

I. INTRODUCTION

Teachers have the power to change lives, they can empower students and help them realise their true potential

– Dr. APJ. Abdul Kalam

Dr. APJ. Abdul Kalam emphasised that no other profession is as crucial to society as teaching. Teachers serve as the backbone of a nation, the foundation upon which aspirations are transformed into achievements. Their responsibilities include nurturing their lives as exemplary individuals for students to emulate. According to Dr. Kalam, teachers must foster an environment where students can grasp lessons that endure throughout their lives (Chauhan, 2017). Teachers are responsible for shaping students' character, encouraging creativity, and nurturing their interest in learning. Any variations in students' academic performance observed by teachers should be communicated to the parents as stated by Dr. Abdul Kalam (Manna and Maiti, 2020). Kalam emphasised that educators impart knowledge and influence students' personal growth and character. Throughout his career, Kalam steadfastly underscored the profound impact of teachers in shaping societies, advocating knowledge as the most significant gift for empowering individuals to shape their futures optimally.

Teachers possess a unique ability to profoundly impact the lives of their students. Through guidance, support, and encouragement, teachers empower individuals, instilling the confidence and skills necessary to navigate the complexities of life. By fostering a nurturing and inclusive learning environment, teachers can inspire students to unlock their inherent talents and abilities and flourish academically, socially, and personally. Ultimately, teachers play a pivotal role in helping students recognise and harness their true potential, shaping them into confident, resilient individuals poised to make meaningful contributions to society. Gandhimathi (2010) emphasises teachers' crucial role in any educational system, portraying them as artists who mould and shape children's physical, intellectual, and moral powers. Jose and Solomon (2016) articulate a teacher's significant responsibility in fostering a child's all-round development, drawing a metaphorical comparison to a gardener. They suggest that teachers are akin to gardeners who provide the conducive conditions necessary for the optimal growth of students. Quoting Mahatma Gandhi, Jose and Solomon emphasise that education, according to the great leader, involves drawing out the best in a child across

dimensions such as the body, mind, and spirit. Jose and Solomon (2016) contend that only an efficient and understanding teacher can discern the unique capacities, strengths, and weaknesses inherent in each student. This perspective underscores the crucial role teachers play in facilitating holistic development and recognising the individual attributes of their students.

Teachers must navigate diverse classrooms, address individual learning needs, and contend with societal and systemic issues impacting education. The ability to inspire and motivate, even in the face of challenges, is a hallmark of effective teaching. The profession, therefore, stands as a cornerstone in the construction of a knowledgeable, skilled, and ethically responsible society.

Teacher - child relationship

The teacher-child relationship in the classroom is essential for fostering trust, emotional support, and guidance. Positive connections enhance academic performance, behaviour management, and individualised attention. A warm relationship contributes to a positive classroom atmosphere, and social skill development, and has a lasting impact on a child's overall well-being and future success. In essence, a strong teacher-child relationship is fundamental to effective education. As students devote a significant portion of their day to school, the daily activities and interactions within the classroom and school environment play an inevitable role in shaping their learning and development (Wentzel, 2015). According to Self-determination theory, humans possess three fundamental needs: autonomy, competence, and belongingness. How teachers address these essential needs directly influences students' well-being, motivation, engagement, and academic achievement (Ryan and Deci, 2017). Relationships between teachers and students, and students' psychological necessities. (Bakadorova and Raufelder, 2018), represent a close and influential aspect of student development within the school context. These relationships result from an ongoing interplay between individual teachers and students' characteristics (Sabol and Pianta, 2012). The quality of teacher-student relationships is equally significant for teachers, impacting their own psychological needs (Klassen, Perry, and Frenzel, 2012) and overall well-being (Spilt, Koomen and Thijs, 2011). The connections that children form with their teachers serve as a significant resource with the potential to enhance both developmental and academic outcomes. Positive or negative teacher-child relationships, as highlighted by Chen et al. (2021), can exert either beneficial or detrimental effects on students' academic progress, behaviours, and emotions. These interactions play a crucial

role in shaping the overall educational experience and contribute to a child's growth and learning. Consequently, the way teachers treat, interact with, and build relationships with their students holds paramount importance. According to Wang (2023), how teachers interact with their students not only influences the results of learning but also plays a significant role in shaping the overall atmosphere of the classroom.

Building on this, teachers' keen observation skills are vital in shaping a child's development. The inherent respect children hold for their teachers, coupled with the significant time spent together, creates a unique opportunity for insightful observation. Through careful observation, teachers can act as detectives, unearthing hidden needs, challenges, and potential within each child. By observing children's interactions, behaviour, and participation, teachers can gain valuable insights into their social skills, emotional well-being, learning preferences, and potential learning difficulties. This awareness empowers teachers to become not only effective educators but also advocates for their students. By leveraging their observations, teachers can tailor their approach, providing targeted support, personalised learning experiences, and early intervention when necessary.

