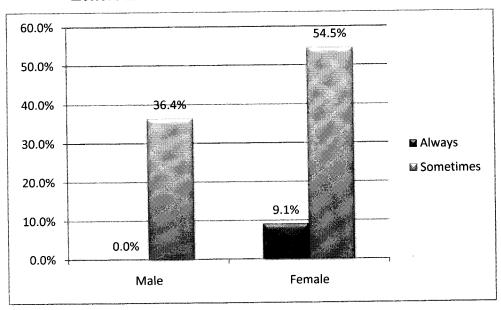
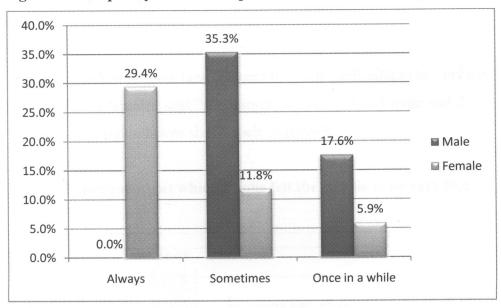
Figure 10: Frequency at which pupils had difficulties in recalling certain Letters and words



## 4.2.1.8: Pupil Responses from Questionnaires on the Frequency at Which Their Attention Would Get Distracted.

Pupils were asked to indicate how frequent their attention was distracted when reading. Figure 11 below illustrates their reactions. The figure shows that most pupils, 6 (35.3%) males and 2 (11.8%) females said "sometimes" while 3 (17.6%) males and 1 (5.9%) female said "once in a while" and five females said "always".

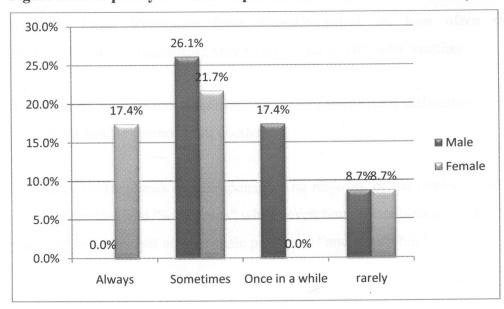
Figure 11: Frequency at which Pupil's Attention was distracted when Reading



## 4.2.1.9: Pupil Responses from Questionnaires on the Frequency of Failing to Understand what Was Being Read.

Pupils were asked to indicate how often they did not understand what they read. Figure 12 shows their responses. As can be seen from the figure, most of them, 6 (26.1%) males and 5 (21.7%) females said "sometimes" while 2 (8.7%) males and 2 (8.7%) females said "rarely". 4 (17.4%) females said "always" while 4 (17.4%) males said "once in a while".

Figure 12: Frequency at which Pupils did not understand what they Read



## 4.2.1.10: Pupil Responses from Questionnaires on the Frequency of Feeling Braille as Faint.

Pupils were asked to show how frequent they felt the Braille to be very faint. 4 (36.4%) males and 3 (27.3%) females said "sometimes" while 1 (9.1%) male and 3 (27.3%) females said "always". The figure below shows their responses.

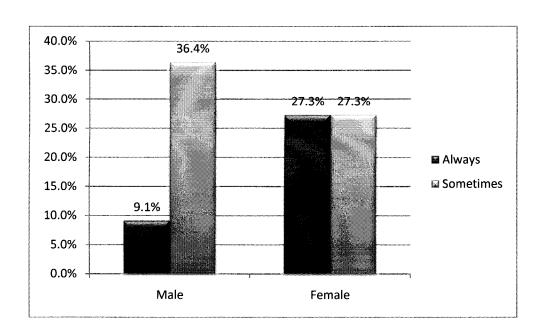


Figure 13: Frequency at which Pupils felt the Braille to be very faint

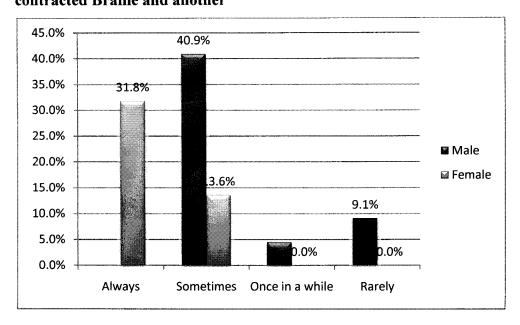
## 4.2.1.11: Pupil Responses from Questionnaires on how often they experienced Difficulties in Distinguishing One Contracted Braille and Another

Respondents were asked to indicate how often they found difficulties in distinguishing one contracted Braille symbol from another.

Figure 14 below shows their responses. The majority of the pupils, 9 (40.9%) males and 3 (13.6%) females said "sometimes" while seven female pupils said "always". Two male pupils said "rarely" while yet another male pupil said "once in a while"



Figure 14: Frequency at which pupils had Difficulties in distinguishing between one contracted Braille and another



# 4.2.2: Pupils' Views From the Focus Group Discussion On The Frequency Of Experiencing Various Reading Difficulties they Experienced at Middle Basic School Level.

In the focus group discussion, a number of views were shared on how often learners with visual impairments experienced reading difficulties. When the researcher put this question to the discussants, learner (D) who was partially sighted said that generally reading difficulties occurred regularly among all learners with visual impairments. The grade six male discussant stated that, "most of the times, it was common to confuse letters or have difficulties with detecting certain letters accurately". Learner (C), a classmate to learner (D) refuted the presentation of her classmate. Instead, she indicated what was frequently experienced as reading difficulties were confusing spellings of certain words and difficulties in differentiating contracted and uncontracted Braille symbols. Learner (F) from grade seven explained that what the two grade six friends had explained was correct. However, he argued that those who were partially sighted always had difficulties with detecting letters when reading Braille with their short sight. While those who were totally blind, they experienced difficulties in detecting letters if they were not frequently reading.

On the question of getting distracted, only one learner with partial sight indicated that she would sometimes get distracted if there was so much noise or there were other things appealing to sight.

Learners (A) and (E) said that they frequently encountered the problems of contractions. They indicated that there were certain words whose contraction symbols were similar to the ordinary letters: example, dots 4, 5 and 6: and w to form the word 'world'. Learner (E) further pointed out that dots 4, 5, 6, would sometimes look like '1'.

On the question of how often they could not understand what they read, learner (B) quickly pointed out that "ama book batupela ukwebati tubelenge, yabomfya icisungu icashupa ukufwa". Meaning; "the books they give us to read use difficult English". Learner (B) was a boy respondent in grade five. Learner (D) said that probably learner (B) had not just gotten used to reading English. Learner (F) from grade seven responded and clarified that it was possible to have frequent difficulties in understanding passages because the school had limited number of books to read. He further argued that even the school library had very few books. Learner (C) agreed with learner (F) but added that above all these difficulties both the partially sighted and the totally blind frequently experienced difficulties in detecting letters and words accurately in sentences. She further explained that because of such a problem, one would become so slow and inaccurate understanding the passages. She further said that in fact, all these frequent problems affect the comprehension of stories.

## 4.2.3: Summary of the Frequent and Prevalent Experiences of Reading Difficulties among Learners with Visual Impairments.

The table below shows how often a particular reading difficult was experienced by learners. For instance, with regards difficulties in detecting letters and words in a sentence, 80% of the respondents indicated that they sometimes experienced it. On the other hand, 12% of the respondents showed that they always experienced such a problem. This would constitute severe reading difficulty.

The rest of the responses are shown in table 11 below.

Table 11: Frequency of experiencing Reading difficulties.

Reading Difficulties Experienced;	Always	Sometimes	Once	Rarely
	(severe).	(moderate).	in a	(normal)
			while	
			(mild).	
Difficulties in detecting letters and words in a	12%	80%	8%	
sentence.				
Confusing certain letters	19%	73%		
Skipping lines.	15%	79%	8%	
Skipping words.	5%	80%	15%	
Difficulties in pronouncing certain words.	19%	67%	6%	
Confusing spellings of certain words.	24%	51%	20%	3%
Difficulties in recalling letters.	38%	64%		
Attention easily distracted.	29%	47%	24%	
Difficulties in understanding texts.	17%	48%	17%	18%
Braille feeling faint.	36%	63%		
Difficulties in distinguishing contractions and	32%	55%	4%	9%
other symbols.				
Average total results.	22.9%	65.0%	9.2%	2.6%

## 4.2.4: Teachers Views on how Prevalent Reading Difficulties were in the Middle Basic Classes.

All middle basic school teachers who were teaching grades five, six and seven in the two sampled schools were asked to indicate how many learners had a particular reading difficult in their classes. Table 12 below shows the total numbers of pupils who were identified to have particular reading difficulties. The table shows the total prevalence among all the respondents and the total prevalence among all middle basic school learners. For instance, the table shows that teachers had indicated that 37 learners with visual impairments demonstrated difficulties in detecting letters and words in a sentence. 37 learners represent 82.2% of the Total Number of respondents.

Table 12: Summary of the Frequencies of Learners Experiencing Reading Difficulties...

Reading difficulties.	Affected	Out of the	Out of all
	learners.	respondents	middle basic
			learners.
Difficulties in detecting letters and words in a	37	82.2%	60.6%
sentence.			
Confusing certain letters.	19	42.2%	31.1%
Skipping lines.	11	24.4%	18.0%
Skipping words.	11	24.4%	18.0%
Difficulties in pronouncing words.	1	2.2%	1.6%
Confusing spellings of certain words.	32	71.1%	52.4%
Difficulties in recalling certain letters and	10	22.2%	16.3%
words.			
Attention easily distracted.	1	2.2%	1.6%
Difficulties in understanding the read material.	8	17.7%	13.1%
Braille feeling faint.	3	6.6%	4.9%
Difficulties in distinguishing contractions.	20	44.4%	32.7%

#### 4.3: Causes of Reading Difficulties.

## 4.3.1: Pupil Responses from the Questionnaires on the Possible Causes for the Reading Difficulties.

From the questionnaires, Learners were required to indicate what could have been the possible cause for each of the reading difficult they used to experience.

## 4.3.1.1: Pupils Responses on Possible Causes for Failure to Detect Letters and Words in a Sentence

Learners were asked to indicate what could have been the possible causes for finding difficulties in detecting letters and words in a sentence. Table 13 shows the possible causes.

