

THE CONTRIBUTION OF THE PHYSICAL ENVIRONMENT TO THE TEACHING AND LEARNING OF LITERACY IN SELECTED PRIMARY SCHOOLS OF LUSAKA DISTRICT IN ZAMBIA

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Abstract

This article advances the contribution of the physical environment to the teaching and learning of literacy skills among Grade Two pupils in selected primary schools of Lusaka District of Zambia. As a descriptive qualitative research design, data was collected through face-to-face interviews and observation using the observation checklist and an interview guide. The targeted population was all primary schools, Grade Two pupils, and early grade teachers of Lusaka District. The sample size was four (4) primary schools and one hundred and twenty (120) Grade Two learners and thirty (30) primary school teachers handling early graders. Findings of the study revealed that the teaching and learning environment played a significant role on the teaching and learning of reading. Diverse factors in classes such as location of the school, print environment, class size, sitting arrangement, design of the class, and nature of materials contributed to the teaching and learning of literacy in the targeted schools. The researcher recommended that head teachers and class teachers should ensure that early grade classroom environments have rich print environment, the Ministry of Education should build library facilities in every primary school to encourage a culture of reading in Zambia. The government should shut down bars and drinking places located near schools.

Key terms: literacy, learning environment, classroom environment factors, school environment, rich print environment, teaching and learning materials, reading, writing.

Background

The nature of physical and school environment can either support or distract the learning process (Mkandawire, 2010). In addition, Msango (2011) reported that usually, the school environment has a bearing on students or learner's overall performance in class. Mulenga and Mwanza (2019) also reported that classroom environments play a critical role for both learners and teachers. Moreover, Chileshe et al. (2018) also explained that everything in a classroom including the arrangement of desks, colour of the wall, materials stuck on the walls all play a critical role in the teaching and learning process. It is, therefore, important that primary schools provide a conducive learning environment with rich print materials that can support literacy development among early graders (Njapau, 2011). Literacy is instrumental in the pursuit of one's development at personal, family and community levels as at macro-levels of national or regions of the world. Therefore, a child who is denied quality primary education is also denied a better future because studies have shown that children that are unable to read and write are also unable to cope with diverse situations requiring them to read, write and arithmetic. Reading and writing skills are precursor to learners' academic success. Furthermore, being literate adds value to one person's life. (EFA Global Monitoring Report; Literacy for Life: 2006). Studies have shown that illiteracy is strongly correlated with poverty both in an economic sense and in the sense of deprivation of capabilities. For instance, UNICEF (2003) noted that in the developing countries, poor learning environments have always been identified as key factors that lead to poor performance in public and private primary schools. However, in the case of Zambia, despite it being one of the developing countries, it is not specifically known how the learning environment has been contributing to the way learners learn literacy skills in Lusaka district.

The term environment in this paper refers to the sum of all conditions an organism is exposed to, and which influences the organism in a particular way (Kafuta, 2016). The design of a classroom influences the nature of lessons. The learning environment should be conducive in supporting and promoting learning, but this knowledge is limited in Zambia as far as literacy education is concerned.

Statement of the problem

Studies in Zambia have shown that multiple factors have contributed to the continued low literacy levels among early grade learners. While diverse factors such as the socioeconomic (Kaunda, 2019), teachers (Luangala, 2002), teacher trainers (Mutolwa, 2019), instructional materials (Mutale, 2016), and the language factor (Tambulukani, 2015) have been cited contributing to low literacy levels in the country. There are, however, limited studies (Njapau, 2011; Msango, 2011) that have investigated the contribution of the learning environment to the teaching and learning of literacy in Zambian primary schools. Little is known about the contribution of the environment to the teaching and learning of literacy among early graders of Zambia, hence, the need for such a study. In other words, this study investigated the extent to which the physical environment contributed to the teaching and learning of literacy in Lusaka district.

Research Questions

The study sought to address the following research questions.

