

Individuals with visual impairments teaching in Nepal's mainstream schools: a model for inclusion

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This paper explores the challenges and strengths of teachers with a visual impairments teaching in Nepal's mainstream schools, using qualitative interviews of teachers and principals, as well as a student survey dataset. Results showed that teachers with visual impairments tend not to teach subjects such as science and mathematics that require frequent use of a blackboard or illustrations of formulas. Additionally, positive attitudes and good communication skills, as well as giving more social and moral lessons were reported by students as strengths of these teachers. However, due to the lack of an adequate support system, educational materials and resources, these teachers continue to experience challenges in lesson preparation, marking students' examination papers or teaching picture-based contents.

Keywords: teachers with visual impairments; mainstream schools; inclusive education; employment; Nepal

1. Introduction

Seeking employment is one of the major issues disabled people in developing countries face. Unemployment of disabled people is higher globally than that of their counterparts (WHO 2011). There are several factors for this higher rate of unemployment. They face difficulty in participating in the labor market mainly because of the disabling environment, the lack of workplace accommodation and misconceptions on the part of potential employers about their ability to carry out the job (Lamichhane, 2015 chapter 2). Different impairment groups face different challenges, and the analysis in this paper focuses on the employment of people with a visual impairment as a teacher in regular mainstream schools of Nepal. Globally, it remains a challenge for those with a visual impairment to seek employment and the few who are successful also face limited employment opportunities. There is also a tendency for them to be limited to certain

kinds of jobs.

In Japan, most of those with a visual impairment are engaged in the massage and acupuncture profession—30 percent of employed individuals with a visual impairment were found working in this sector, making it a primary source of employment for them (Ministry of Health, Labor and Welfare of the Government of Japan, 2008). Similarly, in South Korea, massage therapist positions are protected and promoted for individuals with a visual impairment, with them making up 9.6 percent of massage therapist jobs (Lee, Suh, & Park, 2001). In Turkey, educated individuals with a visual impairment are primarily working as lawyers, judicial advisors, or project coordinators (Bengisu, Izbirak & Mackeih, 2008).

In Nepal, those with a visual impairment who have received education are actively employed as teachers in mainstream schools. Lamichhane (2012) found that in Nepal, among the total number of participants with a visual impairment who are employed, 41.46 percent of them worked as teachers in mainstream schools. An estimated 1000 individuals with a visual impairment hold university degrees and 400 among them are teaching in mainstream schools. In this sense, the involvement of persons with a visual impairment in teaching jobs is unprecedentedly high, and very encouraging (Lamichhane, 2012).

Despite the large number of persons with a visual impairment working in teaching profession in Nepal, to the author's best knowledge, there is no study discussing their involvement in teaching jobs in mainstream schools. Therefore, the objective of this paper is to partially fill the gap in the existing literature by exploring the challenges and strengths of teachers with a visual impairment in the path of teaching in mainstream schools. Using qualitative interviews of teachers and principals together with utilizing a large survey of students, I also descriptively compare students'

perception about the teaching of teachers, with and without visual impairments. The central research question posed in this paper thus is empirical: what are the strengths and challenges in teaching jobs for teachers with a visual impairment?

1.2 Context of the study

Teaching as a profession for people with visual impairment in mainstream schools in Nepal was encouraged by the government's affirmative action after the restoration of democracy in 1989 and this was a result of political activism on the part of people with visual impairment (Lamichhane, 2012). During this era, there were very limited options for educated persons with a visual impairment looking for work, but some did apply to become teachers in regular mainstream schools. However, pervasive skepticism about the ability of people with a visual impairment to teach students without disabilities meant that such applicants did not often get the job. Facing discrimination, persons with visual impairment who wished to work as teachers became united for their rights, emphasizing that they had earned the same credentials as teachers without disabilities (Lamichhane, 2015 chapter 3). When democracy was restored in the country in 1989, they launched protests with the demand that they be provided the opportunity to use their knowledge in the teaching field. Consequently, Nepal's Ministry of Education agreed to allocate certain provisions for hiring persons with a visual impairment to work as teachers. For the first time, about 20 individuals with a visual impairment started working as teachers in regular schools in 1990 (Lamichhane, 2012).

Also, in the second amendment of the Civil Service Act 1993 in 2007 (Civil Service Act 1993, Chapter 3, Article 7, sub article, 7, pp.5-6), the government implemented a quota system for people who are marginalized. This provision set in the amended act sought to ensure that 45 percent of public service jobs were reserved for

those who are marginalized, including disabled people. According to this provision, approximately 2 percent of public service jobs (including teachers) are allocated for disabled people. Qualified candidates with a visual impairment thus have to compete for a limited number of teaching positions, which effectively provides job opportunities for those with disabilities. Through this legal provision, it is expected that the number of individuals with a visual impairment will further increase in the teaching profession.

2. Research Methodology

2.1 Research Design

The research design included both quantitative and qualitative methods (mixed methods). The use of mixed methods not only draws on the strengths of both quantitative and qualitative techniques, but also minimizes the weaknesses when they stand alone (Johnson and Onwuegbuzie, 2004). In this study, quantitative data was analyzed descriptively to first understand students' perceptions of the strengths and difficulties of teaching (by teachers with and without visual impairments). This was then connected to a thematic analysis of the qualitative data.

