Australasian Journal of Special and Inclusive Education (2024), **48**, 122–135
doi:10.1017/jsi.2024.4

CAMBRIDGE UNIVERSITY PRESS

SPECIAL EDUCATION PERSPECTIVES

Teachers' Perceptions of Formative Assessment for Students With Disability: A Case Study From India†

Anannya Chakraborty[1], Amit Kaushik[1] and Vimala Ramachandran[2‡]

[1]Australian Council for Educational Research (India), New Delhi, India, and [2]National Institute of Educational Planning and Administration, New Delhi, India
Corresponding author: Anannya Chakraborty; Email: Anannya.Chakraborty@acer.org

(Received 30 November 2023; revised 13 May 2024; accepted 25 June 2024; first published online 16 September 2024)

Abstract
India has made significant progress in improving the enrolment of students with disability but still has a long way to go before schools can be called inclusive. Despite the widely acknowledged relevance of assessments in shaping teaching and learning practices, little research has been done in disability-inclusive assessment in the Indian setting. In this paper, we explore teachers' perceptions of disability inclusion in formative assessments, including the use of various kinds of accommodations and adaptations, factors that affect the implementation of disability-inclusive formative assessments, and challenges. It is argued that teacher professional development and teacher–parent partnerships are essential for ensuring the inclusion of students with disability in formative assessments. Unless assessment is given its due importance in disability-inclusive education, achievement gaps between children with and without disability may widen due to the unavailability of learning data and its use.

Keywords: inclusive education; students with disability; formative assessment; school education; India; assessment

India signed the Salamanca Statement and Framework for Action in 1994 (UNESCO, 1994) and has made substantial improvements in the education of students with disability, yet much work remains to be done before schools can be deemed inclusive. Although the Right of Children to Free and Compulsory Education Act 2009 (RTE Act 2009; Ministry of Human Resource Development, 2009) and the Rights of Persons with Disabilities Act 2016 (RPWD Act 2016; Ministry of Law and Justice, 2016) establish legal opportunities for advancing disability-inclusive education, the degree of inclusion of students with disability is unequal across different types of schools in different regions. The RPWD Act 2016 defines an inclusive education system as

> *a system of education wherein students with and without disabilities learn together and the system of teaching and learning is suitably adapted to meet the learning needs of different types of students with disabilities.* (Ministry of Law and Justice, 2016, p. 3)

†This manuscript was accepted under the Editorship of Michael Arthur-Kelly.

‡Professor Vimala Ramachandran was retired professor of Teacher Education and Management at the National Institute of Educational Planning and Administration, New Delhi, India, at the time the research was conducted.

The recently launched National Education Policy 2020 (NEP 2020; Ministry of Human Resource Development, 2020) further strengthens India's commitment to inclusive education across core structures of the education system, including learning assessments.

It is well recognised that learning assessments support the distribution of educational resources to help students' progress on their individual learning paths, which may be impeded by their social and personal situations (Masters & Adams, 2018). NEP 2020 suggests focusing on regular formative assessment, stating the key goal of such assessments would be to revise teaching and learning processes to optimise learning for all students (Ministry of Human Resource Development, 2020, Section 4.34). The National Curriculum Framework for School Education (Ministry of Education, 2023) also suggests selecting assessment practices that support inclusion. Therefore, a study on disability inclusion in formative assessments in Indian mainstream inclusive schools and school factors that promote or hinder disability inclusion is relevant and timely.

Research on disability-inclusive school education conducted by two of the authors of this paper has highlighted gaps in evidence on disability-inclusive learning assessments in the Asia-Pacific. In their first study, the authors state that the existing literature focuses majorly on disability-inclusion policies, teacher education, and accommodation guidelines for high-stake summative examinations in most countries (Chakraborty et al., 2019). Further, a recent review conducted by the authors found a lack of empirical studies on professional development in the context of low- and middle-income countries around disability-inclusive assessment (Ahmed et al., 2022). Although 50 studies were found on teacher professional development for disability inclusion, the authors could not identify any teacher professional development related to learning assessment for students with disability.

