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Exploring scaling of inclusive home-based early learning initiative in Liberia: Opportunities and Challenges

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Abstract

This study explored the opportunities and challenges in scaling inclusive home-based early learning in Liberia, focusing on five communities: Zolowee, Sehyikimpa, Zuluyee, Dingamo, and Nengbein in the Sanniquellie-Mahn and Bain-Garr Districts of Nimba County, Liberia. Data collected from 88 respondents revealed a lack of knowledge about home-based schools but a strong willingness to support their establishment. The findings indicate that quality Early Childhood Care and Education (ECCE) services can be promoted through child development workshops, home visits, community children's reading clubs, organized play and game events, and the recruitment of home-based teachers. Equipping untrained teachers with play-based pedagogical skills is crucial but currently lacking, while encouraging fathers to share caregiving responsibilities could help overcome traditional gender role challenges. The study concludes that improving access to quality ECCE services in home-based schools requires workshops, home visits, reading clubs, play events, and recruiting home-based teachers. Adapting cultural norms to support play-based learning fosters inclusivity, while raising awareness encourages fathers to share caregiving responsibilities. The study recommends establishing home-based schools, facilitated and supervised by Nimba University and the Liberian Ministry of Education.

Keywords: Home-based schools; Inclusive Education; Early learning; Play-Based Pedagogy

1. Introduction

The 2006 United Nations Convention on the Rights of Persons with Disabilities (CRPD) ensures the right to inclusive education, including for persons with disabilities, while Sustainable Development Goal (SDG) 4 emphasizes equitable access to quality education and early childhood development. The Government of Liberia, as a signatory to this commitment, has introduced policies to implement its international obligations supporting inclusive education at all levels, including early childhood education, under this framework.

The Liberian Education Reform Act of 2011 establishes a legal framework for inclusive education, emphasizing the government's commitment to developing an equitable education system. Despite the introduction of these international and national policies, the majority of disadvantaged children in Liberia, especially those under eight years old, have limited or no access to inclusive education. This lack of access contributes to perceived future poverty, which may lead to underdevelopment. Home-based schools have emerged as a promising solution to ensure that these disadvantaged children have access to quality and equitable education.

The right of people with disabilities to inclusive education in most signatory countries is outlined in the 2006 CRPD to ensure that students with disabilities receive the assistance needed to fully engage in the educational process. The CRPD emphasizes inclusion as a human rights concern rather than just a matter of policy, thereby reaffirming governments'

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obligations to ensure that all children have fair access to education. This right is also emphasized by SDG 4, which ensures equitable and inclusive education for all children, including those with disabilities, as well as access to high-quality early childhood development, care, and pre-primary education (Saini, Sengupta, & Singh, 2023). These international frameworks serve to guarantee that students with disabilities are provided the necessary assistance to fully engage in the educational process (UNESCO, 2020).

The CRPD and SDG 4 underline the importance of inclusion as a fundamental human right, reinforcing governments' obligations to ensure fair and equitable access to education for all children (Saini, Sengupta, & Singh, 2023). Additionally, SDG 4 supports equitable inclusive education, focusing on high-quality early childhood development, care, and preprimary education. Governments are urged to implement strategies and policies that support inclusive education at all levels, including early childhood education, under these frameworks.

Recognizing the need for institutional improvements to support disadvantaged and vulnerable groups, especially children with disabilities, the Liberian Education Reform Act of 2011 establishes a legal framework for inclusive education, emphasizing the government's commitment to developing an equitable education system (Education Reform Act, 2011). This Act reflects Liberia's response to international frameworks such as the SDGs and the CRPD through the National Policy on Inclusive Education (Ministry of Education, 2018), which outlines precise objectives to create inclusive environments in all learning settings across the nation. The policy aims to ensure that students with disabilities are not only enrolled in classes but also receive the necessary modifications to succeed.

