

The Use Of Environmental Prints To Teach Reading In The English As A Second Language (ESL) Classroom

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Abstract: This study examined the use of environmental prints as appropriate teaching/learning materials for the teaching of reading in Junior High School (JHS) one in rural areas with inadequate teaching/learning materials. The aim of the study was to find out whether an intervention/treatment using environmental prints would improve the reading abilities of learners in JHS one.

The sample of 66 JHS one pupils and two English teachers were from Wurishie Al-Badal JHS in Tamale. Data for the study was collected through questionnaire and tests. Responses from the questionnaire revealed that respondents had no idea that environmental prints could be used to teach or learn reading/literacy in the classroom.

A pre-intervention test was conducted to assess the performance of learners in some language skills before the intervention was carried out. A post-test was then conducted to find out if learners' reading abilities had improved or not after the intervention with environmental prints. The findings show that environmental prints impacted positively on the reading abilities of learners since there was a significant difference in the mean gain scores between the control and the experimental groups. This therefore provides evidence in support of the use of environmental prints to teach reading at the basic school level.

Keywords: Environmental print, teach, reading, English as a Second Language

I. INTRODUCTION

“While large amounts of language inputs inundate our environment, there are constant complaints about the lack of print materials to help children in their literacy development” (Goodman, 2001) cited by Jakalia (2002:1). There is a constant complaint by both language teachers and learners of inadequate teaching and learning materials in the classroom, and most parents are unable to afford the best literacy materials on the market. Teachers as well as learners, especially in the rural areas, hardly have materials for their lessons due to the unequal or otherwise non-uniformity in the supply of teaching and learning materials by the Ministry of Education and the Ghana Education Service (GES) in particular, to schools in the country as a result of their meager budget. This lack of teaching and learning materials in the classroom has made the participation of learners in lessons very minimal and difficult. In addition, the lack of teaching

and learning materials in the language classroom has become a setback on the literacy development of learners and this could lead to poor reading skills as well as poor spoken/oral language expression among learners. The provision of teaching and learning materials in the language classroom will increase learning during and after lessons.

Reading is a basic literacy skill needed by learners to study in order to be able to make use of the learning opportunities in school and beyond. However, many children the world over are unable to read. In a document published by EACEAP9 Eurydice (2011:3), averagely in European countries, not less than one in five 15-year-olds possess low reading skills. According to this report, this situation is “nothing less than a potential catastrophe for European societies; children who leave school unable to properly comprehend even basic written text are not only at a great risk of exclusion from labour market, but are also effectively excluded from further learning”. In the case of Ghana, the

Junior High School (JHS) syllabus by the Curriculum Research Development Division (CRDD) of the Ministry of Education requires that at the end of the JHS course, the pupil will be able to:

- ✓ Read fluently with appropriate voice modulation
- ✓ Read sense groups/phrases at a time
- ✓ Read given texts within given time limits for specific and general information
- ✓ Read and recall simple facts and ideas
- ✓ Answer inferential and derivative questions
- ✓ Read silently with understanding
- ✓ Show the literary effect a text has on the reader (P 19-24)

but most children in public schools especially in the rural areas cannot read. It therefore does not come as a surprise when Kraft (2003:3) laments that, "... the fundamental problem still facing Ghanaian schools remains basic literacy skills in English or Ghanaian Languages". Lipson and Wixson (2004:2) in a report observed that, "[t]here is crisis of reading achievement in public schools in Ghana." According to them, the outcome of the Criterion Referenced Test (CRT) of 2000, on reading achievements indicates that, "fewer than 10% of the school children in primary level six are able to read with grade level mastery" (ibid:2). Also, Adusei (2006), made the same observation when he says that, a great number of Junior High School (JHS) pupils in rural areas are unable to read fluently. He adds that parents are to blame for the situation because "parents seldom spend money on literacy materials, and even in the financially endowed homes, books hardly feature in the budget of the household" (Adusei, 2006:9). Similarly, the 2013 National Education Assessment (NEA) report published by Agyeman (2014), in the Daily Graphic revealed that, most pupils in basic schools cannot read with understanding whether it is English or any Ghanaian language. According to the report in which 19,458 primary three pupils and 17,447 primary six pupils were assessed, at least, 50 per cent of these pupils "could not pronounce a single English or Ghanaian word correctly", 44 per cent could read but did not understand what they read, 4 per cent were able to read with some understanding while only 2 per cent of these pupils could read fluently with understanding. Sound literacy skills can therefore be seen as the basis of every child's academic career since proficiency in reading is the means to all other areas of learning.