In India, while there is a significant body of literature on disability-inclusive education (Das et al., 2012; Sharma & Das, 2015; Singal, 2019), not much attention has been paid to research on inclusive learning assessments. Some extant literature on inclusive learning assessment was identified, notably, the UNESCO 2019 report on the education of children with disabilities in India that reports the unpublished work of Gupta (2018), which found that all 40 schools included in the study lacked accommodation provisions for students with disability; World Bank's mention of the National Council for Education Research and Training's Joyful Inclusion Pack, which is a curriculum-based, criterion-referenced checklist for assessing the learning outcomes of students (World Bank, 2019); and Vijetha and Upadhyay's (2019) study on formative assessment for students with hearing impairment. As evidence is sparse on disability-inclusive formative assessment practised in the Indian context, it necessitates the need to advance research in the field.

This paper addresses the key question: How do teachers assess students with disability through formative assessments in Indian classrooms? The case study of a private inclusive co-educational school in New Delhi is used to describe existing practices of disability-inclusive formative assessments and to arrive at an understanding of the possible reasons affecting the inclusion of students with disability in assessments. We argue that assessments can help realise the objectives of the RTE Act 2009 and NEP 2020 when teachers are supported with professional development.

The Issue

In India, educational boards, including the Central Board of Secondary Education (CBSE), Council for the Indian School Certificate Examinations, National Institute of Open Schooling, and state-level boards, govern the Grade 10 and 12 examinations and set assessment practices in secondary classes. The Department of Empowerment of Persons with Disabilities provides guidelines to different boards, based on which each board sets its own rules for exemptions and accommodations (UNESCO, 2019). However, recommendations in policies are not always in sync with the practices adopted by educational boards.

Examinations in the current system confine themselves to a timed pen-and-paper examination, with the areas examined largely restricted to prescribed textbooks. This means that students have to

https://doi.org/10.1017/jsi.2024.4 Published online by Cambridge University Press

memorise large amounts of text/information and complete examinations in five different subjects within a set time period of about 20 days. Each examination also has a fixed duration, ranging from 90 to 180 minutes. Because of the nature of the examination, it effectively excludes students who cannot perform at a certain speed or pattern or those who cannot memorise or retain information for long.

The board examinations have a tremendous washback effect on the syllabus, classroom methodology, and assessments, which percolates to the primary and even pre-primary levels. Children are subjected to ongoing weekly assessments to prepare them to meet the standards of the board that are intended to be formative but end up becoming summative. The results of the examinations are used to establish popularity and competition among schools. It is also known that summative examinations can lead to demotivation and dropout among students with disability (World Bank, 2019).

In India, national student assessment has begun recently. A majority of large-scale national and international assessments and high-stakes examinations across the globe are able to include students with disability only to a certain degree through available accommodations (Cumming & Dickson, 2013; LeRoy et al., 2019). Against this background, it is important to understand how formative assessments are designed to be inclusive — taking into consideration the support requirements of children with different abilities, the duration and format, and the overall environment in which assessments are conducted — for improving learning. Therefore, this paper focuses on disability-inclusive formative assessments that have a substantial impact on student learning growth and where teachers have a higher degree of flexibility in accommodating the needs of students with disability.

Formative Assessment Is Important for All Students

Black and Wiliam's (1998) seminal work described formative assessment as 'all those activities undertaken by teachers, and/or by their students, which provide information to be used as feedback to modify the teaching and learning activities in which they are engaged' (p. 7). It helps teachers understand student challenges, identify common misconceptions and errors, adjust instructions to target learning gaps, and determine the most valuable teaching strategy for students (Conderman et al., 2020; Frunza, 2014; Gillies, 2014). Formative assessment 'is a process used by teachers and students . . . to improve students' achievements of intended instructional outcomes' (Brookhart & Lazarus, 2017, p. 8). Therefore, formative assessments have a critical role in supporting the learning growth of all students.

Including Students With Disability in Formative Assessments

Formative assessments are key for understanding the learning needs of students with disability and for adapting pedagogy and curriculum according to those needs (UNESCO, 2019). They promote self-regulated learning and build the confidence of students with disability, particularly when they find content difficult (Brookhart, 2020). There is evidence that formative assessments coupled with direct instruction can improve the learning outcomes of all students significantly, including those on individual education plans (Miller, 2019).

