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The Development of Reading and Numeracy Activity at Primary School Level: A Case Study of RANA Program in Katsina State

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ABSTRACT

This study investigates the effectiveness of the Reading and Numeracy Activity (RANA) programme in enhancing early-grade literacy and numeracy skills among primary school pupils in Katsina State, Nigeria. A descriptive survey design was employed, involving teachers, pupils, programme administrators, and School Based Management Committee (SBMC) members. Data were collected through questionnaires, with 170 valid responses analyzed using descriptive statistics. The research Findings indicate that the RANA programme has significantly improved pupils' learning outcomes, increased interest in reading and numeracy. Also, the study identified some challenges, such as inadequate materials supports, large class sizes, irregular pupil attendance, insufficient funding, and logistics. The study concludes that the RANA programme remains an effective intervention towards improving foundational education. Thus, the study recommends sustained teacher training, improved resource provision, strengthened funding and community support.

INTRODUCTION

Early-grade literacy and numeracy are foundational to children's long-term educational trajectory. In many low and middle-income countries, formal schooling is challenged by limited resources, insufficient teacher training, a lack of appropriate learning materials, and linguistic barriers. In response, targeted interventions have emerged to improve foundational learning outcomes at the primary level through mother-tongue instruction, structured pedagogies, continuous teacher support, and community engagement. In Nigeria, particularly the northern states, the Reading And Numeracy Activity (RANA) was established to address deficiencies in Early-grade Reading And numeracy among children in primary grades 1 to 3. RANA's design reflects international best practices in foundational skills development, adapted to local linguistic (Hausa) and cultural contexts.

The RANA Literacy and Numeracy programs are set out plans to improve the literacy and numeracy skills of learners across Katsina State. The plans set out a number of policy measures which aimed for real and lasting change in the way we approach these essential skills of learning. To address the need for mother tongue reading materials, the RANA Program which was implemented by an organization with the code FHi360, worked with a variety of relevant education agencies and professionals including, reading experts, Hausa language experts, mathematics specialists, and translators on various material identification and adaptation workshops to produce instructional materials for use in RANA supported schools. Learning, 'Reading And Numeracy Activity' (RANA) employs a combination of intervention to support early learning at primary school and community level with the objective of improving children's reading skills. The basis of this approach is that early learning begins in the language of the home and community as it represents a foundational skill for success in all subject areas. This research is intended to highlight the development of RANA models, teaching methodologies and achievements of the program, particularly in the area of literacy and numeracy skills development among male and female pupils of participating schools.

RANA Program Background

Reading And Numeracy Activity (RANA) expansion program, is a new activity implemented by FHi 360 as part of UNICEFs girls education project phase 3 (GEP3) funded by the UK Department of International Development (DFID) and Educate A Child (EAC) program insidenigeria.org+2FHI 360+2.

Its initial pilot implementation was in two northern Nigerian states: Katsina State and Zamfara State. FHI 360+1. RANA targets early-grade learners (Primary 1–3) in both formal public primary schools and non-formal schools such as Integrated Qur'anic Schools (IQSs). insidenigeria.org+1. The program has two major components, RANA Light and Haske. RANA Light is implemented in Kebbi and Niger States; and Haske in Bauchi, Katsina, Kebbi, Niger, Sokoto and Zamfara States.

Reading And Numeracy Activity (RANA) is a Hausa Early Grade Reading Programme. The project was implemented by FHi360 as part of the UNICEF's Girls Education Project Phase 3 (GEP3) in Nigeria. The project

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implementation started in 2016 and grew from a pilot in two hundred (200) schools in Katsina and Zamfara states to a large-scale education programme reaching thousands of schools in seven additional states of Bauchi, Jigawa, Kaduna, Kano, Kebbi, Niger and Sokoto. (FHI 360. 2023).

RANA, as a UNICEF programme aimed at ensuring the establishment of a sound educational base and a good developmental foundation came up with new innovative strategies that were practicalized, tested and relied upon for the success of a good start in a child's educational base (Nalado, 2018).

