Diversity Management is the Core Area to Improve Learning Outcomes for All Children in Nepal

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Abstract: Nepal is a country of diversity in terms of ideological, cultural, religious, caste, geographical and sexual orientation, ethnicity, class, and language. Diversity is not merely a problem, it is an opportunity for exploring the creativity of individuals who have cultural, racial, physical, and ethnic differences. In this context, this abstract aims to share the role of teachers in diversity management in the classroom to address the individual's learning needs. I have selected the practices being used in the early-grade classrooms to address diversity in the Nepalese context. Headteacher, the teacher, the parents, and the students are the beneficiary and key respondents of this study. School is an extremely important place for students to feel safe and comfortable. In order to learn, students need an environment that makes them feel welcome. If a student feels unsafe and insecure, they will not be able to focus on learning. Students with a diverse cultural background may feel that they stand out alone in the classroom, they may feel underrepresented in the teaching materials, etc. Children with diverse backgrounds may then feel unsafe and uncomfortable in a classroom when they don't feel that their diversity is seen or valued. Racial, cultural, and gender differences are important factors in a person's identity, and it's extremely valuable for teaching to help students understand differences better. Efforts that teachers make to improve diversity in the classroom can benefit all learners in a variety of ways. From pre-primary students to high school students, it is always a good time for teaching to focus on racial and culturally unique differences in the past, present, and future. It can benefit diverse students who need to be represented and accepted and can help all students learn from unique perspectives and increase their understanding.

Keywords: Diversity, Individual differences, Individual learning needs, Teaching learning materials, Opportunity

Introduction

Nepal has taken a number of steps and introduced several initiatives over the past few decades to improve issues of educational access and inclusion for diverse groups, including children with disabilities. Many development partners and civil society organizations are contributing to improving the learning outcomes of all children in Nepal. This paper provides key highlights on the best practices and achievements of World Education Inc. in improving the reading competency of children with disability in Nepal. World Education is considered a civil society organization in Nepal. This organization has been implementing several projects that address diversity and ensure quality education in Nepal (DoE, 2016; 2017; World Education Nepal, 2017).

Teaching to engage diversity, to include all children, and to seek equity is essential for preparing civically engaged children and for creating a school and society that recognizes the contributions of all people. Teaching for diversity refers to acknowledging a range of differences in the classroom. Teaching for inclusion signifies embracing difference. Teaching for equity allows the differences to transform the way we think, teach, learn and act such that all experiences and ways of being are handled with fairness and justice. These ideas complement each other and enhance educational opportunities for all students when simultaneously engaged. Three imperatives make it an essential component for us to actively practice teaching for diversity, inclusion, and equity (CEHRD, 2006 ; 2008; 2018).

Teacher

Every child needs trained and competent teachers, whether at home or school. Teachers have to deal with students with different characteristics in the classroom. Some students are noisy, whereas some are quiet; some learn quickly, while others need more time, and some are often absent and struggle to keep up. A teacher should know the attributes and learning styles of every student but should not differentiate between them. Teachers should also be able to support children with special needs in school, and they should be willing to accept the challenge. Children may have disabilities or behavioral issues, but in most schools in Nepal, teachers are not aware of such students. Teachers should be made aware of the issues these children face and have the skills to address these challenges in the classroom.

Mentoring (Effective Coaches and Mentors)

It is often found that one-shot training does not bring major changes in the quality of delivery and transfer of knowledge and skills into the classroom. In Nepal, Resource Persons used to provide some mentoring, but with federalism, new systems are being developed. For many years the Resource Class teachers have been deprived of support through mentoring and coaching. Where available, support to the teachers inside their classroom by trained mentors with good knowledge and skill in reading and literacy instruction has proven to be an effective measure for improving the children's reading skills. In early-grade learning programs in remote locations and disadvantaged communities in Nepal, highly skilled and knowledgeable mentors have not been available. World Education, in a number of programs, has used a blended mentoring approach with young, highly mobile learning mobilizers (8-10 schools being supported) coupled with access to more senior professional program staff and mobilization of Education Focal Persons and Roster Trainers when needed. This has been relatively effective, and World Education sought to adapt this approach in early grades to address the needs of children with disabilities.

