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Implementing Cross-Age Peer Tutoring in the Teaching of Reading in Kenyan Primary Schools

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Abstract:

Improving levels of literacy in low-income societies is crucial in securing economic and social progress and lifting people out of poverty. The situation in many regions of Kenya points to low literacy. UWEZO's 2011 survey in 70 Kenyan districts showed that 28% of grade three children could read a Grade 2 English passage and 36% could read a Grade 2 Swahili passage. Other survey work found that 25% of children could not read a single word in a grade level paragraph. Improving academic outcomes for all learners, particularly the most disadvantaged and hard to reach, is imperative. This paper discusses an innovative service delivery intervention being implemented in Kisii, Nairobi and Machakos counties of Kenya in which teachers are trained to model to older pupils how to support younger pupils to apply four reading comprehension strategies – generating questions, summarising, clarifying and predicting - to improve literacy outcomes. The research sites were important to evaluate the effectiveness of the intervention because of their levels of population and poverty, and educational attainment. Preliminary findings affirm the intervention is well-received. Learners are latching onto reading as a fun and pleasurable activity. Implications for a whole language approach to reading instruction are made.

Keywords: *Comprehension strategies cross-age peer tutoring literacy*

1. Introduction

Kenya is an interesting literacy research site based on increased interest in reading that has been stimulated and catalysed by recent funded research showing that Kenyan children are underachieving in reading and other academic subjects, including numeracy [1]. Research by Twaweza East Africa, based on data collected from five rounds (2009, 2011; 2012; 2013 and 2014) of the Uwezo Annual Learning Assessment on a nationally representative random sample of children aged 6-16 years to answer the question *are our children learning*, have consistently shown that Kenyan children may not be benefiting as they should from school experiences. Data from Uwezo survey done in 2011 in 70 Kenyan districts showed that among grade three children, only 28% could read a Grade 2 English passage and just 36% could read a Grade 2 Swahili passage. Other survey work found that 25% of the children could not read a single word in a grade level paragraph. In 2015, these data still show the existence of large and persistent inequalities and gaps in children's access to school and rates of basic literacy and numeracy and overall learning outcomes between leading and lagging counties, and significant clustering of children into better-off and worse-off communities. Differences between neighbourhoods in both access and educational attainment are very large. Uwezo (2015) report states in part:

Despite the notable progress in expanding access to schooling in general, a significant minority of children are being left behind. Consequently, the promise of education as a means to overcome entrenched economic inequality remains elusive for many Kenyan youth. As it is currently delivered, education risks entrenching the very inequality it is supposed to fight (p. 34).

The challenges plaguing the education system in Kenya can be traced back to the year 2003 when the government of Kenya passed a reform package that guaranteed free primary education to all eligible pupils. Pupil enrolment increased from 5.9 million public and private primary school pupils in 2002 to 9.8 million in 2011. The Net Enrolment Rate (NER) was now 95.7%, with near gender parity. Such a drastic change had a huge impact on service delivery and instructional quality – including in the core skill of reading. The situation was exacerbated by existing challenges of teacher shortage, lack of appropriate teaching and learning materials, and inadequate physical facilities. The quality of instruction received in schools suffered and performance on reading proficiency examinations and assessments dropped considerably [1].

There is now widespread recognition in Kenya that the quality of learning in public schools is generally low [2]. Prevalence of people with reading and/or learning challenges is now an undeniable fact. However early screening, diagnosis and intervention measures for children with learning needs remain low. Consequently, many struggling learners continue to fall through the cracks in their academic pursuits. Those remaining in the school system continue to be ignored, especially where teachers feel overstretched.

Poor reading ability negatively impacts academic performance across subjects, retention, and repetition of grades, all of which have major implications for cost and for the achievement of Kenya's Vision 2030 and Sustainable Development Goals (SDGs). Children who perform poorly in the primary grades are likely to score lower on national examinations, repeat a year, or drop out. This has costly implications for MOEST resources which take up around 30% of the national budget [3] and continues to be the largest expenditure line in the government budget.