- (i) How did the school environment support or discourage the learning of literacy skills in selected primary schools of Lusaka district?
- (ii) What classroom factors supported or distracted literacy learning opportunities for learners in primary schools in Lusaka district?
- (iii) What are the effects of school culture on the teaching and learning of literacy?

Review of Related Literature

A qualitative study by Zimba (2011) noted that there were multiple factors in schools that contributed or affected the development of literacy among children. These factors included high teacher pupil ratio where schools had more pupils than teachers, lack of adequate teaching and learning materials, and lack of learner support at home. Zimba noted that preschool teachers' appreciation of emergent literacy rendered them not to fully provide environments and practices that support emergent literacy. The current study is related to Zimba's in the sense that both papers focused on the learning environment of the school as well as the classroom towards the attainment of literacy behaviours among early graders. So where was the gap?

Another study by Njapau (2011) showed that learners in private schools conducive learning environment for learning how to read. This was evidenced by learner's performance in the reading tests with serene environments. The findings of the study also showed that public schools did not use the recommended Primary Reading Programme (PRP), while private schools used most of the PRP features. Additionally, the findings revealed that teachers and learners in public schools did not have enough teaching and learning materials. Most teachers in public schools wrote part of the stories on the board for learner to practice. The Ministry of Education (2001) acknowledges and support these observations and they noted that lack of infrastructure development is one of the main constraints in the provision and expansion of education in Zambia as the little classroom spaces available are overcrowded. A study by Chibamba (2012) on factors leading to low reading levels noted diverse factors associated with low literacy levels in Zambia. This included lack of adequate teaching and learning materials, ill-trained teachers, the classification of learners as a demotivator and the language of instruction. These views were supported by Mkandawire (2022) who contended that low literacy levels in Zambia is associated with diverse factors which include the socioeconomic factors that addresses issues of family support for their children, teachers' skills, teacher educator's competencies, lack of teaching and learning materials, lack of political will, and the language of instruction which advantages and disadvantages some learners in multilingual settings.

A qualitative study by Msango (2011) on the impact of the teaching and learning environment with Grade 4 pupils in Malawi raised several pertinent issues. His study established the contribution of the teaching and learning environment towards the development of literacy skills in learners. Data was collected through interviews and observation. His findings were that the physical environment aided teachers in explaining teaching points to learners in Grade 4. Msango also noted that the use of a familiar language of instruction facilitated the teaching and learning processes in classes. The finding on the use of familiar language was supported by Mkandawire (2017) who noted that the

classroom learning environment for schools that used familiar language-based instruction were more supportive than others. Msango's study focused on Grade 4 pupils in Malawi which may have different school environments from Zambia. Therefore, this study was conducted in Zambia with a focus on grade 2 pupils and teachers.

Another study conducted in Kenya by Mege (2014) on the influence of school environmental factors on the teaching and learning processes. This study was quantitative in nature and data was collected using semi-structured questionnaires and the focus group discussion. Her findings were that the inadequacy of physical facilities affected the teaching and learning process. Furthermore, the findings showed that for effective teaching and learning to take place, the school environment should be conducive by providing all the physical facilities required. Heyneman and Loxley (1993) in their study on the effect of the availability of physical facilities on academic performance agreed with Mege (2014) when they noted that physical facilities in terms of adequacy and quality have a relationship with learners' comfortability in class as well as the performance of students and teachers in the school. Merge's focus was on the learning environment of public schools in Kenya while this study was focused on learning environment of public and private schools in Zambia.

Tella and Akande (2007) conducted a mixed method study in Botswana in which they examined children's reading habits and the availability of reading materials as factors of the learning environment. They used 'children reading habits resources availability scale' with both open and closed ended questions to collect data. Tella and Akande (2007) findings showed that the availability of books provided access and time for reading them. With an availability of books and more time for reading, children develop their literacy skills of receptive language, concept of print, letter knowledge, concept of writing, and narrative competence better. The focus of this study was on the availability of materials for learners. Tella and Akande's study are related to the current research in the sense that it provides a guide and exposes what is already happening in nearby places in Africa that share similar classroom environments as Zambia.