High-Quality Text and Materials

High-quality text and materials play an important role in facilitating the learning and reading of children and need to be carefully designed and developed when it comes to children with disabilities and learning difficulties. Best practices include using Universal Design for Learning (UDL) principles, and special adjustments are needed for some students. Text and materials supported by various projects and organizations are not always appropriate, disability friendly, or accessible.

Strategies and Method

Capacity Building of Teachers in 3 Different Models.

The following paragraph provides an overview of the three types of intervention to enhance the capacity of teachers that have been conducted under the Resource Class, Intensive, and Lite models.

Resource Class Model

All Resource Classes (46) of 10 districts - Types of Resource Class: 14 for visually impaired students, 17 for deaf and hard of hearing students, and 15 for students with intellectual disabilities.

Intensive Support Model

All community schools (257) in four Municipalities in Banke and Surkhet provided additional training, materials, and technical support for screening and pedagogy. The project reached 771 classrooms, trained and mentored 682 teachers, 4,369 SMC/PTA (School Management Committee and Parent Teachers Association) members, and 257 Head Teachers.

Lite Support Model

All schools (3,185) with the training of Head Teachers through cascade approach to lead early screening and orient and support early grade teachers to improve efforts to address learning needs of children with disabilities and struggling learners using early grade reading materials and approaches and individualized education plans.

Capacity Building of Organization of People with Disabilities (OPDs)

Training of OPDs to Mentor in Schools

23 (17F, 6M) OPDs staff enhanced their skill in effective mentoring and coaching techniques for supporting the early grade teachers on reading-focused activities to improve the reading outcomes of the children with disabilities and learning difficulties. Seven days of reading-focused coaching/mentoring training imparted the knowledge, skills, and competencies on instructional strategies and use of instructional materials, classroom observation, assessment techniques, and individualized education plan (IEP) and the development of the teaching-learning aids from locally available materials. After the training, the OPD staff conducted materials development workshops at the school level, engaging the teachers, parents, and members of SMC.

OPD Staff and Member Capacity Development Training

Three-day training on reading-focused community mobilization was conducted where 66 (34F, 32 M) participants, including Inclusive Education Coordinators, Social Mobilizers, program officers, and representatives from the board of the partner organization, were trained. During the training, participants learned the basic concepts and approaches for community mobilization. Issues in the application of activities that contribute to the reading improvement of children with disabilities and functional limitations were identified, and mapping of stakeholders was done. District-wise community mobilization action plans were developed on the prioritized issues.

Providing Hi-Teach and Low-Tech Materials

Learning kits and Teaching-Learning Materials were provided to the 46 Resource Classes benefiting 441 students with disabilities in these Resource Classes in nine project districts. These sets contained 1,014 learning materials, including sets of leveled readers, sets of blocks, sets of flashcards, braille slates and stylus, sponge letters, shapes, and objects that were distributed to the students having disabilities studying in Resource Classes from the nine project districts.

Figure 1. Photographs of children for whom materials were provided in the project

Braille was embossed on the existing letter and word flash cards which was a new innovation by the project that enabled parents, teachers, and volunteers that are not visually impaired to support braille learners. Teachers are using the idea to create and adapt flashcards that are supported by various projects and organizations which are easily available in the classroom.

Figure 2. An example of typoscopes

World Education developed and promoted the use of typoscopes for facilitating the reading of children with visual disorders and children with intellectual and learning difficulties who have problems dealing with a lot of text on a page. These typoscopes were made of rigid plastic materials with appropriate size and thickness that can be easily held by children. Scopes of various sizes were appropriate for reading letters, words, and short sentences and were widely used by the students.