Table 13: Pupils Responses on Possible Causes for Finding Difficulties in Detecting Letters and Words in a Sentence

Possible causes	Sex		Total
	Male	Female	
I do not easily recall letters or words on	5 (20.8%)	2 (8.3%)	7 (29.2%)
a piece of paper			
My fingers do not easily distinguish	2 (8.3%)	3 (12.5%)	5 (20.8%)
shapes and different positions			
I use partial sight to read Braille	4 (16.7%)	1 (4.2%)	5 (20.8%)
I don't use my right or left finger for	2 (8.3%)	2 (8.3%)	4 (16.7%)
reading			
I read using my left finger only	1 (4.2%)	1 (4.2%)	2 (8.3%)
My fingers have poor reading abilities	-	1 (4.2%)	1 (4.2%)
Total	14 (58.3%)	10 (41.7%)	24 (100.0%)

### 4.3.1.2: Pupil Responses on the Possible Causes for Confusing Letters When Reading.

Pupils were asked to indicate the possible causes for confusing letters when reading. Table 14 below shows their responses. The main cause given was that they did not easily recall letters or words on a piece of paper followed by those who said they used partial sight to read.

Table 14: Pupils' Views on Possible Causes for Confusing Letters when Reading

Possible causes	Sex	Total	
	Male	Female	
I read using my left finger only	3 (23.1%)	-	3 (23.1%)
I don't use my right or left finger for reading	-	1 (7.7%)	1 (7.7%)
My fingers have poor reading abilities	-	1 (7.7%)	1 (7.7%)
I do not easily recall letters or words on a piece of	5 (38.5%)	-	5 (38.5%)
paper			
I use partial sight to read Braille	2 (15.4%)	1 (7.7%)	3 (23.1%)
Total	10 (76.9%)	3	13 (100.0%)
		(23.1%)	

#### 4.3.1.3: Pupils' Responses on the Possible Causes for Skipping Lines.

Pupils were asked to give possible reasons for skipping line when reading. Table 15 below shows their responses. The table shows that most of them 7 (50.0%) indicated that the possible reason could be that they did not use their right or left finger for reading.

Table 15: Pupils' Views on Possible Causes for Skipping Letters when Reading

Possible causes	Sex		Total	
	Male	Female		
I don't use my right or left finger for reading	6 (42.9%)	1 (7.1%)	7 (50.0%)	
My fingers do not easily distinguish shapes and different positions	1 (7.1%)	1 (7.1%)	2 (14.3%)	
My fingers have poor reading abilities	-	1 (7.1%)	1 (7.1%)	
I do not easily recall letters or words on a piece of paper	-	2 (14.3%)	2 (14.3%)	
I use partial sight to read Braille	-	1 (7.1%)	1 (7.1%)	
No Braille materials to improve my reading abilities	-	1 (7.1%)	1 (7.1%)	
Total	7 (50.0%)	7 (50.0%)	14 (100.0%)	

#### 4.3.1.4: Pupils' Responses on the Possible Causes for Skipping Words when Reading.

Pupils were asked to indicate the possible reasons for skipping words. Table 16 below shows their responses. From the table it can be seen that most of the pupils, 6 (35.3%) males and 2 (11.8%) females said the possible reason could be that they read using their left finger only

Table 16: Pupils' Views on the Possible Causes for Skipping Words when Reading

Possible causes	Sex		Total
	Male	Female	
I read using my left finger only	6 (35.3%)	2 (11.8%)	8 (47.1%)
I use partial sight to read Braille	-	3 (17.6%)	3 (17.6%)
I read using my right index finger only	1 (5.9%)	1 (5.9%)	2 (11.8%)
I don't use my right or left finger for reading	-	1 (5.9%)	1 (5.9%)
My fingers do not easily distinguish shapes and different positions	1 (5.9%)	-	1 (5.9%)
My fingers have poor reading abilities	-	1 (5.9%)	1 (5.9%)
When cold, fingers sensitivity become	1 (5.9%)	-	1 (5.9%)
poor, can't detect			
Total	9 (52.9%)	8 (47.1%)	17 (100.0%)

## 4.3.1.5: Pupil Responses on the Possible Reasons for Having Problems with the Pronunciation of Certain Words

As regards the possible causes for failing to pronounce certain words, the majority of the pupils, 8 (42.1%) males and 5 (26.3%) females (a total of 81.25%) of the questionnaire respondents said they did not easily know how to pronounce certain words while 3 (15.8%) males and 3 (15.8%) females said they rarely read books.

Table 17: Pupils' Views on the Possible Causes for Having Problems with Pronunciation of Certain Words

Possible causes	Sex		Total	
	Male	Female		
I do not easily know how to pronounce certain words	8 (42.1%)	5 (26.3%)	13 (68.4%)	
I rarely read books	3 (15.8%)	3 (15.8%)	6 (31.6%)	
Total	11 (57.9%)	8 (42.1%)	19 (100.0%)	

# 4.3.1.6: Pupil Responses on the Possible Causes for Confusing Spellings of Certain Words.

Pupils were further asked to indicate the possible causes for confusing the spelling of certain words when reading. Table 18 below show their reactions. The majority of them, 11 (55.0%) males and 7 (35.0%) females (a total of 90%) of the questionnaire respondents said they did not know the rules that govern most spellings in English while two female pupils said they did not easily remember the spelling of certain words.

Table 18: Pupils' Responses on the Possible Causes for Confusing the Spelling of Certain Words when Reading

Possible causes	Sex		Total
	Male	Female	-
I do not easily remember the spelling of certain words	words like "one and wanu in Chinyanja". It	1 '	2 (10.0%)
I do not know the rules that govern most spellings in English	11 (55.0%)	7 (35.0%)	18 (90.0%)
Total	11 (55.0%)	9 (45.0%)	20 (100.0%)

## 4.3.1.7: Pupils' Responses on the Possible Causes for Finding Difficulties in Recalling Certain Letters and Words when reading

Table 19 shows the possible causes for failing to recall certain letters and words by pupils when reading. Only four respondents answered this question. From the table it can be seen that 2 (50.0%) males and another 2 (50.0%) females (a total of 100%) of the questionnaire respondents, said the possible cause was that they read using their right index finger only.

Table 19: Pupils' Responses on the Possible Causes for Failing to Recall Certain Letters and Words when Reading

Possible causes	Sex		Sex		Total
	Male	Female			
I read using my right index finger only	2 (50.0%)	2 (50.0%)	4 (100.0%)		
Total	2 (50.0%)	2 (50.0%)	4 (100.0%)		

### 4.3.1.8: Pupil Responses on the Possible Reason for Easy Distraction of the Attention.

The possible reasons cited for easy distraction of the attention by majority of the pupils, 10 (50.0%) male and 9 (45.0%) female (a total of 95%) of pupil questionnaire respondents was that they were sensitive to noises and other sounds while one female pupil said she found it difficult to concentrate on one thing. Table 20 shows their responses.

Table 20: Pupils' Responses on the Possible Causes for easy Distraction in attention when Reading

Possible causes	Sex		Total
	Male	Female	
I find it difficult to concentrate on one thing	-	1 (5.0%)	1 (5.0%)
I am sensitive to noises and other sounds	10 (50.0%)	9 (45.0%)	19 (95.0%)
Total	10 (50.0%)	10 (50.0%)	20 (100.0%)

## 4.3.1.9: Pupil Responses on the Possible Causes for Failing to Understand What Was Being Read.

As regards the possible causes for failing to understand what the pupils read, the majority of them, 8 (47.1%) males and 8 (47.1%) females (a total of 94.1%), said that most of the times the books they read used advanced English while one female pupil said she found it difficult to interpret what she would be reading. Table 21 below shows their responses.

Table 21: Pupils' Responses on the possible causes for failing to understand what they Read

Possible causes	Sex		Total	
	Male	Female		
I find it difficult to interpret what I read	-	1 (5.9%)	1 (5.9%)	
Most of the times the books I read use advanced English	8 (47.1%)	8 (47.1%)	16 (94.1%)	
Total	8 (47.1%)	9 (52.9%)	17 (100.0%)	

### 4.3.1.10: Pupil Responses on the Possible Causes for Feeling the Braille to Be Very Faint

On this issue, responses varied. Some pupils, 1 (14.3%) males and 2 (28.6%) said the cause could be that they read using their left finger only while 1 (14.3%) male and 1 (14.3%) female pupils said because they read using their right index finger only. Two male pupils said their fingers have poor feeling abilities. Table 22 below shows their responses.

Table 22: Pupils' Views on the Possible Causes for Feeling the Braille to be Faint

Possible causes	Sex	Total	
	Male	Female	
I read using my right index finger only	1 (14.3%)	1 (14.3%)	2 (28.6%)
I read using my left finger only	1 (14.3%0	2 (28.6%)	3 (42.9%)
My fingers have poor feeling abilities	2 (28.6%)	-	2 (28.6%)
Total	4 (57.1%)	3 (42.9%)	7 (100.0%)

## 4.3.1.11: Pupils' Responses on the Possible Causes for Failing to Distinguish Between One Contracted Braille and another.

As regards possible causes for failing to distinguish between one contracted Braille and another, most of the pupils, 7 (38.9%) males and 6 (33.3%) females said most contractions were similar to ordinary Braille letters while 1 (5.6%) male and 3 (16.7%) females said they read using their right index finger only. One female pupil said that when it is cold her finger sensitivity becomes very poor. Table 23 below shows their responses.

Table 23: Pupils' Responses on the Possible Causes for having Difficulties in Distinguishing Contracted and Uncontracted Braille.

Possible causes	Sex		Total	
	Male	Female	_	
Most of the contractions are similar to ordinary Braille letters	7 (38.9%)	6 (33.3%)	13 (72.2%)	
I read using my right index finger only	1 (5.6%)	3 (16.7%)	4 (22.2%)	
When cold my finger sensitivity becomes very poor	-	1 (5.6%)	1 (5.6%)	
Total	8 (44.4%)	10 (55.6%)	18 (100.0%)	

## 4.3.2: Pupils' Views from a Focus Group Discussion on the Possible Causes for Reading Difficulties among Learners with Visual Impairments.

When the focus group discussion members were asked to explain what they thought could be the possible causes for the reading difficulties, learners (A), (E) and (F) said that it was because they were using partial sight to read Braille. Others, 4 of 6, indicated that their main problem was caused by difficulties in distinguishing shapes, positions and differentiating dots. Learner (D) however stated it was usually because of coldness. Three discussants unanimously agreed that whenever it was cold, their fingers felt numb.