Despite the very substantial volume of public expenditure on education, enrolment in private schools and private tuition are large and increasing. Around 18% of children 6-16 years enrolled in school attend private schools. This proportion has been growing steadily over the last five years. So, while public provision of education is important and widely supported (in principle) the public education system may not be functioning effectively.

Myriad education challenges have necessitated national curricula reform (currently underway). This has come out of the realization that education is more than just access to schooling. Instead, full distribution of learning outcomes must be kept firmly in sight if children are to achieve literacy and numeracy competencies. Priority actions must be identified to strengthen schooling in order to better level the playing field of educational opportunity for all. Our innovation, cross-age peer tutoring in the teaching of reading, was conceived to fill this gap. Our assumption was that literacy holds promise and is the key that unlocks all other academic areas for all children, including those marginalized in one form or another. Literacy is also intimately linked to economic and social progress and has potential to lift people out of poverty [4].

But what exactly is cross-age peer tutoring in the teaching of reading? What is innovative about it? How viable is the innovation? In school when learners get to work together to promote learning, the process is called 'peer tutoring'. Cross-age peer tutoring in the teaching of reading is a form of peer tutoring that consists of learner partnerships (usually pairs or dyads of say upper primary pupils who get trained to work with a lower pupil) to conduct reading sessions. In the case of paired reading, the learner working at the higher class/reading level takes on the role of a tutor. The learner working at the lower class/reading level takes on the role of tutee. This allows the more able pupil to help the less able one. It stands to reason that if the tutee gets stuck, the tutor should have the experience and ability to help!

Cross-age peer tutoring in the teaching of reading is innovative in several ways. First, it deviates from other innovative service delivery programs in its target audience. Whereas in-service programs focus on the teacher, cross-age peer tutoring goes beyond the teacher by shifting the responsibility to the learner to take charge of their own learning and to help each other to learn. Specifically, learners support each other to apply four comprehension strategies – generating questions, summarizing, clarifying and predicting. Although in the preliminary stages of the programme, teachers assume the primary responsibility for modelling how to use the teaching strategies, gradually as students become familiar with the strategies, they take over responsibility for using the comprehension strategies to understand text and to work with younger readers during reading sessions. What's more, peer tutoring frees up the teacher's time so that they deal with learners needing the most support in their classrooms. Peer tutoring is thus a powerful way of introducing learners (and their teachers) to reciprocal forms of teaching and learning. This approach is more sustainable because of learner empowerment in the learning process and nurturing of risk-taking behaviour deemed invaluable in obtaining meaning from texts and improving reading comprehension. Secondly, cross-age peer tutoring is innovative by expanding the reading and learning space both in and outside the classroom. Specifically, cross-age peer tutoring in the teaching of reading complements classroom literacy efforts but goes an extra mile by supporting learners' independent reading pursuits outside the regular classroom. Learners get to pursue their love of reading in relaxed environments including under trees and to indulge in reading without the fear of being examined.

In spite of the perceived benefits of cross-age peer tutoring in the teaching of reading, little research into its use in low income countries like Kenya has been conducted, hence our research. The purpose of our study was thus to provide evidence as to whether the implementation of cross-age peer tutoring in Kenyan primary schools is practical and results in higher reading attainment. This purpose was in line with the national curriculum for English which states that in lower primary children should be able to read and understand instructions, to read for information and for pleasure, to develop vocabulary and to use sentence structures appropriately. By the end of upper primary learners should also be able to read and understand instructions, to access information and to read widely for pleasure.

1.1. Theoretical Framework

Cross-age peer tutoring in the teaching of reading was informed by social constructivist theoretical perspectives. In social constructivism, knowledge is co-constructed following an interchange between two or more people in mutually beneficial ways. Social constructivism provided the lens through which we analyzed interactions of cross-age peers around books they read together. It helped us to determine whether the innovation was mutually beneficial to participating dyads. Each reading encounter was treated as a researchable moment so long as it related to cross-age peer tutoring in the teaching of reading in the primary schools.