Even though a great number of children cannot read for several reasons; one of which is lack of teaching/learning materials, school compounds are sometimes flooded with litter in the form of toffee and biscuit wrappers, political party and religious flyers, old newspapers and many things containing some educative information or language input that could be used to teach reading in the classroom. To buttress the above point, Higgins et al. (2000), cited by The Access Center intimate that, "once students reach fourth grade, most of the information they need is given in textual format where the focus changes from learning to read, to reading to learn". It goes without saying therefore that, such students will find it difficult to interact with contents in the classroom. Research has shown that, there is a strong connection between reading, speaking and writing and as a result, it is difficult for children who cannot read to be efficient in writing.

It is important at this point to state that several policy makers share this concern of pupils in rural schools with low literacy levels as a result of lack of teaching/learning materials, but the question is: what do we do about this concern? The most obvious answer is, to turn the concern into real action. Several means may be employed to help children to read and also achieve widespread literacy but environmental print is the easiest means to achieve this.

The term environmental print is used to refer to any print material found in the environment. According to Harris & Hodges (1995:73), environmental print is "print and other graphic symbols, in addition to books, that are found in the physical environment, as street signs, billboards, television commercials, building signs..."

Reading, on the other hand according to Cline et al. (2006:2), is decoding and understanding text for particular reader purposes. Readers decode written text by translating text to speech, and translating directly to meaning. To understand written text, readers engage in constructive processes to make text meaningful, which is the end goal or product, the more it is practised. According to Honeyghan (2000:14), the reading of environmental print can make children develop a sense of learning to read; therefore, they should be included in the curriculum. Usually in school, children are taught reading with materials that are extracted from textbooks. These classroom textbooks and basals according to Honeyghan, present reading in a fragmented manner using selections divorced from student's immediate life experiences and with no relevance to their immediate needs. These selections serve no useful purpose in students' everyday lives and result in little authentic learning. If professional educators incorporate authentic environmental texts into their literacy curriculum, the students will engage in reading... (Honeyghan, 2000:14).

In addition, Honeyghan (2000) is of the view that, environmental print can "enrich and enhance the curriculum with information that is current, practical, relevant and significant". This will therefore make them appreciate the very purpose of reading. That apart, when students read environmental prints, they become aware of the diverse range of reading materials and come to know that reading "fulfills various purposes and functions in their lives." (ibid: 14).

Also, Patterson (1991:37-38) is of the view that newspaper articles can be used to teach English language. He goes on to argue the fact that, not only are newspaper articles a tool for students to improve upon their English language but that, they are cheap and readily available. Patterson intimates that newspaper articles improve the reading as well as the speaking skills of students. It is worth mentioning that this is not limited to newspaper articles only but to other prints that can be found in the environment; magazines, labels and many more.

One can say that environmental prints have a far-reaching effect on children's reading and even the teaching of literacy, in the sense that, "even children from lower socio-economic homes that do not contain a variety of reading materials have considerable experience with prints and are exposed to it in their environment through television, billboards and stores" (Aldridge & Rust 1987, Anderson & Stokes, 1984 cited by Salewski, 1995:7). Burns et al., (1999:40) are of the view that

the environment is full of print and the teacher must make use of this opportunity to link the home environment with that of the classroom. They see this possibility because according to them, children learn to read words they frequently see around them, such as advertisements, promotional materials and familiar products or popular cereals. They add that, teachers should use environmental prints because they are easy to acquire, an assertion I totally agree with since it is evident that environmental prints are found in every part of our environment and we get most of them for free. For example, when new products are launched, people are usually given the product brochures and flyers for free. Similarly, Watson (2013:46), citing Heffeman & Lewison (2003) says that, when a student reads environmental and functional print, it helps him become functionally literate. Watson adds that a student who is "functionally literate possesses the reading and writing knowledge and skills which enable him or her to navigate the print of his or her physical world".