Yeboah (2015) did a study on school culture and its implication on education, the main objective was inquiring into school culture and its implication. The collection of data was through interviews, observation, questionnaire, and document analysis. The finding of the study was that the school culture with respect to its management, classroom organisation and handling of issues relating to school environment had a relationship with performance of learners. Furthermore, pupils are easily influenced by the positive and negative school culture. His study focused on the impact of school culture on learners in Ghana. This study looked at the influence of the school environment and cultural in selected schools of Lusaka in Zambia.

Puteh (2015) conducted a study in Malaysia, on the classroom physical environment and its relation to teaching and learning. The study was quantitative, and data was collected using a Physical Classroom Environment Inventory (PCEI) and Teaching and Learning Comfort Level Scale (TLCLS). The main objective of the study was to identify the relationship between the physical aspects of the classroom and the teaching and learning comfort levels. The findings of the study showed multiple data on learning environment and that "the learning space, furniture, ventilation, and lighting had a direct relationship with the teaching and learning comfort level.

Overall, the findings showed that there was a highly positive correlation between the physical environment and teaching and learning comfort level of learners” (<http://www.ijssh.org/index.php?m=content&c=index&a=show&catid=53&id=781>). Therefore, the classroom physical environment needs to be given due attention and planned carefully, as the right environment can affect the learning atmosphere, generation of ideas of teachers and students’ values, attitude, and behaviour positively or negatively. Puteh ‘s study is related to the current study as it highlights factors to consider in the Zambian study.

A study by Wolfersberger et al. (2004) on the significant role of learning environment and the effect of print-richness on literacy learning showed that classrooms were identified as being print-rich by using an observation checklist. Their findings were that environmental factors that affected literacy learning include providing the classroom with literacy tools, positioning the classroom space with literacy tools, gaining student interest through participation, and promoting literacy learning through literacy tools. The findings of the study further showed that environmental print is a factor in literacy classrooms which assists children in making connections in literacy learning to read. Effective teaching and learning of students have been a central focus of classroom environment in current education situation. That study is important to the current study as it highlights the effect of the environment on literacy development.

Another study by Kausar, Kayini, and Suleman (2017) focused on the effect of classroom environment on academic achievement. The study was conducted to investigate the effect of classroom environment on academic achievement of students. Data collection was through pretest and posttest techniques. The findings revealed that a well-managed and vibrant classroom environment has a positive effect on the academic achievement of learners. They further reported that a learning environment is a critical determinant of whether learning can happen in any classroom or not. This study was focused on the effect of the classroom environment to the teaching and learning of literacy.

Şahin (2018) conducted a study on school culture, the purpose of this study was to get a better understanding of school culture in the United States of America and Turkey. In this quantitative investigation, data were collected using the ‘School Culture Inventory.’ The findings showed that both countries had a culture that was beneficial to the local people. A positive school culture enhances academic achievement, and culture is perceived more positively in medium SES schools in Turkey and low SES schools in the USA in terms of socioeconomic status (SES) (Şahin, 2018). The US schools rated higher in terms of improvements in culture and the teaching culture as well while Turkish schools rated higher in terms of teacher collaboration. This study was conducted in a developed country which has a different profile to Zambia, a third world country. It is unclear whether similar outcomes may apply to the present study.

Methodology

The present study used a qualitative mode of inquiry and data was collected through interviews and observation. The use of subjective methods of data collection is a typical feature of qualitative mode of inquiry (Bryman & Bell, 2019; Cohen, Manion & Morrison, 2018). The population was all the grade two learners and teachers in selected public and private primary schools in Lusaka

district of Zambia. The sample size comprised four primary schools (two public and two private) and these were sampled conveniently and purposively at various times. These schools were coded as A, B, C, and D. One hundred and twenty (120) grade two learners were involved with thirty pupils per school. Thirty (30) primary school teachers were selected and involved in the study.