We invoked also Lev Vygotsky's social cultural theory which emphasizes the importance of the social environment in learning and underscores the primary role of Significant (or Knowledgeable) Other(s) (in this case teachers and tutors) operating within the Zone of Proximal Development (ZPD) to help novices (pupils/tutees) gain requisite knowledge, skills, values and attitudes through guidance and encouragement, which Vygotsky called scaffolding. Vygotsky posits that learners can perform more demanding tasks with

scaffolding or specific instructional supports and props from Significant Others. Specifically, there is the gradual release of responsibility for learning from the teacher to the learner: The teacher begins each session by demonstrating, then s/he invites learners to try out a new strategy or skill or activity with them before eventually letting the learners do the activities on their own. Key tenets of Vygotsky's theory are linked with the setting of incremental goals and achieving them and then setting new ones. This ensures that key milestones are achieved at each step. This informed cross-age peer tutoring where was concerned. Vygotsky's socio-cultural approach to learning has great potential in translating reading challenges into gains. This line of thinking helped us determine the level of scaffolds tutors provided to tutees and whether and/or how these translated to optimal learning by the dyads as well as the setting of reading goals over the research period. Through scaffolding employed by teacher and tutors, learners who were unable to perform certain reading tasks on their own were able to undertake them until they achieved mastery.

Our research was undergirded also by Noam Chomsky work's which proved that human language acquisition defies explanation through the standard linear model that children acquire language through imitation and reinforcement [5]. Chomsky argued that human language was too rich and too varied and any speaker could, in principal, produce an infinite number of sentences of infinite length. Whatever the units of learning might be - phonemes, words, or even whole phrases - it was impossible that this capacity could be acquired by learning to imitate and connect them one-by-one to each other. Furthermore, despite all the complexity of the challenge, nearly all humans, world around, essentially master their native language within the first few years of life. Chomsky proposed that babies were innately prepared to learn language. With a pre-wired Language Acquisition Device (LAD), human infants were seen to be endowed from birth with a deep knowledge of the essential physical, grammatical, and semantic components of all human languages. To become linguistically competent in their native language, children need only discover which of the various options were operative in their own community of speakers. They did so through a process of systematically testing, refining, and reformulating their built-in linguistic hypotheses. This argument justifies that a child from the very beginning of his life looks for rules that provide him with the key to the language community in which he finds himself. The child has rules for learning rules, and he tests to see which particular rules apply.

We subjected the same argument to the relationship between LAD and written language acquisition (or reading). We reasoned that if child is equipped with every skill that he needs in order to read and to learn to read, all that he needs to discover is the particular rules that apply. In our research, we viewed the role of the child in this new light. We also viewed the role for the teacher and tutor or significant other(s) in this new light regarding written language-learning process. This understanding was juxtaposed with insights on the function of adults when a child is learning how to speak [6]. Put differently, we hypothesized that reading experiences should be as natural as learning to talk. There should be no pressure of examinations or punishment for failure to achieve certain milestones just the same way we do not punish our children when they do not acquire language readily. This implies to a large extent that the child can learn "phonic rules for himself, and he will only acquire them through experience in reading" (p. 226). The instructional implications of this view are that beyond providing materials and opportunities for reading, the teacher's most important job is one of providing formative feedback. The teacher must create the sort of positive and supportive environment that would best encourage students to take on the risky business of testing new hypotheses. Children will learn to read quite by themselves if only they are given an adequate corpus of meaningful language and the kind of positive, non-punitive support that will allow their natural hypothesis-testing talents to operate most productively. Cross-age peer tutoring provided these affordances. A learner needs written language that is both interesting and comprehensible, and teachers who understand language-learning and who appreciate his competence as a language-learner.

In sum, tenets of the various theories were invaluable because of their specific focus on the role of support systems in the reading instructional processes, the need to validate individual pupils' capabilities and a re-direction of the focus on what they CAN DO. Collectively, they provide a viable roadmap on handling struggling readers' unique needs appropriately.