Inclusive education practices have been drawn from special education schools (Loreman, 2017). Research reports the frequent use of formative assessment in special schools, among other forms of assessment (Burns & Ysseldyke, 2009). However, general educators cannot consider students with disability as a homogenous group of 'special needs' learners (Loreman, 2017). To ensure their participation in formative assessments, teachers need to provide accommodations or modifications based on the needs of the child. The data from the assessment will help teachers to target teaching for individual learning growth and development such that all students achieve the standards of the general curriculum.

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Accommodations

A wide range of adjustments to assessment design or administration can be offered to offset impediments due to disability (Koretz, 2008). These include 'additional time, ignoring specific types of mistakes, oral instead of written exams, a different learning environment such as a separate room, enlarged test pages, a variation of the length of tests, and the use of dictionaries or other support materials' (Linder & Schwab, 2020, p. 11).

Brookhart and Lazarus (2017) provide an example of adjustments to formative assessment to include students with disability. An eighth grade social studies teacher prepared a self-assessment tool for students based on the set learning targets in their unit. The tool for self-check has four levels, each describing what a student thinks or feels about their work. For students unable to remember the levels, a copy of the tool was provided to make the assessment more valid. This was complemented with exit tickets, where students mentioned their efforts to make their learning go well, which helped the teacher understand the thinking process of students.

Factors Affecting Disability Inclusion in Formative Assessments

There are various school-level factors that encourage teachers to make formative assessment practices inclusive of students with disability, including teachers' understanding of disability, teachers' assessment literacy, professional learning, and the inclusion culture in school.

First, teachers' understanding of disabilities is a prerequisite for ensuring that formative assessments are inclusive, as limited understanding can lead to exclusion. A 'majoritarian discourse' may continue to affect the assessment practices of teachers when they lack awareness of a disability (Ravet, 2013). In addition, negative attitudes toward disability inclusion common among teachers in India can also impact assessments (UNESCO, 2019).

Second, teacher assessment literacy is essential for ensuring disability inclusion in formative assessment. Do teachers have the skills and knowledge of diverse accommodation requirements that meet the heterogenous needs of students with disabilities? Studies show that teachers found it easier to assess children with hearing impairment, physical impairment or visual impairment, as opposed to those with language impairment or ADD and ADHD, and found it difficult to assess students with learning difficulties or those requiring alternative communication (Anderson & Östlund, 2017; Hussu & Strle, 2010).

Third, teachers require support from schools to build their understanding of disabilities, inclusion, and assessment techniques (Vijetha & Upadhyay, 2019). In India, there are concerns around understanding among stakeholders on the availability of exemptions (UNESCO, 2019). Considering the complexity of inclusion and assessment, continuous professional learning is critical in ensuring that formative assessments are inclusive for students with disability, technically robust, and useful for teachers and students (Chakraborty et al., 2019).

Method

Research Objectives

In this study, we aimed to explore the techniques and challenges of implementing disability-inclusive formative assessments. The key objective was to gather Indian in-service teachers' firsthand experience of providing accommodations or adaptations and to bring out the voices of teachers who are at the 'learning site'. Through a case study approach, we investigated

- teacher-led modifications and adaptations of formative assessments for inclusion of students with disability
- diversity in learning assessments for students with disability with examples and an emphasis on teacher autonomy and agency

https://doi.org/10.1017/jsi.2024.4 Published online by Cambridge University Press

- practical challenges to implementing disability-inclusive formative assessments
- school-level support for teachers to design inclusive formative assessments
- teachers' understanding and use of accommodations for inclusion
- the use of data from classroom-based assessments.

The researchers acknowledge that 'there can be no prescription for what a single instance of formative assessment should look like' (Trumbull & Lash, 2013, p. 3). Thus, the purpose of this study was to capture those assessment methods that teachers are using in classrooms, as opposed to judging teachers' knowledge or ability to assess students with disability.

Research Setting

This study was conducted at a private inclusive school in New Delhi affiliated with CBSE. In the academic year 2023–2024, 71 enrolled students were formally diagnosed with disability and around 11 students were under close monitoring. In general, each classroom in the school consists of 30–40 students at the primary and secondary levels. Students with disability can choose to enrol in the National Institute of Open Schooling after completing Grade 8.

The school has a mental health department with special educators and counsellors. It has developed the Universal Mandate, a mandatory policy that outlines the code of conduct and behaviour for students and teachers to ensure an inclusive school environment.