The focus group discussants presented that it was common to confuse letters when reading because there were very few books to read. They rarely practiced to read Braille. Learner © said, "Ubwafya twakwata abengi lwakwebati tubomfya umunwefye umo pakubelenga". Meaning: "the problem we have is that we use one finger to read".

In both skipping lines and words in sentences, the focus group discussants pointed out that many of them were using one finger to read Braille. While, three of them indicated that it was mainly because they would use partial sight to read. They also indicated that certain papers were shiny or sometimes that there would be poor light in the room. These factors would cause them to skip lines and words frequently.

When asked about spellings, Most of the focus group discussants; four of them explained that spellings in English were difficult to master. Additionally, they had no books to read regularly. They also stated it was easy to confuse spellings because many people would read Braille using one finger. Learner (F) stated that there was an interference of certain words in English with those in vernacular. The learner further indicated that certain words in English would be spelt using the vernacular spelling regime. When asked for examples, learner (B) said for instance, the words "were (akale, Bemba and 'was' in English), and wallsin English to mean icibumba in (icibumba)". The discussant went further and said that two words in English sounded the same but they have different spellings.

The researcher asked learner (E) to explain why some people would not recall letters on a piece of paper. Learner (E) pointed out that the main reason for failing to recall letters and words on a piece of paper was basically poor finger sensitivity or reading using one finger only. Learner (A) indicated that failure to recall letters would consequently lead to difficulties in understanding passages.

Concerning feeling Braille as being faint, the discussants in the focus group indicated that sometimes this problem was caused by coldness, the use of old books and that sometimes certain pupils had poor finger sensitivity.

With regards Braille contractions, learner (B) said, "Most of the contractions do confuse us in grade five because we have not yet learnt all contractions. Three of them agreed that while they liked reading contracted Braille, there were inadequate books to read in order to practice from the library. Learner (A) complained that Braille contractions sometimes became difficult because they were forced to read it and yet they had not yet been taught the symbols.

# 4.3.3: Summary of the Pupil Responses on the Suggested Possible Causes of Tactile Reading Difficulties.

Table 24 below is a summary of the pupils' responses on the possible causes for tactile reading difficulties. The table combines responses from the focus group discussions and the questionnaire respondents. Phonological and phonemic possible causes for reading difficulties could not be tabulated in this manner because each of the condition has its own parameters of consideration. As it can be observed from the table, the majority (48.8%) of the pupils indicated that they had reading difficulties because they were using partial sight to read. While 42% of them indicated that they had difficulties in distinguishing shapes and positions of the Braille dots. The rest of the responses are shown below.

Table 24: Summary of the Suggested Possible Causes for the Tactile Reading Difficulties.

Possible causes.	FGD	Questionnaire	Accumulated
T 1		responses	total
I do not recall letters or words on a piece of paper.		14 (35.5%)	15 (33.3%)
My fingers do not easily distinguish shapes and different positions of dots.	5	15 (38.6%)	20 (44.4%)
I use partial sight to read Braille.	3	16 (41.0%)	19 (42.2%)
I do not use my right or left finger for reading.	2	6 (15.3%)	8 (17.7%)
I read using my left finger only.	2	16 (41.0%)	18 (40.0%)
My fingers have poor reading abilities.	3	4 (10.2%)	7 (15.5%)
No Braille materials to improve on my reading abilities.	5	16 (41.0%)	21 (48.8%)
I read using my right index finger only.	5	6 (15.3%)	11 (24.4)
Most of the contractions are similar to the ordinary Braille letters.	5	13 (33.3%)	18 (40.0%)
When cold, my finger sensitivity becomes very poor.	4	2 (5.1%)	6 (13.3%)
Total respondents.	6	39 (86.6%)	45 (100.0%)
	(13.3%)		

### 4.3.4: Teachers' Responses on the Possible

### Causes for Reading Difficulties Experienced By Learners.

From the questionnaires, all the middle basic school teachers in the two schools were asked to indicate what they thought were the main causes for the various reading difficulties experienced by their learners.

# 4.3.4.1: Teachers' Responses on the Possible Causes for Difficulties in Detecting Letters and Words in a Sentence as Experienced by their Learners.

Teachers were asked to indicate the possible causes why learners with visual impairments encountered difficulties in detecting letters and words in a sentence. Table 25 below shows their reactions. The table shows that the commonest possible causes were that learners' fingers did not easily distinguish the shapes of the letters and the different position of the dots. The rest of the responses are shown below.

Table 25: Teachers' Views on the Possible Causes for Learners having Difficulties in Detecting Letters and Words in a Sentence Among Learners with Visual Impairments.

Possible causes	Frequency	%
Some of them read using their right index finger only	5	34.5%
They read using their left finger only	7	50%
They do not use their right or left fingers for reading	1	7.1%
Their fingers do not easily distinguish the shapes of the letters	14	100%
and the different position of the dots		100,0
Their fingers have poor reading ability	13	92%
When it is cold their fingers sensitivity become very poor, so	13	92%
they cannot easily detect letters		7270
They do not easily recall letters or words on a piece of paper	11	78.5%
Some of them use their partial sight to read Braille	14	100%
There are no Braille reading materials for them to improve their	11	
reading abilities	11	78.5%

# 4.3.4.2: Teacher Responses on the Possible Reasons for Confusing Certain Braille Letters.

As regards confusing certain letters, Table 26 shows the teachers responses to this issue. They indicated that the most common reason for confusing certain letters was that the learners' fingers did not easily distinguish the shapes of the letters and the different position of the dots. Other causes are shown in the table below.

Table 26: Teachers' Views on the Possible Causes for Learners Confusing Certain Letters, e.g. d and f; h and j; e and I

Possible causes  They read a six of the six	Frequency	Percent
They read using their right index finger only.	4	33.3
They read using their left finger only.		33.3
	5	41.6
They do not use their left or right fingers for reading.	1	8
They have difficulties in distinguishing shapes and positions of dots.	12	100
They have poor finger feeling abilities.	12	100
When it is cold, their finger sensitivity becomes poor.		
They have difficulties in recalling letters on a piece of paper.	11	92
They was the instanting letters on a piece of paper.	10	83
They use their partial sight to read Braille	12	100
They have no Braille materials to read in order to improve neir reading abilities	10	83.5

## 4.3.4.3: Teacher Responses on Learners Skipping Lines.

As regards skipping lines, the most common reasons cited by the teachers were that the learners; fingers do not easily distinguish the shapes of the letters and the different position of the dots; their fingers have poor reading ability; some of them use their partial sight to read Braille and that there were no Braille reading materials for them to improve their reading abilities. Table 27 below shows the reactions of teachers to the above issue.

Table 27: Teachers' Responses on the Possible Causes for Learners Skipping Lines.

Possible causes	Frequency	%
Some of them read using their right index finger only	5	45.4
They read using their left finger only	6	54.5
They do not use their right or left fingers for reading	1	9.0
Their fingers do not easily distinguish the shapes of the letters and the different position of the dots	10	90.9
Their fingers have poor reading ability	11	100
When it is cold their fingers sensitivity become very poor, so they cannot easily detect letters	10	90.9
They do not easily recall letters or words on a piece of paper	8	72.7
Some of them use their partial sight to read Braille	11	100
There are no Braille reading materials for them to improve their reading abilities	8	72.7

### 4.3.4.4: Teacher Responses on Learners Skipping Some Words

Teachers were asked to state why the learners with visual impairments skipped some words. Table 28 below display their responses. The table shows that the common causes for skipping some words were that the learners' fingers did not easily distinguish the shapes of the letters and the different position of the dots; their fingers had poor reading ability; some of them used their partial sight to read Braille and that there were no Braille reading materials for them to improve their reading abilities. The other cause mentioned was that when it is cold their fingers sensitivity becomes very poor, so they could not easily detect letters. The rest of the responses are shown in the table below.

Table 28: Teachers' Views on the Possible Causes for Learners Skipping some Words

Possible causes for skipping words.	Frequenc	Percen
	$\mathbf{y}$	t
Possible causes for skipping words	5	45.4%
Some of them read using their right index finger only.	5	45.4%
Some of them read using their left index finger only.	1	9.0%
They do not read using their left or right finger.	11	100%
Their finger cannot easily distinguish the shapes and positions of	11	9.0%
the different dots.		7.070
Their fingers have poor feeling abilities.	10	90.9%
When it is cold, their fingers' sensitivity becomes poor. So, they	9	82%
cannot detect letters.		
Most of them use their partial sight to read Braille.	11	100%
There are no Braille materials to read for them to improve on	10	90.9
heir reading abilities.		- 0.0

## 4.3.4.5: Teachers Responses on the Problems with the Pronunciation of Certain Words

In responding to this question, the majority of the teachers showed that most of the learners with visual impairments had problems with pronunciations because they did not know how to pronounce certain words. The table below presents the rest of the answers.

Table 29: Teachers' Views on the Possible Causes for Learners having Problems with the Pronunciation of Certain Words

Frequency	
0	Percent 0
4	100%
2	50%
-	4

# 4.3.4.6: Teacher Responses on the Possible Causes for Confusing the Spellings of Certain Words among Learners with Visual Impairments.

As for the confusion of spelling of certain words, the teachers attributed this problem to the fact that some of the learners did not know the rules that govern spellings in English. Table 30 below shows the teachers responses.

Table 30: Teachers' Views on the Possible Causes for Learners Confusing the Spelling of Certain Words

Frequency	Percent
12	92%
12	92%
10	76.9%
	12

# 4.3.4.7: Teacher Responses on the Difficulties in Recalling Certain Letters and Words Experienced By Learners.

The teachers under study were asked to indicate what they felt were the causes for the learners finding difficulties in recalling certain letters and words. Table 31 below shows their responses. The table shows that the most common cause was that the learners' fingers did not easily distinguish the shapes of the letters and the different position of the dots followed by the fact that when it was cold the learners' fingers sensitivity becomes very poor, so they could not easily detect letters.