However, as Doe (2020) argues, these objectives have yet to be fully realized due to the shortage of special education teachers and accessible educational facilities, particularly in remote areas with limited resources. Additionally, cultural constraints further impede the implementation of these policies. Kromah's (2019) research highlights how traditional views in Liberia often exclude disadvantaged children, particularly those with disabilities, from educational opportunities, especially in remote communities. The National Policy on Inclusive Education has encountered resistance in some areas, hindering its progress, even as it seeks to address these issues through awareness-raising initiatives and efforts to change societal attitudes.

Liberia's education system, still recovering from years of civil unrest, faces obstacles in implementing inclusive, play-based learning as envisioned by the Liberian Education Reform Act of 2011 and Ministry of Education policies (Ministry of Education of Liberia, 2018). In rural areas of Liberia, where the demand for education among preschool-age children is high, challenges such as untrained teachers, overcrowded classrooms, and limited resources are common (Jackson, 2021). Cultural resistance to play-based methods also hinders progress, as traditional teaching approaches are often viewed as more effective (Kromah, 2019). The home-based learning (HBL) approach has emerged as a promising solution to these challenges. It provides children with the advantage of studying in a comfortable, familiar environment, which can be especially beneficial for marginalized communities or children with disabilities (Engle et al., 2011). Additionally, it engages older children in facilitating learning for younger peers, which is particularly effective in resource-constrained settings (Hyde, Koon, & Twala, 2008). This approach is especially valuable in contexts where access to formal education is limited. In Liberia, HBL is regarded to be an effective alternative to formal schooling, particularly in rural areas with inadequate educational facilities (Kollie, 2021). Moreover, HBL allows parents and caregivers to actively participate in their children's education, enhancing academic performance and strengthening emotional bonds (Yoshikawa et al., 2013; Johnson, 2019). This approach emphasizes parental involvement, positioning parents as critical in fostering early numeracy and literacy skills (Jackson, 2021).

Despite its benefits, HBL presents challenges in achieving equity and inclusivity in education. A significant barrier is the lack of resources and knowledge among some families to effectively support their children's education at home, which can exacerbate educational inequalities. This is particularly evident among children from low-income households or those with parents who have limited education (Boahen et al., 2019). In Liberia, many families face challenges in creating structured learning environments due to limited access to the internet, educational materials, and parental literacy, especially in rural areas (Flomo 2021). Expanding HBL programs in resource-poor settings like Liberia requires substantial investments in resources, parental support, and teacher training (UNICEF, 2020).

Cultural barriers further complicate the implementation of HBL in Liberia. Local studies have shown that deeply rooted beliefs about gender roles and education hinder its effectiveness, particularly for girls and children with disabilities. Doe and Sesay (2022) found that these cultural norms often prevent equitable participation in HBL, limiting its potential impact on inclusive education. Addressing these challenges requires a holistic approach that combines resource

allocation, community engagement, and cultural sensitization to ensure that HBL is accessible and effective for all children.

Educational theorists have consistently demonstrated that children aged two to five achieve greater academic success when guided by knowledgeable parents (Piaget, 1952; Erikson, 1963; Vygotsky, 1978). Piaget (1952) theorized that cognitive development occurs in distinct stages. After the Sensorimotor Stage (birth to 2 years), where children develop thinking skills through sensory and motor interactions, they transition to the Preoperational Stage (2 to 7 years). This stage is characterized by symbolic thinking, imaginative play, and the beginning of language use, although logical reasoning and concepts like conservation remain underdeveloped.

Erikson (1963) proposed that early childhood development involves navigating psychosocial challenges that shape identity and emotional well-being. During the Autonomy vs. Shame and Doubt stage (1-3 years), children assert independence and explore their environment. Positive guidance fosters confidence, while inadequate support may lead to frustration and shame. From ages three to six, during the Initiative vs. Guilt stage, children assert control over their activities through play. Supportive relationships with knowledgeable adults help them develop a sense of purpose, while punitive responses can result in feelings of guilt or inadequacy.