Research Design

We employed a case study approach to gather an in-depth understanding of formative assessment practices in an inclusive school (Hamilton, 2011). Through semistructured interviews with general educators and classroom observations, the authors describe the formative assessment practices used in the inclusive school, which are viewed within the broader school context and guidelines from educational bodies.

Positionality can affect the entire research process as well as its results, as diverse perspectives have implications on knowledge construction (Holmes, 2020; Merriam et al., 2001; Rowe, 2014). The research team consisted of researchers from academic and policy backgrounds who have all worked in the area of disability-inclusive education, adding validity and richness of perspectives to the study.

Participants

Around 10 regular in-service general educators teaching primary and secondary grades were invited to participate in the study; however, only nine agreed to participate. All teachers included in this study were female. Most teachers had a postgraduate degree along with a bachelor's degree in education. A few had also completed additional courses. Selected teachers were experienced in teaching classes with at least one child with disability.

Sampling

Purposeful sampling and snowballing were used to select teachers for this study. Teachers were selected based on their teaching experience, grade level and subject area, willingness to participate and availability, and institutional support. Teachers from primary and secondary levels were included, as the nature of formative assessments change in the secondary level when teachers start focusing on preparing students for the school-leaving examination and work in close alignment with the recommendations of the board.

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Data Collection and Analysis

Data were collected using semistructured interviews. All the interviews and classroom observations were conducted by the first author. The interviews had a duration of 30–40 minutes.

Ethical clearance is a voluntary choice rather than a prerequisite for social science research in India (Srivastava, 2020). However, the researchers followed the British Educational Research Association's ethical guidelines, which include obtaining participants' voluntary informed consent, explaining the purpose of research, disclosing researcher identity, and maintaining confidentiality of participant identities during the research process as well as while publishing the findings (British Educational Research Association, 2018).

The interview protocol was developed by the first author and vetted by the qualitative research expert on the team. The tool was informed by a review of inclusive assessment in the Asia-Pacific for UNESCO by the first two authors (Chakraborty et al., 2019). The protocol followed Jacob and Furgerson's (2012) guide on protocol development, including asking general and easy questions at the beginning, asking one main question with multiple follow-up questions and prompts, improvising the questions, and keeping the time limited to approximately 40 minutes to avoid interviewee fatigue. The protocol was designed to elicit information on the different kinds of formative assessments teachers use, test accommodations or modifications, and training on disability-inclusive formative assessment.

Interview data were corroborated through field notes from classroom observations. First, the administration of weekly written tests that are only conducted for secondary grades was observed. This included groups of students in Grades 9–12 and Grades 6–7. Second, one grade each from the primary and secondary level was observed, where teachers from the respective classrooms conducted formative assessments while teaching.

The interviews were conducted virtually through MS Teams. Transcriptions were generated automatically and matched with audio recordings to address doubts. The transcripts were read multiple times and then coded to identify important expressions in the interviews with the help of NVivo 12 Pro (Phillips & Lu, 2018; QSR International Pty Ltd., 2021). The codes were grouped and regrouped a number of times, from developing a preliminary coding framework to arriving at the final coding framework. The data from the codes were interpreted to derive the basic findings of the research. Visual representations were created with the help of NVivo.

Results

Teachers' Understanding of Disabilities Strengthened With Information From Multiple Sources

Positive attitudes and knowledge of disabilities are essential for the successful implementation of disability-inclusive formative assessment. Eight teachers said that counsellors and special educators supported them in understanding the challenges of students with disability. One of them highlighted, 'I will see little red flags and flag them off to the counsellor'.

Seven teachers stated that the process of handing over a student profile from one class teacher to another helped them obtain information about the child. It was observed that the school's handover sheet reported on three categories of students: students with disability, students with academic concerns, and general students. It had information on the student's name, specific concerns, strategies, strengths, and remarks. One teacher highlighted that 'whenever we hand over one class to the other, there's always handing over. And handing over means you give information about each child and the next teacher writes it down'.

An equal number of teachers highlighted that their own observation is critical in helping them understand if the child faces difficulty. One of them said, 'Whenever the child starts to read and write, that's when you'll see gaps. You'll see those specific typical mistakes ... mirror images and all of that'.

Teachers expressed that parents and caretakers, siblings, and friends of students and formal assessments also help them to obtain information about the child's disability.