In the same vein, Reutzet et al., (2003:16) reveal that, using environmental print to teach children to read may not only help them learn to read but may form a bridge from the known to the new that helps them more readily to involve the entire content of their knowledge of printed language and word analysis strategies to read in a variety of new situations and contexts.

What this means is that the teacher can always incorporate materials (environmental prints) that are of interest to students in his/her teaching to help teach them how to read and expand their knowledge and literacy skills. Honeyghan (2000:14), citing Heibert and Ham (1981) points out that, children who received instruction with environmental print showed a significant performance by learning more letter names and sounds than children who learned alphabet letters without using environmental print.

In Ghana, environmental prints are seen almost everywhere in the form of obituary posters, political party posters and billboards, church crusade posters, musical and movie posters, product billboards, writings on vehicles and buildings, and many more. These prints are either cheap or they are for free and can be found everywhere in our surroundings as a result, can be used in ESL classrooms with inadequate textbooks. This research will be based in a Junior High School, specifically Wurishie Community Al-Badal Junior High School in Tamale, where some classes will be chosen to test how environmental prints can be used to teach reading in the classroom.

II. METHODOLOGY

This part describes the various procedures that were used to gather data for the study.

A. THE CONTEXT

Wurishie Community Al-Badal Junior High School (JHS) where the research was carried out, was established in 2002 by an Arabian philanthropist, Al-Badal. The school is located about 500m north of the Tamale Polytechnic. With a pupil population of five (5) in 2002, the school now has a total

population of two hundred and sixty-six (266) pupils, nineteen (19) teachers out of which three teach English.

B. DESCRIPTION OF DEMOGRAPHIC CHARACTERISTICS

This study was conducted in the JHS 1 class with a total population of sixty-six (66) pupils: thirty-three (33) in JHS 1A and thirty-three (33) in JHS 1B. The experimental group (JHS 1B) comprised seventeen (17) males representing 51.5% and sixteen (16) females representing 48.5%, with their ages ranging between ten (10) and twenty-four (24) years. The control group (JHS 1A) on the other hand was made up of eighteen (18) males, making up 54.5% and fifteen (15) females representing 45.5%. The youngest pupil in this group was aged ten (10) and the oldest was eighteen (18) years.

The subjects in this study have mixed backgrounds. Most of them have illiterate parents and guardians who are predominantly subsistence farmers and have little or no value for education. A few of the children have parents who are either teachers or traders. Some children also live with guardians who have no source of income and so are compelled to hawk after school in order to be able to buy books and other necessities. The result of this on some of these children is that, they sleep in class and this has affected their educational development. It is however relevant to state that, the parents of some of these children value education a lot since they were always willing to support their children.

a. INTERVENTION OBJECTIVE

The objective of the intervention is to make learners in JHS one who are unable to read be able to improve upon their reading abilities in the English Language through the use of environmental prints.

C. INTERVENTION PROCEDURE

The following procedures were used:

- ✓ Pre-intervention test
- ✓ Intervention
- ✓ Post-intervention test

a. PRE- INTERVENTION TEST (SEE SAMPLE IN APPENDIX A)

A pre-intervention test was first of all conducted to find out the learners' abilities in the use of the English Language (particularly in reading). Learners were given a short paragraph from a passage in their English reader to read and this was scored on a ten (10) point scale by assessing language skills such as pronunciation, punctuation, speed and understanding. The time allotted for the reading test was ten (10) minutes.

b. INTERVENTION (SEE SAMPLES IN APPENDIX B)

The intervention started immediately after the pre-intervention test. This was done by exposing the subjects in the study (experimental group) to some environmental prints

in the classroom. This was done by showing them pictures of some product billboards and labels which I took using a digital camera (samples of these can be seen in appendix B). The next day, I took the subjects in the experimental group on a walking field trip (an experimental print walk) around the school community and asked them to identify the various environmental prints they could see. They were able to identify some billboard writings like “MTN, Voltic Natural Mineral Water, Airtel Frnz” and many more. The students, especially those who could read these prints could not hide their excitement for being able to explore their own community and given the chance to exhibit their reading ability. After this, I created the awareness that these prints could be used to learn how to read and therefore subjects should be on the lookout for prints in their environment.