In addition, recognising these unique challenges is essential for developing effective teaching strategies. Every child possesses a distinctive set of strengths and weaknesses, accompanied by individual challenges. Learning disabilities (LD) are not a reflection of a child's motivation or intellectual ability, but rather neurological differences that affect how the brain receives, stores, processes, and retrieves information. This can manifest in various ways, impacting a child's ability to read, write, solve math problems, or grasp specific concepts.

Ultimately, by fostering a nurturing environment informed by keen observation, teachers can identify and address each child's challenges or disabilities, significantly contributing to their overall development.

Learning Disability (LD)

“The definition issued by the National Joint Committee for Learning Disabilities (1981) is the definition of schools and SENCOs in India referred by Sheila Saravanabhavan and Saravanabhavan (2010) as 'Learning disabilities is a general term that refers to a heterogeneous group of disorders manifested by significant difficulties in acquisition and use of listening, speaking, reading, writing, reasoning or mathematical abilities’”.

As noted by Prasad and Burle (2022), learning difficulties generally stem from neurobiological issues related to abnormalities in brain function and structure. Moreover, the term "learning disability" is a broad umbrella encompassing various challenges in acquiring and applying specific skills, with reading, writing, listening, speaking, reasoning, and math being particularly affected. LD vary among individuals and encompasses a range of disorders, meaning that someone with LD may face unique learning hurdles distinct from those without such difficulties. For instance, comprehending math concepts might be challenging for one individual with LD, while another may struggle to understand spoken information. "Learning disabilities" (or learning disorders) serve as a comprehensive label for diverse issues like dyslexia, dyspraxia, dysgraphia, and more. Importantly, learning impairments manifest through subtle and regionally dispersed changes in mind-body systems, and it's crucial not to conflate them with learning challenges arising from visual, hearing, or motor limitations, as well as social difficulties.

As outlined by Muktamath, Hegde, and Chand (2021) learning disability is referred to as a hidden disability as children with learning disabilities do not look handicapped and their difficulties are not obvious. Hence, learning-disabled children are often misunderstood and accused of not listening, being lazy or clumsy resulting in low self-esteem, confidence and motivation. Children with a LD have average and sometimes above-average intelligence, but their brains process information differently (Maria Tzouriadou and Sotiria Tzivinikou. 2022)

In recent years, Learning Disabilities have gained prominence as a significant factor impacting a child's academic potential. These conditions are enduring and all-encompassing, influencing every facet of a child's life, progressively weaving into their personality and shaping their career options as they mature. Initially confined to academic challenges, Learning Disabilities gradually permeate into individuals' family lives, impairing social interactions and constricting career opportunities as they mature. The resulting stress contributes to sustained low self-esteem, fostering a sense of demotivation and perpetuating a pattern of underachievement in the long run.

Learning Disabilities (LD) do not constitute a single disorder; rather, they encompass challenges in any of the seven types associated with reading, language, and math. These diverse forms of LD often coexist, and they may co-occur with deficits in social skills as well as emotional or behavioural disorders.

As per the “American Psychological Association (2013) Diagnostic and Statistical Manual of Mental Disorders” and the “Learning Disabilities Association of America (2012) seven disorders listed below are unique learning disabilities such as dyslexia, dysgraphia, dyscalculia, auditory processing disorder, language processing disorder, nonverbal learning disabilities, and visual perceptual/visual motor deficit”.

Specific Learning Disabilities (SLD)

A Specific Learning Disability (SLD) refers to a disorder that affects one or more of the fundamental psychological processes involved in understanding or using language, whether spoken or written (Kauffman, 2001). This disorder can impact a child's ability to speak, read, write, spell, or perform mathematical calculations. “The American Speech-Language-Hearing Association (2016) defines a 'specific learning disability' as a disorder in one or more of the fundamental psychological processes involved in comprehending or using language, whether spoken or written. This disorder may manifest itself through difficulties in listening, thinking, speaking, reading, writing, spelling, or performing mathematical calculations. Examples include dyslexia, dyscalculia, dysgraphia, and auditory processing disorder (APD)”. These challenges exclude impairments like visual or auditory deficits, intellectual disability, or environmental factors.