Vygotsky (1978) emphasized the role of social interaction and cultural tools in cognitive development. He advocated for learning environments that foster collaboration and provide scaffolding tailored to each child's developmental stage. Erikson and Vygotsky both stress the importance of supportive relationships with informed parents or educators in fostering emotional resilience and self-concept.

In practice, home-based schools have proven highly effective for early childhood education. Research shows that such settings promote cognitive, social-emotional, language, and physical development (Bergen, 2002; Bodrova & Leong, 2012). Children develop problem-solving skills, build social connections, and enhance self-esteem through play (Johnson, 2018). Early numeracy and literacy skills acquired through child-to-child play are strong predictors of future academic success (Johnson, 2018). Despite these benefits, establishing home-based schools in many African contexts faces significant challenges. Limited resources, overcrowded classrooms, and insufficient teacher training often hinder their implementation (Boahen, et. al., 2019). Cultural attitudes favoring conventional schools over home-based models further exacerbate the issue (Ainscow, 2016).

In Liberia, inclusive education remains a relatively new concept requiring broader acceptance across sectors to support early interventions for children's cognitive, motor, social, and emotional development, especially for those with disabilities (World Health Organization, 2012). The approach aims to strengthen the education system to accommodate all learners, including those with developmental delays, autism spectrum disorder (ASD), ADHD, and other challenges. Early identification systems are critical for timely intervention and preventing adverse outcomes, such as reduced parental confidence (Draper et al., 2023). Raising awareness and fostering collaboration among institutions are essential to addressing developmental needs effectively.

Play-based pedagogical approaches are critical for fostering cognitive and social development in early childhood. However, their implementation in developing contexts like Liberia requires addressing barriers related to resources, teacher training, and cultural perceptions. By leveraging international frameworks, fostering home-based education programs, and promoting inclusive pedagogies, Liberia can make meaningful progress toward building an equitable and effective education system.

1.1 Statement of the Problem

The UN Convention on the Rights of Persons with Disabilities (CRPD) ensures the right to inclusive education, including for persons with disabilities, while SDG 4 emphasizes equitable access to quality education and early childhood development (Saini, Sengupta, & Singh, 2023). As a signatory to these frameworks, the Government of Liberia has introduced policies to support its international commitment to inclusive education at all levels, including early childhood education. Inclusive education in Liberia has been guided by key policies and initiatives aimed at ensuring access to quality education for all children, including those with disabilities.

Liberia's education system, still recovering from years of civil unrest, faces obstacles in implementing inclusive, play-based learning as envisioned by the Liberian Education Reform Act of 2011 and the Ministry of Education Policies (Liberian Ministry of Education, 2018). In rural areas, such as most parts of Liberia, where the need for education among preschool-aged children is high, challenges such as untrained teachers, overcrowded classrooms, and resource

limitations are common (Boahen, Anane, & Mensah, 2019). Cultural resistance to play-based methods also hinders progress, as conventional teaching approaches are often deemed more effective (Kromah, 2019). The home-based learning (HBL) approach has emerged as a promising solution to these challenges by providing children with the advantage of studying in a comfortable, familiar environment, which can be especially beneficial for marginalized communities or children with disabilities (Engle et al., 2011). In rural areas, where the need for education among preschool-aged children is particularly high, challenges such as untrained teachers, overcrowded classrooms, and resource limitations persist (Boahen, et. al., 2019). However, home-based schools have been successfully established by parents in other countries, for example, Uganda, demonstrating progress in advancing inclusive education. Yet, studies specific to the Liberian context remain unexplored.

While research in Liberia highlights challenges such as insufficient special education teachers and a lack of easily accessible educational facilities (Doe, 2020), there is still a lack of empirical data on education stakeholders' awareness of home-based schools, as well as the opportunities and challenges associated with their establishment. Despite the theoretical foundation and global recognition of the benefits of the home-based approach, there is a notable lack of empirical research on its implementation in Sanniquellie Mah and Bain Garr Districts in Nimba County, Liberia.