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Modifications and Accommodations in Disability-Inclusive Assessment

Teachers reported the use of various disability-inclusive strategies for conducting formative assessments. While talking about formative assessments, they pointed out that such assessments are continuous and help to understand students' growth and progress. One teacher mentioned that the nature of assessments has changed over time: 'we also keep reinventing our assessment system … we did it this way, how can we improve it for next year?' In both primary and secondary schools, teachers had positive attitudes towards teaching and assessing students with disability. All junior school teachers interviewed were conscious of labelling students: 'do not exclude the child and make him feel that, you know, I'm not giving you a worksheet because obviously you are not capable of doing it'.

Two teachers from the senior school also reflected the views of colleagues in the junior school. One of them highlighted that disabilities could arise at any point in school life. Junior school and senior school teachers equally valued a child-centred approach to learning and assessment. One of them reported, 'I know that I've asked this child to write the answer, but his writing is just not legible. So how do I help this child? … How do I make life easier for the child?'

One of the teachers said that for a child with severe Down syndrome, they collaborated with parents to assess the student's progress with simple skill-building activities in the classroom, such as making lemonade or sandwiches, before being able to assess him academically. In another instance, one of the teachers said, 'you know, like the high-functioning autistic child is concerned … he remembers a lot … he's able to identify more places than what is being done in the class. So, [I] give him that opportunity … you identify any other feature which we haven't done'. This indicates that teachers made accommodations or modifications to formative assessments based on the type and degree of challenges faced by students. Teachers also stated that not all children, particularly in the primary grades, were diagnosed with a disability, but they are sensitive to the needs of the students.

One of the teachers mentioned that there is a wide variation in the support needs of people across the autism spectrum; therefore, formative assessment has to be designed bearing in mind the particular needs of that child:

> *… like I told you about the girl which is there in my class whose oral skills are very good, but … she has problems in writing, so I'll take more of oral assessment for her … in my class somebody is writing say questions-answers to five questions, probably for her I'll just do two questions or more of a fill-up kind of thing where she need not be stressed.*

However, a secondary school teacher pointed out that 'they [students] are assessed the way CBSE allows us to do'. This was also validated during the classroom observations. Students sitting the Monday-cycle tests in Grades 9–12 were provided accommodations based on what the board allowed. Those needing extra time or a scribe wrote the exam in the physics and biology laboratories. One of the teachers reported,

> *So, of course, we have our Monday-cycle test … if I have my child with dyslexia … we provide with the prompter to help my child understand the question. Once the child understands, he'll be able to answer.*

Four teachers in the interview spoke about the use of peer support in teaching and learning processes for students with disability. One teacher said, 'I use a lot of peer support … so I make buddies'. Peer support included making children work in groups in classroom learning activities. However, peer assessment was not reported where students were asked to review and provide feedback on the performance of peers. It was, however, noted during classroom observation in a secondary grade that a child with Down syndrome was following the curriculum for two grades below the grade level, and peers were able to check the answers on the answer scripts during the zero period. The child was allowed to use a calculator to do three-digit multiplications but was being trained to do addition mentally.

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Visual impairment

Teachers ($n = 2$) mentioned about providing a writer or using debate to include students with visual impairment in formative assessment. One of them said,

> *Take an example of a mapping activities … the idea is for them to understand the geographical features of the country or any place for that matter … this child is partially visually impaired, so one option is to enlarge the map for him and give it to him … the other option is to provide the laptop, so that's also, the digital tools are, I think, a great help … the map is already there and he knows how to work on the paint tool … so he's able to see the screen, which is also enlarged for him, and you know he, it's clearer so he can do the colour, you know, he can identify the physical features of the count.*

During classroom observation in the primary grade, it was noted that the teacher gave the same assessment to the child with visual impairment. While other students were answering the questions written on the board in their worksheets, the teacher typed the questions on the laptop of the child with visual impairment. The student wrote the answer on the laptop on her own.

Autism

One teacher explained how she would combine the worksheets of English and environmental studies (EVS) for a child with autism to reduce their workload. The English worksheet would be based on the EVS theme that was being taught in the classroom. A modified worksheet with fewer multiple-choice options was observed during observations.