Table 31: Teachers' Views on the Possible Causes for Learners' Difficulties in Recalling **Certain Letters and Words** 

Possible causes	Frequency	0/
Some of them read using their right index finger only	oquency	%
They road with the state only	2	25%
They read using their left finger only	4	
They do not use their right or left fingers for reading		50%
Their fingers do not in the fingers for reading	0	0
Their fingers do not easily distinguish the shapes of	8	1000/
the letters and the different position of the dots		100%
Their fingers have poor reading ability		
With the poor reading ability	8	100%
When it is cold their fingers sensitivity become very	8	
poor, so they cannot easily detect letters	0	100%
They do not as 'I		
They do not easily recall letters or words on a piece	6	750/
f paper		75%
Ome of them use their wast. I it		
ome of them use their partial sight to read Braille	7	87.5%
here are no Braille reading materials for them to	6	
nprove their reading abilities	U	75%
Teachers' Responses on whether Pupils were easily		

## 4.3.4.8: Teachers' Responses on whether Pupils were easily Distracted in Attention.

Almost all teachers felt that their learners did not have attention difficulties.

# 4.3.4.9: Teacher Responses on the Failure by Learners to understand what they were

Teachers in the study were asked to show the possible causes for children with visual impairments failure to understand what they read. The study showed that the teachers were of the view that some of the causes of this problem was that pupils failed to interpret what they were reading. Table 32 below shows their responses.

Table 32: Teachers' Views on the Possible Causes for Learners' Failure to understand what they Read.

Frequency	Percent
8	100%
3	37.5%
	Frequency 8

#### 4.3.4.10: Teacher Responses on Learners Feeling Braille being Faint.

Teachers provided their responses to the question on Braille feeling faint in the table below.

Table 33: Teachers' Views on the Possible Causes for Learners Feeling Braille as being Faint.

Frequenc	%
y	
0	0
0	0
0	0
1	7.7%
3	23%
1	7.7%
2	15%
3	23%
1	7.7%
	y 0 0 0 1 3 1 2 3

## 4.3.4.11: Teacher Responses for Pupils' Failure to Distinguish One Contraction And another.

As regards causes for finding difficulties in distinguishing between one contracted Braille symbol and another, Table 34 shows the teachers responses to this issue. As can be seen from the table, the common causes for failure to distinguish between one contracted Braille symbol and another as observed by the teachers were that some of them read using their right index finger only; the learners' fingers do not easily distinguish the shapes of the letters and the different position of the dots; their fingers have poor reading ability and that some of them use their partial sight to read Braille. The rest of the responses are as shown in the table below

Table 34: Teachers' Responses on the Possible Causes for Learners Finding Difficulties in Distinguishing between one

Contracted Braille Symbol and another

Possible causes	Frequency	Percen
		t
Some of them read using their right index finger only	6	50%
They read using their left finger only	5	41.7%
They do not use their right or left fingers for reading	2	16.7%
Their fingers do not easily distinguish the shapes of the letters and the different position of the dots	11	91.7%
Their fingers have poor reading ability	10	83%
When it is cold their fingers sensitivity become very poor, so they cannot easily detect letters	11	91.7%
They do not easily recall letters or words on a piece of paper	8	66.7%
Some of them use their partial sight to read Braille	11	91.7%
There are no Braille reading materials for them to improve their reading abilities	9	75%

## 4.3.5: Teachers' Views from Individual Interviews on the Possible Causes for the Reading Difficulties As Experienced By Learners.

During interviews, teachers (A), (B) and (F) independently stated that the main problems that their pupils had were difficulties in detecting letters and poor spelling abilities. Teacher (D) also mentioned that it was common among the learners to skip lines or words: "if you tell them to read aloud, they will start properly but you see them omit a word or the entire line". Teacher (E) from Magwero School and teacher (C) a grade six Ndola Lions School teacher explained that most of their learners used their partial sight to read they argued that their learners already had poor sight. So, it was very strenuous to read Braille using eyes.

Teachers (A), teacher (C) and teacher (D) admitted that their pupils had problems of confusing certain letters. They indicated that this problem was mainly caused by poor finger sensitivity, coldness, the use of partial sight to read Braille and failure to distinguish certain

letters. Teacher (A) a Ndola Lions school teacher with visual impairments said, "no matter how you teach these children, they continue confusing certain letters. And, as a teacher you would only discover when you tell them to read aloud". The teacher further indicated that most of the learners were not serious and that's why the learners to read properly.

On the issue of skipping lines when reading, teachers indicated that the possible cause for the problem was reading Braille with one finger. A grade six teacher (E) with visual impairments at Magwero School for the blind explained that in order to read Braille properly, one needed to involve both the left and right index fingers. At the same time, the teacher also indicated that pupils were not practicing on how to read.

Teachers, two grades six and seven teachers from Magwero School noted that the problem of skipping words would increase because of the cold period. The teachers indicated that in coldness, the fingers of learners with visual impairments become numb. Teacher (A) a grade five Ndola lions school class master indicated that sometimes pupils would skip words because of contractions.

Three teachers from Magwero School contended that one major problem was that some pupils did not know how to pronounce certain words while another teacher stated that some pupils had a problem of mother tongue influence.

Four teachers indicated that many learners with visual impairments had problems with spellings because they had few books to read. Furthermore, teacher (E) and teacher (F) indicated that most of the learners did not know the rules that govern the spelling regime in English. On the other hand, one teacher stated that some pupils had problems with remembering spellings.

All except one teacher stated that learners with visual impairments manifested problems related to attention difficulties. Teacher © further said, "There is one boy in my class. Every time one is teaching, he would be losing concentration. So, when you ask him a question, he looks very lost".

The majority of the class teachers (4 of 6) revealed that the schools did not have a lot of books to read. So, the few books that were available, they were either not of the grade standard or because they were not in Braille, the teacher would usually read for them. The

teachers also indicated that some pupils had a general problem with comprehension. Teacher © categorically stated that because of the so many difficulties faced by learners with visual impairments, their performance in examination classes were below the expected standards. On the other hand, teacher (F) said, "it is not that we, as blind people are not intelligent. But, we meet several difficulties in our school experiences. Even our learners face the same challenges".

The researcher inquired from individual teachers what they thought about Braille contractions. They stated that contractions were very good because they helped reduce the volume of Braille books. In any case, teachers ©, (D) and (F) pointed out that some pupils would confuse most of the contractions with ordinary letters because they were using one finger to read or using their partial sight. Two teachers argued that some pupils were not just serious. So, the learners were not ready to read Braille. In addition to this, Teacher (E) stated that some of the special education teacher did not know how to read Braille. As a result, it was difficult for them to teach their children.

#### 4.4: Methods Used in Correcting Reading Difficulties.

### 4.4.1: Pupil Responses on the Teaching Methods Used to Correct Reading Difficulties.

Learners were asked to suggest what the teachers should do to help pupils with Braille reading difficulties. Their responses varied considerably. Table 35 below shows some of the things that teachers should do. The table shows that most of the pupils felt that pupils with reading difficulties needed to be given special homework and that they should be provided with more reading materials. The rest of the responses are shown in the table below.

Table 35: Pupils' Responses on the Methods Used by Teachers to Help Learners with Braille Reading Difficulties.

Teaching methods	Frequency	Percent
Providing more reading materials	21	53.8%
Teaching the identified Braille problems through repetition	13	33.3%
Providing remedial work	12	30.8%
Giving special homework to pupils with reading difficulties	26	66.7%
Asking other learners to teach their friends (peer tutoring)	16	41.0%
Improving the feeling sensitivity of the fingers by making the	12	30.8%
learner identify different objects using finger tips		
Braille lessons should be taught in all the grades	18	46.2%
4.4.2 D II.A.D		

## 4.4.2: Pupils' Responses From The Focus Group Discussion On Methods Used To Correct Reading Difficulties.

In the focus group discussions, pupils revealed that teachers were using the same methods to teach Braille. The discussants also pointed out that they mostly learnt Braille from their friends. Four of the discussants indicated that they needed more reading materials in order to improve on their reading abilities. Learner (F) said, "though we have a library here, most of the books found there are either useless or just some Christian materials". Learner (B) stated that they would improve on their reading skills if Brillion was not used as the main paper for Braille reading.

The majority of the pupils further stated that they needed a variety of Braille learning methods in order to be good readers. When asked how fast they were in reading Braille, 4 (66%) stated that they were very poor at reading Braille. Subsequently, learner (D) proposed that Braille needed to continue as a lesson up to grade seven. They indicated that such an approach would help everyone remain abreast with the latest developments in Braille. Learner (E) however argued that even if Braille was taught throughout all the classes, some teachers did not know how to read and write Braille. Learners (B) and (D) told the researcher that because some of their teachers were not very good in Braille, it was difficult to teach it in classes.

### 4.4.3: Teachers' Responses on The Methods Used To Correct The Reading Difficulties.

With regard to teaching methods used to correct Braille reading difficulties, teachers in the study revealed the following as shown in Table 36 below. As can be seen from the table, the teachers in the study were of the view that improving the feeling sensitivity of the fingers by making the learners identifies different objects using finger tips would be the best solution to apply to correct Braille reading difficulties among learners with visual impairments. The other methods are shown in the table below.

Table 36: Teachers' Responses on the Teaching Methods Used by Teachers to Correct Braille Reading Difficulties

Teaching methods used	Frequency	Percent
Providing more reading materials	1	7.1%
Teaching the identified Braille problems through repetition	4	28.5%
Providing remedial work	3	21.4%
Giving special homework to such learners	3	21.4%
Asking other learners to teach their friends (peer tutoring)	3	21.4%
Improving the feeling sensitivity of the fingers by making	5	35.7%
the learners identify different objects using finger tips		
Braille lessons should be taught in all the grades	3	21.4%

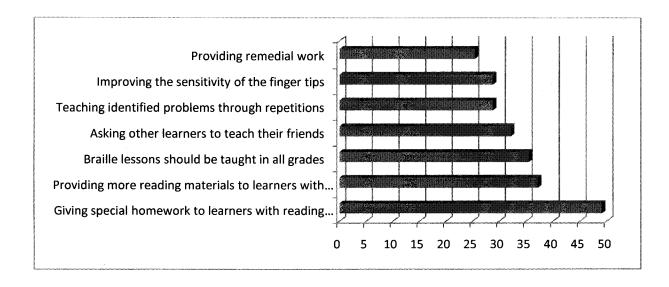
## 4.4.4: Teachers' Views From Interviews On Teaching Methods Used To Correct The Reading Difficulties.

When asked in separate interviews on how learners with visual impairments could be helped in mastering good Braille reading skills, three teachers advocated for more practice among learners. Teacher (F) stated that pupils needed to be encouraged because some of them feel that education would not help them in any way. The teacher told the researcher that it would be good if the researcher spoke to the learners with visual impairments and motivate them about life. Others contended teachers needed to identify the actual problems of the pupils and design individualized education programs for such learners. Teacher (D) indicated that serious teachers would not rest until their learners learnt how to read Braille. He said especially those teaching reception classes.

