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Literacy Cooperatives:
Sharing Culturally Relevant Literacy Materials and Best Practices amongst Early Childhood Educators in Nigeria

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Abstract

Repeated Interactive Read Aloud is an evidence-based literacy strategy that has been found to increase children's reading comprehension skills. However, this strategy is rarely used in Nigerian early childhood classrooms due to lack of available storybooks and training on the role of reading aloud in literacy development. In Nigeria, a common approach for overcoming the challenge of scarce resources is a cooperative, which is a democratically controlled organization where members voluntarily contribute assets to meet specific needs. This solution of a cooperative can be applied to the challenges of scarce reading materials and the need for contextually-relevant teacher training in Repeated Interactive Read Aloud. This project originated the concept of a Literacy Cooperative in two phases. In the first phase, a Literacy Cooperative was piloted and its feasibility and perceived impact were evaluated based primarily on focus group discussions. In the second phase, the impact of participating in a Literacy Cooperative on teachers' knowledge and literacy instructional strategies as well as pupils' reading motivation were evaluated. In the main study, three Literacy Cooperatives met every other week for two academic terms (totaling 12 meetings) to rotate culturally-relevant storybooks and receive training on using Repeated Interactive Read Alouds for improving reading skills. Pre-treatment and post-treatment interviews were conducted with participating educators (n=32) on their knowledge of and use of literacy instructional strategies as well as their pupils' reading motivation. Pupils' reading motivation was also measured through interview and questionnaire. The study found that participating in a Literacy Cooperative was effective in improving teachers' knowledge of best practices in literacy instruction and literacy instructional practices. The study found mixed evidence on the impact of Literacy Cooperatives on pupils' reading motivation, with results of the interview with young pupils demonstrating significant improvement at post-treatment but not on the questionnaire with older pupils. However, all participating teachers believed that pupils' reading motivation increased through their involvement in the Literacy Cooperative. An additional unexpected finding is that in addition to the 648 pupils in the classrooms of the participating teachers, a further 1,653 pupils in the teachers' networks were regularly read aloud to using the culturally-relevant storybooks. In conclusion, Literacy Cooperatives were found to be an effective strategy for meeting Nigerian children's right to excellent literacy instruction.

Context

The field of early childhood education is relatively new in Nigeria, with formal professional development only becoming available in the last 15 years. Society also perceives that anybody can teach young children because the children only need to know ABC, 123, and colours. As such, few early childhood educators have formal training in the field. However, early childhood educators should receive "specific preparation, knowledge, and skills in child development and early childhood education" (NAEYC, 2019, p. 78).

Literacy is also overlooked in the Nigerian curriculum. Few schools have reading or writing on the timetable. Instead, it is assumed that children learn to read by studying the English language, which is typically on the daily timetable for a 35-minute period. In contrast, effective literacy learning requires both direct instruction in reading skills and integration of reading throughout other learning activities (Pyle et al., 2018).

Most teachers in Nigeria – including early childhood educators – use rote instruction for all subjects, including English and reading, where children are required to repeat after the teacher. Oftentimes, children copy notes from the board, including children as young as Nursery 1 (3 years). Literacy instruction typically includes identification of letters, followed by

memorization of two-letter words, memorization of three-letter words, and so on. Very few schools have systematic and integrated approaches to teaching reading or assessing reading development. Furthermore, most classrooms lack appropriate literacy resources. When asked at pre-treatment what types of literacy materials they have access to in their classroom or school, almost all of the participants first reported English textbooks. When probed about whether they had access to storybooks, 72% said yes. Of these, many said something similar to one participant who said that they had storybooks, but "very, very, very few."

In Northern Nigeria, over 70% of third grade children are unable to read a single word (USAID Nigeria Northern Education Initiative, 2011) and almost half are unable to read a complete sentence at the end of primary school (UNESCO, 2017). Poor reading skills negatively impact health, economic, and political outcomes not just for an individual, but also for society (UNESCO Institute for Statistics, 2008). Two problems need to be corrected to reduce this learning poverty in Nigeria: improve the quality of literacy instruction and provide better access to reading materials, which is also an important strategy for improving literacy rates (Bloch, 2002).

The language of instruction in primary education, according to Nigeria's official National Policy on Education (Federal Republic of Nigeria, 2013), "shall be the language of immediate environment for the first three years in monolingual communities" (p. 8). The official curriculum for Primary 1 to 3 includes English Studies and one Nigerian language. The Nigerian Educational Research and Development Council (NERDC, 2013) has developed curriculum for the three most frequently used languages in Nigeria: Hausa, Igbo, and Yoruba. In practice, most schools use English as the official language of instruction at all levels. During instruction, teachers in some schools "code-switch" into the language that pupils best understand to aid learning.

The specific context of this study was Jos, the capital of Plateau state. About 40 different languages are indigenous to Plateau state (Eberhard et al., 2023), plus many other Nigerian languages are spoken by families who have moved to the pleasant climate of Jos for work or personal reasons. Amidst the wide diversity of languages in the state, English is primarily spoken in government and educational institutions, and Hausa is primarily spoken in markets. Within Jos, there are a few areas that can be considered monolingual Hausa communities, and a few other monolingual communities with local languages. Most of the schools that participated in the Literacy Cooperatives used English as the main language of instruction, though teachers in a few schools read the Literacy Cooperative storybooks in English and then gave quick translations into Hausa.

Background

Reading is a core foundational skill for learning and academic success (RTI International, 2015). Good reading skills are also important for long-term outcomes, including higher salaries, better houses, and better jobs at age 40 (Ritchie & Bates, 2013).

Learning to read is a complicated task that requires high-quality, focused instruction. This study emphasized reading aloud because it is one of the most important teaching methods for helping emergent and early readers learn the skills and knowledge needed to become fluent readers (International Literacy Association. 2018; see also Bridges, 2014; Mol & Bus, 2011). Reading aloud is important for both emergent and early readers (International Literacy Association, 2018). Emergent readers are those who are beginning to develop basic skills in print awareness, phonological awareness, and phonics (Tompkins, 2011), typically in the Nursery 1 to 3 classes

in Nigeria. Early readers are those who can use phonics skills to decode words as well as identify many high frequency words, typically in Primary 1 to 3 levels in Nigeria.

The practice of reading aloud has been found to increase emergent and early readers' oracy, including vocabulary (Lennox, 2013) and overall language development (Mautte, 1990). Reading aloud also improves reading comprehension and interest in reading (Klesius & Griffith, 1996) as well as print related skills (Trivette & Dunst, 2007). Furthermore, reading aloud provides a meaningful context for teaching important foundational reading skills, such as phonological awareness, letter recognition, and phonics (Lennox, 2013). In Northern Nigeria, storybook read alouds have been found to increase listening comprehension, phonemic awareness, reading fluency, and interest in reading (Moussa & Koester, 2021).