Comprehension dice have been adapted by World Education and produced in bright colors with rattling seeds which are very attractive to students and have been effective for teachers to conduct activities in groups to enhance the comprehension skill of the student. Early Grade Reading Assessment testing and experience have shown that for children with disabilities, many students able to decode words lack the vocabulary and skills to comprehend text. Teachers found the comprehension block an effective way to get much more focus on comprehension and understanding of the text. This was especially useful in Nepali Sign Language(NSL)classes where deaf students have been focused on finger spelling words in the past rather than understanding the meaning of sentences. In addition to the above materials, braille paper with slate and a stylus was provided to Resource Classes for children with visual impairments. All classes were provided with typoscopes, and all the Resource Classes were provided with general stationery items like exercise books, pencils, crayons, and chart papers. Teachers shared that they found identifying the most appropriate teaching-learning materials for specific reading skills or addressing the specific needs of disability groups challenging. More effort is needed to help teachers understand different ways materials can be used and to make use of them frequently.

Results and Discussion

World Education's intervention to improve the reading competency of a diverse group of children studying in the early grade of public school in Nepal has made remarkable achievements. The intervention has conducted two levels of assessment 1. Fidelity of the teacher's capacity building program and 2, assessment of children's progress in reading.

Teachers practicing inclusive and child-centric approach/techniques to improve the reading/learning outcome of children with disabilities in the Resource Class model and intensive support model:

"This training proved to be very effective and productive. Spending years in this profession never made me realize and think about the various learning-related difficulties being one of the major reasons for children not achieving competency. This training provided us with some basic guidance to identify children with possible symptoms regarding learning difficulties and skill to develop a plan for improving their learning". -Early grade teacher- Karnali Province, Nepal

Classroom observation with the purpose of measuring the percentage of teachers practicing inclusive and child-centric approach/techniques for improving the reading/learning outcome of children having disabilities was conducted through the fidelity of implementation (FOI) study. The first round of the study was conducted in the month of May, 2022, and the final round was conducted in September 2022. A total of 96 classes from 53 schools of the intensive model being run by trained early-grade teachers were observed by 10 enumerators. 24 observation questionnaires under five major areas of observation; 1. Accessible and Inclusive classroom, 2. Reading Instructional Strategy, 3. Use of TL and Supplementary Learning/Reading Materials, 4. Teaching Learning Process and Methodology and 5. Assessment and Evaluation were included in the observation. The results were analyzed by dividing the score into three thresholds; I. Below 40 percent, II. Between 40 percent and 59 percent, and III. 60 percent and above. It is assumed that children from those classes with teachers meeting the threshold of fidelity of implementation score "60 percent and above" are expected to have improved learning outcomes.The below graph shows the percentage of teachers practicing inclusive and child-centric teaching-learning approaches;
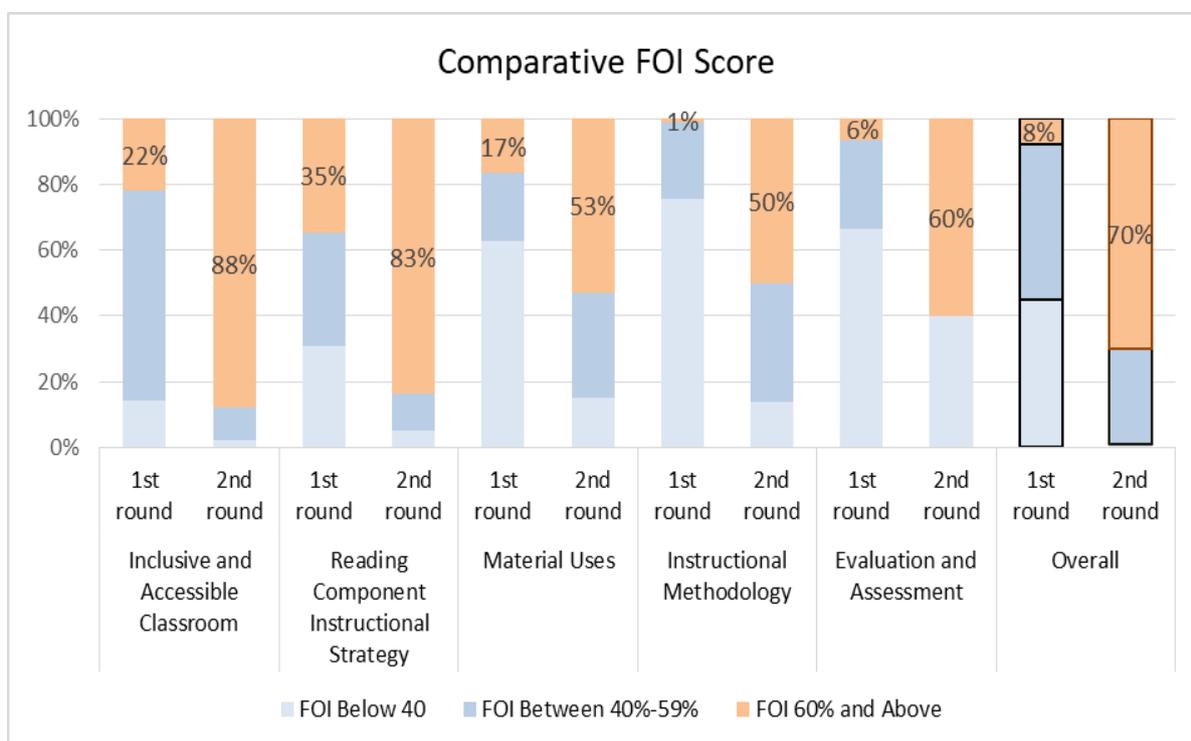