Another teacher explained how she designed a shopping activity to assess the addition skills of a student with autism. With the help of his parents, he was asked to identify five things and then find out the total price after checking the prices. The teachers also highlighted that

> *the child [with autism] would do the comprehension. For this child also, I'm doing the same thing [as other students] … he has a written passage next to him. It's pasted in his notebook. He'll be asked to read the paragraph from that. Some fill-in-the-blanks would be given because he takes a lot of time to write. So for him, little accommodation that we have made that answers are there on the sticker … he reads the sentence, it's super colourful sticker and sticks it to complete the sentence.*

Dyslexia and dyscalculia

Teachers ($n = 3$) spoke about accommodations for dyslexia and dyscalculia. The teacher explained that a child with dyslexia will find it difficult to spell; therefore, cut-outs could be provided, and for dyscalculia, they would provide the child with a calculator. One of them said,

> *I know my child has dyslexia suppose, and I know when I have to ask him to write down the answers, he may not be perfect at that. So, either I [provide] a writer and then get it done, or I orally listen to what they've studied, because the whole question is about whether they've understood what was taught.*

Down syndrome

Two teachers explained the accommodations used for children with Down syndrome. Figure 1 describes an assessment task.

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Task	Make a flipbook as part of their assessment on the topic of landforms
Instructions	Draw, name, and write definitions of the landforms in their book
Modifications	One teacher shared that she could ask the child to simply label the landforms without the need to write definitions, provide the child with a help box with the landform names on their worksheet, or provide the child with a buddy who could help with the labels, and would probably ignore the spellings written by the child.

Figure 1. Assessment Task, Instructions, and Modifications for Assessing a Unit on Landforms Administered to a Student With Down Syndrome.

Attention-deficit/hyperactivity disorder

One of the senior schoolteachers mentioned how she accommodated a child with ADHD in her maths classroom:

> *He [the student] has a problem in sitting down at one place and doing, so for me, after a certain initial time I give him opportunity to go and do it on the board . . . I understand that he cannot sit and do it [the task] completely. So he's got an opportunity to fill in the blanks. So the duration where he has to engage himself is shorter.*

Use of Assessment Data in Teaching and Learning

Teachers described how they use the assessment data to change strategies. With assessment data, 'we got to know the problem, then we worked towards it' and 'it also helps us to assess ourselves and from where we have to start working on the child'.

Teachers described diverse strategies for using assessment data at the primary and secondary levels, with one of the teachers highlighting,

> *that's why when it comes to addition or any concept or even in nouns, not with one activity, we'll have something of a visual, something kind of static, something, you know, audio. So that at the end every child has achieved what the concept was all about.*

However, a few teachers were of the opinion that for a student with disability, strategies are predetermined based on the learning style of the learner. The strategies described by teachers are as follows:

- using video and audio to revisit the topic ($n = 2$)
- taking students to the laboratory for hands-on experience ($n = 2$)
- forming peer groups for learning ($n = 3$)
- storytelling to break complex calculations ($n = 1$)
- using physical exercise to teach directions ($n = 1$)
- using lessons that allow teaching interrelated topics ($n = 1$).

School Interventions in Disability Inclusion in Classrooms

All teachers reported receiving support from experienced colleagues or peers. The school has a system of mentoring where experienced teachers support early career teachers: '[a] senior teacher is assigned as the mentor who guides the [new] teacher in everything about the school . . . the system, the assessment, the teaching methodologies'.

Around eight teachers from senior and junior school mentioned workshops with professionals and external experts and on a wide range of topics. One of the primary teachers mentioned that 'we have

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outside professionals also who are coming and training us'. Teachers from the junior school spoke about sharing best practices among themselves, whereas senior teachers said teachers met in meetings. One senior teacher from the secondary school said,

> *Periodically we keep having these workshops … some workshops are … oriented towards understanding or updating one's own skills and repertoire, but most of them are to do with coping. Even as a teacher, you know, you have to give a lot, so you need to be heard as well.*

Teachers mentioned workshops after the summer break and workshops on every working Saturday for teachers (third and fifth Saturdays of every month, where applicable). They specifically recalled attending workshops on special education needs, including learning braille.

Also, one teacher from the senior school mentioned, 'the pattern [of assessments] completely changed from CBSE, so these workshops actually were organised by CBSE'. Although teachers spoke quite a bit about professional learning workshops, no teacher could recall specific workshops on formative assessment for a student with disability, possibly because the topic is covered under the broad topic of assessment.