One evidence-based strategy for reading aloud is Repeated Interactive Read Alouds, which has been found to increase children's reading interest and comprehension (McGee & Schickedanz, 2007). Interactive read alouds are designed to incorporate dialogic strategies where children actively engage with the text (Lennox, 2013). Walker-Dalhouse (2003) recommended interactive read alouds as an effective strategy for African children.

Repeated Interactive Read Aloud is a systematic method of reading aloud that requires teachers to reread the same text multiple times. In each read aloud, teachers scaffold children's comprehension, model comprehension strategies, and teach vocabulary and other reading concepts before, during, and after reading the text. The Repeated Interactive Read Aloud strategy is viewed as particularly relevant to the Nigerian context due to the paucity of reading materials. Since repeated read alouds have been found to be effective in contexts where texts are readily available (see Lin, 2014), then it can be expected that reading the same text multiple times will be even more effective in contexts where few books are available for reading aloud, as in Northern Nigeria.

To perform an effective read aloud, teachers first need to develop basic skills for reading a text out loud, including fluency, tempo, and expression. They also need to develop skills for promoting effective language interactions in a read aloud. This includes both knowledge of what components to include before, during, and after reading as well as effective questioning techniques to promote interactive dialogue. Scaffolding and thinking aloud are important skills for teachers to learn to provide effective comprehension instruction in a reading aloud. Teachers also need guidance on enhancing vocabulary learning during the read aloud (McGee & Schickedanz, 2007).

Skills for effectively reading aloud can be taught through literacy coaching (Kraft et al., 2017). The style of literacy coaching ranges on a continuum from responsive coaching to directive coaching (Bean, 2014). In responsive coaching, the literacy coach empowers the teacher to set goals for the coaching and develops the teacher's ability to be reflective in instruction. In directive coaching, the literacy coach assists teachers in learning to implement effective reading instructional strategies. Research in Northern Nigeria has found that directive literacy coaching is more effective (Smiley et al., 2020), which supports the thesis that directive coaching benefits teachers with little training and knowledge in literacy instruction (Bean, 2014).

Reading aloud is rarely used as an instructional strategy in Nigerian early childhood classrooms (Korb, 2010), primarily due to lack of available reading materials (Oyetunde et al., 2016). In fact, the dearth of storybooks in most African classrooms has led to calls for urgently increasing the supply of reading materials that are relevant for African children (RTI International, 2015).

However, simply providing storybooks is not enough to improve literacy outcomes; supplementing supply with contextually-relevant teacher training is essential for teachers to effectively use the storybooks in a way that enhances children's reading skills (Stranger-Johannessen, 2017).

Literacy Cooperatives

In Nigeria, a common approach for overcoming the challenge of scarce resources is cooperatives. Cooperatives are democratically controlled organizations whereby members voluntarily contribute assets to meet specific needs (Okonkwo et al., 2019). Cooperatives can be formed in any sector, with common cooperatives including financial cooperatives to mobilize capital for small businesses, deposit savings cooperatives to help households save for larger financial needs, and consumer cooperatives that reduce the cost of household items. Typically, members of cooperatives also meet regularly to learn about and discuss topics of shared interest.

The contextually relevant practice of a cooperative can be applied to the education sector to overcome the challenge of scarce reading materials and the need for contextually-relevant teacher training in repeated interactive read alouds. This project piloted the concept of a Literacy Cooperative, which combined a supply of storybooks with teacher training to enhance reading outcomes. The purpose of a Literacy Cooperative is to empower teachers to use reading aloud as an effective tool for literacy instruction. The Literacy Cooperative did this by providing educators with both the materials (storybooks) and training needed for reading aloud to achieve the positive reading outcomes identified in the research literature described above.

This project created and evaluated Literacy Cooperatives, which are associations of early childhood educators that share culturally relevant reading materials and receive in-service training on using repeated interactive read alouds via Literacy Coaches. The effectiveness of a Literacy Cooperative was evaluated by examining how participation in a Literacy Cooperative impacted teacher knowledge and instructional practices. A further research question examined teachers' experiences with better access to culturally relevant literacy materials. To determine the impact of a teacher's participation in a Literacy Cooperative on pupils, we used the dependent variable of reading motivation. For developing readers, reading motivation is an important influence on reading competence (Schiefele et al., 2012). For example, intrinsic motivation is positively related to reading amount, use of diverse reading strategies, and reading competence. Reading attitude is also positively correlated with reading competence.

In our study, each Literacy Cooperative typically included 11 educators and one Literacy Coach, totaling a group of 12. Each Literacy Cooperative met every other Friday for about 90 minutes. Each Literacy Cooperative received two culturally-relevant storybooks per member of the group (e.g., a group of 12 would have 24 storybooks). At the first meeting, each member received two books. The storybooks were then rotated at subsequent meetings, enabling each member to get two different storybooks every two weeks. Because the Literacy Cooperative met every other week, this enabled each member to read aloud one different storybook per week for the duration of the Literacy Cooperative.

The following activities occurred at each meeting.

- Peer mentoring, where members discussed how they used read aloud in their classroom in the past two weeks, and group members provided assistance and feedback to each teacher as needed.
- Direct instruction by the Literacy Coach on using repeated interactive read alouds to teach reading skills. A handout was provided each week to supplement the direct instruction.
- Practicals, where members were paired to plan how to implement the direct instruction provided by the Literacy Coach. For example, in the week where members learned about teaching vocabulary, each pair chose one storybook, selected three vocabulary words to teach in that storybook, and planned how the vocabulary instruction would proceed.
- Demonstration, whereby one member did a read aloud based on the plan made during the practical. The member then received feedback on their read aloud.
- Rotate storybooks so each member received two different books.

The following topics were taught at the Literacy Cooperative meetings.

- Introduction to Reading Aloud
- Repeated Interactive Read Alouds
- Performing an Engaging Read Aloud
- Book Care
- BDA Framework for Reading Aloud (Before, During, and After)
- Teaching Vocabulary in a Read Aloud
- Thinking Aloud during Read Alouds
- Teaching Reading Comprehension in Read Alouds
- Reading comprehension skill: Predicting
- Reading comprehension skill: Asking Questions
- Reading comprehension skill: Visualizing
- Reading comprehension skill: Summarizing
- Reading comprehension skill: Clarifying
- Reading comprehension skill: Making Connections
- Teaching Elements of Story using Read Alouds

In the first phase of the study where we were piloting the concept of a Literacy Cooperative, we formed one Literacy Cooperative of 12 early childhood educators ranging from Nursery 1 (three-year-olds) to Primary 2 (seven-year-olds). This Literacy Cooperative only met for one term, totaling six meetings. (As a result, not all of the topics above were taught.)