This study used the observation check list as a data collection tool where the researchers physically observed classroom practices, school practices and the environment. An observation checklist was used to solicit information from teachers and the environment. The tool used was economical and focused on documenting available resources, practices, and time. Other aspects observed included the learning environment, sitting arrangement, number of learners in class, learning resources, time tabling of the reading lessons, talking walls or print which could either encourage or discourage learning.

The interview guide was used to help the researcher ask specific questions during the interviews with in-service early grade teachers in primary schools. During the interview, researchers asked more probing questions to solicit detailed information from respondents on specific issues of interest to the research.

Ader (2008:333) described research data analysis as “a process of inspecting, cleaning, transforming, and modeling [data](#) with the goal of highlighting useful information, suggesting conclusions, and supporting decision making.” The data collected from interviews and observations was analysed and presented using themes, trends, and similarity of data. The recorded data from lesson observations, and interviews were transcribed into specific scripts. All the data collected on lesson observation was merged into one lesson observation script of data. The same procedure was followed for the data on interviews. The researchers then did a qualitative content analysis, through a process of meaning condensation as described by Brinkmann and Kvale (2015) on each of the two data scripts. The two researchers met again for data coding where “statements in the transcripts that were relevant for the research questions through a thorough reading of the transcripts, and utterances expressing certain views on environment, pedagogies and multilingualism in education were identified” (Iversen and Mkandawire, 2020:39). Later, common data codes were generated in form of themes under which specific statements related to the codes were assigned, a concept that Brinkmann and Kvale, (2015:228) described as “data-driven coding”. When common codes based on the data were generated, the researchers went further with paraphrasing and quoting of content and assigned themes and points with various meaning units as simply as possible using a process called data condensation which was then ready for presentation in the next segment

Findings and Discussion

The findings in this paper are presented following the research questions of the study. These research questions were as follows: (i) How did the school environment support or discourage the learning of literacy skills in selected primary schools of Lusaka district? (ii) What classroom factors supported or distracted literacy learning opportunities for learners in Lusaka district? (iii) What were the effects of culture on the teaching and learning of literacy? Specific themes from the data reflecting emerging data trends were captured and these have been presented in this section.

It is important to note that the themes generated were similar to the research questions with exception of a few.

Good Learning Environment Supports Learning

The first research question sought to establish how the school environment supports the teaching and learning of literacy skills. All the respondents on the study reported that good learning environment positively contributed to the teaching and learning of literacy skills among early grade learners. According to respondents, a good learning environment contained the following: good physical infrastructure in terms of classroom spaces, library, play fields, toilets, offices, furniture, adequate teaching and learning materials, teaching aids including technological assistive devices such as projectors, microphones, speakers, and cameras. They also noted that the location of the school is particularly important, and teachers needs to be professionally qualified. When teachers were asked how conducive their schools were, one of the teachers interviewed from school C explained as follows:

I think this school and classrooms are conducive for learners because pupils are not crowded as there are thirty-five only and the school surrounding is also good. It is just that the school does not have enough desks for learners to sit on. Right now, they sit four per desk which is supposed to take two pupils or three and this affect their writing of letters and spellings.

What was reported by the teacher from school C, was also observed by the researchers during lesson observation in class. Some pupils had to sit on the floor due to lack of furniture. These findings were also echoed by Puteh (2015) who contended that the learning space, furniture, ventilation, and lighting have a direct relationship with the teaching and learning comfort level of learners. Furthermore, Hallack (2000) noted that the learning environment covers school physical facilities, furniture, rich availability of teaching and learning materials but also the emotional climate that is created.