Figure 3. Percentage of teachers practicing ınclusive and child-centric approach

The comparative chart shows the improved result from the first round and the last round of fidelity of implementation classroom observation conducted in May 2022 and September 2022, respectively. The Social Mobilizers developed specific support plans based on classroom observation. They provided intensive support to the teachers for transferring reading instructional strategy, use of teaching-learning and supplementary materials, development and updating IEPs, regular assessment and evaluation of children's learning, and effective classroom management. As the project intervention reached the peak in the final quarter, the result from the second round of the fidelity of implementation study showed a huge improvement compared to the previous round. The study result shows 70 percent of teachers implement and practice inclusive and child-centric approaches with a fidelity of 60 percent or above. This is more by 62 percentage points, which was only 8 percent during the first round of the study.

Early Grade Reading Assessment (EGRA)

World Education supported the Nepal government in developing adapted EGRA tools for measuring the reading gains of children with disabilities and measured the progress through a baseline and an endline study using the tools. The adapted EGRAs measure children's ability to read and comprehend on the basis of various subtasks included in the adapted tools developed for children with different types of disabilities. Overall six major subtasks were included in the reading assessment. The EGRA testing of children with disabilities in Resource Classes resulted in data for almost one full academic year. The intensive and lite interventions through medical verification started to pick up in early 2022. The below result is the achievement made within one academic year. The below graph shows the samples that were administered the EGRA baseline at various times of the year (World Bank and the Global Partnership for Education, 2017).
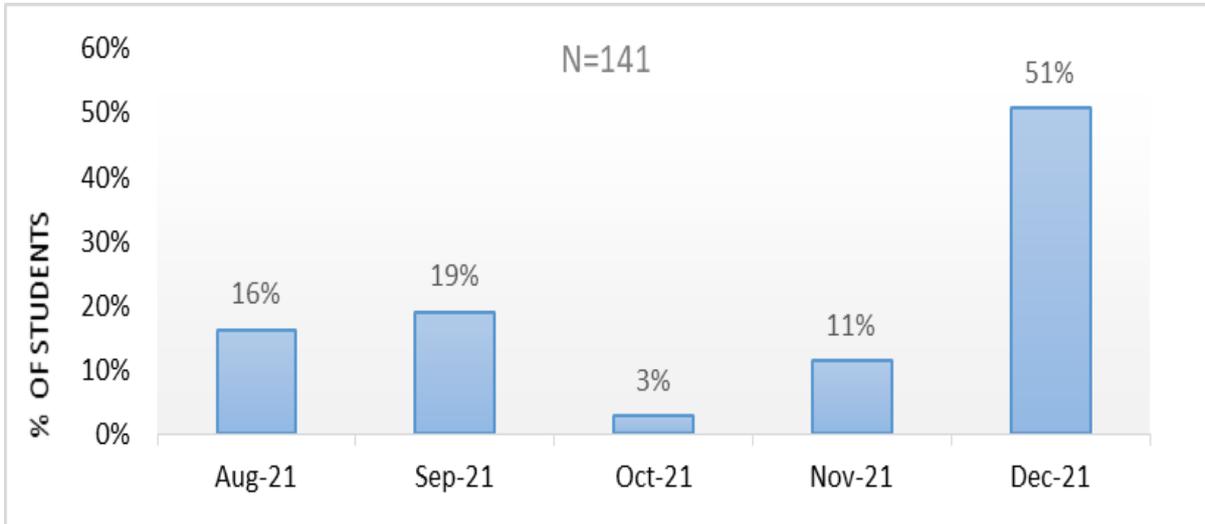

