & Cantell, H. (2019). Climate change education: A new approach for a world of wicked problems. In *Sustainability, human well-being, and the future of education* (pp. 339–374). Cham: Palgrave Macmillan.
- Lemke, A., & Harris-Wai, J. (2015). Stakeholder engagement in policy development: Challenges and opportunities for human genomics. *Genetics in Medicine*, 949–957.
- Luna, S., C. (2015). *The futures of learning 2: What kind of learning is for the 21st century?*
- Marinoni, G., & Jensen, T. (2020). *The impact of Covid-19 on higher education around the world: IAU global survey report*. Miollis: International Association of Universities.
- März, V., & Kelchtermans, G. (2013). Retrieved from “Sense-making and structure in teachers' reception of educational reform. A case study on statistics in the mathematics curriculum”. *Teaching and Teacher Education*. <http://dx.doi.org/10.1016/j.tate.2012.08.004>.



- Megahed, G., Elshater, A., & Afifi, S. M. (2019). Competencies urban planning students need to succeed in professional practices: Lessons learned from Egypt. *Archnet-IJAR: International Journal of Architectural Research*.
- Mehrmohammadi, M. (2005). *Needs-based curriculum development process: A multilevel conception*. Tarbiat Modarres University.
- McKillip, J. (1998). Needs analysis: Process and techniques. In L. Bickman, & D. J. Rog (eds.), *Handbook of applied social research methods*. Thousand Oaks, CA: Sage Publications.
- Michel, V., Karolien, L., & Miroslav, B. (2018). *Benefits of early childhood education and care and the conditions for obtaining them*. European Union.
- Modise, M. R. (2019). *Pedagogical leadership in early childhood development: A means for quality practices through professional training*. Bulgarian Comparative Education Society.
- Moore, D., Edwards, S., Cutter-Mackenzie, A., & Boyd, W. (2014). Play-based learning in early childhood education. *Young children's play and environmental education in early childhood education* (pp. 9–24). Cham: Springer.
- Ministry of Education and Sports (MoES) (2018). *Early childhood care and education policy*. Kampala: MoES
- MoES. (1992). *Government white paper on education*. Kampala: MoES
- MoES. (2008). *Education Act*. Kampala: MoES.
- MoGLSD (2016). *National Integrated Early Childhood and Development (NIECD) policy*. Kampala.
- Mukiibi, E. (2016). *Research data management and research data re-use in Uganda*.
- Murray, J. (2015). Early childhood pedagogies: Spaces for young children to flourish. *Early Child Development and Care*, 185(11–12), 1715–1732.
- National Planning Authority. (2020). Planning for increased access to early childhood care and education. *Thematic studies final report*. MoGLSD Kampala.
- Ndijuye, L. G., & Tandika, P. B. (2020). Towards global peace and sustainability: Role of education in peace-building in the great lakes region of sub-Saharan Africa. *IntechOpen*.
- Nicholls, J. G. (1978). The development of the concepts of effort and ability, perception of academic attainment, and the understanding that difficult tasks require more ability. *Child Development*, 800–814.
- NCDC Act. (1973). *The NCDC Act*. Kampala: Parliament of Uganda.
- NIECD. (2016). *National integrated early childhood development policy*. Kampala: Ministry of Gender Labour and Social Development.
- Obbo, J. (2017). *Embrace early childhood development education*. Retrieved from <https://www.Monitor.co.ug/Uganda/news/education/embrace-early-childhood-development-education-1711068>: <https://www.Monitor.co.ug/>
- OECD. (2018). The future of education and skills: Education 2030. *Position paper*.