Other teachers from other schools shared diverse experiences on learning environments that have a bearing on the teaching and learning of literacy of literacy in Zambia's primary schools and these were as follows. Another teacher from school B added:

The school has a few classroom blocks, but the school management also contributes to having classrooms being crowded due to over enrolment of pupils and that is why they started to run three streams. As a result of these streams, we have no time to address those having challenges in reading and pupils do not revise after class has ended. Also, the school being near the market our learners when they knock off, they are too playful they do not have time for books.

Another Teacher from School B said: *'The school does not have enough teaching materials, the books that the school uses are not up to date as a result this creates insufficiency on how we deliver literacy lessons.'* Another teacher from School B said: *'The number of pupils is too much you find that a class has sixty-eight learners and looking at the learning materials that the school has cannot cater for them all.'*

Another striking feature which came out from all the teachers was about lack of proper infrastructure and furniture to support literacy lessons. Teachers lamented not having enough classroom blocks for revision with their pupils after class as the existing classes were being used by other afternoon sessions. All the teachers from the four schools said that this feature played an important contribution to the conduciveness of the learning environment. In other words, both public and private schools had challenges with conduciveness of school environment and these were equally noted by the researcher during school observation.

Based on the data from observation, school A had the most conducive learning environment of the four schools involved on the study as it was safe for both the teacher and the learners. In this school, both teachers and learners were provided with adequate materials for their lessons with exception of one class that had limited materials. Also, there was enough time that they spend with their learners, the timetable had the morning session and the afternoon session with the same learners and this gave chance to teachers to address learners that had learning difficulties in reading in the morning session. From the classrooms that the researchers observed, teachers reported that a respectable number of learners begun to learn the art of reading, and they could respond to the teacher after the lesson about what they learnt. Two teachers from School A shared their experiences. The first teacher said:

The school is conducive, it creates a flexible learning environment for the learners and us because it provides all the necessary requirements and very accommodative in terms of the classrooms which are well furnished with desks, tables, shelves that are designed for a conducive learning environment. The school has a library, and the materials are adequate. We want to develop a proficient reading culture for our learners in our school.

The second teacher from School A said:

The school is conducive there are enough teaching and learning materials, each teacher is provided with teacher's textbooks, also the school provides us with every necessary material resource such as manila paper, markers as well as chalks. The school has a library and a computer room so in most cases we use both in preparing our literacy lessons, also when conducting a reading activity we use books from the library, these books are adequate for our learner considering that it caters for all grade levels of our learners.

Although a few teachers claimed to have adequate materials, their views contradicted the data collected during lesson observation, which indicated that even in a good school like school A, teaching and learning materials were inadequate. Some teachers agreed with this position as they also raised the issue of inadequacy of teaching and learning materials in schools which makes the learning environment unconducive to foster the teaching and learning of literacy.

From the four schools, the findings showed that teaching and learning material were another feature that contributed to how a learning environment is conducive. Further, the idea of strengthening the culture of reading in schools was also shared by Kafusha et al. (2021) where they noted that teachers and schools needed to make several initiative activities such as establishing a

reading club, reading corners in classrooms and give reading homework as a way of improving the culture of reading.

Teachers from school C equally shared their experiences on the conduciveness of teaching and learning environments. One of them said:

This is week five and we must start assessing the learners but due to the lack of materials or resources, we are unable to assess these learners because we must prepare the aids to use when assessing them. Also, when teaching literacy we use one teachers' textbook, which consume the time for starting your lesson because you must wait for the other teacher to write the work on the board and later give that book to you and then I have pass it on to another teacher.

Similarly, other teachers from school D commented on how their school lacked teaching and learning materials thus affecting the conduciveness of the learning environment. The views of these teachers agree with the data from lesson observation, which indicated limited teaching and learning materials. However, the teachers indicated that the school management supports them by providing several teaching materials such as chalk, manila paper for preparing lessons and others.