Figure 4. Timeline showing samples of students administered EGRA baseline in 2021

The above graph shows that more than half, i.e., 51 percent of the children who went through the baseline in December 2021, had an early endline in September 2022 after just nine months from the baseline.The below chart shows the actual change seen in the result at EGRA endline based on the goal level indicator set for the project evaluation purpose on the below-mentioned indicators:
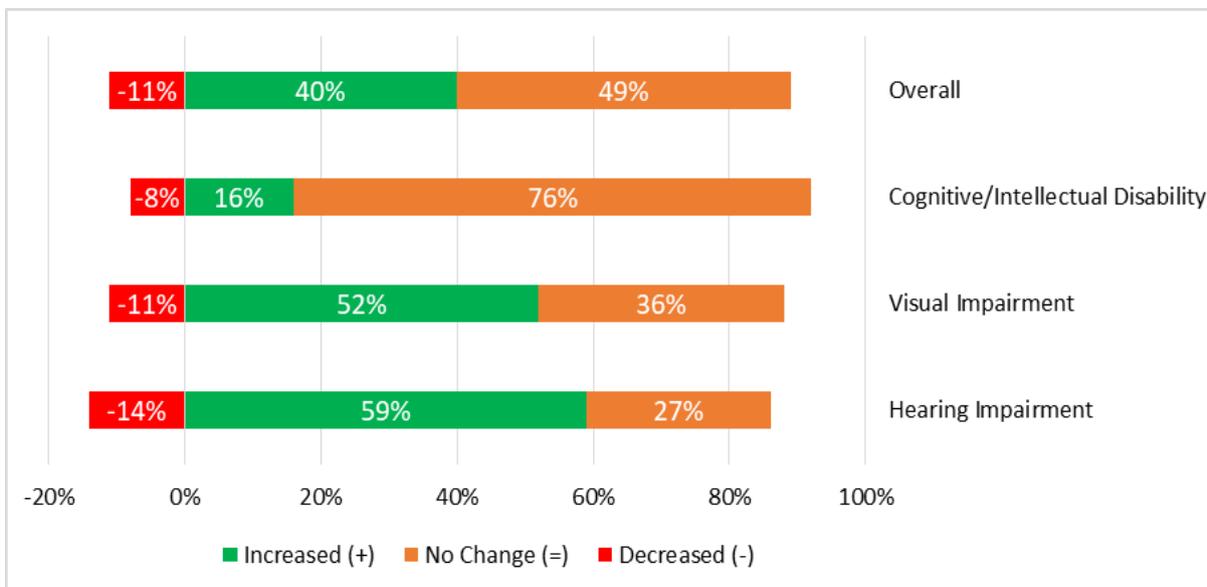

Figure 5. Percentage of children demonstrating increased fluency by disability types in the endline