- Auditory Processing Disorder (APD) impedes sound processing, causing difficulties in distinguishing sounds in words and organising auditory information.
- Dyscalculia hampers mathematical proficiency, affecting number comprehension, memorisation, and time-telling.
- Dysgraphia impacts handwriting and fine motor skills, resulting in illegible writing and spelling issues.
- Dyslexia affects reading and language skills, varying in severity and affecting fluency, comprehension, and writing.
- Language Processing Disorder (LPD) disrupts language interpretation specifically, affecting verbal communication.
- Non-verbal Learning Disabilities (NVLD) show a gap between verbal and non-verbal skills, affecting social cues and coordination.
- Visual Perceptual/Visual Motor Deficit affects visual comprehension and replication, often seen with dysgraphia or NVLD.

These conditions necessitate tailored support in education. Children with SLD struggle with perceptual abilities, reading, writing, cognitive processes, math, behaviour, and motor skills. Challenges in visual perception significantly impact academic performance. Issues in reading and writing execution vary across regions and timeframes. Cognitive challenges include attention, memory, and executive functions, hindering learning. Mathematical difficulties include concept understanding and problem-solving. Classroom behaviour issues arise from frustration with learning, leading to inattention and task avoidance. Motor skill delays affect fine and gross motor abilities, requiring intervention like occupational therapy. They may struggle with handwriting, coordination tasks, or physical activities requiring precise movements. These motor challenges can impact their participation in classroom activities, academic tasks, and recreational pursuits. Occupational therapy, sensory integration techniques, and adaptive equipment can support LD children in developing motor skills and enhancing their overall functional abilities.

Categorising learning disabilities helps teachers devise effective classroom strategies for inclusive education. By identifying individual areas of need, tailored interventions can support academic progress. This approach fosters a more inclusive learning environment, ensuring all students have the opportunity to thrive

When teachers are aware of the categories of learning disabilities, they can better understand the behaviours exhibited by students. These behaviours can be observed in the classroom, making the identification of LD easier. According to the “National Centre for Learning Disabilities (2014)”, signs of specific learning disabilities include:

- Persistent difficulties in reading, writing, arithmetic, or mathematical reasoning
- Inaccurate or slow and effortful reading or writing
- Poor written expression that lacks clarity
- Difficulties remembering number facts
- Inaccurate mathematical reasoning

Recognising these key symptoms allows for timely intervention and support, enhancing the educational experience for students with LD.

The identification of LD has significantly increased in the past two decades. However, the actual prevalence of LD remains debated due to varying definitions and identification criteria. Some argue that the reported 5% prevalence rate is inflated, while

others believe LD is still under-recognised. The prevalence varies depending on the definition used. Mishra and Pahwa (2018) noted that about 5% of public-school students were identified with LD in 2009.

Learning disability, Learning disorder, Learning difficulty

Learning disabilities, learning disorders, and learning difficulties are all brain conditions that can make it hard to understand or process information.

According to Kohli (2018), the terms "learning disorders," "learning disability (LD)," and "learning difficulty" are often used interchangeably, but they differ significantly in meaning. The term "disorder" refers to notable academic challenges faced by children, but these challenges may not be severe enough to qualify for an official diagnosis. "Disorder is a medical term recognised in authoritative mental health guides such as the Diagnostic and Statistical Manual of Mental Disorders (APA, 2013) and the International Statistical Classification of Diseases and Related Health Problems (WHO, 1992)".

The term "disability," particularly in the context of SLD, is defined as a "diverse group of conditions characterised by deficits in processing language, whether spoken or written, which may present as difficulties in understanding, speaking, reading, writing, spelling, or performing mathematical calculations. This encompasses conditions such as perceptual disabilities, dyslexia, dysgraphia, dyscalculia, dyspraxia, and developmental aphasia." SLD is a legal designation mentioned in the Right of Persons with Disabilities Act (RPWD Act, 2016) in India, and the Individuals with Disabilities Education Act (United States federal law) [United States Department of Education, 2018]. These laws protect the rights of students with disabilities. To qualify for special disability certificates and services under these acts, a student must be recognised as a "child with a disability" [National Centre for Learning Disabilities, 2018]. SLD is a formal clinical diagnosis requiring assessment by a professional, such as a psychologist or paediatrician.

In contrast, "learning difficulties" refer to academic underachievement due to a variety of factors, such as behavioural, psychological, or emotional issues; English is a second language; ineffective instruction; high absenteeism; or inadequate curricula. These children have the potential to achieve age-appropriate academic levels with appropriate support and evidence-based instruction [Understanding Learning Difficulties: A Guide for Parents, 2018].