RANA Programme

The Reading And Numeracy Activity (RANA) is an educational program that was introduced by UNICEF in two states of the North Western Region of Nigeria. The two benefiting states are Katsina and Zamfara, and the programme was to last for eighteen month (Jan 2016 – June 2017). The aim of the program was specifically to spread general literacy and ability to read, write and understand simple Arithmetic among children of lower grades of primary school (P1, P2 and P3). Using the child's mother-tongue which is universally accepted as the most relevant to learning, communicating ideas and acquiring new knowledge. RANA has initiated and developed pull-proof modern strategies and effective method that will stand the test of time.

LITERATURE REVIEW

Literacy and numeracy are cornerstones of education and vital for personal, social, and economic development. The evolution of literacy and numeracy in education reflects changes in societal needs, educational priorities, and technological advancement. These skills are no longer limited to reading, writing and arithmetic but now encompass critical thinking, problem-solving, and digital literacy.

The Concept of Literacy

Literacy is broadly defined as the capacity, confidence, and disposition to use language in its various forms. It encompasses multiple modes of communication, including music, movement, dance, storytelling, visual arts, media, and drama, as well as traditional skills such as speaking, listening, viewing, reading, and writing. In contemporary contexts, literacy also involves engagement with both electronic and print-based media. In an increasingly technological world, the ability to critically analyze texts has become a fundamental component of literacy. Early exposure to technology enables children to explore their environment and develop confidence in using digital media (Early Childhood Education and Development [ECED], 2009).

Traditionally, literacy was understood as the basic ability to read and write. However, this definition has expanded to include functional and cultural dimensions. The United Nations Educational, Scientific and Cultural Organization (UNESCO, 2006) defines literacy as "the ability to identify, understand, interpret, create, communicate, and compute, using printed and written materials associated with varying contexts" (p. xx). This definition highlights the dynamic and context-dependent nature of literacy, emphasizing its role in effective communication and societal participation.

Recent empirical evidence from the RANA implementation assessment provides insight into literacy and numeracy outcomes among pupils in northern Nigeria. The assessment compared the performance of pupils in RANA-supported schools with those in non-RANA schools in Katsina State and Zamfara State. Findings revealed that pupils in RANA schools outperformed their counterparts across several literacy and numeracy subtasks. For example, in reading comprehension, pupils in RANA schools achieved a slightly higher correct response rate (77%) compared to those in non-RANA schools (76%) (FHI 360 & UNICEF, 2023). More substantial differences were observed in numeracy tasks: 84% of RANA-school pupils correctly solved word problems, compared to 74% in non-RANA schools, while 62% of RANA pupils answered subtraction tasks correctly, compared to 50% (and as low as 45% in some cases) among non-RANA pupils (FHI 360 & UNICEF, 2023).

Furthermore, significant improvements were recorded in basic Hausa literacy among Grade 2 pupils. The proportion of girls achieving foundational literacy skills—including sound identification, reading high-frequency words, decoding, and passage reading—increased from 2.78% at the 2014–2015 baseline to 4% in 2016–2017, and further to 22.8% in the 2022 assessment (FHI 360 & UNICEF, 2023). These findings underscore the positive impact of the RANA program on early grade literacy outcomes.

The Concept of Numeracy

Numeracy refers to the ability to understand and work with numbers, particularly at the basic level of education. It extends beyond simple calculation to include the application of mathematical knowledge in everyday contexts. The Department of Education and Early Childhood Development (DEECD, 2009) defines numeracy as "the capacity, confidence, and disposition to use mathematics in daily life." This definition highlights not only cognitive skills but also the attitudes and confidence required to apply mathematical understanding effectively.

Children develop new mathematical understanding through active engagement in problem-solving activities. Therefore, it is essential that the mathematical concepts introduced to young learners are relevant and meaningful within the context of their everyday experiences. Such contextualized learning enhances comprehension and retention of mathematical ideas.

Furthermore, educators play a critical role in fostering numeracy development. They are expected to possess a

rich mathematical vocabulary to accurately describe and explain concepts, thereby supporting children's learning. Key areas of numeracy development include spatial sense, patterns and structures, number concepts, measurement, and data interpretation and argumentation (Department of Education and Early Childhood Development [DEECD], 2009).

