

# The Vitality of the Braille in Enabling Inclusion for the Visually Impaired in Regular Secondary Schools in the North West Region of Cameroon

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**Abstract**—The inclusion of the visually impaired in regular schools necessitates that braille is provided to them. Nonetheless, there is a likelihood or possibility in actuality for the visually impaired not being included in the learning that goes on in the regular secondary schools unless appropriate measures are taken to ensure their inclusion. This article which is an excerpt of an ongoing qualitative research in the North West region of Cameroon examines the braille provisioning in regular secondary schools, the approaches used in the provision of this resource and the appropriate measure to fully include the visually impaired. An examination of the braille, the appropriate measures to fully include the visually impaired leaves the conclusion that there is a prospect and likelihood for the visually impaired to be educated in regular secondary schools and that it is important for the regular schools in Cameroon to build on the existing provisioning of the braille. This is owing to the fact that this resource in actual fact is however what is currently available and also the working initiative in the education of the visually impaired.

**Index Terms**—Braille, cameroon, inclusion, visually impaired.

## I. INTRODUCTION

As a pen is to a writer so is the braille to the visually impaired. Visually impaired is a general term used to describe people who are partially-sighted or completely blind [1]. In this study the visually impaired is restricted to the blind but this terminology was not preferred owing to the critique which is associated with its usage [2]. Visual impairments of moderate severity or greater in the North West region of Cameroon is estimated to be about 2.3% (27,700-50,000 people) [3].

Studies have proven the need and vitality of the braille to the visually impaired and also to their inclusion [4], [5]. To this end, the enrolment of the visually impaired in regular schools necessitates that braille is provided to them. Owing to the importance associated with this resource in the education of the visually impaired, concerted efforts is being made in terms of policy towards enabling their inclusion by the provision of this resource. The UNCRPD (2006) in its Article 5 requires that all states “take all appropriate steps to ensure that reasonable accommodation is provided”. By reasonable accommodation, the UNCRPD refers to the “necessary and appropriate modification and adjustments not imposing a

disproportionate or undue burden, where needed in a particular case, to ensure to persons with disabilities the enjoyment or exercise on an equal basis with others of all human rights and fundamental freedoms”. The concept of reasonable accommodation does not only cut across all the articles in the UNCPRD but also extends to a wide range of issues including the education of the visually impaired in regular schools. Article 24 recognizes the braille in enabling the inclusion of the visually impaired in regular schools. Other international policy documents that promote inclusion include: the United Nations Human Rights to Education (1948), the UN Standard Rules on Equalization of Opportunities for Persons with Disabilities (1993), the Salamanca Statement and Framework for Action on Special Needs Education (1994) and the Dakar world education forum (2000).

## II. OBJECTIVE OF THE PAPER

This paper has the succeeding issues as its interest:

- The approaches used in providing the braille in regular secondary schools in Cameroon.
- The appropriate measures to fully include the visually impaired in regular secondary schools in Cameroon.

## III. RESEARCH METHODOLOGY

### A. Study Context

This study was undertaken in the North West region of Cameroon and two schools which had enrolments of visually impaired were visited. One of the schools is a government and the other private. Two Christian organizations are involved with providing the braille resources. For the purpose of clarity, codes will be used to identify the different schools and organizations: Government school (S1); private school (S2); Christian organization one (CO1) and Christian organization two (CO2).

### B. Brailing within the Context

Brailing resources for the visually impaired in the schools S1 and S2 are outsourced and this is owing to the fact that all the teachers in both schools do not know how to read and write the braille. All the visually impaired students who however participated in the study know how to read and write the braille using their stylus and slates. The provision of the braille in the region is not structured and the manual braille is currently what is being used in the schools. The CO1 and CO2 providing the braille basically make the provision only at the

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primary and secondary school level and their approach to providing the braille resources is slightly different.

The CO1 is located in only one of the divisions in the region and its provisioning of the braille is for the visually impaired in only one school, which is school S1. CO1 has its own braille resource center with four braille teachers, two of whom are based at the center while the other two are assigned to the primary and secondary schools respectively. The provision of brailing services by CO1 is limited to the visually impaired that are supported or taken care of by the organization, implying that it does not cover the visually impaired that are not under the organizations custody.