2.2 Ethical Considerations

The survey was conducted at a time when the author was a postdoctoral researcher at the Japan Society for the Promotion of Science (JSPS) in the Graduate School of Economics of the University of Tokyo from April 2010 for two years. The study followed all the required ethical guidelines and procedures of the University of Tokyo before administering the survey. The survey was carried out with informed consent from the participants, who were aware that they could withdraw from the study at any time, during or after, and without incurring any personal consequences. Also, the

participants were reassured that their privacy would be strictly maintained and the information obtained from them would be used only for the purposes of this study. A formal letter of request from the Graduate School of Economics of the University of Tokyo was also submitted to each school administration for their approval of the surveys.

2.3 Data Collection

2.3.1 Quantitative Data Collection

Students studying in seven regular schools were the participants for the survey. To approach the respondents, I selected seven schools from four different districts of Nepal where there are teachers with a visual impairment. Among the selected schools, three are from the Chitwan district (central part of Nepal); two are from Kaski and one each from the Palpa and Kapilbastu districts (all three in the western part of Nepal). The size of the student body in these schools ranges from 1,200 to 1,500. All of these schools are major schools in the respective districts that have been employing individuals with a visual impairment as teachers. I administered questionnaires to all students from grade six to nine as teachers with a visual impairment were found mainly teaching in the upper grades. A total of 3,022 students from the seven schools participated in the survey.

The survey was conducted in six-week sessions in January and February of 2011. The survey sought a wide variety of socioeconomic information including demographic characteristics, educational background, and students' views on the strengths and difficulties of learning from teachers with and without visual impairments.

2.3.2 Qualitative Data Collection

In order to further capture various perspectives on the ground in mainstream classes,

semi-structured in-depth interviews were conducted with five teachers with a visual impairment and two principals from October through November of 2010. Among the interviewed teachers, all were Braille users and from different schools; two were from two different schools in Kathmandu, another two were from two schools in Bhaktapur and one was from a school in the Lalitpur district. One of the interviewed principals was from a school in Chitwan and the other from a school in the Kaski district.

All interviews were carried out by the author at a venue to the convenience of the participants (usually their schools). The interviews lasted between 30 and 60 minutes. A flexible and open-ended interview guide was used for interview. The advantage of using an interview guide is that it increases the comprehensiveness of the data and makes the data collection process more systematic and provides an opportunity for unexpected information to emerge from the respondents (Dahlgren et al., 2007). This semi-structured approach allowed the researcher to ask questions pertaining to the main research questions while allowing the unique experiences of each individual teachers and principals to be presented. Interviews were conducted in Nepali, recorded digitally and later translated into English.

2.4 Data Analysis

2.4.1 Quantitative Analysis

The analysis of students' responses has been mainly done descriptively. Socio-demographic characteristics and educational information of the students are presented in percentage points. Although there were 3,022 student-respondents, only 2696 respondents were considered in the analysis since 326 participants were not taught by teachers with a visual impairment.

Students were given open-ended questions and asked to describe the strengths

and challenges of learning under two groups of teachers (with and without visual impairments). These open-ended answers were coded separately by 3 people (including the author), generating different categories and themes. Major findings are explained in Figures 1 to 4. These figures are presented in percentage points according to the grades of the students.

2.4.2 Qualitative Analysis

A thematic content analysis has been used for qualitative data analysis. Following repeated re-reading of the anonymized transcripts, excerpts from the transcripts were coded and the codes were then clustered and condensed. The similar condensed codes were then transformed into categories which eventually developed into the following overarching themes—perceived attitudes of students and school administration toward teachers with a visual impairment; the subject that these teachers generally teach; and teaching methodologies adopted, as well as challenges and strengths in teaching by teachers with a visual impairment. The themes relevant to the individuals' experience were revealed through this process. Assimilation and interpretation of the main themes helped to form the basis of the final paper.

3. Results

3.1. Result of the students' survey

(Table 1 here)

Table 1 gives the basic socio demographic characteristics of the students. Among them, majority (58 percent) were female and respondents were aged between 14 and 34 years. Seven percent of the students had some form of disability and 89 percent had the opportunity to learn with visual impaired teachers.