Literacy And Numeracy

Literacy and numeracy have evolved beyond basic reading, writing, and arithmetic to encompass a broader range of communication, quantitative, and problem-solving skills across upper primary and secondary school levels. The Organisation for Economic Co-operation and Development (OECD, 2012) defines numeracy as "the ability to access, use, interpret, and communicate mathematical information and ideas, to engage in and manage the mathematical demands of a range of situations." This definition reflects a shift from traditional computational skills to more applied and functional uses of mathematics.

Earlier definitions of numeracy focused primarily on basic computational abilities. However, contemporary perspectives emphasize the application of mathematical concepts in real-world contexts. Functional numeracy, for instance, involves the use of numbers in everyday activities such as budgeting, measuring, and data analysis. Similarly, statistical literacy at advanced levels includes the ability to interpret data, probabilities, and graphical information to support informed decision-making (Gal, 2002).

Furthermore, numeracy is closely linked to critical thinking. Merrilyn Goos *et al.* (2014) argue that mathematical literacy involves reasoning, problem-solving, and the capacity to apply mathematics in making informed judgments across various life contexts. The increasing integration of technology in education and daily life has also introduced the concept of digital numeracy, which focuses on the ability to interpret and use numerical information in digital environments.

According to the Organisation for Economic Co-operation and Development (OECD, 2018), literacy and numeracy are essential indicators for evaluating educational outcomes. Consequently, effective education systems prioritize the development of both competencies to prepare learners for the complex demands of the 21st century.

Research Questions

1. How effective is the RANA programme in improving pupils' reading skills in Katsina State?
2. What impact does the RANA programme has on pupils' academic performance in Katsina State?
3. What challenges do teachers face in implementing the RANA programme in Katsina State?
4. To what extent does community participation, through the School Based Management Committee (SBMC), support the RANA programme in promoting pupils' learning in Hausa (mother tongue) at the primary school level?
5. What successes have been recorded as a result of the introduction of the RANA programme in improving reading abilities among primary school pupils in Katsina State?

MATERIALS AND METHODS

The design for this research was a descriptive survey design. This is because, according to Creswell and Creswell, (2018). "Descriptive research is a type of qualitative research that involves making careful observations and detailed documentation of a phenomenon of interest." They went ahead to state that, "the primary purpose of a descriptive survey is to describe the current state of variable or phenomenon, rather than to establish casual relationship or make predictions." Sambo (2015). A survey research design is one in which group of people or items are studied by collecting and analysing data from only a new people or items considered being representative of the entire group. The larger population consist of RANA teachers, students, Programme Administrators, and School Based Management Committee of some selected local governments of Katsina, Daura and Funtua Senatorial Zones. A sample of the population was taken. Random sampling was used for gathering information from the sampled Local governments of Katsina Senatorial Zone. 17 LGEAs of the 3 Senatorial Zones of Katsina State, fifty one (51) Hausa RANA teachers, thirty four (34) RANA Administrators, thirty four (34) members of School Based Management Committee (SBMC) of RANA program, and fifty one (51) RANA pupils respectively. Two hundred (200) well designed and structured questionnaires were issued to the respondents, at the end of which one hundred and seventy (170) questionnaire were retrieved.

Data Presentation and Analyses

The data retrieved are presented and analysed as follows:

Table 1: Demography Data of Respondents

Category	Variable	Frequency	Percentage (%)
Pupils	Boys	30	58.8
	Girls	21	41.2
Teachers	Male	35	68.6
	Female	16	31.4

Programme Administrators	Male	24	70.6
	Female	10	29.4
SBMC Members	Male	20	58.8
	Female	14	41.2

From the data above, it is evident that male respondents dominate across all categories, although the degree of difference varies. Among the pupils, boys constitute 58.8% while girls make up 41.2%, indicating a moderate gap but still reflecting a reasonable level of female participation at the primary school level. This suggests that access to early education is relatively inclusive, even though boys are slightly more represented.

A more pronounced gender imbalance is observed among teachers, where 68.6% are male compared to 31.4% female. This pattern continues among programme administrators, with male accounting for 70.6% and female 29.4%, indicating that leadership and administrative roles are largely dominated by men. Such a trend may reflect broader societal and cultural dynamics that influence workforce composition, particularly in Northern Nigeria. In contrast, SBMC members show a relatively more balanced distribution, with 58.8% male and 41.2% female. This suggests that community-level participation may be more inclusive compared to formal institutional roles, possibly due to increased awareness and encouragement of community involvement in school activities.