From the pilot study, we found that it was best to group educators according to the level they taught so that the storybooks were matched to the pupils' developmental level. In the main study, we formed three Literacy Cooperatives based on the class/grade that the teacher taught. One Literacy Cooperative included teachers of Nursery 1 (3 years) and Nursery 2 (4 years), another Literacy Cooperative included teachers from Nursery 3 (kindergarten/5 years) and Primary 1 (first grade), and a third had teachers from Primary 2 and 3. For the main study, each Literacy Cooperative met every other week for two academic terms; totaling twelve meetings.

Research Questions

The following research questions were addressed by this study.

1. What structures and practices are necessary to create an effective Literacy Cooperative?
2. What is the perceived feasibility, acceptability, and impact of Literacy Cooperatives amongst participating educators?

Because the concept of a Literacy Cooperative was brand new, these first two research questions were needed to first establish whether a Literacy Cooperative actually worked. They were answered in a pilot phase (April to July 2022) with one Literacy Cooperative that met for one academic term. To answer the research questions, a focus group discussion was held at the end of every Literacy Cooperative meeting where participants shared their experiences in the Literacy Cooperative.

Findings from the pilot study revealed that the procedures for a Literacy Cooperative that we first set were acceptable with minor modifications. To answer the second research question, we found that participating educators perceived that the Literacy Cooperative positively impacted themselves and their pupils. The educators reported an improved understanding of using read aloud to teach reading and improvement in their pupils' interest in reading (reading motivation).

The main study then addressed four research questions.

1. How does participation in a Literacy Cooperative influence teachers' knowledge of best practices in literacy instruction?
2. How does participation in a Literacy Cooperative influence teachers' literacy instructional strategy?
3. How does participation in a Literacy Cooperative influence pupils' reading motivation?
4. What are Literacy Cooperative teachers' experiences with having better access to culturally-relevant literacy materials for literacy instruction?

Variables and Definitions

- **Literacy Cooperative**: A democratically controlled group of 6 to 12 early childhood educators who share culturally-relevant reading storybooks and meet every two weeks for professional development using directive literacy coaching and peer mentoring. A successful Literacy Cooperative shares storybooks for reading aloud and provides "bite-sized"

professional development in effectively using reading aloud to improve reading skills, emphasizing teaching vocabulary and reading comprehension. Participants are then encouraged to put the training they receive at each meeting into practice before the next training.

- **Knowledge of Best Practices in Literacy Instruction**: Educators' beliefs and knowledge about literacy development and instructional practices that effectively teach literacy skills to young children.
- **Literacy Instructional Strategies**: The methods and practices that early childhood educators use to teach literacy to the pupils in their classroom. Knowledge of literacy practices is related to selection and implementation of literacy practices; however, the correlation is imperfect, demonstrating that they are two separate constructs (Piasta et al., 2019).
- **Reading Motivation**: Relatively stable readiness of a pupil to initiate reading activities.
- **Culturally Relevant Literacy Materials:** Storybooks with characters, plots, themes, settings, and illustrations that are relevant to pupils' cultures.

Participants

Throughout this entire project, a total of 46 educators participated in a Literacy Cooperative. In the first phase, 12 educators and the Literacy Coach were involved in a Literacy Cooperative for one term.

The main study included 32[1] early childhood educators, including those who teach at both private and government schools. Of those participants, 4 were males and 28 were females. They ranged in teaching experience from 1 to 32 years, with a mean of 8.02 years. Twenty participants had completed formal training in the field of education, while twelve participants did not receive formal training in education. See Tables 1 and 2 for the grade levels taught and level of education of participants.

Our sampling technique was convenience sampling by selecting those participants and schools who responded to our invitation to participate in a Literacy Cooperative.

Table 1. Grade level (Age) taught by Participants.

Level Taught	Frequency	Percentage
Nursery 1 (3 years)	4	13%
Nursery 2 (4 years)	5	16%
Nursery 3 (5 years)	6	19%
Primary 1	8	25%
Primary 2	6	19%
Primary 3	3	9%

Table 2. Educational Level of Participants.

Education Level	Frequency	Percentage
SSCE (High school certificate)	4	13%
NCE/Diploma (2 to 3 years post-secondary)	14	44%
First Degree (Bachelor's degree)	12	38%
Post-Graduate Diploma (One year after Bachelors)	2	6%

[1] Each Literacy Cooperative had a literacy coach, who was not included in this data analysis. One participant left the school after first term and was replaced by the new teacher at their school for the second term. This participant was also excluded in this data analysis.

In the main study, a total of 648 pupils from Nursery 1 to Primary 3 were taught by teachers who participated in the Literacy Cooperatives. We were not able to collect demographic characteristics for all of the pupils. However, we were able to collect data for 469 of the pupils. Of those pupils, 52% were male and 48% were female. Pupils' ages ranged from 2years 8months to 12years 4months at the start of the Literacy Cooperative.

Research Process

This study primarily used a qualitative research design using applied thematic analysis. Quantitative methods were used to evaluate the impact of the Literacy Cooperatives on pupils' reading motivation.

In the first pilot phase of the study, we used participant observation during each Literacy Cooperative meeting, focus group discussions after the meeting, and an in-depth interview at post-treatment. Those results are briefly presented above (see Research Questions).

For the main study that addressed the impact of Literacy Cooperatives on teachers' knowledge of best practices in literacy instruction and use of literacy instructional strategies as well as pupils' reading motivation, we used a single group, pre-treatment, post-treatment comparison research design. Interviews were conducted with teachers before participating in the Literacy Cooperative and again after participating for two academic terms to assess their knowledge of best practices in literacy instruction and use of literacy instructional strategies. Pupils' reading motivation was assessed by questionnaires for the older pupils (Nursery 3 to Primary 3) and one-on-one interviews with younger pupils (Nursery 1 and 2).

Over the course of two academic terms, participants took part in 12 Literacy Cooperative meetings that each lasted about 90 minutes. The meetings were led by a Literacy Coach, an expert early childhood educator who received guidance and mentorship by the research team. The trainings included peer mentoring, direct instruction, and practice applying the direct instruction similar to microteaching. At the beginning of each meeting, the Literacy Coach led a peer mentoring discussion whereby participants shared how they used read aloud in their classroom in the past two weeks and challenges they faced. This was followed by "bite-sized" direct instruction from the Literacy Coach on using repeated interactive read alouds to teach specific reading skills, including vocabulary and reading comprehension skills such as visualizing, predicting, and making connections. The direct instruction was supplemented by a handout.