During the school visit, the school's professional learning calendar was observed. Training for the academic year 2023–2024 was scheduled in July and January. The most recent professional learning program had differentiated teaching and learning as one of the topics.

The school also believes in positive collaboration with parents about the education of students with disability, and this was mentioned in the interviews. Teachers ($n = 8$) described that they interacted with parents to become aware of the difficulties that a student with disability is encountering and also for involving them in the teaching, learning, and assessment that takes place in the classroom. One teacher said, 'we have asked parents to, you know, ask kids to watch some documentary based on Gandhiji's life to prepare them for the next class'. Assessment data is also shared with special educators and parents so that they can work as a team towards improving the learning outcomes of the child. At the primary level, if teachers observe certain challenges in the child, they connect with parents to opt for a formal diagnosis and to gain deeper understanding of the challenges the child may face. Parents are invited to attend classes to understand their child's challenges and to prepare individual education plans.

Parents also have a role in supporting the child with training on assistive technology suggested by special educators. Teachers noted that they work with the special educator and parents as a team, and that the school conducts workshops with the parents:

> *You know, we always tell parents that the child is always the focus and there's like a little triangle that we have where there's the teacher, there's the society and there's the parent, and all three of us have to work together as a team.*

Challenges to Implementing Disability-Inclusive Assessment

Teachers reported various challenges in assessing students with disability. Two teachers said they found it difficult to manage challenging behaviours. Mood issues, making noises, or not ready to sit in the classroom, as described to the interviewer, were significant challenges to conducting assessments. One teacher said, 'Then I had to sort of sick child who used to make sounds, so everybody used to get stunned'.

Teachers also reported being uncomfortable working with enlarged print and having limited knowledge of modern assistive technology. One of them pointed out that it was difficult to assist a Grade 8 student with disability who was following the Grade 2 curriculum. Another teacher acknowledged that teachers did not always know the method for assessing a student with disability but discover it over a period of time.

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Many teachers highlighted that one of the major challenges of teaching and assessing students with a disability is the denial of parents with regard to support needs, particularly in light of the social stigma often attached to disability.

It was also reported that COVID-19 had brought a new set of learning challenges for all students. In particular, teaching students with a disability online was difficult as 'there was no peer support with them, nobody sitting with them', said one of the teachers. Most teachers did not have any preservice training on teaching and assessing students with a disability. One teacher explained,

> *I mean, when the first time I faced a classroom which had three children with some kind of disability or the other, it was in this school when I joined way back in 2006.*

Additionally, teachers stated that they required more time in order to properly support students with disabilities. Teaching and assessing students with a disability is not always easy, as two children with the same condition, such as autism, may require two different strategies.

Discussion

In this study, teachers described the use of accommodations for students with a disability in their classrooms with examples. They reported that the type of disability and its severity determine the accommodation or modification required — for example, a help box, cut-outs, combined worksheets, oral assessments, scribes, fill-in-the-blanks, enlargement of maps, etc. However, they did not report the planning of assessments with students or informing them about the assessment criteria in advance.

Also, teachers noted that they find it difficult to assess students when they demonstrate challenging behaviours. This resonates with the findings of extant literature, indicating that teachers face challenges in assessing students with behavioural problems (Hussu & Strle, 2010).

Modification of teaching technique and the use of feedback are the cornerstones of formative assessment (Guskey, 2010). Formative assessments can result in higher student achievement if teachers are able to identify why students are making errors and implement appropriate pedagogical strategies (Bottge et al., 2021). The study noted how teachers used the assessment data in teaching and learning. The use of assessment data has various pedagogical implications, including targeted inventions for individual students, differentiated instructions, providing concrete feedback, and setting achievable goals within the general curriculum for every child. In this study, when probed during the interviews, teachers reported revisiting their teaching strategies after conducting formative assessments. A number of teachers mentioned that they used peer support to teach students with a disability.

Peer assessment and self-assessment were not mentioned in the interviews. During the classroom observation, evidence was available on the use of peer assessment for mathematics assessment of a student with Down syndrome. However, peer assessment can be useful for students with intellectual disabilities but not for those with behavioural issues (Brookhart & Lazarus, 2017).