Table 2: Section A: Class

S/NO	Class	Frequency	Percentage (%)
1	Primary 1	10	19.6
2	Primary 2	21	41.2
3	Primary 3	20	39.2

Pupils' Questionnaire

The table presents the distribution of pupils according to their class levels. It shows that Primary 2 has the highest number of respondents with 21 pupils (41.2%), followed closely by Primary 3 with 20 pupils (39.2%), while Primary 1 has the lowest representation with 10 pupils (19.6%).

Table 3: Section B: Reading Activities

Item	Yes	%	No	%
I enjoy reading in school. (Ina jin daɗin karatu a makaranta).	42	82.4	9	17.6
My teacher helps me read better. (Malamina yana taimaka mani don yin kyakkyawan karatu/ karatu mai kyau).	45	88.2	6	11.8
I have books to read in class. (Ina da littattafan da zan karanta a aji)	39	76.5	12	23.5
I can read stories by myself. (Zan iya karanta labarai da kaina)	37	72.5	14	27.5

The findings clearly show a high level of engagement in reading activities among pupils. A large majority (82.4%) reported that they enjoy reading in school, while an even higher proportion (88.2%) indicated that their teachers help them read better. This suggests that teachers are playing an active and effective role in supporting literacy development.

In addition, 76.5% of pupils reported having access to books, and 72.5% indicated that they can read independently. These figures point to meaningful progress in reading ability and access to learning materials. However, the remaining percentages (23.5% without adequate books and 27.5% unable to read independently) suggest that not all pupils are benefiting equally, highlighting areas where further support is needed.

Table 4: Section C: Numeracy Activities

Item	Yes	%	No	%
I enjoy mathematics lessons. (Ina jin daɗin darussan lissafi).	41	80.4	10	19.6
My teacher helps me solve mathematics problems. (Malamina yana taimaka mani wajen warware matsalolin lissafi).	44	86.3	7	13.7
I understand numbers better now. (Yanzu na fi fahimtar lambobi fiye da da)	40	78.4	11	21.6

The results also indicate strong engagement in numeracy activities. A substantial proportion of pupils (80.4%) reported enjoying Mathematics lessons, while 86.3% confirmed that their teachers assist them in solving mathematical problems. This reflects a supportive teaching environment that encourages learning.

Moreover, 78.4% of pupils stated that they now understand numbers better, suggesting that the programme is having a positive effect on numeracy skills. Nonetheless, the presence of about 21.6% of pupils who still struggle indicates that additional efforts may be required to ensure more inclusive learning outcomes.

Table 5: Section A: Qualification

S/NO	Qualification	Frequency	Percentage (%)
1	NCE	21	41.2
2	B.Ed	14	27.4
3	B.Sc/BA + PGDE	10	19.6
4	M.Ed	6	11.8
5	Others	0	0.0

Teachers' Questionnaire

The qualification structure of teachers shows that a good proportion possess professional teaching qualifications. Specifically, 41.2% hold NCE certificates, while 27.4% have B.Ed degrees. In addition, 19.6% possess B.Sc/BA with PGDE, and 11.8% hold M.Ed qualifications.

The mean scores for programme success items are all above the benchmark of 2.50, indicating general agreement among teachers. For instance, improvement in pupils' reading skills recorded a mean of 3.27 (SD = 0.88), while improvement in numeracy performance had a mean of 3.25 (SD = 0.85).

Table 6: Section B: Programme Implementation

Item	Mean	SD	Decision
The reading programme has improved pupils reading skills.	3.27	0.88	Agree
The numeracy programme has improved pupils Mathematics performance.	3.25	0.85	Agree
Pupils show increased interest in reading activities.	3.22	0.90	Agree
Pupils demonstrate improved problem-solving skills.	3.16	0.92	Agree

Similarly, increased pupil interest in learning (Mean = 3.22, SD = 0.90) and improvement in problem-solving skills (Mean = 3.16, SD = 0.92) further confirm that the programme is positively influencing learning outcomes. These relatively high mean values suggest consistency in teachers' perceptions.