2. Methodology

This research was a randomized control trial. Within this design, the difference-in-difference approach was followed to determine group-specific and across-group changes in order to control for unobserved dynamics, thereby ensuring accurate capture of additionality. Proof of concept was accommodated through tracking the cohort of pupils in the experimental group over the pilot and full implementation period in order to measure within-subject improvements in reading scores, which further allowed for inferences to be made to a similar target population. Triangulation of data from multiple sources was done to ensure validity of findings.

2.1. Sample Size and Sampling Techniques

Purposive sampling was used to select Kisii, Nairobi and Machakos Counties in Kenya. The counties were chosen as research sites to evaluate the effectiveness of the intervention because of their levels of population and poverty, and educational attainment.

Simple random sampling was used to select 60 participating schools from each county for a total of 120 schools.

Purposive sampling was used to select Standards 3 – 6 pupils. These four levels (Standards 3 – 6) were purposively selected because Standards 1 and 2 were already benefiting from a nationally scaled reading programme dubbed Tusome while Standards 7 and 8 were deemed 'sensitive classes' needing to be left alone to prepare for Kenya Certificate of Primary Education (KCPE).

The experimental group consisted of Standard 6 'tutor pupils' matched to Standard 4 'tutee pupils' and tutor pupils in Standard 5 with tutee pupils in Standard 3. All pupils in each of the two classes were included in the project. Pupils worked in pairs. There were a few cases where pairs changed on a short-term basis due to pupil absence from schools. In a few cases the pairs were changed when they did not get on with each other. In a few schools, teachers formed triads. In such cases, the teachers clearly defined the role of the third pupil as either being a tutor or tutee. Several possibilities were allowed. If the third pupil was from the older class they became a tutor.

If they came from a younger class they became a tutee. If the triad formed with two tutees, the tutees were placed in the triad of tutees of close ability. The tutees 'shared' equally the time of the tutor by for instance, reading the same book, or by choosing different books and having the tutee switch attention as they read. Where the triad formed with two tutors, then the roles of the tutors became more flexible. One triad member covered absenteeism in other pairs. The tutors also took turns in their roles.

Reading ability was the initial pairing criteria. Generally, pupils were paired from the highest to the lowest in the older and younger classes. Two highest ability pupils from each class were paired together followed by the next highest two ability pupils, and then the next and so on until all pupils are matched with another pupil.

Teacher judgement, test results and other reasonable criteria (e.g., gender, ethnicity, maturity, working habits and personality) which were likely to interact negatively to affect a pairing were taken into consideration as deemed necessary. Where a pupil-pairing, based on ability, had problems due to other factors, the tutor was changed with the one next in line. Endeavours were made to stick as closely to the ability guidelines as possible. Once matching and teething problems were sorted out, the pairs remained stable for the full duration of the innovation. No serious incidents or personality clashes warranting reconstruction of pairs were reported.

All English and Kiswahili language teachers from target classes and schools were purposively selected to participate in the research. There was a total of 250 teachers.

2.2. Research Instruments

Pre-and post-test reading assessments were used to determine pupils' reading skills.

2.3. Validity and Reliability of research Instruments

Validity and reliability of the research instrument was determined through piloting and expert guidance from literacy experts and the research team.

2.4. Procedures for Implementing the Cross-Age Peer Tutoring Innovation

Following approvals to conduct research with human subjects, the research team first trained the 250 Standard 3 – 6 English and Kiswahili language teachers on the four comprehension strategies – generating questions, summarizing, clarifying and predicting. Through a cascade model teachers, in turn, trained Standard 5 and 6 pupils to support Standard 3 and 4 pupils to apply the four strategies. Standard 6 tutors and Standard 4 tutees were trained together, and then the process was repeated with Standard 5 and 3 together. Training partners together from the outset conveyed the immediate impression that we are all learning together. It was necessary to build a community of practice.

To minimize the limitations of the cascade model to capacity building, the research team employed the help of two research associates who coordinated school-specific trainings and travelled to the sites to work alongside the teachers. The research associates determined well in advance the date, time and place of each training session and, subsequently, provided on-going support, mentoring and coaching.