## 4.5: Summary of both Teacher and Learners Responses on the Teaching Methods used to correct Reading Difficulties.

The figure below shows responses from both teachers and learners from questionnaires on the suggestion for the teaching methods to correct the reading difficulties. For instance, the figure shows that both teachers and learners indicated that if pupils were given special homework, they would improve their Braille reading. This was followed by those who indicated that they needed more reading materials.

Figure 15: Summary of both Teacher and Learners Responses on the Teaching Methods Used by Teachers to Correct Reading Difficulties.



## CHAPTER FIVE. DISCUSSION OF FINDINGS.

This chapter discusses the findings which were presented in chapter four. The chapter outlines the findings in accordance with the four themes as determined by the objectives. The following are the themes; the nature of reading difficulties, prevalence of the reading difficulties, causes of the reading difficulties and establishing the teaching methods which teachers use to correct the identified reading difficulties.

#### 5.1: The Nature of Reading Difficulties among Learners with Visual Impairments.

This study found out that there were three main types of reading difficulties that existed among learners with visual impairments at middle basic school. The three types of reading difficulties were; tactile reading problems, phonological and phonemic reading difficulties. As it may be observed from tables 7, 8 and 9 in chapter-4, there were six questions that sought to determine tactile reading difficulties. These included the following statements: difficulties in detecting letters and words in a sentence, confusing certain letters when reading, skipping lines, skipping words, Braille being felt faint and difficulties in distinguishing contracted and uncontracted Braille.

All the statements above refer to finger touch which means tactile. According to table-7, the findings revealed that 64.4% of learners with visual impairments indicated that they had difficulties with detecting letters and words in a sentence. Additionally, in table-9, all the fourteen (100%) teacher respondents indicated that their pupils had problems with detecting letters and words in a sentence. In a summative diagram (figure-3), 72.8% of all the respondents in this study, admitted that learners with visual impairments had tactile reading difficulties. From the findings presented above, it can generally be observed that most of the learners with visual impairments in Zambia do experience tactile reading difficulties. These findings were consistent with what Artter (1998) found that instead of visual reading difficulties, learners with visual impairments in U.K had tactile perceptual difficulties. Therefore, despite the regional, social contexts, environmental and climatic differences between England and Zambia, the experience of tactile reading problems can be found both in developed and third world countries among readers of Braille. Owing to the tactile reading difficulties, the learners with visual impairments would demonstrate a significant challenge in

reading passages. Poor reading abilities can have severe detrimental effects on the reader. For instance, because of the poor tactile reading abilities, it can be deduced that the learners under review would demonstrate slow and inaccurate reading skills. This confirms what Susan (2009) found that an individual with tactile reading difficulties would have challenges in understanding texts.

This study rules out poor teaching abilities as a factor in reading difficulties. Learners themselves admitted that while they received adequate teaching attention, they had problems with reading. As indicated above, one nature of their reading difficulties was 'tactile'. From this study, it is explicit that if a blind individual has difficulties with his/her tactile abilities, such a one are at a loss. It is clear from literature in this study that An individual with visual impairments entirely depends on finger sensitivity to transmit, coordinate and interpret dots and shapes of Braille (the ANFB, 2009). The type of reading difficult highlighted in this study implies that many learners proceed to middle basic school level with no masterly in reading Braille. The consequence of these findings among learners with visual impairments should be saddening.

Another important nature of reading difficulties investigated in this study was to do with phonological and phonemic problems. The two are interrelated. And, they were represented by the following statements, difficulties in pronunciations, confusing spellings, difficulties in recalling letters and words, difficulties in attention and problems in understanding the read materials. These five statements sought to establish language performance difficulties that could be linked to reading abilities. For instance, if someone had problems with pronunciations, such an experience would not be associated with finger tip difficulties. However, poor pronunciations or difficulties in pronouncing words can affect the reading abilities of an individual and can consequently impair the understanding of a passage of the reader him-herself.

Phonological and phonemic reading difficulties seem to be a significant problem among learners with visual impairments in Zambia. According to table 7 51.1% pupil respondents showed that they had difficulties in spellings of certain words. While, 48.8% acknowledged having problems with understanding passages and 42.2% showed that they had difficulties in the pronunciation of certain words. Additionally, middle basic school special education teachers indicated similar trends of responses. For Example, table-9, 92% of teacher

respondents showed that their learners had difficulties with spellings and 28% of them admitted that their learners had problems with pronunciations. These findings among learners with visual impairments were alarming. According to Wong (1995) only 20% of the sighted readers demonstrated phonological and phonemic difficulties. It may be argued that Zambia's situation is extreme with a very high prevalence of children with phonological and phonemic challenges.

From the presentation in table-7, it is evident that phonological and phonemic reading difficulties are relatively high among learners with visual impairments in the two sampled schools of Zambia. These findings do substantiate the revelations of Mioduser and Lahav (1999) who contended that unlike their sighted peers, learners with visual impairments would experience more spelling challenges because of the lack of eye sight to help in contextualizing phonological and phonemic details. Moreover, the difficulties in spellings, pronunciations and comprehension of passages vividly experienced by learners with visual impairments do complicate their situation. For instance, very few teachers, examination markers and general public do understand the underpinning challenges of learners with visual impairments. In the case of examiners, they would fail such children on the basis of poor English language spelling abilities.

### 5.2: Prevalence of Reading Difficulties among Learners with Visual Impairments.

From the preceding chapter, it is evident that learners with visual impairments in Zambia demonstrated a high prevalence rate of reading difficulties. Wong (1995) indicated that at a global level, the prevalence of reading difficulties were estimated at 2 to 5% of school going children. Probably, the estimation by Wong (1995) did not include learners with visual impairments whose prevalence of reading difficulties seem to be very high.

The SACMEQ report in Nkamba and Kanyika (1998) revealed that 51.1% of primary boys and girls in Zambia had reading difficulties. Similar to the results for sighted learners, this study found that 49.95% of learners with visual impairments had reading difficulties. These overall reading difficulties results confirm the SACMEQ (1998) research findings among sighted learners in Zambia. Generally, it means the reading difficulties found among sighted learners are somewhat equal to the reading difficulties found among learners with visual impairments. Nevertheless, this study found that in accordance with table 11, 22.9% of the

learner respondents had severe reading difficulties and 65.0% of them had moderate reading difficulties. And, only, 2.6% of the learners had normal reading experiences. Additionally, the teachers for the learners with visual impairments in the two schools indicated in table 12 that 82.2% of the respondents and 60% of all middle basic school learners in the schools had difficulties in detecting letters and words in sentences. From the same table, it is evident that according to teachers, one third of learners with visual impairments had reading difficulties. Since the majority of the teachers for these learners were well trained, the prevalencies tabulated in this section are unacceptable. These findings imply that the reading difficulties among the learners under review are widespread.

To elucidate the above findings, this study found that 56.3% of the targeted sample admitted having tactile reading difficulties. If this percentage is extrapolated to the total population of the middle basic school learners with visual impairments, it would be interpreted that on average more than half of the grades five, six and seven learners had tactile reading difficulties. In other words, 65 out of 116 middle basic school learners with visual impairments in Zambia had tactile reading difficulties. On the other hand, 43.6% of the respondents admitted demonstrating phonological and phonemic reading difficulties. To simplify this, it means, 50 out of 116 middle basic school learners with visual impairments acknowledged having reading difficulties as a result of phonological and phonemic problems. These findings are alarming and contrary to the findings by Gross (1995) who reported interesting findings among the English speaking grades two and three in the United Kingdom (U.K). The study in U.K. revealed that mainly a quarter of learners were functioning at a fairly low level for their grade and approximately one in twenty were hardly able to read. These results were intended for grades two and three in the U.K. but, the alarming results above are meant for the grades five to seven among learners with visual impairments. It would therefore be concluded that the majority of middle basic school learners with visual impairments operate and read below their standard grades.

According to Artter (1998), 10% of the research subjects in Britain displayed tactile reading difficulties. This study shows that the Zambia learners with visual impairments experience more tactile reading difficulties. That the prevalence rates are higher among the targeted subjects of this study. As it may be postulated from the findings above, the Zambian tactile reading difficulties were four times higher than the British research results.

Though phonological and phonemic reading difficulties were relatively lower than tactile reading difficulties among learners with visual impairments. In this study, it is evident that 43.6% of the pupil respondents: approximately one third of learners with visual impairments experience reading difficulties due to phonological and phonemic problems. Wong (1995) and Kenyon (2003) both submitted that 20% of learners with reading difficulties had phonological and phonemic reading difficulties. Reading difficulties caused by phonological and phonemic challenges can lead to comprehension and information retention problems. Since the phonological and phonemic reading difficulties are high among learners with visual impairments, it would be postulated the learners under-review have difficulties in comprehending what they read hence poor performance in tasks that require understanding and analysis. It would also be argued that such learners would have problems in writing and answering examinations. Examinations in Zambia require that the candidate reads and interpret what he has comprehended. Therefore, inadequacies in the discussed areas would impact negatively on the said learners.

In a research conducted by Matafwali on grade three sighted learners in Zambia, it was found that the majority of grade three research participants displayed relatively high phonological and phonemic reading difficulties. Matafwali (2005) indicated that the grade three learners mainly displayed spelling problems and phonemic challenges. The pupils would say, "bress to mean dress". This study shows a strong correlation between the findings of Matafwali (2005) and learners with visual impairments at middle basic school. This study revealed that 53.3% of the respondents had spelling difficulties. These findings confirm the assertions of Mioduser and Lahav (1998), who observed that since visual information plays a central role in the consolidation of linguistic identity, the lessened performance of the visual channel affects negatively the construction process of the spelling and syntactical properties. In this context, the stored words of learners with visual impairments lack in many areas. It is therefore difficult to retrieve the correct spellings because the stored words may not have adequate references to remind the reader. For those that are able to see, whatever the visual channel receives as incomplete or unclear material, the mind completes by using additional external and internal information.