After the direct instruction, participant engaged in a practical exercise where they were paired to implement the direct instruction. For example, in the week where members learned about teaching vocabulary, each pair chose one storybook, selected three vocabulary words to teach in that storybook, and planned how the instruction on the vocabulary word would proceed. Finally, one or two members demonstrated reading aloud based on the plan they made during the practical, and they received feedback on their read aloud. The Literacy Cooperative storybooks were also rotated between participants, so each participant received two different storybooks. The participants were then encouraged to read aloud one storybook at least three times in a week to their pupils.

Instruments

Participating teachers were interviewed using open-ended questions to assess their knowledge of best practices in literacy instruction and use of literacy instructional strategies, as well as gather information about their experiences having better access to culturally relevant reading

materials. Probing questions were used to draw out more information on participants' responses.

The pre-treatment interview consisted of 13 items. Key questions that assessed knowledge of best practices in literacy instruction are as follows.

- In your opinion, what are the best ways – or best methods – for teaching children how to read?
- What skills can children learn through reading aloud?
- What does the teaching method called "reading aloud mean?

The key question that addressed use of literacy instructional strategies was: What do you do to teach your pupils how to read? The key question that addressed participants' experiences having better access to culturally-relevant reading materials was: Please describe your experiences with having better access to culturally relevant storybooks.

The post-treatment interview consisted of 18 items, including all of the original 13 items plus five more, such as the following.

- Think about how you teach children how to read in your classroom. Will you change how you teach pupils how to read because of your participation in the Literacy Cooperative?
- Has your pupils' interest in reading changed since you began your participation in the Literacy Cooperative? If so, please describe what changed.
- Overall, how do you think that participation in the Literacy Cooperative impacted you as an educator?

To measure reading motivation for older children (Nursery 3 to Primary 3), a 20-item questionnaire was developed adapted from the Elementary Reading Attitude Survey (McKenna & Kear, 1990) and the Intrinsic Motivation Inventory (Ryan, 1982). The first 17 items used a 3-point scale with a smiley face, neutral face, and frown as response options. Adapted items from the Elementary Reading Attitude Survey included, "How do you feel about receiving a book as a birthday gift?" Items adapted from the Intrinsic Motivation Inventory include, "How interesting do you think reading is?" The last three items asked children to compare reading aloud to another activity. For example, item 18 read, "Would you want to have someone read to you or would you want to play?" Response options included an adult reading a storybook to a child on her lap and a child playing. (See the Appendix for the instrument.)

However, we believed that pupils in Nursery 1 and Nursery 2 (3 and 4 year olds) would not have the capability to accurately report their reading motivation on a questionnaire, so we developed a brief interview for these children. The interview had 9 items. The first two items mirrored the questionnaire whereby the interviewer presented a picture of the 3 cartoon faces of a smiley face, neutral face, and frown. For the first question, the researcher presented a storybook and asked, "When you see a book like this, how do you feel?" Pupils then pointed at the face that best represented how they felt. For the second question, the researcher asked, "When someone reads to you from a book, how do you feel?" In items 3 and 4, the interviewer presented a picture of a book and another item (toy or shirt) and asked the child to choose which he/she would prefer to receive as a gift. For the next four items, the interviewer presented a picture of an adult reading a storybook to a child and a child participating in another activity, and the interviewer asked the child to choose which the child would prefer. Activities included playing, watching a video, doing a chore, and talking with their mates. The final item simply asked, "Do you like reading?"

Analysis of Findings

Before addressing the main research questions in the study, one of the most interesting unanticipated findings from the pilot study was that almost all of the teachers read aloud the storybooks to more than just the pupils in their classroom. Therefore, in the main study, we added a question to the interview schedule: In the Literacy Cooperative, you had access to culturally relevant storybooks to read to the pupils in your class. Were those storybooks regularly read to any children outside of your class?

Only two teachers reported that only pupils in their class benefitted from the Literacy Cooperative storybooks. The additional children who benefitted from the culturally relevant storybooks are presented in Table 3.

Table 3. Additional Pupils who Benefitted from the Culturally-Relevant Storybooks.

Group of Children	Frequency Mentioned	Number of Children
Pupils in other classrooms in the school	26	1,091
Children in the home	15	49
Neighborhood children	9	73
Home lessons	2	10
Assembly ground	2	400
Sunday School	1	30
Total		**1,653**

As can be seen from Table 3, 1,653 children were regularly read aloud to beyond the 648 pupils in the classrooms of the teachers who participated in the Literacy Cooperatives. The most frequently reported group of children are pupils in other classrooms in the school. Most of the participants reported that other teachers borrowed the storybooks from them, although some participating teachers personally went to the other classrooms to engage in a read aloud. Almost half of the participants reported that their own children also read the books, and some participants reported reading aloud to children in their neighborhood. Two teachers reported reading aloud the books when they go for home lessons, which are tutorials that occur outside of school. In addition to the two teachers who reported that the storybooks were read aloud on the assembly ground – meaning that the entire school heard the read aloud – one teacher reported that "the whole school, we picked two days that we just read it with everybody under a tree." One of the teachers justified reading aloud to other children by saying, "I basically read them to my own children at home and I read it to the children in the school…because those books are so rare."

For the main study, the first research question asked, how does participation in a Literacy Cooperative influence teachers' knowledge of best practices in literacy instruction. The research question was addressed by three interview questions. The first relevant interview question asked participants, In your opinion, what are the best ways – or best methods – for teaching children how to read? A total of 21 teaching methods were identified in participants' responses. The top 10 themes are presented in Table 4.

Table 4. Participants' Knowledge of Best Methods of Teaching Reading.

Pre Rank	Post Rank	Skills		Pre-Test		Post-Test	
		Theme	Definition	Freq.	Percent	Freq.	Percent
2	1	Read aloud	Reading aloud or Reading Storybooks	8	25%	16	50%
N/A	2	Comprehension Skills	Mention any comprehension skills (e.g., summarize, predict)	0	0%	10	31%
4	3	Teaching Aids	Suggested any materials that aid in lessons. "Storybooks" included if did not suggest reading those storybooks	7	22%	5	16%
1	4	Sounds	Identify sounds of letters	18	56%	3	9%
2	5	Blending	Blend sounds into words	8	25%	2	6%
5	6	2 and 3 letter words	"2 and 3 letter words"	5	16%	1	3%
6	6	Repetition	Repeating information for the purpose of memorizing	4	13%	1	3%
7	6	Pronunciation	"Pronunciation"	3	9%	1	3%
9	6	Phonics	"Phonics"	2	6%	1	3%
7	N/A	Identify letters	Letters of the alphabet	3	9%	0	0%

Before participating in the Literacy Cooperatives, the most commonly mentioned method for teaching reading was Sounds (N=18). For example, one participant said, “I feel…teaching children how to read start with the sounds, being able to recognize and then pronounce the sounds then blending the sounds.” The theme of Sounds was frequently mentioned together with Blending, as demonstrated in the previous quote. Another common teaching method was 2 and 3 letter words, such as “They start with two letter words, three letter words, four letter words. From there you can start helping them to form simple sentences.”