1.2 Purpose of the Study

This study aimed to explore the opportunities and challenges in scaling inclusive home-based early learning initiatives in Sanniquellie Mah and Bain-Garr Districts of Nimba County, Liberia.

1.3 Research Objectives

The study sought to examine:

- The level of community awareness and views (teachers, parents, leaders, etc.) regarding the use of inclusive home-based early learning schools in Sanniquellie Mah and Bain-Garr Districts in Nimba County, Liberia.
- Any knowledge or existing practices of play pedagogy on the performance of early learners in the Sanniquellie Mah and Bain-Garr Districts.
- The strategies that can be implemented to encourage home-based school establishment in the Sanniquellie Mah and Bain-Garr Districts.
- The understanding of gender-responsive pedagogy in the home-based model to increase participation of fathers in childcare.

1.4 Research Questions

The following research questions were formulated to guide the study in relation to the landscape mapping tool (baseline) adopted by Kyambogo University, Department of Early Childhood Education, Uganda:

- What practices help to promote engagement of families and communities to improve access and quality of ECCE services?
- Which ECCE teacher support programs promote capacity of untrained or undertrained teachers to support play pedagogy in home-based preschools?
- How can we contextualize child to child play pedagogy in home-based model to increase participation of all children including those with special needs in learning in Liberia?
- How can we contextualize gender-responsive pedagogy in the home-based model to increase participation of fathers in childcare in Liberia?

2. Method

The study explored the opportunities and challenges in scaling inclusive home-based early learning initiatives in Sanniquellie Mah and Bain-Garr Districts of Nimba County, Liberia. The baseline survey was conducted in five communities within the Sanniquellie Mah and Bain-Garr Districts of Nimba County, Liberia. These communities included the following: Zolowee, Sehyikimpa, Zuluyee, Dingamo, and Nengbein. In each community, 12 parents, two teachers, one community leader, one community development officer, one special needs officer, two District Education

Officers (DEOs), and one County Education Officer (CEO), making a total of 88 respondents, were selected to participate in the baseline survey or landscape mapping. A purposive sampling method was employed because the respondents met the criteria of receptiveness, interest in the initiative, and the desire to participate in community development efforts, particularly those relating to young children.

To address the research questions, a general interview guide was developed. Ethical clearance was obtained from the Office of Research Protection, Nimba University, ensuring strict adherence to ethical research standards. The data collection instrument was considered an exempt review validating the use of implied consent, meaning that respondents were not required to sign consent form. The respondents were informed of their right to withdraw or refuse to answer any question through a consent form, and were assured that the collected data would be used solely for research purposes, with portions potentially included in published findings. For ease of analysis of the qualitative research, a thematic approach was used to analyze the data.

3. Results and discussion

The study explored the opportunities and challenges in scaling inclusive home-based early learning initiatives in Sanniquellie Mah and Bain-Garr Districts of Nimba County, Liberia. An interview guide was used to collect respondents' demographic characteristics and the data needed to address the research questions.

A valid sample of 88 participants participated in the study. The thematic results addressed the research questions, and the findings are discussed in relation to the views of other academic scholars and theorists.

3.1 Demographic Characteristics of Respondents

Demographic data comprised 88 different participants, including 60 parents, 10 teachers, five community leaders, five community development officers, and five special needs officers, along with two DEOs and one CEO. This information indicates that a valid sample of 88 participants were interviewed.

The purpose of collecting this data was to gain a thorough understanding of the opportunities and challenges in scaling inclusive home-based early learning initiatives in Sanniquellie Mah and Bain-Garr Districts of Nimba County, Liberia by consulting key informants who were well-positioned to provide relevant insights for effectively addressing the research questions.