Unlike other sections, responses on teaching materials were less strong. Reading materials had a mean of 2.75 (SD = 1.02), while numeracy materials recorded 2.75 (SD = 1.01). These moderate values suggest that materials are available but not sufficient. Writing materials showed a slightly better position (Mean = 2.86, SD = 0.98), though still not very high.

Table 7: Section C: Teaching Materials

Item	Mean	SD	Decision
Adequate reading materials are provided.	2.75	1.02	Moderate
Numeracy materials are sufficient.	2.75	1.01	Moderate
Writing materials are available to pupils.	2.86	0.98	Agree

Teachers also expressed positive views regarding programme implementation. Adequate training recorded a mean of 3.08 (SD = 0.95), while clarity of guidelines had a mean of 3.12 (SD = 0.91). Teaching methods were also considered effective (Mean = 3.12, SD = 0.94), and monitoring was seen as fairly regular (Mean = 3.02, SD = 0.97).

Table 8: Section D: Programme Success

Item	Mean	SD	Decision
I received adequate training before implementing the programme.	3.08	0.95	Agree
Programme guidelines are clear and easy to follow.	3.12	0.91	Agree
Teaching methods used in the programme are effective.	3.12	0.94	Agree
Monitoring and supervision are regularly conducted.	3.02	0.97	Agree

Although these values indicate agreement, the slightly lower mean for monitoring suggests that there may be some inconsistencies in supervision across schools.

Teachers strongly agreed on the presence of key challenges. Large class size recorded the highest mean of 3.33 (SD = 0.82), followed by lack of materials (3.27, SD = 0.85) and poor pupils attendance (3.22, SD = 0.88). These high mean values indicate that these challenges are widely experienced and may significantly affect programme effectiveness.

Table 9: Section E: Challenges

Item	Mean	SD	Decision
Large class size affects effective teaching.	3.33	0.82	Agree
Lack of materials affects programme success.	3.27	0.85	Agree
Poor attendance of pupils affects programme outcomes.	3.22	0.88	Agree

Programme Administrators

The data on teaching experience shows a fairly balanced distribution among respondents. Teachers with 1–5 years of experience account for 29.4%, those with 6–10 years represent 26.5%, while 11–15 years account for 23.5%, and those with above 15 years make up 20.6%.

Administrators generally rated programme implementation positively. Proper planning recorded a mean of 3.24 (SD = 0.89), while teacher training had a mean of 3.21 (SD = 0.87). Monitoring and communication of guidelines also showed favourable ratings, with means of 3.09 (SD = 0.93) and 3.12 (SD = 0.91) respectively.

These values suggest that the administrative structure supporting the programme is functioning effectively.

Table 10: Section A: Years of Experience

S/NO	Experience	Frequency	Percentage (%)
1	1–5 yrs	10	29.4
2	6–10 yrs	9	26.5
3	11–15 yrs	8	23.5
4	Above 15 yrs	7	20.6

Table 11: Section B: Programme Implementation

Item	Mean	SD	Decision
Programme planning is properly carried out before implementation.	3.24	0.89	Agree
Teachers are adequately trained to implement the programme.	3.21	0.87	Agree
Monitoring and supervision are conducted regularly.	3.09	0.93	Agree
Programme guidelines are effectively communicated.	3.12	0.91	Agree

In contrast, financial and logistic support received lower ratings. Financial support recorded a mean of 2.76 (SD = 1.02), logistics 2.74 (SD = 1.01), and timely release of funds 2.56 (SD = 1.05). These moderate scores suggest that funding and logistics are areas of concern and may hinder smooth programme implementation.

Despite these challenges, administrators agreed that the programme has been successful. Improvement in literacy recorded a mean of 3.21 (SD = 0.88), while numeracy improvement had a mean of 3.18 (SD = 0.90). This reinforces the positive outcomes reported by both teachers and pupils.

Table 12: Section C: Financial & Logistic Support

Item	Mean	SD	Decision
Financial support from SUBEB is adequate.	2.76	1.02	Moderate
Logistics support (materials distribution, transport) is adequate.	2.74	1.01	Moderate
Funds are released on time.	2.56	1.05	Moderate
Adequate teaching materials are supplied to schools.	2.88	0.97	Agree

SBMC Questionnaire

The table presents the distribution of respondents based on their years of service in the SBMC. The findings show that the majority of respondents, 24 (70.6%), have served for above 6 years, indicating a relatively high level of experience among most participants. On the other hand, respondents with 1–3 years and 4–6 years of service each account for 5 respondents (14.7%) respectively.