After participating in the Literacy Cooperatives, half of the participants mentioned reading aloud as an important method for teaching pupils how to read, an increase from 25% at pre-treatment. Furthermore, teaching comprehension skills was never mentioned before participating in the Literacy Cooperatives, whereas 31% of the participants mentioned it at post-treatment. Unknowledgeable responses such as 2 and 3 letter words, repetition, and pronunciation reduced at post-test.

Additional interview questions focused specifically on knowledge of reading aloud as a teaching method for teaching reading. The interview question asked, what skills can children learn through reading aloud? A total of 28 skills were identified in response to this question. A selected number of skills based on frequency and relevance to the question are presented in Table 5.

Table 5. Participants' Responses to Reading Skills that Pupils can learn through Read Aloud.

Pre Rank	Post Rank	Skills		Pre-Test		Post-Test	
		Theme	Definition	Freq.	Percent	Freq.	Percent
7	1	Comprehension	Understanding the text or Specific reading comprehension skills (e.g., predicting, summarizing)	2	6%	17	53%
5	2	Vocabulary	Vocabulary or New words	3	9%	7	22%
3	2	Listening	"Listening"	4	13%	7	22%
9	4	Phonemic Awareness	"Sounds" or "Phonemic awareness"	1	3%	5	16%
1	5	Read	"Read" or identify words	7	22%	3	9%
3	5	Language	Language or Oral language or Communication skills	4	13%	3	9%
N/A	5	Print Awareness	"Print awareness" or Identify letters/alphabet	0	0%	3	9%
2	8	Pronunciation	"Pronunciation"	5	16%	1	3%
5	8	Concentration	Concentration or Attention	3	9%	1	3%
N/A	8	Reading Fluency	"Reading fluency"	0	0%	1	3%
7	N/A	Memorization	"Memorization"	2	6%	0	0%

As can be seen from Table 5, participants' knowledge about the impact of reading aloud on reading skills improved after participating in the Literacy Cooperative. First, relevant reading skills of comprehension and vocabulary were rarely mentioned at pre-treatment (N=2 and N=3) but were frequently mentioned at post-treatment (N=17 and N=7). Other foundational reading skills mentioned more frequently at post-treatment included print awareness (N=0 at pre-test and N=3 at post-test), phonemic awareness (N=1 at pre-test and N=5 at post-test), and reading fluency (N=0 at pre-test and N=1 at post-test).

Furthermore, unknowledgeable responses given at pre-treatment reduced at post-treatment. For example, a generic "read" response reduced from N=7 at pre-test to only N=3 at post-test, "pronunciation" reduced from 5 at pre-treatment to 1 at post-treatment, and "memorization" reduced from 2 at pre-treatment to none at post-treatment.

The third relevant interview question asked, what does the teaching method called "reading aloud" mean? Before participating in a Literacy Cooperative, most of the teachers were not familiar with reading aloud. Some thought reading aloud meant that the children read aloud (N=7). For example, one participant answered, "The teaching method called reading aloud means for pupils to read. They stand in front of their mates and read while the others follow through the lines." Two additional participants believed that reading aloud was chorus reading. "It's more less like a chorus reading, maybe probably the teacher will take the lead and then students will chorus after the teacher." At pre-treatment, six participants believed that the purpose of reading aloud was to emphasize pronunciation. One participant replied, "A class teacher, they should use their books to be pronouncing the words often and loudly in the classroom, so that they will be able to memorize it."

However, after participating in the Literacy Cooperative, participants' knowledge of reading aloud improved. Only one participant mentioned pronunciation or children reading – the same person. The improvement in knowledge of reading aloud is demonstrated by the change in one participant's responses before and after participating in a Literacy Cooperative. The pre-treatment response was, "When they are reading, they have to speak out and it has to do with rote learning. They are learning repeatedly. So, if they are learning repeatedly, they have to read it aloud." After participating in the Literacy Cooperative, their response was, "You pick a book. You read it to the children while they listen to you and also follow. You show them the book as well, so as you are reading, they are following too, looking at the pictures because they are more attracted to pictures."

The second research question asked, how does participation in a Literacy Cooperative influence teachers' literacy instructional strategy. One item on both the pre-treatment and post-treatment interview asked, what do you do to teach your pupils how to read? The data is presented in Table 6.

Table 6. Instructional Strategies used to teach Reading Before and After Participation in a Literacy Cooperative.

Pre Rank	Post Rank	Skills		Pre-Test		Post-Test	
		Theme	Definition	Freq.	Percent	Freq.	Percent
4	1	Reading aloud	Teacher read storybooks	8	25%	18	56%
1	2	Phonics	Letter sounds and blending into words	14	44%	11	34%
9	3	Vocabulary	Explain word meanings	2	6%	10	31%
3	4	Pupils read	Pupils read passages in textbooks, stories, or charts	11	34%	9	28%
1	5	Learning materials	Flash cards, pictures, charts	14	44%	7	22%
7	5	Play method	Playing through dramatization, games, or others	4	13%	7	22%
8	7	Comprehension	Asking questions after reading or teaching specific comprehension skills	3	9%	4	13%
9	8	Sight words	Recognizing words by sight	2	6%	3	9%
4	9	Pronounce words	Pupils repeat correct pronunciation of words	8	25%	1	3%
6	9	Letters	Recognize letters or the alphabet	6	19%	1	3%

As can be seen in Table 6, before participating in the Literacy Cooperatives, the most common teaching practices for teaching pupils how to read were phonics (N=14) and learning materials (N=14). After participating in the Literacy Cooperatives, half of the participants mentioned reading aloud as an important practice for teaching pupils how to read, an increase from 25% at pre-treatment. Furthermore, only 6% of the participants mentioned vocabulary (N=2) before participating in the Literacy Cooperatives, whereas 31% of the participants mentioned it at post-treatment (N=10). Simply teaching letters and the unknowledgeable instructional strategy of pronouncing words reduced at post-treatment.

Another item in the post-treatment interview asked, "Think about how you teach children how to read in your classroom. Will you change how you teach pupils how to read because of your participation in the Literacy Cooperative?" A total of 28 teachers (78%) said yes, they would change their teaching practices. Some quotes from the participants include the following.

- "Yes…my reading habit changed, I no longer read the way I read, because I've been educated in reading."
- "Yes, before now reading aloud comes occasionally but this time around it has become part and parcel of us."
- "Yes, I have to change that, new knowledge has been gotten from the literacy cooperative."