The CO2 on the other hand has its resource center with nine braille teachers. Braille provisioning in this organization is different from the first in that its coverage extends to the visually impaired in other schools within the region. Three of the nine braille teachers are stationed at the center while the other six go to the schools.

C. Method

A qualitative approach was chosen for its strengths in detailing, revealing and describing occurrences, situations, activities and events in their habitat or natural setting and the meaning that these occurrences, events activities etc. have on those who participate in them; as well as its strength in providing depth and details through direct quotations and descriptions of situations, events, interactions and observed behaviors [6]-[8]. Data was collected from a sample of 9 visually impaired, 4 teachers and 2 principals using semi-structured interviews, participant observation and field notes as the data collection instruments [9]. Purposive sampling was the sampling method used in identifying the participants as it opened up information rich cases [10], Snowball sampling which is the access to other participants with common characteristics with the identified participants through the assistance of identified participants [11] became evitable as study advanced. The data was analyzed using manual thematic analysis [12].

The Table I to Table V give an overview of the variations of the different participants of the study:

TABLE I: VARIATIONS OF THE VISUALLY IMPAIRED IN SCHOOL S1 AND S2

S1		S2	
Boy(s)	Girl(s)	Boy(s)	Girl(s)
7	0	1	1

TABLE II: VARIATIONS OF TEACHER(S) IN S1

Teacher(s)	Gender		Year(s) of experience in teaching the visually impaired	Qualifications
	M	F		
1	1	0	4	DIPES 1

Key: DIPES 1 (Diploma of Secondary Education Teachers in 1st grade) and DIPES 2 (Diploma of secondary education teachers in second grade).

Knowledge of inclusive practices for the teachers and the principals in both schools is developed from the years of experience in the inclusive setting and the wider study

explained that the teachers and principals in both schools had no prior training on inclusive practices.

TABLE III: VARIATIONS OF TEACHER(S) IN S2

Teacher(s)	Gender		Year(s) of experience in teaching the visually impaired	Qualifications		
	M	F		Bachelor	DIPES 2	DIPES 1
3	1	2	1	1	1	1

TABLE IV: VARIATIONS OF PRINCIPAL S1

Principal	Gender		Years of experience in an inclusive setting	Qualifications
	M	F		
1	1	0	2	Masters

TABLE V: VARIATIONS OF PRINCIPAL S2

Principal	Gender		Years of experience in an inclusive setting	Qualifications
	M	F		
1	1	0	1	Masters

IV. RESULTS

A. Approach to the Provision of the Braille

Schools S1 and S2 are affiliated to the organizations CO1 and CO2 respectively. The discussions below reveal the approaches in the provision of the braille in school S1 and S2.

In school S1, all the visually impaired are sponsored by the organization CO1. This organization makes provision for their brailing and all their necessary support to learning. The visually impaired in this school are assisted by only one braille teacher who mostly assists them on a weekly basis back at the organizations' center by checking the content of their notes, making language corrections and also provide those explanations in subjects that have diagrams and symbols. The braille teacher however comes to the school mostly on the request of the teachers or principal and also during evaluations and assessment periods to transcribe the questions for the teachers.

*"...the braille teacher mostly helps them back at the center with their notes and also assists them with explaining difficult concepts...yeah!! It is the organization that actually makes provision for everything that has to do with the visually impaired in this school. We only enroll them, teach them and support them...everything with the braille is for the organization..."*

In school S2, the braille teacher who assists the visually impaired is sourced from the organization CO2. He comes on a weekly basis to the school to assist with the correction of notes, the explanation of concepts, take the visually impaired students' assignments or homework of the visually impaired for transcription and during evaluation periods transcribe

evaluation questions.