The research team carefully pre-selected reading material to be used in the cross-age peer tutoring programme. This included 50 copies of each of the 30 different multi-genre collections. The material was made readily available for both the practice sessions and the actual intervention period. During training, easier books were used to allow pairs to focus on getting the tutoring method right, without having to use a lot of brainpower for the actual reading. Learners also participated in selecting reading materials that were above the independent reading ability of the tutee but below that of the tutor. The research team exercised some degree of editorial control over the content and in that way, there was an eclectic mix of multi-genre texts selected for the innovation. Teachers did the same using books in their school libraries to ensure reading materials are challenging enough but not too difficult.

The tutee was shown how to select what to read using a 'five-finger technique'. For this the tutee opened a book on a random page and placed five fingers onto the page. S/he then attempted to read the words under the fingers. This process was repeated for another randomly selected four pages. If s/he could read all the words on the five pages, the book selected was too easy. The tutee was advised to choose a book where they made between two and ten errors. Although this seemed a strange manner in which to assess the suitability of the reading level of the book, it was quick and had worked quite well in previous research. Particularly important of tutee's self-selection was that fact that it encouraged them to be interested in what they were reading. In the end, the book chosen by pairs had to be above the independent readability level of the tutee but below that of the tutor. This facilitated the tutor being able to help the tutee. Teachers were encouraged to support tutees' selection to help them experience the different genres of text and to ensure that the book chosen by a particular learner was at the right level of reading difficulty.

The training sessions/days for both teachers and learners were four. In the first session, the facilitators focused on explaining what cross-age peer tutoring in the teaching of reading is and why it was being done. In terms of the paired reading process, the first session also focused on choosing a book at the right level and then switching between reading alone and reading together including error correction. The Paired Reading Log (for recording books read and reading milestones achieved) was introduced in session one to ensure pairs completed it at the end of the session.

The second session focused on providing feedback and consolidating error correction. These strategies were modelled for pupils during this session. The third session was for practicing previous techniques and introducing before, during and after reading questions. Question mats (see Appendix) were provided as well for further practice. The fourth session was used for consolidating the learning and to correct any areas of weakness. From the fifth session, the cross-age peer tutoring process was working for most pairs.

Ice-breaker activities were used to introduce the sessions. A verbal explanation of the overall structure and purpose of the various techniques was given. This included an explanation of tutor and tutee to ensure the roles were clearly understood. Written instruction

was given to participants and included cards for questioning and praising. This was followed by a demonstration of the required behaviour/good practice and debriefing sessions.

Guided practice by all participants was done. This included the opportunity to practice paired reading and providing formative feedback on good or bad practice. Following this, general feedback was given to the groups. Teachers were encouraged to check, monitor and coach five to six pairs in each practice session.

Participants were briefed on the organizational nuts and bolts of the weekly sessions. These included details about the access to materials, means of record keeping, arranging times and places for paired reading sessions and the procedure for further help and follow-up. Lastly was on how to fill the reading log.

Supported cross-age peer tutoring took place twice a week during normal school hours for at least two terms of approximately three months each. Each session lasted about 35 minutes. Of this, about 25 minutes were quality-reading time. School teams identified appropriate times when tutoring could take place. Many schools settled for the afternoon sessions. They agreed on the venue for their tutoring sessions which included half of the younger class going to their tutors' class and half of the older class going to their tutee's classes or reading under trees or any comfortable place within the school compound. The other ten of the 35-minute sessions were spent organizing exchange of learners between classrooms and getting them settled for reading.

Learners were shown how to sit comfortably close to each other. They were close enough to hear each other without straining or having to raise their voices. This meant, for instance, sitting next to each other at a desk or in a quiet corner of a classroom library or under a tree.