However, 5 teachers (16%) said they would not change their teaching practices.[2] Of these 5 teachers, 4 teachers said that they would improve what they were already doing. For example, one teacher said, "I will not change but I have added to what was already on ground." These were likely the few teachers who regularly read aloud before participating in the Literacy Cooperative. Their responses might mean that they have not changed their literacy instruction because they were already reading aloud but will improve by more effectively integrating literacy instruction in their read alouds.

One of the interview questions at post-treatment asked, overall, how do you think that participation in the Literacy Cooperative impacted you as an educator? We identified six key themes in participants' responses (see Table 7).

Table 7. Perceived Impact of Participating in a Literacy Cooperative

Theme	Frequency	Percent
Improved teaching ability	15	47%
Added knowledge	11	34%
Improved ability to read aloud	11	34%
Improved personal interest in reading	3	9%
Ability to interact with other educators	3	9%
Understanding the importance of reading aloud	3	9%

Interestingly, the findings from this interview question mirror the research questions. Almost half of the participants reported that participating in the Literacy Cooperative improved their teaching ability. This included improved literacy instructional strategies, such as a participant who said, "It has impacted me to a great extent, developing my skills to teach children how to read." However, participants also reported that their ability to teach other subjects was also impacted. One participant said, "I teach better, not even in read aloud…also in other subjects it has helped." Participants reported that the Literacy Cooperatives improved their ability to

[2] Two participants (6%) did not give an answer to the question.

prepare before reading aloud, creativity as a teacher, and even their classroom management. "It actually impacted me a lot. In fact, even the way I handle the children before, you know being harsh on the children, but now it's not like that."

One in three teachers reported that they were impacted through added knowledge, which mirrors our research question on how participation in Literacy Cooperatives impacted knowledge of best practices in literacy instruction. For example, "It has impacted me a lot. It has put more knowledge on me." The same number of participants reported that their ability to read aloud improved. "It has changed the way I read stories to the children. Even the way I position the books…I have come to know a better way to read to the children in order to motivate them and make them be more interested in reading."

Interestingly, Literacy Cooperatives did not just improve pupils' interest in reading (see the findings for the next research question), but it also impacted some teachers' interest in reading. "[Before participation], me as a person, I don't like reading. But everything changed about me when I started attending that cooperative…I like reading too…I pick interest in reading."

Some participants reported appreciating the opportunity to interact with other educators. For example, "It helped me to meet with other people with different ideas where we could share, you know, and learn new methods from other people." Again, some participants reported that their participation helped them understand the importance of reading aloud. "It made me see the importance to read aloud and I don't even want to stop." It is likely that participants' experience applying the training they received in reading aloud and seeing the subsequent change in pupils' reading motivation helped them to understand the importance of reading aloud in literacy instruction.

The third research question asked How does participation in a Literacy Cooperative influence pupils' reading motivation. For pupils in Nursery 1 and Nursery 2, we conducted interviews. The first two items asked pupils to report their interest in reading whereas the next six asked pupils to compare reading to other activities and select which they would choose. The results are presented in Table 8.

Table 8. Correlated Samples t-test Comparing Nursery 1 and 2 Pupils' Reading Motivation via Interview Before and After their teacher participated in a Literacy Cooperative.

	Mean	SD	t	df	p	Result
Interest in Reading Items						
Pre-Treatment	2.71	0.47	2.06	45	.045	Significant
Post-Treatment	2.88	0.32				
Comparing Reading to Other Activities						
Pre-Treatment	1.23	0.24	3.15	45	.003	Significant
Post-Treatment	1.37	0.28				

As seen from Table 8, the reading motivation for pupils in Nursery 1 and 2 increased at post-treatment for both scales, including interest in reading by itself and interest in reading compared to other activities.

The last item on the interview asked pupils if they liked reading. At pre-test, 42 pupils said yes and 3 said no. At post-test, all but 1 of the pupils agreed that they liked reading.

For pupils in Nursery 3 to Primary 3, we conducted a correlated samples t-test to compare pupils' reading motivation on the questionnaire before and after their teacher participated in the Literacy Cooperative. The first 17 items examined interest in reading on a 3-point scale where pupils rated their response to items such as, How interesting do you think reading is? These items were grouped in a variable called Interest in Reading. The last three items asked pupils to compare being read aloud to with other interesting activities as play. For these items, choosing reading was scored as 2 while the other activity was scored as one, meaning that higher scores reflect more positive reading motivation. Results are presented in Table 9.

Table 9. Correlated Samples t-test Comparing Pupils' Reading Motivation Before and After their Teacher participated in a Literacy Cooperative.

	Mean	SD	t	df	p	Result
Interest in Reading Items						
Pre-Treatment	2.60	0.35	1.03	287	.304	Not Significant
Post-Treatment	2.58	0.35				
Comparing Reading to Other Activities						
Pre-Treatment	1.65	0.35	0.61	287	.542	Not Significant
Post-Treatment	1.67	0.32				

As can be seen in Table 9, there was no significant difference in the reading motivation scores of pupils in Nursery 3 to Primary 3 before and after their teacher participated in a Literacy Cooperative on either the interest in reading items or the items comparing reading to other activities. There are three potential reasons for this outcome. First is a ceiling effect whereby pre-treatment scores were close to the highest possible score. Again, interest in reading items were on a scale of 1 to 3 and comparing reading activities were on a scale from 1 to 2. On both scales, the pre-treatment scores were close to the maximum, providing very little room for improvement.

The second reason why reading motivation did not demonstrate improvement on the questionnaire may be due to social desirability whereby the pupils responded positively because they perceived that the researchers valued reading motivation. Most school children are aware of the societal importance placed on reading, so they may have reported more based on societal expectations than their own beliefs, even though we emphasized the need for children to report their own beliefs (not the beliefs of others) as we were introducing the questionnaire.

Again, a response shift bias might have influenced the results, which is a change in internal standards from pre-test to post-test (Sprangers, 1989). In other words, pupils' internal standards of reading motivation may have been different at pre-test than at post-test. They may have believed that they were interested in reading before they realized the joys of reading culturally relevant literature. One way around this is retrospective reporting whereby a person reports on a psychological construct from the past. For this particular project, we might have done this by asking two questions at post-treatment: "1) Please rate your reading motivation now. 2) Thinking back to the beginning of first term, how would you rate your reading motivation then?" However, young children likely do not possess the cognitive abilities to accurately report retrospectively.

Another way we evaluated the impact of participating in a Literacy Cooperative on pupils' reading motivation was through teacher reporting. On the post-treatment teacher interview, one

question asked, Has your pupils' interest in reading changed since you began your participation in the Literacy Cooperative? All 32 teachers unanimously agreed that their pupils were more motivated after their participation in the Literacy Cooperative. For example, some responses from participants include the following.