(Figure 1 here)

(Figure 2 here)

Figures 1 and 2 respectively show students' perception on the strengths of both teachers with and without visual impairments. The percentages are ranged from grade six to nine respectively and their responses were classified into eight categories. Among the eight categories, except for two, teachers with a visual impairment were perceived to have better performance. Maintaining class discipline and frequent demonstration were found to be the strengths of teachers without visual impairments. Approximately 3 to 4 percent students from grade 6 to 9 reported that there was discipline in the class of teachers with a visual impairment while the percentage increases by 3 percent in grades 6 and 8 percent in grade 9 for teachers without visual impairments. Similarly, in terms of using demonstration skills such as using a black or white board, drawing pictures, explaining pictures and teaching geometrical configurations, teachers without visual impairments were found to be clearly in the advantageous position as they were favored to do these tasks by 8 to 17 percent students from grade six to nine. In other categories such as giving more moral and social lessons, having good communication skills, effective teaching skills, demonstrating exemplary behavior and other life skills, teachers with a visual impairment were perceived to be in a better position than their counterparts. Compared to their counterparts, teachers with a visual impairment were found to use different methods such as storytelling to illustrate the characteristics of good society and good behaviors of the individuals. Approximately 5 to 9 percent of the students acknowledged that teachers with a visual impairment were better at this, whereas the percentage was lower for teachers without visual impairments. Interestingly, for both cases, the lower the grade, the higher the perception toward this category that is (1 to 3 percent). Moreover, students favored teachers with a visual impairment in terms

of having better communication skills than teachers without visual impairments (1 to 3 percent and 0 to 1 percent respectively). Likewise, larger percentage of students (33 to 50 percent) perceived teachers with a visual impairment to have more effective teaching skills whereas the figure for teachers without visual impairments was significantly lower at 17 to 22 percent. Additionally, teachers with a visual impairment were perceived to be better at explaining subject matters, making lectures easier to understand, and motivating students to study hard and teach more effectively. Furthermore, a larger segment of students perceived better attitudes on the part of teachers with a visual impairment compared to other teachers (8 to 15 percent and 2 to 6 percent respectively); students stated that teachers with a visual impairment care for and respect them more. In the same manner, students reported learning more extracurricular knowledge and life skills from teachers with a visual impairment (3 to 7 percent) as compared to teachers without visual impairments (1 to 2 percent).

Despite the differences in these aforementioned categories, a large percentage of students (42 to 55 percent) did not perceive any difference in teaching by both groups of teachers, indicating that there are no serious problems for teaching by teachers with a visual impairment in mainstream class.

(Figure 3 here)

(Figure 4 here)

Figures 3 and 4 show the results on the perceived difficulties by students, in classes instructed by teachers with and without visual impairments respectively. Teachers with a visual impairment were perceived to have difficulty (2 to 13 percent) in maintaining classroom discipline compared to teachers without visual impairments (0 to 2 percent). Compared to classes of teachers without visual impairments, students hinted that they might have been more disobedient and noisy in the classes taught by those

with a visual impairment. Similarly, using demonstration skills such as using black or white boards and explaining through pictures, teachers with a visual impairment were perceived to have difficulties (16 to 32 percent) whereas this was not a problem for teachers without visual impairments. Additionally, none of the students found behavioral problems in teachers with a visual impairment whereas 1 to 12 percent of the students cited beating, scolding and not showing good behavior as some of the problems of teachers without visual impairments. Moreover, while none of the students perceived the same for teachers with a visual impairment, 0 to 2 percent regarded the teaching style of teachers without visual impairments as mechanical—that is, not speaking while writing on the board, not repeating what they teach and not willing to reply when asked questions. Teachers without visual impairments were also perceived to provide less extracurricular knowledge (0 to 1 percent) whereas the same was not observed for teachers with a visual impairment. More than two third of the students did not perceive difficulties learning with teachers without visual impairments (86 to 99 percent), whereas the figure was lower for teachers with a visual impairment (58 to 81 percent), decreasing by 26 percent in Grade 6 and 18 percent in Grade 9.

3.2. Result of the qualitative interviews

(Table 2 here)

Table 2 provides the brief characteristics of teachers with a visual impairment and principals. Among the teachers, three were male and remaining two were female. Three were in their forties, one in the thirties and one in the mid-twenties. Except one female teacher who holds a masters degree, others obtained a bachelor's degree. Their years of teaching experience ranged from 5 to 15 years. Similarly, both principals were in their 50s with a bachelor's degree. They had 28 and 33 years of teaching experience respectively.

This section presents the interviews of teachers and principals that mainly focus on the three dominant themes as mentioned in the methodology section. They are illustrated below with direct quotations from the interviews.

3.2.1. Attitude of School Administration and Students

Teachers with a visual impairment were asked how they perceive the attitudes of school administrators and students toward them. They expressed satisfaction with the attitudes of administrators and students. Teacher 2 said, “The school is very supportive. Students are also highly disciplined.” He further stated that many students prefer to have him as their classroom teacher rather than his colleagues without disabilities. He shared some of the things his students pointed out as his specific strengths; a student highlighted how his way of explaining through the use of simple examples enabled students to understand better. Specifically, some students told him: “teachers without visual impairments read the books and ask us to follow it. But you give us more information on the subject matter.”

Similarly, Teacher 3 also acknowledged the schools’ supportive attitude, noting that other than himself, there are two other teachers with a visual impairment in the same school. “The school hired other teachers with a visual impairment after evaluating my performance. So, there is no negative attitude on the part of school.” However, these teachers were unaware of parents’ feedback as he said, “Maybe they (parents) do not know that their children are being taught by blind teachers, or perhaps they simply do not have any negative attitude toward the teaching by teachers with a visual impairment.”