Supported paired reading in the cross-age peer tutoring had five main aspects to it. These were: choosing the right book, supported reading, error correction, questioning and positive feedback. The cycle of paired reading alternated between the tutor and tutee reading together and the tutee reading alone. The tutor and tutee started by reading together. The tutee then signalled to read alone when they felt comfortable enough to tackle the text read independently. In moving between reading alone and reading together, the tutor and tutee agreed on a signal, such as a finger tap or any other signal that worked well for them. When the signal was issued, the tutor praised the tutee and then kept quiet. The tutor followed the reading of the tutee carefully and waited for a reading error to occur. When an error occurred, the tutor waited 4-5 seconds and if the tutee did not self-correct, the tutor corrected the tutee. In correcting the error, the tutor either repeated the error word correctly or helped the tutee to sound out the word by connecting the sounds of spoken English with letters of groups of letters together to produce approximate pronunciations. Once the word had been corrected, the tutee would repeat the error word correctly and the pair read together again until the tutee signalled to read alone again.

If there were no mistakes made, the tutor still has several important jobs to do monitoring for errors, praising the tutee and asking questions at the right moment. Generally, questions could be used at three points: Before, during and after reading. Before reading questions are about the book or text, the author and the reasons for choosing the text. During reading questions are used to make sure the tutee understands, to help them understand, to summarise what has been read, to predict what will happen next and to look back to the whole text. After reading questions look at the understanding of the text, what the pair thought about the reading and what they enjoyed or found interesting.

A question mat (with general use, easy and harder versions) was available to guide the questioning and probing sessions. Teachers guided learners on the questions that were appropriate for their groups. Ground rules were established in which tutors were expected to listen to tutees attentively and respond respectfully.

Last but not least, teachers were encouraged to think about what coaching and support they would need to improve their work by for instance how to praise pairs that are doing well; how to coach pairs; and how to demonstrate how to do things more effectively. Teachers were given tips on trouble shooting during support and monitoring period. Common problems identified included personality clashes among learners, poor communication, pace, difficulty in tutors praising tutees, and generally how to help pairs improve by observing them in action. They were given an aide-memoire for observing pairs working together to help them focus their attention on what each pair is doing and to make notes during observations.

During the early stages of the programme, the teachers assumed the primary responsibility for modelling how to use the teaching strategies. Gradually, as tutors become familiar with the strategies, they took over responsibility for using the comprehension strategies to understand text and were trained to work with tutees on structured reading sessions. The tutors were given tutoring responsibilities after one day of training on how to do it. However, they received on-going support from the teachers who took on the role of facilitators in the tutoring sessions. Teachers circulated among tutoring pairs, helping them to choose appropriate books, monitoring their reading, and asking comprehension questions. They also helped learners who were struggling. Last but not least, pre-tests were conducted with learners to determine their reading comprehension levels before the innovative service deliver intervention.

2.5. Data Analysis Procedures

Data were analysed (and this is still on-going for the rest of the year 2016) using both qualitative and quantitative data analysis procedures. Preliminary findings in this paper are reported in narrative format. Quantitative results will be presented in subsequent papers.

2.6. Ethical Considerations

Ethical considerations were made throughout the research period. Participants' privacy and confidentiality was maintained. Pseudonyms were used and participants reserved the right to withdraw from participating in the research without explanation. Consent was sought from participants before data collection (including audio- and video-taping of sessions) and sharing of research findings with other stakeholders. Child protection policies and procedures, including appropriate behaviour protocols and vetting of staff who

interacted with the children was done. The research team conducted a comprehensive assessment of potential child safety risks, and implement appropriate measures to prevent, mitigate, and respond to child abuse, exploitation, violence, or neglect by project personnel or any sub-grantees.

2.7. Presentation and Discussion of Preliminary Findings

We are gathering evidence that our innovation, cross-age peer tutoring in the teaching of reading, is working efficiently and effectively. We have recorded successes in pupils' abilities to read and interact with each other around a book and their levels of motivation while doing so. We report views solicited from teachers on what is working and why. We report these two findings in turn. We must emphasize up front that the techniques for implementing our innovation drew on best practices developed over many years of research. Implementing schools were encouraged to stick close to the recommended techniques for higher benefits to accrue to learners. It was essential that the innovation succeeds. The research team ensured therefore that the first training session for both teachers and learners is successful and that cross-age peer tutoring in the teaching of reading gets off to the best possible start. We expected nothing less.