Also, a literacy-rich environment was created for the experimental group by bringing different types of real world environmental prints such as cuttings from newspapers and news magazines, labels, empty toothpaste and cereal boxes, posters among others to the classroom. A word wall was also created using sight words. This was done so that pupils could consult the word wall for words they found it difficult to spell. Subjects were also made to bring interesting environmental prints from home and these were used to create an environmental print corner in the classroom. Some of the items in the environmental print corner included: milk, Milo, baked beans and sardine tins, cornflakes and oats boxes, Junior Graphic, news magazines, obituaries and many more. Since this corner was not created for the fun of it, the subjects were encouraged to read at least one item in the corner every day.

Also, as part of the intervention, I taught the experimental group twice in a week with each session lasting for 75minutes for eight weeks using environmental prints as teaching and learning materials. It is worth mentioning that the syllabus was not abandoned during this research; all I did was to incorporate environmental print in my teaching. For example, for a reading/comprehension lesson, stories from newspapers (Junior Graphic) were used to teach reading and comprehension (samples are seen in appendix B). These stories were cut and photocopied for pupils in the class to learn to read, discuss and answer questions. Pupils were made to find the meaning of new words in these stories and also made to use these words to form sentences of their own to ensure that they understood the meaning of these words. The pupils tend to identify with these stories because they are written by their colleagues. Pupils also see their parents or other literate people in their community reading the newspaper and so using it in the classroom to teach reading bridges the home community with the classroom. They were also encouraged to look out for good environmental prints in their communities and create environmental print books from these prints. The control group received equal amount of tuition as those in the experimental group but with the traditional materials - classroom readers. This group was taught by the English teacher.

c. *POST-INTERVENTION TEST*

This test was carried out after the intervention to measure the progress or otherwise of subjects. The posttest measured the language skills that the pre-intervention test measured. This was possible because the post-intervention test was identical to the pre-intervention test that was administered to subjects at the beginning of the study. Subjects were made to read the same paragraph they read at the pre-intervention stage and this was scored on a 10-point scale. It must be stated that this test was administered to both experimental and control groups. It must be stated that this test was administered to both experimental and control groups.

III. FINDINGS AND DISCUSSION

A. INTRODUCTION

This part analysis and discusses the data that was collected at the pre-intervention and post-intervention.

B. TEST OF HYPOTHESIS

It is hypothesized in this study that the use of environmental print would have an effect on the reading abilities of learners. For the experimental group, Table 1 below reveals in the reading test, an overall minimum score of 2.00 and a maximum of 7.00 were obtained out of 10points in the pre-intervention test (pretest) while an overall minimum of 3.00 and a maximum of 9.00 were obtained in the posttest. Comparatively, the mean value of 6.06 obtained in the posttest which is greater than 4.12 obtained in the pretest shows that there is a significant difference between the pre and the posttest scores which provides evidence for the effectiveness of the intervention with environmental prints.

ASPECT	Test	N	Minimum	Maximum	Mean	Std. Deviation
Reading	Pretest	33	2.00	7.00	4.12	1.12
	Posttest	33	3.00	9.00	6.06	1.37

Source: *Test Scores (2013)*

Table 1: *Group Statistics - Experimental Group*

Similarly, Table 2 below which represents the group statistics of the control group shows that for the reading test, pupils made an overall minimum score of 2.00 and a maximum of 6.00 in both pretest and posttest. Again, the table further reveals that in the reading test, the control group recorded higher scores in the posttest with a mean value of 4.00 as compared to the mean value of 3.64 recorded for the pretest.

ASPECT	Test	N	Minimum	Maximum	Mean	Std. Deviation
Reading	Pretest	33	2.00	6.00	3.64	1.01
	Posttest	33	2.00	6.00	4.00	.933

Source: *Test Scores (2013)*

Table 2: *Group Statistics - Control Group*

ASPECT	Test	N	Mean	Std. Deviation	T	Sig. (p)
Reading	Pretest	33	4.12	1.37	-5.062	.124*
	Posttest	33	6.06	1.12		

Source: Test Scores (2013)

Table 3: Test of Significance - Experimental Group

Aspect	Test	N	Mean	Std. Deviation	t	Sig.(p)
Reading	Pretest	33	3.64	1.01	-34.333	.019*
	Posttest	33	4.00	.933		

Source: Test Scores (2013)

Table 4: Test of Significance - Control Group

From Table 3, the experimental group performed significantly better (mean = 6.06) in the posttest than in the pretest (mean = 4.12) ($t = -5.062$ and $p > 0.05$).