3.2 Communities Awareness and Views on Inclusive Home-based Learning

The 2006 United Nations Convention on the Rights of Persons with Disabilities (CRPD) emphasizes the right to inclusive education for individuals with disabilities. It ensures that all learners, including those with disabilities, are provided the necessary support to fully participate in the educational process. However, in the five selected communities - Zolowee, Sehyikimpa, Zuluyee, Dingamo, and Nengbein - inclusive home-based learning initiative has not been established there before despite Liberia being a signatory to the CRPD. This proposed SIHELI Project (scaling inclusive home-based early learning initiative) will be introducing home-based inclusive education to these communities for the first time.

To examine the level of community awareness and views regarding the use of inclusive home-based early learning schools in Sanniquellie Mah and Bain-Garr Districts, Liberia, the research question, "What practices help to promote engagement of families and communities to improve access and quality of ECCE services?" was developed. Specifically, this question sought to examine teachers', parents', and leaders' views on the use of inclusive home-based early learning schools.

The results show that child development awareness workshops, home visits, community children's reading clubs, organized child play and game events, and home teachers for children are practices that help promote the engagement of families and communities to improve access and quality of ECCE services. In the practice of activities to promote family and community engagement, activities such as reading books and naming objects in the home are expected of children, guided by their parents. These activities help early childhood care and education (ECCE) centers that develop young children's literacy and numeracy skills.

Attending meetings and/or workshops, assisting inside the classroom with young children's emergent literacy and numeracy, social-emotional functioning, motor development, and executive functions are additional practices that help promote the engagement of families and communities to improve access and quality of ECCE services. These practices

align with what Sabol (2018) identifies as parenting classes, family support services, social capital activities, and human capital services. Despite these benefits that these activities are expected to provide for the HBL, it worth noting that the challenges relative to the facilities persists. Establishing home-based schools in many African contexts faces significant challenges; limited resources, overcrowded classrooms, and insufficient teacher training often hinder their implementation (Ainscow, 2016). Cultural attitudes favoring conventional schools over home-based models further exacerbate the issue (Siraj-Blatchford & Sylva, 2014). When these practices are prioritized considering these challenges, they help promote the engagement of families and communities, thereby leading to improved access to and quality of ECCE services.

3.3 ECCE Teacher Support Programs that Promote Capacities of Untrained Teachers

Early learners achieve better outcomes when their activities are play-based and guided by well-trained teachers. Recognizing this, the government has prioritized developing professional criteria for all teachers in Liberia. Establishing such criteria in rural areas, including the study setting, would enhance capacity building, promote the training of untrained and undertrained teachers, and improve the numeracy performance of early learners in the Sanniquellie Mah and Bain-Garr Districts of Liberia. The research question, "Which ECCE teacher support programs promote the capacity of untrained or undertrained teachers to support play pedagogy in home-based preschools?" was formulated to examine any knowledge of or existing practices regarding play pedagogy and its impact on the performance of early learners in the Sanniquellie Mah and Bain-Garr Districts of Liberia.

The results showed that ECCE support programs exist in some of the five target communities (i.e. Sehyikimpa and Zuluyee Towns) to promote the capacity of untrained and undertrained teachers to support play pedagogy in home-based schools. The public schools in those two communities are demonstration schools for the USAID TESTS (Transforming the Educational System for Teachers and Students) in Liberia. The public schools have both ECE and primary education programs supported by Nimba University in training teacher aspirants in early childhood and primary education. However, this finding implies that the five communities lack teacher support programs that could adequately equip them with knowledge of play pedagogy in home-based schools despite the demonstration school partnerships. The play-pedagogical knowledge of teachers is essential for enhancing teaching skills at the early childhood level.

Piaget and Vygotsky emphasized the importance of this knowledge in their theories on child development, highlighting the concepts of cognitive development and the social environment, which play crucial roles in a child's early learning. Through play, children construct their understanding of the world through direct experiences with it. Froebel's notions about using activity and play in preschool education complement many principles of early childhood education applied in contemporary schools (Provenzo, 2009).

In light of the foregoing, ECCE teachers must benefit from support programs that promote the capacity of untrained or undertrained teachers to support play pedagogy in home-based preschools. Providing pedagogical skills and content knowledge about play might help build the capacity of untrained teachers to support play pedagogy in early childhood education programs.