Preliminary findings indicate that pupils are making progress in their reading because of several critical puzzle pieces of our intervention. First, Standard 6 and 5 tutors are providing supported reading. Supported reading has been instrumental in helping tutee to gain confidence in their ability to read. In the spirit of scaffolding and gradual release of responsibility from tutor to tutee, tutees are beginning to read books that are slightly harder than their reading ability. Tutors are not only modulating the speed of their reading to be just behind the reading of the tutee but are also providing a good model of reading for the tutee by reading with more expression or intonation. This has helped tutees to be more expressive when reading out loud.

Another aspect that is working for the cross-age dyads is the aspect of error correction. Tutors are shown the right procedure for correcting reading errors. This include provision of a 4-5 second pause once an error has been committed instead of jumping in right straight away when a mistake has been made. The pause gives the tutee the opportunity to and space to self-correct. The timeframe is flexible depending upon the reading speed of the tutee. This process of error correction is central to the successful implementation cross-age peer tutoring. Pupils have reported that they have learned new words and increased their vocabulary as a result. The successes can be attributed to several features including waiting to correct the errors, using the correct process to correct the errors, and moving smoothly between the tutor/tutee reading together and the tutee reading alone.

One other key to getting the most benefit from cross-age peer tutoring in the teaching of reading is to get effective questioning and probing of answers going on during the tutoring session. This involved tutors and tutees asking each other questions about the book before, during and after reading. The question mat the research team provided is especially useful in guiding learners to ask the right type of questions at the right time of the reading process. Additionally, learners are at liberty to ask their own questions. Noteworthy also, teachers used the mats and their knowledge of the learners to fine-tune the design of the mats for their classrooms. A powerful feature incorporated in questioning is the use of probes of tutees' answers. Reports from teachers indicate that such a move in following up an answer to a question is prompting tutees to expand upon their ideas (e.g., 'Can you say more about that?') and others to help them to dig deeper to provide evidence to support their claims (e.g., 'Why do you say that? What's your evidence?'). Coupled with this, are the ground rules for attentive listening and respectful response to tutees. This has helped build a sense of tutees' trust that their ideas are being taken seriously, a culture on which further productive talk can and is being established. Still on questioning, we have observed that many teachers are incorporating in each paired reading session question time, usually at the end, in which they ask different pairs what worked well for them and what did not. They also ask tutors and tutees to think up questions for each other. After a month of intervention, for example, we observed learners move from asking organic questions to using the structured guidance contained in the question mats. As they became more adept at questioning, the tutors they attempted the harder version of the question mat. Of course, there were some who continued to struggle. These are the ones the teacher supported the most and had them use the simpler version of the question mat. Teacher observation was invaluable in making these informed decisions.

In the supported paired reading sessions, it was important for the tutors to praise tutees as they read and to state specifically why they were praising them. We observed many tutors becoming quite good at doing this with the seriousness that needed to accompany the positive feedback. Teachers are particularly instrumental in working out with tutor's different ways to praise tutees. For instance, they help determine set points during the cross-age peer tutoring reading cycle where the tutor can praise the tutee. Noteworthy, the praise was increasingly happening spontaneously. This includes, for instance, when a tutee reads a difficult word, or reads with expression. Other points include when the tutee volunteers to read alone. Praise is important in this research work because it promotes positive reading and reinforces correct patterns in reading behaviour. Another interesting development where praise is concerned is where the tutees are now learning to praise themselves. This involves the tutees reflecting on their reading and how it is improving. Tutors and teachers are working closely to determine progress made and to help in this process. Tutors, for instance, ask tutees to identify how their reading is improving and to articulate or provide specific examples of this growth. The dyads are using the Paired Reading Log as a good reference point for tutees to determine their reading development.

The role of the tutor is an active one. Consistent with previous research, the tutors are also exhibiting even more benefits than tutees. This is because the tutors have to think about a topic or subject matter read in a text, make sense of it and then explain it in a straightforward manner to the tutee. As teachers, we know the best way to learn something is to have to teach it; this is a key tenet of the process of peer tutoring. What's more, we are noticing tutors taking on more leadership roles and reaching out to support younger learners in other content area subjects.