Although the control group was not taken through the intervention with environmental prints, Table 4 above shows that they performed better in the posttests since they recorded a mean value of 4.00 and 3.64 for the pretest ($t = -34.333$ and $p > 0.05$) The closeness in the significant difference recorded between the tests could be attributed to the fact that members of this group were not taken through the treatment.

Comparing the posttest mean values of the control group (4.00) with that of the experimental group (6.06), it is evident that the experimental group out-performed the control group.

In conclusion, there was a significant mean difference in the posttest scores obtained by the experimental group and this goes to strengthen the assumption that instruction with environmental prints will help learners perform well in reading in particular and literacy in general.

C. LEARNERS' READING BEHAVIOUR AFTER THE INTERVENTION

The most significant observation I made is the great interest learners showed in the use of stories from the Junior Graphic for reading and comprehension lessons. One could attribute this to the fact that these stories are written by their peers and centered on everyday happenings. They even developed the habit of cross checking the meaning of words from the dictionary or asking their teachers for the meanings of words; this is something they used not to do. The fact that some of these learners saved part of their pocket money and some came together to contribute money to buy the Junior Graphic on every Wednesday implies that their reading behaviour has improved. Those who could not afford to buy the Junior graphic impressed on school authorities to make available copies to their class every week.

Although there are no voice recordings of learners to show as evidence, it is important to mention that by the end of the intervention, learners had improved quite drastically in their speaking. This is because they were made to bring their choice of environmental prints and talk about them. This made most of the shy and less confident ones to break their silence in class and interact freely, using the English language. Besides, since some of the prints talked about general issues such as the importance of education, sanitation, honesty, election dispute and so on, they gave each learner the opportunity to contribute. The general nature of the environmental prints that were used in this study not only

helped learners to improve on their spoken language but helped them to get information on everyday life situations and what goes on around them.

It is imperative to mention finally that, the progress that a learner makes in reading will depend on what he/she already knows. It was therefore not surprising to see that those who were good improved faster than those who were not good. This means that the teaching of some prerequisite skills and the active use of environmental prints in the classroom could improve the reading skills of learners at all levels of basic education.

IV. CONCLUSION

The most significant finding of this study is that, the intervention/treatment with environmental prints brought about significant improvement in learners' ability to read, speak and even spell words. There were significant mean gains made in the posttest scores for the experimental group as compared to the posttest scores of the control group and this attests to the fact and also provides evidence that environmental prints are useful materials that can be used to develop the reading abilities of learners. This finding is consistent with Patterson (1991:37-38) who says that newspaper articles (which of course are part of environmental prints) improve the reading skills of students.

There was no significant difference between the pretest and posttest scores of some of the children who could not read even before the intervention and so the intervention with environmental print alone could not help them learn how to read. This finding is consistent with the view that children need to possess certain prerequisite skills before they can do conventional reading.

APPENDICES

APPENDIX A: READING TEST

NO ONE CAN HELP AN UNLUCKY MAN

Once there was a very poor farmer who never had enough to eat. But his neighbour owned a big farm, had many wives and children, and plenty of food and money. One day, a very rich man came walking down the road towards the two farms. Although he was rich, he was wearing a ragged coat and torn trousers, and a cap with a hole in it. Nobody would guess he was rich. Everyone thought he was a beggar.

Source: JHS One English Reader Page 67

APPENDIX B: SAMPLES OF ENVIRONMENTAL PRINTS



Source: Fieldwork 2013, 10/5/2013
Image 1



Source: Junior Graphic, July 22-30, 2013
Image 3

SAMPLES OF STORIES FROM THE JUNIOR GRAPHIC THAT WERE USED FOR THE INTERVENTION

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Source: Junior Graphic, June 26 – July 2, 2013
Image 2

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