3.4 Strategies to Encourage Home-Based Schools Establishment in Liberia

Early learners achieve better outcomes when their learning activities are play-based and guided by well-trained teachers. Recognizing this, the government has prioritized developing professional pedagogical skills for all teachers in Liberia, including those teaching in specially organized early childhood schools (Liberian Education Reform Act, 2011). This policy-driven decision allows for the establishment of schools that provide access to quality and equitable education for all, irrespective of location, socio-economic status, or the educational levels of parents. The establishment of home-based schools to cater to the educational needs of early learners is one way of implementing this policy. Therefore, with the introduction of the SIHELI Project, the target communities stand to benefit from this opportunity despite the challenges. To address this gap, the research question, "How can we contextualize child-to-child play pedagogy in the home-based model to increase the participation of all children, including those with special needs, in learning in Liberia?" was formulated. This question aimed to examine the strategies that can be implemented to encourage the establishment of home-based schools in the Sanniquellie Mah and Bain-Garr Districts.

Results show that child-to-child play pedagogy can be contextualized in the home-based model to increase the participation of all children, including those with special needs, by engaging homes to explore existing cultural practices that align with play pedagogical activities. A critical analysis of Liberian culture reveals that child-to-child play pedagogy

is inherent in every home. According to researchers, family engagement in early learning and education is considered a key predictor of children's development (Rey-Guerra et al., 2022).

The findings also indicate that every child in a Liberian home learns about cultural norms and social values through activities such as evening storytelling, playing under the moonlight, daytime play behind the house, and interactions on their way to the farm. Facilitators or teachers who implement child-to-child pedagogy should learn and integrate these culturally inherent practices to succeed. Learning in this model will be enjoyable for children and will help all of them progress in literacy, numeracy, and arts, engaging multiple learning domains. Studies show that home-based family engagement is associated with higher levels of numeracy, literacy, social-emotional functioning, and motor skill development (Rey-Guerra et al., 2022). It also leads to cognitive, social-emotional, language, and physical development among preschool children (Bergen, 2002; Bodrova & Leong, 2012).

Adapting cultural norms and social values that align with play pedagogical activities is a viable way to contextualize child-to-child play pedagogy in the home-based model to increase the participation of all children, including those with special needs, in early learning in Liberia.

3.5 Gender-Responsive Pedagogy to Increase Participation of Fathers in Childcare

Childcare is perceived as a woman's responsibility in the Liberian context. To examine gender-responsive pedagogy in the home-based model and increase fathers' participation in childcare, the research question, "How can we contextualize gender-responsive pedagogy in the home-based model to increase fathers' participation in childcare in Liberia?" was developed.

The findings showed that raising awareness to encourage fathers to share child caregiving tasks with mothers is a viable way to contextualize gender-responsive pedagogy in the home-based model and increase fathers' participation in childcare in Liberia, a condition indicated by Doe and Sesay (2022) as often preventive to equitable participation in HBL, limiting its potential impact on inclusive education. In Asia, for instance, women are often perceived as solely responsible for caring for children, especially at the early stages of development. This perception, highlighted by researchers, reflects the global stereotype of early childcare being discriminatorily attributed to women. Addressing this stereotype is critical when contextualizing the establishment of home-based schools in Liberia.

Although Liberia shares similar cultural perspectives with many countries, where childcare has traditionally been tied to mothers in the home (Palriwala & Neetha, 2010); the contextualization of gender-responsive pedagogy in the home-based model has the potential to increase fathers' participation in childcare. One way to address this issue is through intentional awareness campaigns to include fathers in caregiving roles in typical Liberian homes. Such initiatives would challenge traditional beliefs and encourage Liberian men to become equal partners with their wives and female counterparts. This shift would promote gender-responsive pedagogy in home-based early learning models (Chigateri, 2017).