#### 5.3: Causes of Reading Difficulties among Learners with Visual Impairments.

Some studies conducted by a number of scientists revealed that some reading difficulties were inherited. This study did not seek to establish the inherited reading difficulties. However, what was evident in this study was that many learners with visual impairments acknowledged having reading difficulties which could have been inherited or acquired. These reading difficulties are phonological and phonemic. For instance, the study in 4.3.1.5, found that 81.2% of the questionnaire respondents presented that they did not know how to pronounce certain words in English. This could be as a result of mother tongue influence or the problem of learning a second language. Chomsky (1971) in Wrench (2008) explained that for people who learn a second language, it may be difficult for them to be proficient because the orthography registered in the brain would be for the mother tongue language. Idor et-al (1999) presented similar results in a research done to test Swedish emigrants on proficiency in Swedish. It was observed that 60% of the emigrants had problems with the pronunciations of the new language. In this context, it seems learners with visual impairments in Zambia are heavily affected by the learning of English as a second language. The two schools sampled in this study were in multi-cultural institutions. It seems pupils in the said schools are not compelled to speak English. Consequently, the learners have high prevalency of poor pronunciations.

Apart from the above, 90% of the pupil respondents in 4.3.1.6 stated that they had problems with spellings because they did not know the rules that governed the spelling of English. This confirms the information given by Lerner (1997) and Saddock (2000) that the English spelling regime did not have a predictable rule to follow. In fact, Wong (1995) argued that unlike the Bantu languages, English had 44 phonemes which would make it difficult for some pupils to grasp all the phonemes and then use them accurately. This shows that learners with visual impairments have an added challenge in learning spellings and pronunciations because they have little exposure to reading books and they even when they do find books, the information is limited.

In contrast with the other phonological difficulties, in 4.3.1.7, the study found that very few (33.3%) of learners indicated that they had difficulties with recalling letters and words on a piece of paper. However, among those who indicated having this problem, 100% showed that they had such a problem because of using one finger when reading. it evidently shows that reading Braille with one finger can create severe reading difficulties. As Susan (2009) contended that Braille would be read better if both the right and left index fingers were

involved in feeling and touching the dots. On attention difficulties, the study found that 90% of the respondents stated that they had attention problems because they were sensitive to sounds. This is justifiable for learners with visual impairments. Such learners heavily depend on ears to learn and appreciate the environment. As a result, the Roman Catholic Encyclopedia (2010) pointed out that learners with visual impairments were 80% more disadvantaged than their sighted peers because while others used both sight and ears, learners with visual impairments would simply rely on hearing. The study further found out that among those who had difficulties with understanding what they read, in 4.3.1.9, 94.1% contended that the books they were reading were using more advanced English. Understanding read texts requires a number of skills. Jean (2009) and Chall (2009) explained that in order to understand a written text, the reader must have retention skills, comprehension abilities, visual memory of the objects being discussed, and ability to encode and decode the information being read. This study evidently showed that learners with visual impairments lacked most of these skills. This inadequacy among learners with visual impairments cannot be disputed. The learners under review have little or no access to many reading materials and they are not exposed to the general reading in society as their peers would be.

Susan (2009) pointed out that for a reader with visual impairments to be accurate, his-her finger tips need to be sensitive and fast. As one reads Braille, the finger should be able to pass on information quickly for interpretation on the shapes, positions and distances of the dots in order to form letters and consequently words. This study found out that 56.3% of the pupil respondents had tactile reading difficulties. In summarizing the possible causes, in 4.3.3, 42.2% of the said target sample had reading difficulties because they used partial sight to read Braille. Partial sight cannot be effectively used to read Braille. Unless one combines tactile and partial sight, his-her reading abilities would be negatively affected. This study significantly confirmed the findings of Mutati (2010) who indicated that more than 46% of learners with visual impairments in schools for the blind were partially sighted. The findings of this study on learners with partial sight were higher than the Mutati (2010) results. This study found that 64.1% of the questionnaire respondents were partially sighted. Unfortunately, the learners under review are made to read Braille which gives them additional problems. On the other hand, 44.4% of those who read using fingers indicated that they had problems with reading because they had difficulties in distinguishing different dots of letters. It was evident that most of the learners had challenges in dot recognition and

subsequent interpretation of the dots. These difficulties could be as a result of several other factors. For instance, teacher respondents and pupils themselves substantially indicated coldness could reduce the feeling sensitivity. It was also presented that the use of brailion would also reduce the readers speed and accuracy.

This study also revealed a significant correlation between frequent practice of reading Braille and erratic practice of finger use. Table 24, shows that 48.8% of the respondents rarely read books because they were not readily available in schools. The possible explanation for this inadequacy is that most of the Braille readers need frequent practice so that the finger sensitivity is sharpened and increased. In fact, in relation to finger sensitivity, the study established that 13.3% of the pupil respondents indicated that their fingers lost sensitivity whenever it was cold. Lack or inadequate finger sensitivity for a learner with visual impairments is detrimental. The individual would not be able to feel the Braille hence affecting the reading skills. Zambia is not a cold country. However, there are certain places and certain seasons that may have very low temperatures. from this study, it is vivid that pupils do have problems with reading in cold places or during cold seasons. Somewhat the number of respondents who indicated that they would lose their finger sensitivity was small because almost half of the learners use their partial sight to read Braille.

Considering the findings presented in this section, it could be postulated that with the high reading difficulties experienced by learners with visual impairments, their educational progress can significantly be impeded. It could also be assumed that their examination pass percentage could be very low. In an interview with the teacher respondents in 4.3.5, it was revealed that the pass rate for both Magwero and Ndola Lions were very low. The reading difficulties revealed and described in this are a conclusive evidence of the impeccable challenges faced by learners with visual impairments in reading.

# 5.4: Teaching Methods Used By Teachers to Correct the Reading Difficulties among Learners with Visual Impairments.

On correcting the identified reading difficulties by teachers, table 35, the majority (66.6%) of learners with visual impairments proposed that teachers needed to provide special home works to learners with reading difficulties. This would mean that teachers ought to increase

on individualized attention to the pupils with reading difficulties. The individualized teaching approach significantly helps learners with visual impairments. However, the classrooms for the learners in focus seem to be quite big for such an approach to be used. For instance, some classes sampled had more than fifteen learners in one class. This contradicts the recommendations made by Gallagher et-al (1998) that a class for some severe disabilities ought to comprise between four to ten learners.

Both in focus group discussions and interviews, it was revealed that the two schools for the blind did not have adequate reading materials. These findings confirm the inadequacy of reading materials in schools for the blind. The inadequacy of reading materials would hinder the acquisition of reading skills both for the sighted and individuals with visual impairments. It would nevertheless be more detrimental to those who cannot see. The need for reading materials prompted learners and teachers to suggest that there was need for more books. These suggestions by learners with visual impairments were supported by Kenyon (2003) and Lyon (2010) who indicated that in order to improve on reading, a primary school learner ought to read at least ten million words in a year. On the other hand, table 36 revealed that the majority (35.9%) of the teachers stated that in order to improve on the reading abilities of learners with visual impairments, there was need to work on the feeling sensitivity of the pupil's fingers. This proposal substantiates the presentation made by Stephens and Patterson (1996) who jointly indicated that tactile acuity could be improved if the finger tips were made more sensitive. These findings were supported by Susan (2007) who explained that in order to help a blind child learn how to read Braille, the child should be helped to know the most sensitive part of his finger tip. After the identification of the sensitive index finger tip, the child should be trained to distinguish textures, shapes, dots and positions of different dots. This study concluded that teachers did not adequately train their learners in finger manipulation hence the difficulties in sensitivity. The Ministry of Education Braille syllabus (2009) was designed to embrace the approach proposed by Susan (2009) and the ANFB (2010). It is clear that using these approaches to teach learners with visual impairments would be quite helpful for the acquisition of good reading skills.

Considering the need for more reading materials, it would be said that the schools have no method of acquiring or making Braille books. It also seems that the schools entirely depend on books from the Ministry of Education or donated materials. In modern times, these challenges need not to be impossibilities. The ANFB (2010) proposed that schools could use

a number of assistive devices to help learners with visual impairments improve on their reading abilities. The assistive devices would include computers, screen readers and talking calculators.

# CHAPTER SIX SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter provides a summary of this study. It also presents the conclusion of the study and recommendations.

## 6.1: Summary of the Findings

This study investigated the nature, prevalence, causes and methods used by teachers to correct the reading difficulties among middle basic school learners with visual impairments in Zambia. A survey was conducted in two residential schools for the blind on forty-five learners and fourteen teachers. Random purposive sampling was used to get the responses.

The study was divided into six chapters. Chapter one consisted of the background to the study, statement of the problem, purpose of the study, objectives, research questions, the significance of the study, limitations and definitions of key terms as used in this report. Chapter two reviewed related literature while chapter three contained the research methodology. Chapter four presented the findings of the study while chapter five discussed the findings. Chapter six covered the summary, conclusion and recommendations.

Data was collected using questionnaires, interviews and focus group discussions. Questionnaires were administered to learners and teachers while interviews were conducted with teachers. Focus group discussions were held with learners.

The findings of the study revealed that the commonest nature of reading difficulties experienced by learners with visual impairments included tactile reading difficulties. It was observed that tactile reading difficulties affected 56.3% of the learners while 43.6% of them had phonological and phonemic reading difficulties. On the other hand, the prevalence of reading difficulties was found to be very high among the said learners. For instance, teachers indicated that 72.8% of their learners had reading

difficulties and on average 40% of the learners always experienced the underpinning reading difficulties. It was also found that the highest cause of the reading difficulties were the use of partial sight which stood at 48.8% and difficulties in distinguishing letters and words at 42.2%. finally, it was found that learners felt that if they were given more individualized homework's and attention they would learn Braille better. Teachers also indicated that most learners needed to have their finger tips retrained in their sensitivity.

#### 6.2: Conclusion

In conclusion, from the study, it is evident that learners with visual impairments in Zambia have a very high prevalence of reading difficulties. The identified reading difficulties need a corrective approach. if not, the education of learners with visual impairments will remain undeveloped and insignificant. For this reason, the findings presented herein should prompt all stakeholders to get concerned and provide support to learners with visual impairments.

#### 6.3: Recommendations

## (i) The Ministry of Education should

- A. provide enough reading materials to learners with visual impairments. The materials should not just be academic but also social, fictions, scientific and any other important reading materials.
- B. provide assistive technology to schools for the blind. These assistive technologies would include speaking computers or electronic spellers. Pupils should be helped to use such facilities.
- C. ensure that all schools for learners with visual impairments close for vacations before the end of May when the cold season begins. For those in inclusive schools, the Ministry of Education should provide assistive devices in the cold season.
- D. Learners with partial sight should be given appropriate reading media according to assessments done. For instance, those that can read large ink should be given such print.