Although she expressed similar satisfaction with regard to the school and students’ behavior, Teacher 4 said that it was not initially easy to convince her school's

administration to accept her as a teacher. Having previously had no contact with persons with a visual impairment, administrators were unsure at the beginning whether she could teach students without disabilities. "Although schools were skeptical of my ability to teach, I was able to convince them that I have the same credentials as other non-disabled teachers. When they looked at my performance in trial teaching in the classroom, then they accepted me."

Likewise, school principals were positive about having teachers with a visual impairment in their schools; the two principals commended their diligence and punctuality. Speaking with admiration for them, Principal 1 commented, "They (teachers with a visual impairment) are very dutiful. They are punctual. They come to school on time compared to non-disabled teachers, who on occasion are not so punctual. They are also amicable. They interact with others." Additionally, the principals felt that the inclusion of teachers with a visual impairment in regular schools would likely have a positive effect on both teachers and students without disabilities. "Students may develop greater motivation to study through the example set by the teaching of teachers with a visual impairment because these teachers are hardworking and skilled in classroom teaching."

According to the principals, despite the difficulty in preparing materials and adopting different approaches to teaching, teachers with a visual impairment tend to make extra effort to provide students with accurate information. Principal 1 acknowledged their effort and dedication in teaching as he said "Even when they do not understand some points of the lesson, non-disabled teachers often try to teach by guessing, which may result in students being given inaccurate information. In the case of teachers with a visual impairment, they tend not to teach by guessing. If something is

unclear, they say students that they will tell them later after searching for the correct answer.”

Principal 1 was quite satisfied with the efforts made by teachers with a visual impairment and provided an example of how they review students' examination papers. “They ask for the help of non-disabled teachers or other students who are not involved in that exam to read aloud the answer papers for them. Once they hear the answers of their students, they then decide how to mark the papers.”

Principal 2 was also happy about the involvement of teachers with a visual impairment in the school. He mainly discussed the positive effect of hiring teachers with a visual impairment, and the importance of cooperating with one another: “Despite not being able to see, teachers with a visual impairment work so hard that they inspire both teachers without disabilities and students.” Acknowledging the importance of cooperation between teachers with and without visual impairments, Principal 2 said, “If teachers with a visual impairment have any difficulties, we teachers without visual impairments try to help. We encourage teachers with a visual impairment and we try to pull their inner energy out, so they do not experience negative feelings on their visual impairments.” Moreover, in his school, teachers with a visual impairment are considered as an example of success. The same principal found his students to be very supportive toward teachers with a visual impairment, “our students walk alongside teachers with a visual impairment and help them to get to and from the classroom.”

3.2.2. Subjects taught by Teachers with a visual impairment and their adopted pedagogies

It was found that teachers with a visual impairment tend to avoid teaching subjects such as Mathematics, Science and English, because these subjects require frequent use of the

blackboard. Instead, schools typically assign them to teach subjects such as Social Studies, History or Nepali language—that is, subjects which do not necessarily require much use of the blackboard. Furthermore, teachers with a visual impairment stated that their schools generally help them by not assigning them to lower grades in a primary school (i.e. below grade five), since students at lower grades need greater guidance in learning to write the Nepali and English alphabets and teachers with a visual impairment would not be able to see their students' writing and correct it.

With regard to the methodologies in the classroom, these teachers were found to use lecture or discussion methods. For example, Teacher 2 teaches Social Studies from Grades 4 to 8. In addition to this subject, he said that he has been teaching moral education, upon the request of the school. He mainly uses the lecture method, citing the difficulty in the use of demonstration skills. For Teacher 3, as a teacher at the elementary level, he had to teach all subjects. However, since it was difficult for him to use the white or black board, he did not teach subjects like English and Mathematics. With regard to teaching style, he said, "I mainly use discussion and lecture methods. I teach in lower grades in a story-telling way so that students find it interesting." Depending on the content, he sometimes uses a question-answer method; along with demonstrating the real object mentioned in the textbook as far as feasible.

Finally, Teacher 4 – who teaches Nepali language in Grades 5 to 9 – uses different methods depending on the subject matter. "I use discussion, question-and-answer sessions and organize field visits. I ask students to find the information by themselves and, if they are unable to do so, I help them. The first step in my teaching is to motivate my students by giving them tasks which require them go into the field to search for appropriate solutions."

3.2.3. Challenges and Limitations Teachers with a visual impairment face

In our study, we find that teachers with a visual impairment are often likely to suffer from the absence of sufficient support systems to overcome difficulties. The fact that almost all of our participants noted this as a problem makes it clear that there are still significant barriers to teachers' with a visual impairment work in the classroom.

For Teacher 2, the major problem is the lack of materials in Braille. "It was very hard for me to adjust to school in the beginning because I did not have access to enough books in Braille." He further mentioned not being able to mark the examination answer sheets of students as a primary difficulty "I need others' help to mark students' exam papers. If I were a teacher in the school for students with a visual impairment, I could easily check those papers, as they would be in Braille."