For teachers to successfully adapt assessment, knowledge of a student's disability — strengths and weaknesses, behavioural problems, particular interests, medication, and current functional and cognitive abilities — is essential for the adjustment of the teaching and learning processes including assessment (Sperotto, 2014). Teachers pointed out that they obtain information about the disability of students from special educators and counsellors, as part of the process of student profile handover during class promotion, and from their own observations. Special educators' expertise is critical to the success of the education of students with disability (Cook & Friend, 2010). The importance of the handover process needs to be studied in depth across schools to understand its use and enhance its effectiveness as a teacher's resource.

Research has repeatedly pointed out the need for supporting general educators in the inclusion of a student with disability (Ahmed et al., 2022; Chakraborty et al., 2019). In this study, teachers mostly reported being supported by experienced teachers in teaching students with disability, collaborating

https://doi.org/10.1017/jsi.2024.4 Published online by Cambridge University Press

with peers and taking part in multiple workshops with external providers in various areas, including disability-inclusive teaching and learning. The finding endorses the view of existing literature, which emphasises the need for collaboration in disability inclusion (Majoko, 2019).

The study found that teachers did not receive specific training on assessing the learning of students with disability, although it could be part of training on assessments or other broader topics. In 2022, Ahmed et al. highlighted a lack of disability-inclusive professional learning in the Asia-Pacific. In practice, it is advisable to include training on disability-inclusive assessment as part of the 50 hours of continuous professional development proposed in NEP 2020.

In inclusive education, the importance of teachers' attitudes in ensuring inclusion has been a recurring theme (Bhowmick, 2018; Das & Kattumuri, 2011). In this study, teachers demonstrated positive attitudes towards students with a disability. This could perhaps be attributed to the support that teachers have received at school for inclusion and collaboration among teaching staff.

Teachers in the school mentioned collaborating with parents in a range of areas. Studies undertaken outside India have also highlighted that parents provide children with learning aids (Hussu & Strle, 2010).

The issue of social stigma and the need for wider sensitisation on disability inclusion is a recurring theme in the literature (Forlin et al., 2007; Sharma et al., 2006). This study validated the concern, as teachers expressed that denial of disability by parents is one of the biggest hurdles in implementing inclusive education.

Limitations

First, the results of this study should not be generalised, as this is a case study that explores the perspectives of a group of teachers employed in a single reputed inclusive school in New Delhi. Second, the findings of the study are not applicable to summative assessments (e.g., school leaving) or standardised assessments. Third, no conclusion should be drawn on the effectiveness of the disability-inclusive formative assessment strategies, accommodations, or modifications described in the study. Fourth, the study is restricted to the voices of teachers, and further research is needed to include the voices of school leaders and students on disability-inclusive formative assessment. Finally, although the study reports a range of school-level factors that support disability inclusion, it does not examine the effect of the interventions on teachers' disability-inclusive formative assessment strategies.

Conclusion

This study is a stepping stone towards understanding formative assessments for students with disability in the context of South Asia. Overall, the study describes teachers' perspectives on the methods employed by them to assess students with disability in a private inclusive school in New Delhi.

The findings suggest that teachers in the school adapt formative assessment practices in their classroom to include students with disability and use assessment data to deploy instructional changes. However, there is a need for more detailed large-scale studies to collect and disseminate evidence on the use of formative assessment to measure the learning of students with disability and the use of such data in government and private schools. Results also indicate the need for professional learning to manage difficult behaviour, assistive technologies, and inclusive formative assessment as priority topics and measuring the outcomes of such training.

Further, competent inclusive schools should be considered resource centres for inclusive learning assessments. The role of such schools could be explored within the school clusters recommended in NEP 2020.

Teachers mentioned the critical role of parents in advancing inclusive education. Studies on parent–school partnership for inclusive education will be helpful in understanding such school-based interventions and gaps in evidence in India along with examining efforts to sensitise parents and the wider community.

https://doi.org/10.1017/jsi.2024.4 Published online by Cambridge University Press

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Cite this article: Chakraborty, A., Kaushik, A., & Ramachandran, V. (2024). Teachers' perceptions of formative assessment for students with disability: A case study from India. *Australasian Journal of Special and Inclusive Education* **48**, 122–135. https://doi.org/10.1017/jsi.2024.4