- E. develop policies to enhance the reading abilities of children with visual impairments.
- F. include Braille books in public libraries to enable learners with visual impairments continue reading even during their vacations.

## (ii) The Curriculum Development Centre should

- A. ensure that Braille is frequently learnt in class. Therefore, the Braille syllabus should be designed to cater for all classes.
- B. always ensure that all books that sighted learners read in schools are also printed in Braille for the use of learners with visual impairments.

## (iii) The Examination Council of Zambia (ECZ) should

- A. ensure that examinations are not prepared on brailion paper.
- B. advise ad clearly indicate on the question paper the extra time for learners with visual impairments who are most likely slow at reading because of the many reading challenges. This would help reduce writing examinations hastily leading to poor performance among learners.
- C. encourage the use of assistive technology to do examinations by learners with visual impairments. For instance, the use of computers during examinations.

## (iv) Teacher Training Colleges and Universities should

- A. design teaching schemes to train all trainee teachers on how to read and write Braille. This will consequently help those learners who may be in inclusive schools.
- B. ensure that a Braille skill for the trainee teachers is mandatory.

#### (v) Teachers should

- A. train their pupils' fingers adequately in order to help the said learners acquire reading abilities easily.
- B. vary their Braille teaching methods so that they capture the interest of the learners.
- C. provide personal commitment in order to attend to the needs of learners adequately.

### (vi) Learners with visual impairments should

- A. desire to learn and use multiple reading skills in order to avoid certain reading difficulties. These would include the use of computers and Braille.
- B. frequently read books without waiting to be told to read.

#### Future research.

In relation to this study, it would be necessary to carry out further researches in the following areas: special education teachers' knowledge in Braille and assessment of the levels of reading skills among upper basic school learners with visual impairments.

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#### APPENDIX 1.

## QUESTIONNAIRE FOR GRADES 5, 6 AND 7 LEARNERS WITH VISUAL IMPAIRMENTS.

#### **INSTRUCTION:**

(i)

(ii)

There are four section in this questionnaire, provide your honest opinion on all the questions you will be requested.

## SECTION ONE. RESPONDENT'S PROFILE

School:

Grade

Kindly indicate the following details;

()	orace .
(iii)	Your sex
(iv)	Age
(v)	Indicate your date and year of birth
(vi)	In which year did you lose your sight?
(vii)	How old were you at the time you became blind or visually impaired?

- (viii) How old were you when you learned Braille?
- (ix) Are you totally blind?

#### **SECTION TWO**

### **Nature of Braille Reading Difficulties**

(i) Which type of Braille does you like reading? Choose one of the three given b	elow.
--	-------

- (a) Uncontracted Braille
- (b) Semi-contracted Braille or grade: one and half
- (c) Contracted Braille
- (ii) Why do you like reading the Braille type that you have chosen above?....

.....

- (iii) Which of the following statements would describe the nature of your Braille reading difficulties? Indicate the ones which are applicable to your situation.
  - (a) When I am reading, I have difficulties in detecting letters and words in a sentence.
  - (b) When I am reading, I do confuse certain letters. For instance, d and f, h and j, e and i, mention any other.
  - (c) When I am reading, I skip lines.
  - (d) When I am reading, I do skip some words.
  - (e) When I am reading, I do have problems with the pronunciations of certain words.
  - (f) When I am reading, I do confuse spelling of certain words.
  - (g) When I am reading, I have difficulties in recalling certain letters and words.
  - (h) When I am reading, my attention is easily distracted.
  - (i) When I am reading, I do not understand what I read.
  - (j) When I am reading, Braille feels faint.
  - (k) When I am reading, I have difficulties in distinguishing between one contracted Braille symbol and another.

#### SECTION THREE

Frequency of the experience of reading difficulties and the cause of the problem you experience.

The reading difficulties above have been repeated below. For each point, the frequencies have already been listed. Write what is applicable to you in relation to the nature of your Braille reading difficulties. Additionally, the possible causes have also been listed. When your write the frequency of your problem, you should write the possible causes by choosing from the suggested causes. If you have a different cause, please write it down.

- (a) When I am reading, I have difficulties in detecting letters and words in a sentence.
  - (i) Always
  - (ii) Sometimes
  - (iii) Once in a while

- (iv) Rarely
- (v) Never

- (i) I read using my right index finger only.
- (ii) I read using my left finger only.
- (iii) I do not use my right or left fingers for reading.
- (iv) My fingers do not easily distinguish the shapes of the letters and the different position of the dots.
- (v) My fingers have poor reading abilities.
- (vi) When it is cold, my fingers sensitivity become very poor. So, I cannot easily detect letters.
- (vii) I do not easily recall letters or words on a piece of paper.
- (viii) I use partial sight to read Braille.
- (ix) There are no Braille reading materials for me to improve on my reading abilities
- (b) When I am reading, I do confuse certain letters. For instance, d and f, h and j, e and i, mention any other.
  - (i) Always
  - (ii) Sometimes
  - (iii) Once in a while
  - (iv) Rarely
  - (v) Never

- (i) I read using my right index finger only.
- (ii) I read using my left finger only.
- (iii) I do not use my right or left fingers for reading.
- (vi) My fingers do not easily distinguish the shapes of the letters and the different position of the dots.
  - (v) My fingers have poor reading abilities.

- (vi) When it is cold, my fingers sensitively become very poor. So, I can not easily detect letters.
- (vii) I do not easily recall letters or words on a piece of paper.
- (viii) I use partial light to read Braille.
- (ix) There are no Braille reading materials for me to improve on my reading abilities
- (c) When I am reading, I skip lines.
  - (i) Always
  - (ii) Sometimes
  - (iii) Once in a while
  - (iv) Rarely
  - (v) Never.

- (i) I read using my right index finger only.
- (ii) I read using my left finger only.
- (iii) I do not use my right or left fingers for reading.
- (vi) My fingers do not easily distinguish the shapes of the letters and the different position of the dots.
  - (v) My fingers have poor reading abilities.
  - (vi) When it is cold, my fingers sensitively become very poor. So, I can not easily detect letters.
  - (vii) I do not easily recall letters or words on a piece of paper.
  - (viii) I use partial light to read Braille.
  - (ix) There are no Braille reading materials for me to improve on my reading abilities
- (d) When I am reading, I skip some words.
  - (i) Always
  - (ii) Sometimes

- (iii) Once in a while
- (iv) Rarely
- (v) Never

- (i) I read using my right index finger only.
- (ii) I read using my left finger only.
- (iii) I do not use my right or left fingers for reading.

My fingers do not easily distinguish the shapes of the letters and the different position of the dots.

- (v) My fingers have poor reading abilities.
- (vi) When it is cold, my fingers sensitively become very poor. So, I cannot easily detect letters.
- (vii) I do not easily recall letters or words on a piece of paper.
- (viii) I use partial sight to read Braille.
- (ix) There are no Braille reading materials for me to improve on my reading abilities
- (e) When I am reading, I have problems with pronunciation of certain words.
  - (i) Always
  - (ii) Sometimes
  - (iii) Once in a while
  - (iv) Rarely
  - (v) Never

- (i) I stammer
- (ii) I do not easily know how to pronounce certain words.
- (iii) I rarely read books.
- (f) When I am reading, I do confuse spellings of certain words.

- (i) Always
- (ii) Sometimes
- (iii) Once in a while
- (iv) Rarely
- (v) Never

- (i) I do not easily remember the spelling of certain words.
- (ii) I do not know the rules that govern most spellings in English
- (g) When I am reading, I have difficulties in recalling certain letters and words.
  - (i) Always
  - (ii) Sometimes
  - (iii) Once in a while
  - (iv) Rarely
  - (v) Never

- (i) I read using my right fingers only
- (ii) I read using my left fingers only.
- (iii) I do not use my left or right index fingers for reading.
- (iv) My fingers do not easily distinguish the shapes of letters and different position of dots.
- (v) My fingers have poor feeling abilities.
- (vi) When it is very cold, my fingers sensitively become very poor.So, I cannot easily detect letters.
- (vii) I do not easily recall letters or words on a piece of paper.
- (viii) I use partial sight to read Braille.

- (ix) There are n Braille reading materials for me to improve on my reading abilities.(h) When I am reading, my attention is easily distracted.
  - (i) Always
  - (ii) Sometimes
  - (iii) Once in a while.
  - (iv) Rarely
  - (v) Never

- (i) I find it difficult to concentrate on one thing.
- (ii) I am sensitive e to noises and other sounds.
- (i) When I am reading, I do not understand what I read.
  - (i) Always
  - (ii) Sometimes
  - (iii) Once in a while.
  - (iv) Rarely
  - (v) Never

- (i) I find it difficult to interpret what I read.
- (ii) Most of the times, the books I read use advanced English beyond my comprehension abilities
- (j) When I am reading, Braille feels very faint.

- (i) Always
- (ii) Sometimes
- (iii) Once in a while
- (iv) Rarely
- (v) Never

- (i) I read using my right index finger only.
- (ii) I read using my left finger only.
- (iii) I do not use my left or right index fingers for reading.
- (iv) My fingers have poor feeling abilities.
- (v) When it is cold, my finger sensitivity becomes very poor. So, I cannot easily detect letters.
- (vi) There are no Braille reading materials for me to improve my reading abilities.
- (k) When I am reading, I have difficulties in distinguishing between one contracted Braille and another.
  - (i) Always
- (ii) Sometimes
  - (iii) Once in a while
  - (iv) Rarely
  - (vi) Never

- (i) Most of the contractions are similar to the ordinary Braille letters.
- (ii) I read using my right index finger only.
- (iii) I read using my left finger
- (iii) My fingers have poor feeling abilities.

- (iv) When it is cold, my finger sensitivity becomes very poor. So, I cannot easily detect letters.
- (v) There are no Braille reading materials for me to improve on my reading abilities.

#### **SECTION FOUR**

## **TEACHING METHODS**

What should teachers do to help pupils with Braille reading difficulties? Below are some suggested points. Write those you agree with and suggest new ones.