For Teacher 3, one of the major difficulties is not being able to use the blackboard, "There are several occasions where students have had difficulty understanding. If I could write on the board and explain, that would be a great help for the students." Like Teacher 2, he too acknowledged the difficulty of checking students' assignment and said that he has to rely on someone to read the assignments in order to evaluate students' performance. Additionally, he cited the difficulty of preparing educational materials "Sometimes the course books are changed, and when this happens, the new books are not quickly available in Braille. In this case, I have to again request help from others and rely on their reading."

Acknowledging the difficulty of marking students' exam papers and assignments, Teacher 4 shared how she has overcome this difficulty with the help of her family. "I often take their exam papers and assignments home to ask for help from my family members, who will read them out to me. So it sometimes takes longer to mark these papers compared to teachers without visual impairments." Moreover, she

mentioned the difficulty of teaching picture-based content from textbooks. “Sometimes, students ask me to explain the pictures in their textbooks. Before explaining these pictures to the students, I have to listen to my friends or family members about what the picture depicts.”

While recognizing the talent of teachers with a visual impairment in the subjects they teach, Principal 1 suspected the possibility of student taking advantages of their teachers: “It is hard for teachers with a visual impairment to sense students’ facial expressions and attitudes. Students may feel that, if a teacher with visual impairment is the only one teaching and there is no other person to monitor the class, they can get away with sleeping or cutting their nails or whatever they please, as long as they do it without making noise.” Principal 1 was also very much concerned about the hardship that both teachers with a visual impairment and students face in absence of educational materials geared specifically toward teachers with a visual impairment, in particular the lack of availability of textbooks in Braille: “Generally, teachers with a visual impairment in my school teach Nepali as a main subject. If there happen to be several teachers specializing in this subject area, sometimes I would like to be able to ask teachers with a visual impairment to teach other subjects, such as creative arts, but there are no books on the topic available in Braille. This means they cannot prepare well for this subject.” Principal 2 emphasized the importance of demonstrating educational materials to the students, and felt the difficulty teachers with a visual impairment face in adapting these demonstration skills.

Returning to the interview with Principal 1, he also raised some issues with regard to the methodological aspect of teaching “most of the teachers with a visual impairment teach Nepali or other literature-based subjects. For Nepali, it is hard for teachers with a visual impairment to correct students’ grammar because they cannot

check students' handwriting. Therefore, it is sometimes likely that students become weaker in the spelling aspects of the Nepali language.” Considering these difficulties but also seeing that teachers with a visual impairment are stronger in literature-based subjects, Principal 1 is in favor of giving teachers with a visual impairment primary responsibility for literature-based subjects instead of having them teach the whole Nepali language curriculum.

In addition to these challenges to performing effectively in the classroom, all our interviewees emphasized the necessity of using computer technology in their work. Among five teachers with a visual impairment, only one had learned computer skills. Teachers stated that if they were offered the opportunity to learn computer skills, it would greatly contribute to their effectiveness in the classroom. Teacher 1 said, “I have great desire to use assistive technology, but unfortunately, I did not have the opportunity to learn.”. Similar views were expressed by Teacher 3 “If computers were available to us, it could help save time, as I could possibly do a good deal of preparatory work on it. This would certainly make our teaching more effective.”

Principal 1 was also worried about the lack of access teachers with a visual impairment had to assistive technology, “If the education system gets changed, and demonstration methods using computer technology are made compulsory in schools' teaching and learning activities, teachers with a visual impairment may face further challenges.”

4. Discussion

Nepal's attempt to provide educated individuals with a visual impairment the teaching jobs in local mainstream schools is a positive step. One of the reasons to bring about such a radical change might be the increasing access to higher education by individuals with a visual impairment. Lamichhane (2015) claimed that better qualifications give

disabled people access to a much wider choice of jobs. This claim is supported by the findings of the study by Lamichhane and Okubo (2014) for Nepal, in Turkey by Bengisu, Izbirak and Mackeih (2008) and by Lee & Park (2008) in South Korea explaining that higher education and Braille literacy increase the chance of employment for individuals with a visual impairment. Additionally, while looking at the history of education for children with a visual impairment, Nepal from the beginning offered them an education in inclusive schools where resources were provided to address their educational needs (Lamichhane, 2013).

As a result of inclusive education, society is changing and relatively accepting disabled people and recognizing their strengths. Early experiences of studying alongside friends without disabilities may also increase the confidence level of individuals with a visual impairment, to serve as teachers in mainstream schools. For example, a positive attitude toward teachers with a visual impairment was reflected in the students' survey and interviews of both teachers with a visual impairment and principals. Students found teachers with a visual impairment in a better position in terms of teaching and communication skills. Except for the two categories of maintaining class discipline and using demonstration skills, teachers with a visual impairment were clearly favored by students possibly because these teachers overcame the lack of demonstration skills through other alternatives such as explaining more, providing extra information and motivating the students.

Similarly, for principals, teachers with a visual impairment are punctual, dutiful, responsible and cooperative. School administration and colleagues are supportive. The long term advantage when individuals with a visual impairment teach in regular schools is that their increased visibility in the community may also help promote understanding and reduce prejudice or discrimination against all disabled people (Lamichhane, 2012).