The findings (from teachers) also showed that to make a school or classroom environment conducive for the learners, the school should provide other materials such as play zones and carpets where learners should sit on at some point, projectors, and laptops for showing videos in class. A teacher from School D complained: *'When teaching literacy learners must be at the teaching corner on a mat, but the school does not provide such materials hence learners do not want to sit on the floor; so, it becomes difficulty for the teacher to motivate learner when it is time for literacy lessons.* Another Teacher from School D said:

In terms of the buildings, they are okay because they all have big windows for fresh air and this may prevent some viruses such as covid. The classrooms have those ventilation things and the boards are exceptionally good. It is just that there are too many pupils in these classes against space with limited teaching and learning resources.

The lack of adequate teaching and learning materials including equipment had been reported by several teachers and their narratives agreed with our observations during data collection in schools. These findings are further supported by Mutolwa (2019) and Mutale (2016) who contended that lack of teaching aids has been a long-standing issue across schools as several learning institutions lack adequate materials to support learning

Classroom factors that support or distract literacy learning opportunities

Findings from the interviews with teachers revealed that teachers had some knowledge of classroom factors that supported or distracted literacy learning. Common factors cited that supported or distracted literacy lessons included the presence or absence of rich print environment, the attitude of pupils and teachers, time allocation to teaching literacy and physical classroom environment, and location of the school. When teachers were asked which classroom factors supported or distracted literacy learning, a teacher from School D explained:

A classroom that has a rich print environment, talking walls, word display, a library corner, charts, and others adequately support literacy learning because learners

can interact with printed materials in class. Mostly such an environment is set during the early grades to enable learners to be exposed to the literature in the classroom.

Another teacher from School A added: *‘A print environment is a continuation of learning, when the teacher is not around or attending a meeting, the talking walls act like a second teacher.’*

These observations were also observed in class during lesson observation and classroom visits. The findings are supported by Nally, Healy, Holloway, and Lydon (2018:15) who noted that children as young as two years-of-age demonstrate emergent or pre-reading behaviours. “These emergent reading behaviours include print awareness (letters and words have meaning), oral language skills (recite rhymes and letters) and print conventions (knowledge of book orientation and turning pages of a book).” Furthermore, Mkandawire (2022) noted that these behaviours in turn facilitate the acquisition of fluent reading abilities that lead to exceptional reading achievements among early grade learners.

A teacher from school B observed that the classes have talking walls, but they are of inferior quality as the print is not good. When teachers make good talking wall materials, they are removed by other people that also use the same the classrooms. The teacher further noted that without talking walls, classes look empty and not representative of early grade classes. The idea of sharing a classroom between lower grade classes with a higher grade level has implications on talking walls. Lower grade levels need more talking walls than higher levels and schools needs to pair lower classes to use the same classes than the other way round. In addition to the above finding, another teacher from school B observed: *‘It is exceedingly difficult to maintain a rich print environment in my class or these other classrooms because after knocking off, classrooms are occupied by other grades levels who usually temper with classroom materials such word walls, charts, and others.’*

From the findings teachers reported that creating a print environment was a challenge. One teacher from school C said: *‘The challenge we face is lack of the materials to use consistently in the classrooms because on Sundays, these classes are usually occupied by the church people, they remove the charts, word displays that are stuck on the walls. As a result, we are not motivated as teachers to create a rich print environment.’*

From the four schools, the findings showed that several teachers agreed that time allocation for literacy lessons was another factor that supported or discouraged literacy learning. Wilson (2004) noted that the teaching of reading to early graders require more time to allow learners verbalise the teaching point. A teacher from school C said: *‘Literacy is taught every day and it is an hour lesson, we have allocated enough time because as a school we know how important reading and writing is. In addition, the class timetable has created an afternoon section for more literacy practice.’* These findings are supported by Honig, Diamond and Gutlohn (2018) who noted that early grade classes need to be coloured with diverse materials such as letter knowledge on walls, word walls, charts and others that itemise word structure, decoding, and word recognition, reading fluency, and vocabulary as these are necessary skills for children to learn reading skills.