In conclusion, creating awareness to include fathers in caregiving roles is a promising approach to contextualize gender-responsive pedagogy in the home-based model and increase fathers' participation in childcare in Liberia.

4. Conclusion

The findings of this study have led to the following conclusions:

- Access to quality ECCE services in home-based schools could be improved by implementing engaging activities
 such as child development awareness workshops, home visits, community children's reading clubs, organized
 child play and game events, and home-based teachers for children in the target communities of Sanniquellie
 Mah and Bain-Garr Districts.
- The presence of USAID TESTS supported ECE and PE program at Nimba University is an opportunity for more teacher aspirants to be trained in the early childhood education to give support to the inclusive home-based early learning initiative to be executed by Nimba University through the SIHELI Project. This complementarity between the SIHELI Project and USAID TESTS will go a long way in strengthening the capacity of the ECE landscape in Liberia by building the capacity of untrained and/or undertrained teachers to support play pedagogy in home-based pre-primary schools by enhancing the capacity of untrained and/or undertrained teachers to support play pedagogy in early learning initiative in Liberia.

- The adaptation of cultural norms and social values within the target communities that align with play
 pedagogical activities is essential for contextualizing child-to-child play pedagogy in the home-based model.
 This approach could increase the participation of all children, including those with special needs, in early
 learning in Liberia.
- Raising awareness to encourage fathers to share caregiving responsibilities with mothers could increase fathers' participation in childcare within home-based schools.

Recommendations

From the conclusion, the following recommendations are made to enhancing the promotion of SIHELI Project in Liberia:

- A team should be established by Nimba University (NU), civil society organizations (CSOs) and the Education
 Officials to create awareness about home-based schools in the target communities. This team should establish
 committees to ensure that parents are regularly trained on child development, organize play and game events
 among children to enhance their play pedagogical skills, and raise awareness among fathers to encourage them
 to share childcare responsibilities with mothers.
- Untrained and undertrained teachers should be provided with training in pedagogical skills and content knowledge about play to enable them to teach effectively in home-based schools.
- Parents and communities should work collaboratively to establish home-based schools to ensure that quality education is equitably accessible to all children.
- A home-based school monitoring team should be established by Nimba University, CSOs and the Education
 Officials to oversee the activities of the home-based schools to be established.
- Before the end of the SIHELI Research Project, NU and its partners should support the Ministry of Education to develop an inclusive home-based early learning policy.

Compliance with ethical standards

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No conflict of interest to be disclosed.

References

- [1] Ainscow, M. (2016). Struggles for equity in education: The selected works of Mel Ainscow. London: Routledge.
- [2] Bergen, D. (2002). The Role of Pretend Play in Children's Cognitive Development. Early Childhood Research and Practice, 4, 1-12.
- [3] Boahen, E. A., Anane, C. A., & Mensah, F. (2019). Challenges and prospects of home-based learning: Evidence from Sub-Saharan Africa. International Journal of Education and Development, 39(4), 67-78.
- [4] Bodrova, E., & Leong, D. J. (2012). Scaffolding Self-Regulated learning in Young Children:
- [5] Lessons from Tools of the Mind. In R. Pianta (Ed.), Handbook ...
- [6] Chigateri, S. (2017). "Pathways to Accessible, Affordable and Gender-Responsive Childcare Provision for Children Under Six-India Case Studies.
- [7] Doe, M. (2020). Barriers to inclusive education in Liberia: A critical analysis. Journal of African Education Research, 12(3), 58-74.
- [8] Doe, P., & Sesay, M. (2022). Cultural barriers to home-based learning: A study of gender and education in rural Liberia. Liberian Educational Review, 12(1), 89-104.