Table 13: Section D: Programme Success

Item	Mean	SD	Decision
The programme has improved pupils' literacy levels.	3.21	0.88	Agree
The programme has improved numeracy skills.	3.18	0.90	Agree

This shows that only a small proportion of members are relatively new or moderately experienced in SBMC responsibilities.

Table 14: Section A: SBMC Members Role

S/NO	Experience	Frequency	Percentage (%)
1	Chairman	9	26.5
2	Secretary	11	32.4
3	Member	14	41.1tr

Table 15: Years of service in SBMC

S/NO	Years of service	Frequency	Percentage (%)
1	1-3 years	5	14.7
2	4-6 years	5	14.7
3	Above 6 years	24	70.6

Community participation appears fairly strong. Community support recorded a mean of 3.09 (SD = 0.93), while parental encouragement had a mean of 3.06 (SD = 0.92). Participation in planning and programme awareness also showed similar trends, with means of 3.09 and 2.91 respectively.

These values suggest that communities are generally aware of and supportive of the programme.

However, support in terms of resources is less strong.

Table 16: Section B: Community Participation

Item	Mean	SD	Decision
The community supports reading and numeracy activities.	3.09	0.93	Agree
Parents encourage their children to read at home.	3.06	0.92	Agree
SBMC participates actively in programme planning.	3.09	0.91	Agree
Community awareness about the programme is adequate.	2.91	0.96	Agree

Community provision of resources recorded a mean of 2.65 (SD = 1.03), parental support for materials 2.62 (SD = 1.04), and community monitoring 2.76 (SD = 0.99). These moderate scores indicate that while communities are willing to support the programme, their capacity to contribute materially is limited.

RESULTS AND DISCUSSION

The findings of this study clearly show that the RANA programme is making a meaningful difference in the teaching and learning of literacy and numeracy in primary schools. The responses gathered from pupils, teachers, administrators, and community members reveal that the programme is generally effective and appreciated by those directly involved in its implementation. However, the findings also show that some important challenges still need attention if the programme is to achieve even greater success.

Table 17: Section C: School Support

Item	Mean	SD	Decision
The community contributes resources to support the programme.	2.65	1.03	Moderate
Parents support the provision of learning materials.	2.62	1.04	Moderate
Community members assist in monitoring the programme activities.	2.76	0.99	Moderate

One of the most encouraging findings from the study is the positive response from pupils. A large number of pupils reported that they enjoy reading and mathematics lessons. This is important because children learn better when they are interested in what they are being taught. The fact that many pupils now enjoy reading and solving mathematical problems suggests that the teaching methods used in the programme are making learning more interactive, practical, and enjoyable. Pupils also indicated that their understanding of numbers and mathematical concepts has improved. This means that the programme is not only increasing participation in class activities but is also helping pupils develop stronger foundational skills that are necessary for future learning.

Beyond academic improvement, the findings also suggest that the programme is helping pupils build confidence in themselves. When children are able to read better or solve mathematical problems successfully, they become more confident and willing to participate during lessons. This confidence can motivate them to ask questions, express their ideas, and become active learners. Such improvements are very important at the primary school level because they help create a strong educational foundation for children as they progress to higher levels

of education.

Teachers' responses further support the positive experiences shared by the pupils. Most teachers agreed that the programme has improved pupils' reading abilities, numeracy skills, classroom participation, and problem-solving abilities. According to the teachers, pupils are now more interested in classroom activities and more willing to engage in learning tasks than before. This agreement between teachers and pupils strengthens the reliability of the findings because both groups are observing the same positive changes in the classroom.

The findings also show that teachers are benefiting from the programme. Many teachers acknowledged receiving training and instructional guidance that helped them improve their teaching methods. This is very important because no educational programme can succeed without competent and motivated teachers. Through the training provided by the RANA programme, teachers appear to have gained better understanding of how to teach literacy and numeracy effectively, especially using learner-centered approaches that encourage participation and interaction among pupils.