Absenteeism was also mentioned by teachers as one of the classroom factors that distracted literacy learning. Most of the teachers interviewed indicated that pupils who were frequently absent from school lacked reading skills compared to those who were never absent. In addition, most of the pupils who were failing to read and write properly were those absentees who did not breakthrough to literacy. One teacher said, *'I teach two to three syllables per week, and if a child is absent, meaning they will lag behind on the taught syllables.'* These findings agree with other studies which reported that absenteeism, shortage of suitable teaching/learning materials, shortage of teachers particularly those trained in literacy methodologies, large classes, poor family and educational background, poor and inadequate infrastructure, inadequate time allocated for literacy/reading lessons, and use of unfamiliar language of instruction are among the reasons for poor literacy performance in Zambia and the same factors may distract the acquisition of literacy skills (Mkandawire, 2022; Mwambazi, 2011; Mambwe & Mwape, 2016).

Another factor that supported literacy learning was the choice of phonics approach or instructional method. A teacher from school C said:

For example, when you see audio lingual is not working for your learners, we try other methods like translanguaging. From the method you choose one produces activities that build up an interest in the learners such as songs, role play, audio listening, games and organise quiz competition.

These factors are supported by Nyimbili (2021) and Iversen and Mkandawire (2020) who noted that translanguaging should be encouraged and supported in diverse classes to support learning for learners from diverse backgrounds.

Classroom organisation was another factor cited that supported or distracted literacy learning. Most teachers reported that organisation of a class may facilitate or distract learning in class. One of the teachers said, *'I organise the desks in an orderly manner, the sitting arrangements of my learners are in groups facing one another. They are grouped according to their reading levels... or ability groups.'* These findings agree with Chileshe *et al* (2018) who observed that putting learners in ability groups was a feature borrowed from the Primary Reading Programme, which is absent in the Primary Literacy Programme, but some teachers use it as a personal initiative.

Remedial work is also one of the classroom factors that support literacy learning. Some teachers agreed that remedial work supports literacy learners to catch up where they are behind. Remediation is an old practice and teachers from the four schools indicated that they ensure that the learners are given work to practice in class or at home later, these works are revised. One teacher said:

Two to three days in a week, I spend some time extra time to help learners that do not understand a topic of the day. I call these learners or go where they are in class and explain to them and this activity sometimes happen just after class or in class after an activity.

Musongole (2019) agreed with the findings and noted: *'Remedial work is a form of cooperative and supportive learning between teachers and learners.'* Mwanza and Mkandawire (2020) agree with the observation while Shield and Morgan (1998) reported that, *'remedial work is intended to*

help learners who fall behind grasping lessons during normal learning time'. Remedial work is a one-on-one interaction between the teacher and a pupil(s) that showed signs that they did not understand a teaching point for a particular lesson or complete tasks effectively early or on time (Mambwe, 2019; Lufungulo et al., 2021).

All the findings that the researcher is said to have found in the field are all book knowledge which one does not need to spend time on to do a scientific study to know this. These factors are all known even without doing research. What the researcher needed was to go beyond just identifying factors but explain the extent to which such factors affect learning of literacy in quantitative terms. Otherwise, this is common knowledge which has already been documented and well known.

Effects of school culture on literacy learning opportunities in schools

The third research question sought to address cultural issues that had a bearing on the teaching and learning of literacy skills in schools. Some teachers believed that the cultural background of learners and teachers had a bearing on the teaching and learning process. For instance, according to teacher from school C:

These pupils we are teaching come from different homes with different socioeconomic conditions. This means that their cultures, beliefs, and practices are different and we need to diversify our classroom practices to address the needs of these learners if meaningful literacy skills are to be impacted in them.