Schools were also observed to positively recruit teachers with a visual impairment, assigning them to the upper grades and subjects that they were strong at teaching. Although a support system is necessary, none of the teachers with a visual impairment regarded the school's educational support system as problematic to the extent that it discourages them from continuing to teach. Despite not having set provisions of support, it seems that they were able to find ways to work around these problems through their own individual efforts. Their high level of motivation in teaching enabled them to seek support from their close network of family members, friends and colleagues, who recognize their efforts and desire to contribute to society (Lamichhane, 2012). However, despite their diligence and strong command of subject matters, teachers with visual impairments experience difficulty in teaching effectively in part as a result of the absence of supportive teaching materials and resources.

5. Conclusion

In this paper, I discussed the strengths and challenges of individuals with a visual impairment teaching in mainstream schools in Nepal. It was found that teachers with a visual impairment tend not to teach subjects such as science and mathematics, which requires frequent use of black or white boards and the need to draw pictures/ maps. However, subjects such as Nepali language and social studies and history, which are basically non-technical in nature are commonly taught by them. Some of the challenges for teachers with visual impairments include coping with the lack of educational materials in Braille and training in the use of computers.

Additionally, the lack of support when marking the exam papers is also an issue. They have utilized their family and friends to temporarily resolve this problem. However, there are not any specific resources or provisions to support mainstream schools to employ a teacher with visual impairment. Since there are no special programs

aimed at providing support to these teachers, schools in collaboration with ministry of education can perhaps help by offering more work flexibility in order to accommodate for their additional needs.

Though students overall perceived the teaching of teachers with a visual impairment to be good, some common challenges also existed. It was thought that they had difficulty in maintaining classroom discipline and difficulty in using demonstration and illustrations in their teaching. It is crucial to find ways to overcome the technical problems that teachers with a visual impairment face and equip them with necessary materials and resources for more effective teaching. For effective classroom management, teachers with a visual impairment can also draw upon the presence of well behaved students within the classroom and gain their help in monitoring and reporting mischief.

A number of strategies can be applied to support the teaching of teachers with a visual impairment. For example, subjects in which teachers with a visual impairment are much comfortable teaching should be assigned to them. This positive practice was reflected in the schools where some participants in this study currently work. A necessary support system is the part of reasonable accommodation proviusual stated in the Article 2 of the UN Convention on the Rights of persons with disabilities (CRPD, 2006). Since Nepal ratified CRPD in 2010, it should act upon the needs of teachers with a visual impairment, arrange support system, provide adequate materials, textbooks in Braille so that they will not have to face obstacles in the path of teaching.

Despite the challenges encountered by teachers with a visual impairment, the positive perception of school administration, colleagues and students was found to be a key factor in making their teaching possible and successful.

One of the implications of this study therefore, would be that the policy Nepal has implemented in providing opportunity to qualified individuals with a visual impairments to teach in mainstream schools can be considered for other parts of the world. This initiative will not only enable individuals with a visual impairment to become economically independent but also falsify social stigma which holds that disabled people cannot contribute to society.

It is hoped as well that studies like this will encourage the development of inclusive education and labor policies promoting the full participation of disabled people.

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Table 1: Descriptive Statistics of Students

Variable	Observations	Mean	Std. Dev.	Min	Max
Total number of observations collected	3022				
Total number of observations for study (taught by Teachers with visual impairments)	[a] 2***	0.89	0.31	0	1
Male	of [a]	0.42	0.49	0	1
Age	of [a]	14.34	1.87	10	29
Grade	of [a]	7.49	1.14	6	9
Having Disability	of [a]	0.07	0.25	0	1

Table 2: Socio-Demographic Characteristics of Teachers

Participants	Age in years	Sex	Education attained	Designation	Years of teaching in years
1	27	M	Bachelor	Teacher	5
2	43	M	Bachelor	Teacher	15
3	35	M	Bachelor	Teacher	5
4	42	F	Master	Teacher	7
5	42	F	Bachelor	Teacher	10
6	54	M	Bachelor	Principal*	33
7	50	M	Bachelor	Principal*	28

*principal (non-disabled)

Figure 1: Students` Perception on Strengths of Teachers with Visual Impairment in Classroom Performance