School administrators also gave positive responses regarding programme planning and monitoring. Their responses suggest that the programme is being organized and supervised properly in many schools. Effective supervision is important because it helps ensure that teachers are implementing the programme correctly and that learning activities are taking place as planned. Good monitoring also allows administrators to identify challenges early and provide solutions before problems become serious.

Despite these achievements, the study revealed some major challenges affecting the programme. One of the most serious issues is the shortage of teaching and learning materials. Although materials are available in some schools, many respondents indicated that they are not sufficient for all pupils. In many classrooms, there may not be enough textbooks, charts, or learning aids for effective teaching. This can make it difficult for teachers to fully implement learner-centered teaching methods, especially in literacy and numeracy lessons where practical activities and demonstrations are important.

Another major challenge identified in the study is overcrowded classrooms. Many teachers reported that large class sizes make teaching more difficult. When there are too many pupils in one classroom, teachers may not be able to give enough attention to individual learners, especially those who are struggling academically. Large classrooms can also reduce classroom control and make it harder to monitor pupils' progress effectively. Even when teachers are well trained, overcrowding can reduce the overall effectiveness of instruction.

The study also highlighted financial and logistical problems affecting programme implementation. Administrators reported that funds are sometimes inadequate or delayed. This can affect several programme activities such as teacher training, monitoring visits, and the provision of learning materials. Delayed funding may also slow down important school activities and reduce the efficiency of programme delivery. These findings suggest that stronger financial support and better planning are needed to ensure smooth implementation of the programme.

Another interesting finding from the study relates to community involvement. Members of the School-Based Management Committees (SBMCs) generally showed strong interest in supporting the programme. Many community members encourage children to attend school and participate in educational activities. This positive attitude is important because community support often contributes to the success of educational programmes.

However, while community members are willing to support the programme morally, many are unable to provide significant financial or material assistance. This may be due to economic hardship within the communities. Many families in rural areas face financial difficulties and may struggle to contribute resources to schools even when they value education highly. This finding shows that government agencies and donor organizations still have an important role to play in supporting schools and sustaining educational programmes like RANA.

Overall, the findings suggest that the RANA programme has made noticeable progress in improving literacy and numeracy among primary school pupils. Pupils are becoming more interested in learning, teachers are improving their instructional methods, and schools are benefiting from better programme organization. At the same time, challenges such as inadequate learning materials, overcrowded classrooms, and limited funding continue to affect programme effectiveness. Addressing these problems will help strengthen the programme further and ensure that more pupils benefit from quality literacy and numeracy education in the future.

CONCLUSION

The findings indicate that the RANA programme has made a significant contribution to improving literacy and numeracy among lower primary school pupils. High levels of pupil engagement and strong teacher agreement suggest that the programme enhances both learning outcomes and classroom practices. Its effectiveness is largely attributed to structured implementation, including teacher training, clear guidelines, and regular monitoring.

However, challenges remain. Moderate ratings for teaching materials and financial support highlight resource limitations, while large class sizes and irregular pupil attendance continue to affect programme delivery. Although community participation is positive, it is mostly non-material, indicating the need for additional external support.

Overall, the RANA programme is effective and impactful in strengthening foundational learning skills. Nevertheless, its long-term success depends on improved resource provision, efficient funding, and sustained monitoring and evaluation.

Recommendations

Based on the findings of this study, it is hereby recommended that the relevant educational authorities and stakeholders in Katsina State should prioritize the sustainability of the RANA programme through continuous professional development of teachers, regular and well-structured training workshops should be organized to enhance teachers' pedagogical skills, particularly in reading and numeracy instructions.

Furthermore, adequate provision, effective distribution, and consistent availability of instructional materials should be ensured in all participating schools to facilitate effective teaching and learning processes. In addition, deliberate efforts should be made to improve school infrastructure and create a more conducive learning environment that supports both teaching effectiveness and pupils' academic engagement.

Moreover, community participation should be strengthened through active involvement of School Based Management Committees (SBMC) and other relevant stakeholders. Such collaboration should be directed towards providing necessary educational support, promoting school development initiatives, and reinforcing the use of the mother tongue (Hausa) in early grade instruction. This will contribute significantly to sustaining and enhancing the achievements of the RANA programme in Katsina State.

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