The above chart shows, overall, 40 percent of the early grade children having disabilities demonstrated increased reading fluency during the EGRA endline study.
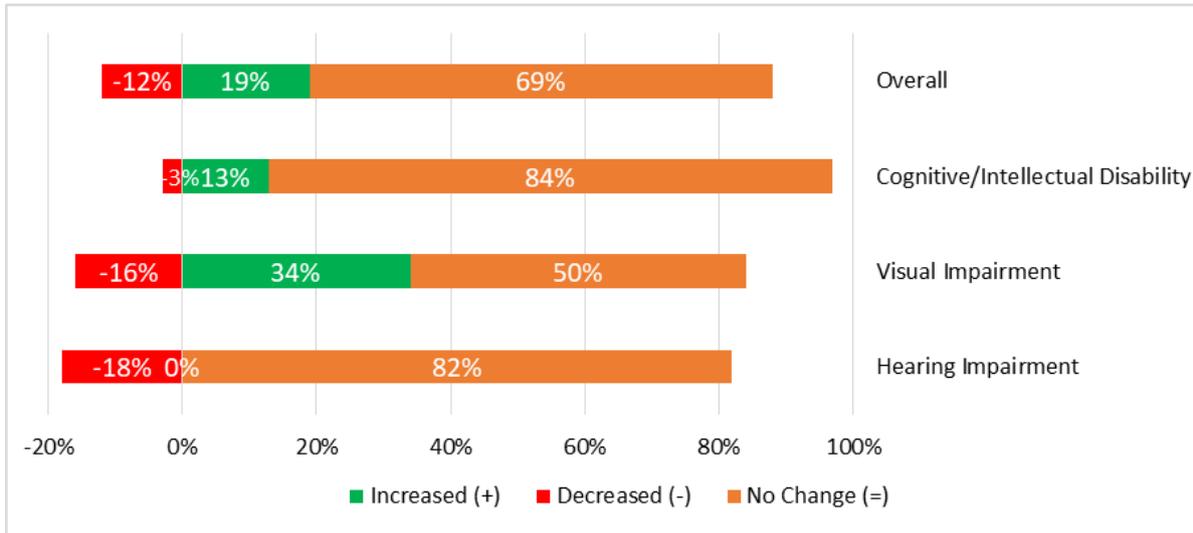
Figure 6. Percentage of children demonstrating ıncreased comprehension by disability types in the endline

The above chart shows, overall, 19 percent of the early grade children having disabilities demonstrated increased comprehension skills during the EGRA endline study. Overall no increase in the reading comprehension score for children with hearing impairments was found, while children with visual impairments showed more improvement. Three children with hearing impairments who answered three, four, and five reading comprehension questions correctly in the baseline answered less than three questions in the endline and 18 among the total 22 scored zero.

Percentage of Zero Scores

The number of children with zero scores are substantially decreased in all the subtasks during the endline. However, the result shows that a large percentage of children having disabilities from early grades haven't started to read. The percentage of children who haven't started to read in their early grades was analyzed through the zero scores, and the comparative result is presented below:
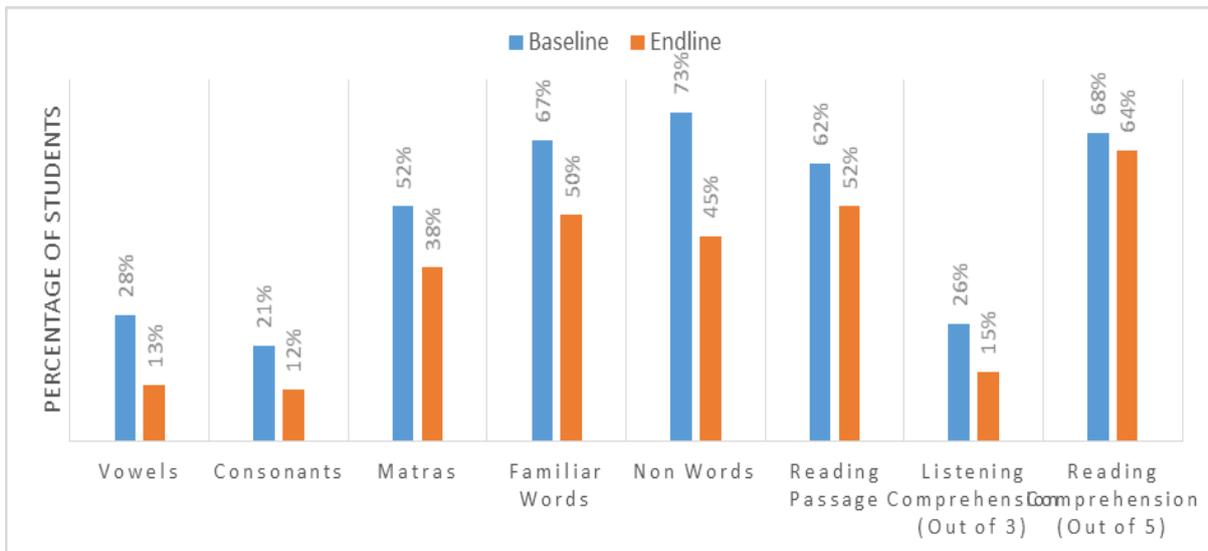