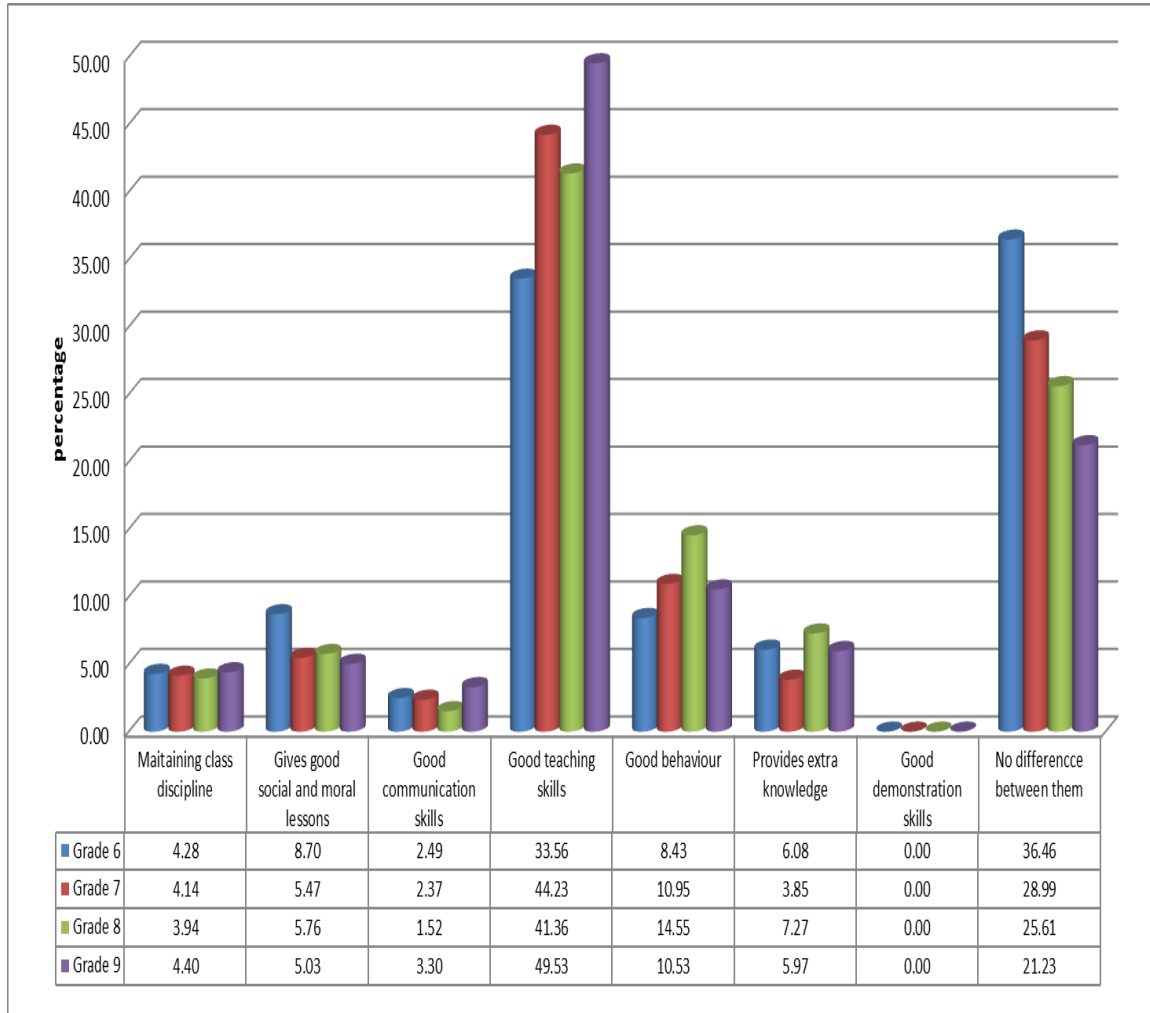


Figure 2: Students` perception on Strengths of Teachers without visual impairment in Classroom Performance