- [9] Draper, C. E., Klingberg, S., Wrottesley, S. V., Milner, K., Fisher, J., Lakes, K. D., & Yousafzai, A. K. (2023). Interventions to promote development in the next 1000 days: A mapping review. Child: Care, Health and Development, 49(4), 617-629.
- [10] Education Reform Act (2011). Liberian code of laws Revised. Liberian Government
- [11] Engle, P. L., Black, M. M., Behrman, J. R., Cabral de Mello, M., Gertler, P. J., Kapiriri, L., Martorell, R., & Young, M. E. (2011). Strategies to avoid the loss of developmental potential in more than 200 million children in the developing world. The Lancet, 369(9557), 229–242.
- [12] Flomo, P. (2021). Barriers to inclusive early childhood education in rural Liberia: A case study. Liberian Journal of Education and Development, 5(2), 45-60.
- [13] Hyde, K. A. L., Koon, T. G., & Twala, M. P. (2008). Child family needs assessment. Ministry of Education, Republic of Liberia; Open Society Foundations
- [14] Jackson, M. (2021). Parental involvement and its impact on inclusive education in rural Liberia. Liberian Journal of Educational Studies, 9(1), 33-47.
- [15] Johnson, T. (2019). Home-based learning and parental involvement in rural Liberia. Liberian Journal of Educational Studies, 11(2), 45-59.
- [16] Kollie, S. (2021). Building partnerships for inclusive early learning: A case study of Liberia. Early Childhood Research Journal. 36, 112-125.
- [17] Kromah, S. (2019). Cultural challenges to inclusive education in Liberia. Liberian Studies Journal, 5(3), 45-59.
- [18] Ministry of Education of Liberia. (2018). National Education Policy 2018-2023. Monrovia, Liberia: Government of Liberia.
- [19] Palriwala, R., & Neetha, N. (2010). "Care practices and care bargains: Paid domestic workers and Anganwadi workers in India," International Labour Review, 149(4), 551–527.
- [20] Piaget, J. (1952). The Origins of Intelligence in Children. New York, NY: W.W. Norton & Co.
- [21] https://doi.org/10.1037/11494-000
- [22] Provenzo Jr, E. F. (2009). Friedrich Froebel's Gifts: Connecting the Spiritual and Aesthetic to the Real World of Play and Learning. American Journal of play, 2(1), 85-99.
- [23] Rey-Guerra, C., Zachrisson, H. D., Dearing, E., Berry, D., Kuger, S., Burchinal, M. R., Nærde, A., van Huizen, T., & Côté, S. M. (2023). Do more hours in center-based care cause
- [24] more externalizing problems? A cross-national replication study. Child development, 94(2), 458-477. https://doi.org/10.1111/cdev.13871.
- [25] Saini, M., Sengupta, E., Singh, M. (2023). Sustainable Development Goal for Quality Education (SDG 4): A study on SDG 4 to extract the pattern of association among the indicators of SDG 4 employing a genetic algorithm. Educ Inf Technol 28, 2031–2069. https://doi.org/10.1007/s10639-022-11265-4
- [26] Sabol, T. J., Sommer, T. E., Sanchez, A., & Busby, A. K. (2018). A new approach to defining and measuring family engagement in early childhood education programs. AERA Open, 4(3), 2332858418785904.
- [27] United Nations (2006). "Convention on the Rights of Persons with Disabilities." Treaty Series, vol. 2515, p. 3
- [28] UNICEF. (2020). Reimagining education in Liberia: The role of technology in inclusive education. UNICEF Liberia.
- [29] United Nations Educational, Scientific, and Cultural Organization (UNESCO). (2003). The EFA global monitoring report: Education for all by 2015. Will we make it? UNESCO.
- [30] UNESCO. (2020). Inclusive education: Global perspectives. Paris: UNESCO Publishing.
- [31] Vygotsky, LS (1978). Mind in Society: The Development of Higher Psychological Processes. Cambridge, MA: Harvard University Press.
- [32] World Health Organization. (2012). Early childhood development and disability: A discussion paper.
- [33] Yoshikawa, H., Weisner, T. S., Kalil, A., & Way, N. (2013). Mixing qualitative and quantitative research in developmental science: Uses and methodological choices. Developmental Psychology, 49(5), 803-816.