- Osman, T., Shaw, D., & Kenawy, E. (2018). Examining the extent to which stakeholder collaboration during ecotourism planning processes could be applied within an Egyptian context. *Land Use Policy*, 78, 126–137.
- Papadakis, S., & Kalogiannakis, M. (2017). Mobile educational applications for children: What educators and parents need to know. *International Journal of Mobile Learning and Organisation*, 11(3), 256–277.
- Paton-Ash, M., & Wilmot, D. (2015). Issues and challenges facing school libraries in selected primary schools in Gauteng Province, South Africa. *South African Journal of Education*, 35(1).
- Persson, A. (2016). *Curriculum and expected learning outcomes. 25 ways to Improve learning*, p. 63.
- Prajapati, R., Sharma, B., & Sharma, D. (2017). Significance of life skills education. *Contemporary Issues in Education Research (CIER)*, 10(1), 1–6.
- Rakotomanana, H., Walters, C. N., Komakech, J. J., Hildebrand, D., Gates, G. E., Thomas, D. G., ... & Stoecker, B. J. (2021). Fathers' involvement in child care activities: Qualitative findings from the highlands of Madagascar. *PloS One*, 16(3), e0247112.
- Rao, K., & Meo, G. (2016). Using universal design for learning to design standards-based lessons. *Sage Open*, 6(4), 2158244016680688.
- Rao, N., Sun, J., Pearson, V., Pearson, E., Liu, H., Conostas, M. A., & Engle, P. L. (2012). Is something better than nothing? An evaluation of early childhood programs in Cambodia. *Child Development*, 83(3), 864–876.
- Republic of Uganda (2016) *Children's Act, amendment*. Kampala.
- Richter, L. M., Daelmans, B., Lombardi, J., Hayman, J., Boo, F. L., Behrman, J. R., ... & Lancet Early Childhood Development Series Steering Committee. (2017). Investing in the foundation of sustainable development: Pathways to scale up for early childhood development. *The Lancet*, 389(10064), 103–118.
- Rouse, E., & O'Brien, D. (2017). Mutuality and reciprocity in parent-teacher relationships: Understanding the nature of partnerships in early childhood education and care provision. *Australasian Journal of Early Childhood*, 42(2), 45–52.
- Rubin, H., & Rubin, I. S. (1995). *Qualitative interviewing: The art of hearing data*. Thousand Oaks, CA: Sage.
- Saleema, P. (2019). Teachers' competence and use of play pedagogy in nursery schools: A case of Kampala central division, Uganda (Doctoral dissertation, Kyambogo University (unpublished work)).
- Sarantakos, S. (1998). *Social research*. South Melbourne: MacMillan Education Australia.
- Sekaran, U. (2003). *Research methods for business: A skill-building approach*. New York: John Wiley & Sons.
- Seman, S. C., Yusoff, W. M. W., & Embong, R. (2017). Teachers' challenges in teaching and learning for higher order thinking skills (HOTS) in primary school. *International Journal of Asian Social Science*, 7(7), 534–545.
- Sleeter, C., & Carmona, J. F. (2017). *Un-standardizing curriculum: Multicultural teaching in the standards-based classroom*. Teachers College Press.

- Spillane, J., Reiser, B., & Reimer, T. (2000). <http://dx.doi.org/10.3102/00346543072003387>. Retrieved from policy implementation and cognition: Reframing and refocusing implementation research. *Review of Educational Research*.
- Stufflebeam, D. L., & Shinkfield, A. J. (2007). *Evaluation theory, models and applications*. San Francisco, CA: Jossey-Bass.
- Taba, H. (1962). *Curriculum development theory and practice*. New York: Harcourt Brace, Jovanvich.
- Taderera, C., & Hall, H. (2017). Challenges faced by parents of children with learning disabilities in Opuwo, Namibia. *African Journal of Disability*, 6(1), 1–10.
- Takyi, S. A., Amponsah, O., Asibey, M. O., & Ayambire, R. A. (2021). An overview of Ghana's educational system and its implication for educational equity. *International Journal of Leadership in Education*, 24(2), 157-182.
- The Constitution of the Republic of Uganda. (1995). *The Constitution of the Republic of Uganda - Article 30 and Article 34 (2)*. Kampala: Parliament of Uganda.
- Treadaway, J. (2003). Education for what? *Revisited paper presented at the SICHE Education Conference*. Honiara: Panatina.
- Tyler, R. W. (1950). Basic principles of curriculum and instruction. *Syllabus for Education*, 305, pp. 5–6.
- Tyilo, P. N., Luggya, S. K., & Mdaka, V. N. (2017). Challenges faced by educators in implementing early childhood development (ECD) policies. *Journal of Sociology and Social Anthropology*, 8(4), 209–214.
- UBOS. (2020). *Uganda Bureau of Statistics*. Kampala: Uganda Bureau of Statistics.
- UNESCO. (2015). *Education for All 2000-2015: Achievements and challenges*. Washington, DC: UNESCO.
- UNESCO. (2015). *The curriculum in debates and educational reforms to 2030: For a curriculum agenda of 21st century*. Geneva: IBE.
- UNESCO. (2021). Early childhood care and education. *Global partnership strategy for early childhood, 2021–2030*. ED-2022/WS/7.
- UNESCO (2014). Strong foundation, early childhood care and education. *EFA global monitoring report 2014*. Paris: UNESCO.
- Usman, Y. D. (2016). Educational resources: An integral component for effective school administration in Nigeria. *Online Submission*, 6(13), 27–37.
- Vaccari, V., & Gardinier, M. P. (2019). Toward one world or many? A comparative analysis of OECD and UNESCO global education policy documents. *International Journal of Development Education and Global Learning*.
- Vasileiou, K. (2018). *Characterising and justifying sample size sufficiency in interview-based studies: Systematic analysis of qualitative health research over 15 years*. 18, 148. (J. Barnett, & S. Thorpe, Eds.) Retrieved from BMC Med Res Methodol: <https://doi.org/>

Wang, M. T., & Degol, J. L. (2016). School climate: A review of the construct, measurement, and impact on student outcomes. *Educational Psychology Review*, 28(2), 315-352.

Wetherell, M. (2015). Trends in the turn to affect: A social psychological critique. *Body & Society*, 21(2), 139-166.

Wilkinson, J. E. (2021). *Contemporary challenges for education in early childhood*. Doi: 10.5772/intechopen.98903

Woods, A. D., Morrison, F. J., & Palincsar, A. S. (2018). Perceptions of communication practices among stakeholders in special education. *Journal of Emotional and Behavioral Disorders*, 26(4), 209-224.