- "Yes, it has, they always want to be read to, they always want me to read the storybooks for them. Once they see the storybooks, they will even prefer the storybooks to the normal lesson."
- "Yes, most have changed. Those that don't know how to read well, they are beginning to come up and those that are reading before are increasing."
- "Yes, very well, before they are more of a passive reader but now, they are more engaged in the reading. They can read to themselves; they can describe what has happened in the story and give you a detail comprehension or summary of what has happened in the story because they are more engaged."
- "Very well; it has actually changed, what changed about the children was that they got more wrapped into reading, they want to read more, they want to learn more."

The data suggests that participating in a Literacy Cooperative improved pupils' reading motivation according to the interview results from young pupils and according to teacher report on the interview. However, the results were not significant for older children who reported their reading motivation via questionnaire.

The final research question asked: What are Literacy Cooperative teachers' experiences with having better access to culturally relevant literacy materials for literacy instruction? The themes, definitions of each theme, and number of participants who mentioned each theme are presented in Table 10.

Table 10. Participating Educators' Beliefs of the Benefits of Reading Aloud Culturally-Relevant Literature.

Theme	Definition	Frequency	Percent
Relate	Pupils are able to relate to the content in the story, or the content is familiar	10	83.33
Academic Content	Pupils learn academic content	6	50.00
Interest	Pupils develop an interest in reading or have fun	5	41.67
Learn	Pupils learn important lessons	5	41.67
Attention	Pupils pays attention during read alouds	4	33.33
Remembers	Pupils remember the story and/or lessons learned from the story	4	33.33
Cultural Identity	Develops pupils' cultural identity	3	25.00
Understand	Pupils are able to better understand the story	3	25.00
Write	Inspires the reader to write stories based on their own experiences	2	16.67

The most frequently perceived benefit of reading aloud culturally-relevant literature is that pupils are able to relate to the content of the story. Because the content is familiar, they are able to make connections between the stories and their experiences. This theme was mentioned by 10 out of the 12 participants. For example, one participant said, "Children were able to relate better to these stories because these are things they see, these are things that we are used to here."

The next most frequently perceived benefit was that pupils are able to learn academic content, which was mentioned by half of the participants. Examples of academic content mentioned include animals, colours, and awareness of different cultures.

Interest and Learn were themes tied for the third most frequently perceived benefit of reading aloud culturally-relevant literature, both mentioned by five participants. The Interest theme captured both that pupils developed a greater interest in reading and that they enjoyed reading. For example, one participant said, "I got to see a change in their attitude towards reading. They got more excited to read books." The Learn theme captured responses about broader lessons that pupils learned, such as learning that they are special.

Other perceived benefits related to learning included that pupils paid better attention (N=4), they remembered better (N=4), they understood better (N=3), and would be more motivated to write stories (N=2). Another interesting theme was that listening to culturally-relevant stories would develop pupils' cultural identity (N=3). For example, one participant said, "Those stories with a cultural touch you know has really given some of them the chance to like connect very well with their roots…definitely it will help the children have a sense of belonging."

These results support the conclusion that pupils need access to culturally-relevant literacy resources to improve their reading motivation and skills. Because pupils can relate to the content of the stories, they are better able to understand the stories, which aids in their reading comprehension. Furthermore, the stories are a "mirror" to their lives (see NAEYC, 2020), which improves their reading motivation.

As we were wrapping up the Literacy Cooperatives funded by the CODE Context Matters grant, we also administered a questionnaire to all participants in order to determine how to move forward with Literacy Cooperatives after the funds ended. When asked of the overall quality of the Literacy Cooperative, 75% rated it as Excellent (5 on a 5-point scale). The remaining participants rated it as Good (4 on the scale). An open-ended item on the questionnaire asked, "What is the most important thing you have learned during your participation in the Literacy Cooperative?" Here are some highlights of their responses.

- "First of all, I want to thank this cooperative for giving me this great opportunity. It has really been a very good and interesting program. It gives me great joy to see my pupils performing so well and boosting their interest for learning."
- "I have learned how very important and effective read aloud is…It helps these learners to become better readers as they grow."
- "Teaching and developing comprehension strategies through read alouds. (Never knew this could be achieved through read alouds.)"
- "How to teach my pupils how to read using the different skills in read aloud"
- "The better way of reading aloud is not just to passively read aloud to pupils but to get the pupils involved for better comprehension"
- "It has made me a better teacher."
- "Read aloud is not just reading a story for the fun of it. Children learn a lot of skills that will help them in their learning in life."

Another open-ended item asked, "What do you think is the most important benefit to your pupils that has resulted from your participation in the Literacy Cooperative?" Here are some highlights of their responses.

- "They are more motivated to read."

- "Those [pupils] that have little or no interest in reading have interest in reading because it's fun."
- "The pupils in my class love books."
- "The pupils like reading storybooks now so it increase their reading habits."
- "Improved the vocabulary of my pupils as they use some of the new words explained from a reading passage during read aloud in the class."
- "It has really built my learners' comprehension skills."
- "They've learnt to take their time to read, understand, and read fluently (comprehension)."
- "It has helped my pupils to be active learners and…likewise morals from the stories"
- "It has broadened my learners' imagination. My pupils now reason and think out of the box."

Relevance and Value of Research

Literacy Cooperatives were designed to provide access to culturally relevant storybooks and provide literacy training for educators to use reading aloud to teach important reading skills. This was achieved by adapting the traditional practice of a cooperative to the context of literacy instruction. Culturally responsive teaching entails using the cultural characteristics, experiences, and perspectives of students to improve teaching and learning (Gay, 2002). This project has found that culturally responsive teaching is important not just for the pedagogies used within a classroom, but also in the structures for equipping educators to provide excellent literacy instruction.

The Literacy Cooperative had two components: training in reading aloud as a strategy for literacy instruction and provision of culturally relevant literacy materials. From our research findings, it is impossible to separate the impact of one component from the other. Instead, we believe that the two components are synergetic how they impact literacy instruction and reading motivation. If participating educators received training without literacy materials, they would not be able to put their new knowledge and skills into practice. Again, if they received literacy materials but no training, then they would not have been able to effectively use the materials, as evidenced by the findings that many participants did not understand what reading aloud was at pre-treatment. Stranger-Johannessen (2017) also reported that provision of storybooks must be supplemented with contextually relevant teacher training to effectively improve children's reading skills.

The International Literacy Association (2019) asserts that access to excellent literacy instruction is a basic human right. Realizing this right requires access to a knowledgeable literacy teacher and to high-quality literacy resources, which includes culturally-responsive resources. This project has established that a Literacy Cooperative is one strategy for fulfilling a child's basic right to a knowledgeable literacy teacher as well as the right to high-quality literacy resources. Therefore, Literacy Cooperatives can be an effective strategy for meeting Nigerian children's right to excellent literacy instruction.