*“...the braille teacher in our school here comes from outside... he is here mostly on Fridays...he mostly helps; for instance like in my subject biology, he helps with the assignments and also to explain some concepts to her (visually impaired)...during exams also we give the questions to him to braille, then we give the braille questions to the student, then we give it to him again and after he braille's it and then we mark...”*

#### *B. Measures for the Inclusion of the Visually Impaired*

The non-subcontracting of braille teachers was revealed as appropriate to the inclusion of the visually impaired in the schools. The presence of a braille resource center with permanent braille teachers was established as applicable as it was revealed to guarantee training for the regular school teachers adequate and timely support as well as constant follow-up of the learning and academic progress of the visually impaired. One of the principals explained:

*“...it could have been nice if we had our own resource center here in school, to have trained personnel in braille being made permanent school staff rather than we having the temporal staff that come and go... their permanence here in the school will help train our teachers...”*

The fact that the teachers always have to take materials for transcription to the braille teachers or request them to come to the schools to either explain certain concepts to the visually impaired presented enormous delay in the teaching and learning for both the teachers and the visually impaired.

Further, the training of regular school teachers in the braille is revealed as a measure that could curb incorrect transcription and increase the chances of the better academic performance of the visually impaired. It was revealed by one of the teachers as well as a visually impaired that during evaluation the braille teachers make mistakes and transcribe evaluation questions incorrectly. This inevitably means that the visually impaired answer questions differently which result to poor academic performance. The teacher explained:

*“...Sometimes I ask her (visually impaired) why she failed so badly in the test, because I feel so bad, sooooo bad!!!!, I want to know if she does not understand when I teach or something...she mostly says she understands...one time I took, like the last sequence we just had, I sat with her and I was asking her the questions verbally and when I asked her some of the questions, she said madam that one was not there...”*

The visually impaired also explained:

*“...I always have the feeling that last year I failed the GCE (general certificate of education) because some of the questions were not transcribed correctly...like when we finished writing history, some of our friends were talking about some questions which I didn't find on my paper...may be this mistakes could also be in other subjects...”*

It is evident from the excerpts above that training of the regular school teachers in braille would make visible incorrect transcriptions and consequently increase the chances of better-quality academic performance of the visually impaired.

## V. DISCUSSION AND CONCLUSION

Some significant interpretations were made from this study:

First, the responsibilities of the braille teachers in both schools and the kind of assistance which they provide to the visually impaired are similar particularly in terms of support to learning. This similarity reveals the very essence of this paper; that braille is vital or essential in the education of the visually impaired in regular schools in Cameroon. This is concurrent with the fact that there is need for braille to be provided in all schools for inclusion to hold water [13], [14].

Second, the study reveals that braille provisioning in the schools is accompanied with huge deprivations and gaps. The coming of the braille teacher to the school on a weekly basis reveals lack in the provision of the braille or endangers the inclusion of the visually impaired to a once a week issue. Also, the erroneous transcriptions of evaluation questions which result in the low academic performance of the visually impaired not only present the learning and inclusion trajectories of the visually impaired as challenging but of course also questions the effective inclusion of the visually impaired in the regular schools. Discontinuities in braille provisioning in the schools are further made compound by the fact that the teachers in the schools do not know how to read and write the braille which makes the outsourcing of the braille critical. This outsourcing of the braille of course comes with its own practical discrepancies which are most visible in evaluation sessions as explained earlier.

Third, the study reveals affiliations between the schools and the organizations providing the braille but then again the approach to the braille provisioning is evident as unstructured in terms of the way the visually impaired are supported with the braille in the schools. Also, the study reveals that weak links exist between one of the schools and its affiliated organization and no collaboration between both organizations. Schools leaving the organizations with almost all responsibility that has to do with the braille is a connotation of one-sided support, and collaboration which is conceptualized as a dynamic, interactive, and nonhierarchical process characterized by power sharing and equity among two or more partners who collectively set goals, make decisions, and solve problems through negotiation, cooperation and consensus building [15] is presented as marginal. This does not only undermine the importance of collaboration which is a qualification for a successful inclusive effort [16] but also presents the need for collaboration for an adequate and effective inclusion of the visually impaired in the regular schools in this region of Cameroon.

It is evident from the study that inclusion for the visually impaired is ongoing in regular secondary schools in the North West Region of Cameroon and the braille so far has been vital in making it a reality. Although discrepancies exist in the provision of the braille to support the learning of the visually impaired, it is also evident from the findings that this initiative is practical in the context and education for the visually impaired feasible.

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