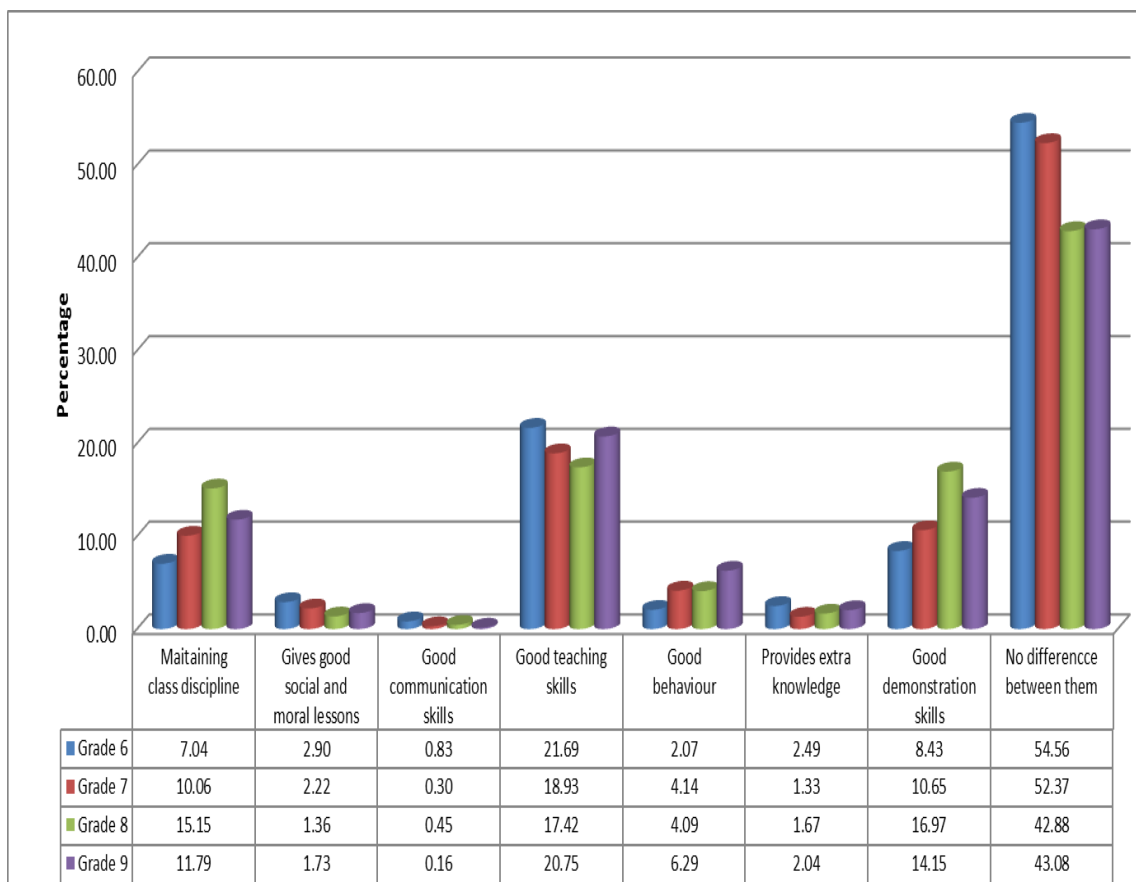


Figure 3: Students` perception on Difficulties of Teachers with Visual Impairment in Classroom Performance

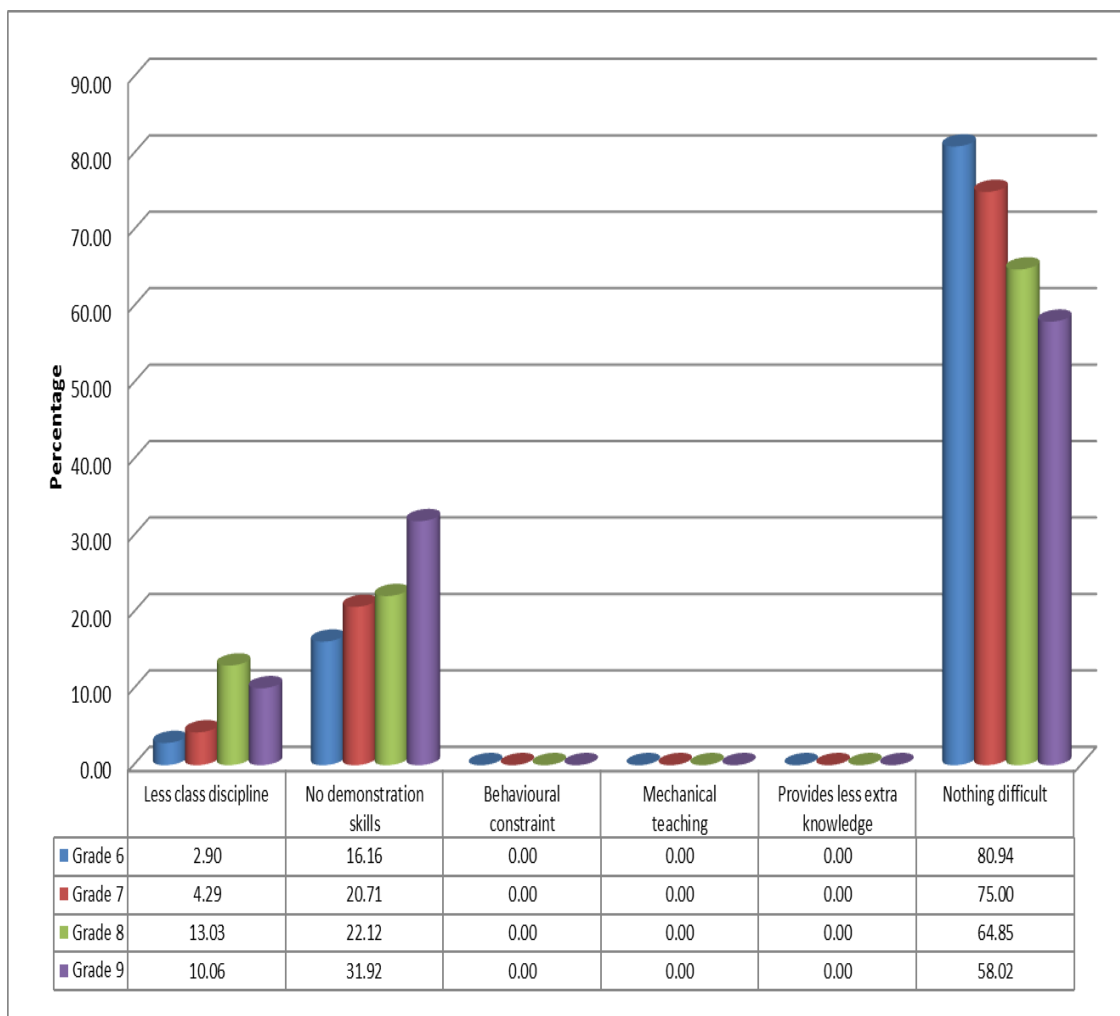


Figure 4: Students` perception on Difficulties of Teachers without visual impairment in Classroom Performance