Figure 7. Change in percentage of students with zero scores from baseline to endline by subtasks

The comparative result shows the percentage of students with zero scores has significantly decreased for all subtasks in the end line, while for the reading comprehension subtask, the number of children with scores is still at the same point. In the above graph, 64 percent of children are not able to answer any of the comprehension questions correctly. This concludes that a large percentage of children are still facing difficulty in comprehending the text read.

Conclusion

Diversity expresses itself in so many different ways, so it can be daunting to try and start conversations around bringing it to the classroom. Start slowly and intentionally. Addressing diversity issues has to be slow and steady. The teachers are the key actors to manage the diverse group of students in the classroom. The government system should have a robust plan and strategy to improve teachers' capacity. Competent and motivated teachers can contribute to improving the learning outcomes of all children. Diversity in and out of the classroom will continue to grow. Only through competent teachers, it is possible to prepare students to adapt to an evolving world and embrace those different from themselves. High-quality materials and texts can help identify teaching materials that are already fully accessible as well, and in many cases, the judicious choice of such materials greatly alleviates accessibility issues. Using of use specific tools (captioning video recordings, providing alternate text for images, and more) to facilitate accessibility in an online learning environment. Accessibility ensures that all students can equally access, use, and understand learning content. New accommodation needs may arise in hybrid and online learning environments. Moreover, making course content accessible to all students in these scenarios requires some adjustments in relation to face-to-face settings.

Recommendations

● Many students learning sign language is essentially starting from scratch when they arrive in the classroom, as most have little prior exposure to the national sign language. In addition, Nepal Sign Language is rapidly evolving with many teachers struggling to keep up with the new formally recognized signs. It needs to incorporate an assessment of language development/vocabulary assessment for NSL students alongside EGRA tests. In this way, the acquisition of language can be assessed and enable a better understanding of what is affecting comprehension scores, as both poor language skills and poor reading skills can inhibit comprehension.

● The OPDs were found to play an important role in supporting teachers to focus on children with disabilities. Having a person more familiar with disability issues to interact with helps teachers and parents feel more supported and motivated to address the children's needs. As many of the mentors were persons with disabilities themselves they also provided good role models. Their engagement also motivated LGs to pay more attention to the learning needs of children with disabilities. Local governments and future projects should mobilize OPD staff to mentor teachers and support schools.

● Regular technical backstopping and discussion for local Government and schools are very critical to develop and implement inclusive education plans. The provision of sharing best practices on inclusive education through videos, literature, articles, and supporting materials can be a good source to refer to while developing an inclusive education plan at the local level.

● Children with disabilities have diverse characteristics. Using the national benchmark for early grade to measure children's reading competencies may not fully capture the learning paths of children with disabilities. Further research and discussions on assessment and benchmarking may help generate additional insights on how well children are learning, which interventions are effective, and how to set learning targets. with disabilities is recommended for the future projects.

Scientific Ethics Declaration

The author (Seema Acharya) declares the scientific ethical and legal responsibility of this article published in EPESS journal.

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