Conclusion

In conclusion, this research study found that Literacy Cooperatives are a beneficial strategy for improving literacy instruction via early childhood educators' knowledge of best practices in literacy instruction and literacy instructional practices. This was accomplished both by the training on repeated interactive read alouds provided at the bi-weekly meetings of the Literacy Cooperatives and the provision of culturally relevant storybooks, which are a vital resource for excellent literacy instruction. This study provides evidence that Literacy Cooperatives improve

pupils' reading motivation through interviews of pupils and teachers, even though the findings from the questionnaire did not support this conclusion. Finally, Literacy Cooperatives are a powerful way for improving children's access to culturally relevant literature, not just for the pupils in the classrooms of the participating teachers, but also for other children within the participating teacher's network at school and in the community.

Recommendations

- Pupils need access to culturally relevant literacy resources to improve their reading motivation and skills (International Literacy Association, 2019). Many different approaches are needed in order to improve the supply of culturally relevant storybooks. A Literacy Cooperative is an effective approach to accomplishing this.
- Early childhood educators need training in literacy instruction in general, and reading aloud specifically in order to provide excellent literacy instruction. A Literacy Cooperative is one effective way to do this. We believe that one strength of the Literacy Cooperative is that educators received "bite-sized" training every two weeks, with the charge of putting what they learned into practice over the course of the next two weeks.
- The Literacy Cooperatives integrated literacy training with literacy resources. We believe that the two components are synergetic, and the Literacy Cooperatives would not have been successful without both. Consequently, in-service professional development for early childhood educators should ensure that educators have the resources necessary for putting the training into practice. This is especially important for training educators in low-resourced settings.
- Educators at all levels within Africa should identify strong and effective cultural practices and creatively consider how they can be used to overcome the many challenges in both early childhood education generally and literacy instruction specifically. This was the approach used to develop the Literacy Cooperative model.
- Additional research is needed to consider how to expand the model of a Literacy Cooperative to other contexts, especially rural contexts where educational disparities are even greater.
- Additional research can consider how the cooperative model might apply to other educational challenges, especially in the field of early childhood education. For example, perhaps Toy Cooperatives could be developed whereby early childhood programmes rotate toys for free choice play. Or perhaps Educator Cooperatives could be created whereby trained early childhood educators rotate to different schools so that their expertise can be shared with programmes that do not have professionally trained educators and they can serve as models for the untrained teachers in the schools.

Postscript

The original idea behind the development of a Literacy Cooperative is that a teacher or school could pay for two storybooks per term and, through rotating the storybooks at the Literacy Cooperative, have access to new storybooks every week. For this research study, there was no cost for participating in the Literacy Cooperative thanks to the generosity of the CODE Context Matters research grant. However, as we worked towards extending the Literacy Cooperatives beyond the scope of the grant, we discovered that the schools that need the Literacy Cooperatives the most – the traditional schools that do not realize the importance of reading aloud or storybooks, or those schools that barely have enough financial resources to pay teacher salaries – are the least willing or able to contribute money towards even two storybooks per term. The cost of running a Literacy Cooperative is also more than just the cost of the storybooks, including honorarium for the Literacy Coaches and light refreshments for the meetings.

Because of the great enthusiasm by those who participated in the Literacy Cooperatives, we began a new cohort of Literacy Cooperatives at the start of this academic session (September 2023). However, instead of the original idea of having participants contributing all of the finances towards the Literacy Cooperative expenses, we decided on a hybrid funding model whereby donors provide the storybooks and participants pay a small "subscription fee" to cover other running costs. Furthermore, schools that have never participated in a Literacy Cooperative before can send one teacher for free for one term so that they can "taste" the benefits of a Literacy Cooperative – something like a free sample at a supermarket. This term, we have 27 new early childhood educators enrolled in two Literacy Cooperatives, 17 of which are free teachers from new schools, and 10 of which paid the subscription fee. We are looking forward to finding out how many of the 17 free teachers pay the subscription fee for second term in January 2024.

Biographies of Team Members

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Mrs. Eseyin Janet Motunrayo hails from Oke-Onigbin in Isin L.G.A of Kwara state, Nigeria. She attended All Saints school, Oke-Onigbin for primary education, St Clares Girls Grammar School Offa, for Secondary Education, Christian Teachers College Omu-Aran and Federal Advanced Teachers College Oyo, for teachers' training in education. She has a B.Ed in Language Arts/Education from University of Jos and an MEd in Educational Psychology (Child development) from University of Jos, and is currently running a PhD programme in Educational Psychology (child development) University of Jos. She is a lecturer I in the Department of Educational Foundations and Early childhood Unit of the University of Jos. She has taught at different educational institutions in Nigeria, such as University of Jos Staff School, Institute of Education, University of Jos, and National Open University of Nigeria. She is a member of many professional associations of national repute, including Nigeria Society of

Educational Psychologists (NISEP), Nigeria Primary and Teachers Education Association (NPTEA), Teachers Registration Council of Nigeria (TRCN) and Early Childhood Association of Nigeria (ECAN) among others. She has published many articles in local and international journals and delivered public lectures on current issues in Early Childhood Education.

Chukwu Mary John (BEd, Early Childhood Education, University of Jos) is a Research Administrative Officer at Early Years Nigeria Initiative. Mary is responsible for assisting and facilitating the operations and activities of the organization. She is passionate about the growth and development of young children. Her research interests include in children's language and literacy development, children's play and learning as well as early childhood teacher education.

Appendix: Reading Motivation Questionnaire for Pupils Nursery 3 to Primary 3

1. How do you feel when you read?

2. How do you feel about reading a book during break?

3. How do you feel about reading a book at home?

4. How do you feel about reading for fun?

5. How do you feel about reading by yourself?

6. How do you feel when someone reads out loud to you?

7. How do you feel about reading textbooks?

8. How do you feel about reading storybooks?

9. How do you feel about receiving a book as a birthday gift?

10. How do you feel about reading during a school holiday?

11. How do you feel about reading instead of watching cartoons?

12. How do you feel about reading instead of playing?

13. How do you feel about reading instead of spending time with your friends?

14. How much do you like reading?

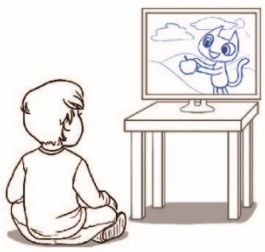
15) How much do you think that reading is fun?

16. How interesting do you think reading is?

17. How much do you enjoy reading?

18. Would you want to have someone read to you or would you want to play?

19. Would you want to have someone read to you or would you want to watch cartoons?



20. Would you want to have someone read to you or would you want to do a chore?