Another teacher from school D said:

For a long time, I have been trying to improve the culture of reading for my pupils. I believe that reading and writing skills can only improve in these children if we change our teaching culture and adopt more proactive steps.

Similarly, another teacher from school B added:

At this school we understand that our learners come from vulnerable homes, for example one pupil in my class after knocking off from school goes to the market to help the mother sale, so he does not find time to read his books. So, we find ways and means to encourage that child to read even at the market. Developing a good relationship with the learners and knowing the background of that children helps rethink our culture of handling them. Once you have a good relationship with the child you can develop various skills in them.

These views are supported by Kafusha *et al* (2021) who contended that the culture of reading in schools needs more attention as it is an indicator of reading practices in the country at a later stage. Furthermore, culture is an important factor that may alter people's way of life and therefore, developing a preferred culture in learners may shape the future of a country (Daka et al., 2020; Mkandawire *et al.*, 2019).

The reading culture in Zambia has shown tremendous progress with a bias on social media. More homes with phones and other electronic gadgets that can connect to internet have shown an increase in reading and writing on social media particularly WhatsApp, Facebook, Twitter, and LinkedIn. Reading of phone messages was also reported to occur on daily basis.

However, the reading of print media is still exceptionally low. Most household indicated an absence of reading of text with exception of religious books such as the Bible. Very few families reported active reading habits and with history of reading in their families (Kafusha et al, 2021: 102).

These findings were further in tandem with Silavwe *et al* (2019) who noted that people that read for fun only read materials that interest them and anything that deviates from that is not read.

Some teachers reported that the cultural backgrounds of their learners had consequences in early grade classes as some of the pupils were failing to read fluently in Cinyanja because of the different languages that they were exposed to at their homes. At home, some learners were using a different language and when they get into schools, another language is given to them. Referring to this, one teacher said:

Some pupils do not speak Cinyanja at home because their parents are not Nyanja speakers. As a result, children are forced to speak and read the language spoken by their parents at home. This brings confusion on the part of the child.

These findings are supported by Tambulukani (2015), Bus and Tambulukani (2011) who contended that linguistic diversity is a contributory factor to poor reading levels in Zambia. Diverse learners require diverse teaching strategies. One teacher said, *'I am not familiar with the language of instruction during literacy lessons, so it demotivates me, and as a result I do not put in all my effort as a teacher.* Another teacher added: *'In my class most of my learners are familiar with the local language we use to teach literacy, so the learners have a good attitude towards learning literacy.'*

Some teachers indicated that the attitude of learners and teachers is a cultural matter and has a bearing on learner performance in school. Tambulukani (2001) urged teachers and learners to develop a cheerful outlook towards the teaching and learning of literacy skills.

Conclusion and Recommendations

From the findings, it was **concluded** that learning environment contributes to the teaching and learning of literacy. There is considerable evidence from the data collected that the conduciveness of the learning environment includes many other factors such as the physical infrastructure, availability of teaching and learning materials, school location and teacher qualification. These factors may aid effective learning of literacy skills among early graders. The study also noted that classroom factors such as print environment, learners and teachers' attitudes, cultural background of the learners, time allocation to teaching literacy and physical classroom environment have a bearing on the teaching and learning of literacy. The nature of the learning environment of schools that the learners spend time in has a profound influence in the learners' attainment of literacy skill. The school environment, social and culture of the school are key segments that may facilitate the acquisition of literacy skills in learners.

The researchers made the following **recommendations**:

1. School authorities and the government through the Ministry of Education should provide enough teaching and learning resources to support the learning of literacy skills.
2. Schools should ensure that early grade classes are rich in print materials, talking walls and small library to support the development of children's language and literacy.
3. Schools should develop a good culture of reading in schools to encourage and support learners develop reading skills and the culture of reading print materials.
4. The government through local councils should shut down alcoholic drinking places located near schools as they distract some learners and the learning process.

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