- (a) Providing more reading materials.
- (b) Teaching the identified Braille problems through repetition.
- (c) Providing remedial work
- (d) Giving special homework o pupils with reading difficulties.
- (e) Asking other learners o teach their friends (peer tutoring)
- (f) Improving on the feeling sensitivity of the fingers by making the learner identify different objects using finger tips.
- (g) Braille lessons should be taught in all the grades.

Please	indicate	any	other
methods		2	
••••	•••••		••••••
	•••••		
	•••••		
	•••••		•••••

Thank you so much for your cooperation.

#### **APPENDIX-2**

## INTERVIEW GUIDE FOR THE FOCUS GROUP DISCUSSION

- 1. Do you all know how to read Braille? If the answer is no, explain your reasons for failing to read.
- 2. Are you all able to read the three types of Braille? That is, grades one, one and half and two Braille types.
- 3. For those who cannot read one or two forms of Braille, explain the problems you have had to learn the other forms of Braille.
- 4. What problems do you have in reading Braille?
- 5. Do you have any problems in using fingers to read Braille? Explain your difficulties.
- 6. When you read long passages, do you have difficulties to remember what you would have read?
- 7. What do you think causes reading difficulties among most of the visually impaired learners?
- 8. Do teachers help learners with visual impairments to learn how to read Braille?
- 9. What are the commonest methods that teachers use to help people learn Braille?

## APPENDIX-3.

## INTERVIEW GUIDE FOR TEACHERS OF GRADES FIVE, SIX AND SEVEN.

1 which classes do you teach?
2 for how long have you taught the class?
3 how many learners do you have in your class?
4 how good are your pupils at reading Braille?
5 how many learners do you think are very good at reading Braille in your class and how many have Braille reading difficulties?
6 what is the nature of their reading difficulties?
7 what do you think are the main causes for poor Braille reading among your learners?  8 As a teacher, what have you been doing to correct the reading problems as a second of the secon

- 8 As a teacher, what have you been doing to correct the reading problems manifested by your learners?
- 9 what challenges do you have in teaching Braille reading?

#### **APPENDIX-4**

# QUESTIONAIRE FOR THE GRADES FIVE, SIX AND SEVEN SPECIAL EDUCATION TEACHERS FOR LEARNERS WITH VISUAL IMPAIRMENTS.

### **INSTRUCTIONS**;

This questionnaire has five sections. Provide your honest opinion in all questions according to the guidelines given in each section.

## SECTION ONE.

## RESPONDENTS PROFILE.

Kindly provide the following information:

- 1. School
- 2. Which grades are you teaching?
- 3. Your sex.
- 4. For how long have you been teaching children with visual impairments?
- 5. (a.) Are you a trained special education teacher for the learners with visual impairments? If your answer is no, indicate your specialization
  - (b.) where did you do your special education course?
  - (c.) are you a visually impaired individual yourself or you are a sighted teacher?
- 6. Which other grades have you told before?

#### SECTION TWO.

## Nature, Prevalence and Causes of reading Difficulties.

What are the commonest reading difficulties you have observed among learners with visual impairments?

You may decide to choose from the list indicated below. You tick what you think is correct.

When some learners with visual impairments are reading Braille, they experience the following;

(a.) They have difficulties in detecting letters and words in a sentence.

- (b.) They do confuse certain letters. For instance, d and f, h and j, e and I, mention any other.
- (c.) They skip lines.
- (d.) They do skip some words.
- (e.) They do have problems with the pronunciations of certain words.
- (f.) They do confuse spellings of certain words.
- (g.) They have difficulties in recalling certain letters and words.
- (h.) Their attention is easily distracted.
- (i.) They do not understand what they read.
- (j.) Braille feels faint for some of them.
- (k.) They have difficulties in distinguishing between one contracted Braille symbols and another.

### SECTION THREE.

## Prevalence of Reading Difficulties in your Class.

For each f the problems presented in section two, indicate how many learners in your class exhibit a particular problem. The Braille reading difficulties have been repeated below. For each point, write the number of learners that display the kind of reading difficulties:

- (a.) They have difficulties in detecting letters and words in a sentence.
- (b.) They do confuse certain letters. For instance, d and f, h and j, e and I, mention any other.
- (c.) They skip lines.
- (d.) They do skip some words.
- (e.) They do have problems with the pronunciations of certain words.
- (f.) They do confuse spellings of certain words.
- (g.) They have difficulties in recalling certain letters and words.
- (h.) Their attention is easily distracted.
- (i.) They do not understand what they read.
- (j.) Braille feels faint for some of them.
- (k.) They have difficulties in distinguishing between one contracted Braille symbol and another.

#### SECTION FOUR.

## Factors Causing the Reading Difficulties.

For each of the reading difficulties you identified in section two, what do you think could be the causes of these Braille reading difficulties? You may choose to tick some of the points below. If you have additional points, you can still write them down.

(a.) They have difficulties in detecting letters and words in a sentence.

#### Possible Causes

- (x) Some of them read using their right index finger only.
- (xi) They read using their left fingers only.
- (xii) They do not use their right or left fingers for reading.
- (xiii) Their fingers do not easily distinguish the shapes of the letters and the different position of the dots.
- (xiv) Their fingers have poor reading abilities.
- (xv) When it is cold, their fingers sensitivity become very poor. So, they cannot easily detect letters.
- (xvi) They do not easily recall letters or words on a piece of paper.
- (xvii) Some of them use their partial sight to read Braille.
- (xviii) There are no Braille reading materials for them to improve on their reading abilities.
- (b.) They do confuse certain letters. For instance, d and f, h and j, e and I, mention any other.

- (i) Some of them read using their right index finger only.
- (ii) They read using their left fingers only.
- (iii) They do not use their right or left fingers for reading.
- (iv) Their fingers do not easily distinguish the shapes of the letters and the

- different position of the dots.
- (v) Their fingers have poor reading abilities.
- (vi) When it is cold, their fingers sensitivity become very poor. So, they cannot easily detect letters.
- (vii) They do not easily recall letters or words on a piece of paper.
- (viii) Some of them use their partial sight to read Braille.
- (xix) There are no Braille reading materials for them to improve on their reading abilities.
- (c.) They skip lines.

- (i) Some of them read using their right index finger only.
- (ii) They read using their left fingers only.
- (iii) They do not use their right or left fingers for reading.
- (iv) Their fingers do not easily distinguish the shapes of the letters and the different position of the dots
- (v) Their fingers have poor reading abilities.
- (vi) When it is cold, their fingers sensitivity become very poor. So, they can not easily detect letters.
- (vii) They do not easily recall letters or words on a piece of paper.
- (viii) Some of them use their partial sight to read Braille.
- (ix) There are no Braille reading materials for them to improve on their reading abilities.
- (d.) They do skip some words.

- (i) Some of them read using their right index finger only.
- (ii) They read using their left fingers only.
- (iii) They do not use their right or left fingers for reading.
- (iv) Their fingers do not easily distinguish the shapes of the letters and the different position of the dots.

- (v) Their fingers have poor reading abilities.
- (vi) When it is cold, their fingers sensitivity become very poor. So, they cannot easily detect letters.
- (vii) They do not easily recall letters or words on a piece of paper.
- (viii) Some of them use their partial sight to read Braille.
- (ix) There are no Braille reading materials for them to improve on their reading abilities.
- (e) They do have problems with the pronunciations of certain words.

- (iv) They stammer
- (v) They do not know how to pronounce certain words.
- (vi) They rarely read books.
- (iv) They have mother tongue influence.
- (f.) They do confuse spellings of certain words.

#### **Possible Causes**

- (x) They do not easily remember the spelling of certain words.
- (xi) They do not know the rules that govern most spellings in English.
- (iii) They have mother tongue influence.
- (g.) They have difficulties in recalling certain letters and words.

- (i) Some of them read using their right index finger only.
- (ii) They read using their left fingers only.
- (iii) They do not use their right or left fingers for reading.
- (xii) Their fingers do not easily distinguish the shapes of the letters and the different position of the dots.
- (v) Their fingers have poor reading abilities.
- (vi) When it is cold, their fingers sensitivity become very poor. So , they cannot easily detect letters.
- (vii) They do not easily recall letters or words on a piece of paper.

- (viii) Some of them use their partial sight to read Braille.
- (ix) There are no Braille reading materials for them to improve on their reading abilities.
- (h.) Their attention is easily distracted.

- (i) they find it difficult to concentrate on one thing.
- (vi) They are sensitive e to noises and other sounds.
- (i.) They do not understand what they read.

### **Possible Causes**

(i) they find it difficult to interpret what they read.

Most of the times, the books they read use advanced English beyond their comprehension abilities

(j.) Braille feels faint for some of them.

- (i) Some of them read using their right index finger only.
- (ii) They read using their left fingers only.
- (iii) They do not use their right or left fingers for reading.
- (iv) Their fingers do not easily distinguish the shapes of the letters and the different position of the dots.
- (v) Their fingers have poor reading abilities.
- (vi) When it is cold, their fingers sensitivity become very poor. So, they cannot easily detect letters.
- (vii) They do not easily recall letters or words on a piece of paper..
- (viii) Some of them use their partial sight to read Braille.
- (ix) There are no Braille reading materials for them to improve on their reading abilities.
- (k.) They have difficulties in distinguishing between one contracted Braille symbols

and another.

#### Possible Causes

- (i) Some of them read using their right index finger only.
- (ii) They read using their left fingers only.
- (iii) They do not use their right or left fingers for reading.
- (iv) Their fingers do not easily distinguish the shapes of the letters and the different position of the dots.
- (v) Their fingers have poor reading abilities.
- (vi) When it is cold, their fingers sensitivity become very poor. So, they can not easily detect letters.
- (vii) They do not easily recall letters or words on a piece of paper..
- (viii) Some of them use their partial sight to read Braille.
- (ix) There are no Braille reading materials for them to improve on their reading abilities.

#### SECTION FIVE.

## Teaching Methods used to correct the Braille Reading Difficulties.

What teaching methods do you use to correct Braille reading difficulties? Some points have been listed below. Tick those that you think are appropriate to you and make any additions.

- (a) Providing more reading materials.
- (b) Teaching the identified Braille problems through repetitions.
- (c) Providing remedial work.
- (d) Giving special homework to such learners.
- (e) Asking other learners to teach their friends: (peer tutoring).
- (f) Improving on the feeling sensitivity of the fingers by making the learners identify different objects using finger tips.
- (g) Braille lessons should be taught in all the grades

Please, indicate any other methods.

Thank you so much for your cooperation