Overall, there is enhanced motivation among tutors and tutee. If anything, they are all taking initiative to ask for books from teachers to undertake their peer reading sessions. For poor readers, there is increased self-esteem and self-concept not only in reading but also

in other subjects as well. Pupils are now working more collaboratively than before to use the four strategies. This, inadvertently, is enhancing their interpersonal, social and teamwork skills. The pupils are becoming much more aware of their own and other pupils' learning needs. They also are developing better communication skills. Ultimately, we think there is a greater sense of belongingness to their schools. The resultant effect we are witnessing is enhanced social cohesiveness. The benefits are evident across all the four benefiting class levels.

We stated earlier that benefits are two-pronged: for learners and for teachers. We have outlined several benefits that accrued to the learner. But how is teacher benefiting from cross-age peer tutoring in the teaching of reading? We start by acknowledging that like any other way of effective teaching or managing learning, setting up peer tutor projects needs enthusiasm, careful planning and hard work on the part of the teacher. It would be a mistake to think of peer tutoring as an easy option. Effective teachers can play an important role in modelling a positive value for reading by sharing their own honest attitudes. Teachers must share the notion that reading is not simply a school task; it is valuable in itself and a rewarding communication art. Effective teachers explain why *they* read, what *they* enjoy about different stories or authors, how *they* feel when they read a letter, poem, or story on their own. Effective teachers also provide parents with information about how to model positive values for literacy in the home. Teachers enhance learners' motivation to read by making reading and writing positive, important, and pleasurable activities. They select good literature to read aloud to learners. They create special times for writing and reading in the class. They organize areas of the room to display pupil writing, and they create spaces and opportunities for learners to read for pleasure. They also contribute to pupils' motivation to read when they provide pupils with feedback on their progress as readers and writers.

Participating teachers in the cross-age peer tutoring had mixed feelings at the beginning of the project. They assumed organizing cross-age peer tutoring sessions would be a daunting task. And indeed, it was for many of them. However, once the sessions were up and running and the pupils were assuming more responsibility in their learning, teachers began to see changes at several levels. They reported that pupils were using their free time well by reading. That meant less disciplinary issues to deal with. Teachers reported also that their work was being made easier because the pupils could read and understand other content areas as well. The teachers reported also that their own interest in personal reading had grown. This was attributed to the fact that they often had to read the books before recommending them to the learners. Some said they found themselves referencing some of the interesting stories in other areas of their professional and personal lives.

3. Conclusion

Cross-age peer tutoring in the teaching of reading was implemented successfully based on preliminary findings indicating the innovation is being well received. Self-reports from teachers and other data sources show the innovation being mutually beneficial to pupils (both tutors and tutees) and their teachers. The shift in instructional focus is in favour of learner-centered classrooms, pupil empowerment and increased talk around the book. More importantly perhaps is the emphasis that the acquisition of reading is happening in natural contexts using authentic texts, much like the process through which children learn to speak. Cooperative and collaborative work and an emphasis on affective aspects of pupils' learning experience is slowly taking root. Hopefully, this motivation, enthusiasm, and interest in reading with flourish into a life-long, life-deep and life-wide love of reading among pupils in Standards 3-6. With child-centered instruction and subscription to the view that children are naturally predisposed toward written language acquisition, the possibilities are endless.

Educators need to embrace an eclectic mix of reading instructional strategies including cross-age peer tutoring in the teaching of reading if they are to reach all children in the primary grades and to expand the space where learning to read and reading to learn happens. Learners must read authentic texts as often as they can in and outside the classroom. Significant others (teachers, tutors) have an important role to scaffold learners' reading skills and to validate and celebrate what learners CAN DO. That means that the school environment and the academic experiences learners go through must be pleasurable and uplifting to learners and be as close as possible to the ideal classroom. Ideally, classrooms should be psychological safety nets for learners where their funds of knowledge are valued and included in the teaching and learning process. A stimulating multisensory learning environment that caters for different learning styles and provides for ALL learners must be nurtured.

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