Learning Disability around the world

Individuals with LD are considered among the most vulnerable and socially excluded members of society. The identification and prevalence of LD have been the focus of numerous studies over the years, revealing significant variation across different regions and methods of assessment. In a separate study conducted by Mariana and Wong (2011) in the USA, around 5% of all public-school students were identified as having a learning disability. Cortiella (2011) in “The Survey of Income and Program Participation (SIPP)” indicated that the prevalence rate of LD among the U.S. population was 1.8%. However, when considering parent-reported data for school-age children, the SIPP found a rate of 3%. It's noteworthy that the actual prevalence of LD in the United States was estimated to be between four to six per cent for both children and adults, drawing upon available data. In an epidemiological survey conducted by Nag and Snowling (2012) in London City, the prevalence of dyslexia was reported to be 3% in the metropolitan area. In England, it was estimated that around 1.2 million individuals had mild or moderate LDs, while around 120,000 adults exhibited severe or profound LDs. In the previous thirty years, the closure of almost all long-stay National Health Services beds for individuals with LDs has occurred, leading to the majority of people with LDs now residing in the community and relying on community-based practices for their primary health care needs. According to recent UK government data from the Guidance "Learning Disability - Applying All Our Health," (2023), there were approximately 1.3 million people with a learning disability in England, including over 950,000 adults aged 18 and over.

According to the American Psychiatric Association (2013), Diagnostic and Statistical Manual of Mental Disorders (DSM-5) estimated the prevalence of all learning disorders (including impairment in writing, reading, and mathematics) to be about 5% to 15% worldwide. A review study stated that approximately 5% of primary students in Singapore were likely to suffer from dyslexia. The World Health Organisation has estimated the prevalence of learning disabilities in industrialised countries to be around 3% (Mishra Pahwa, 2018).

According to the Learning Disabilities Association of Canada (LDAC, 2024), Statistics Canada reports that learning disabilities are the most common type of disability among Canadian children, with more than half (59.8%) of children with disabilities having a learning disability. Additionally, 3.2% of Canadian children are identified with a learning

disability, which is about one child in every school bus. The number of children diagnosed with learning disabilities increases by nearly 25% as they transition from home to school. These statistics are based on the 2006 Participation and Activity Limitation Survey (PALS).

The prevalence of LDs varies significantly across regions and studies, highlighting the challenges in identifying and measuring these conditions. Despite varying estimates, ranging from 3% to 15% worldwide, the impact of LDs on individuals is profound and far-reaching. These disabilities are often under-identified or misdiagnosed due to the lack of standardised criteria and objective identification methods. However, the consensus remains that early and accurate identification is crucial for providing appropriate support and interventions.

It is estimated that roughly 90 million individuals in India exhibit varying degrees of LDs, and, a typical school class has around five students grappling with such challenges. Despite these estimations, there remains a lack of clear understanding regarding the incidence and prevalence of learning disabilities in India, as highlighted by Karnath in 2001. Karanth (2003) has outlined several environmental factors linked to Specific Learning Disabilities (SLD), including poverty, a lack of literary resources at home, limited access to preschool instruction, parental illiteracy, overcrowded classrooms, and inadequate teaching. Mehta and Swarup (2004) point out that English is frequently used as the major language of education for children in Indian cities, which is frequently not their mother tongue. Bilingualism, a distinctive feature of the Indian educational system, exacerbates challenges for dyslexic individuals. A subset of dyslexics in the country faces a dual challenge involving perceptual issues and language-related difficulties. In South India, based on 2002 research by Ramma and Gowramma, 5% to 6% of primary school students had dyscalculia. Affecting 5-15% of school-going children, specific learning disabilities, encompassing conditions such as dyslexia, dysgraphia, and dyscalculia, have become increasingly recognised in India over the past decade. Awareness of this invisible handicap has experienced notable growth during this period. Karande et al. (2011). Surveys conducted in the southern Indian city of Bangalore reveal that the impact of socio-economic disadvantage is more significant in explaining prevalence rates than the language of literacy learning among children. In schools serving families from middle socio-economic classes, where reading instruction is provided in a non-dominant language, specifically English, the prevalence rate is 18%. Contrastingly, within an institutional home for children in conflict

with the law who are learning to read in their home language, Kannada, the prevalence rate significantly rises to 60% Nag and Snowling (2012).

In an analysis of prevalence studies on LDs in India, various types of deficits in scholastic skills were reported to affect 3-10% of the student population. Another study conducted in rural India indicated a prevalence of 13% for specific learning disabilities among primary school children. Additionally, in a study from the northern region, it was found that 1% of children attending an outpatient clinic at a tertiary hospital were diagnosed with specific learning disabilities Arun et al. (2013).

The research on SLDs in India has occurred mainly in the past twenty years. However, epidemiological studies on LDs in India face challenges ranging from identification and assessment to unique socio-cultural factors specific to the country Chennat and Singh (2014). Singh et al. (2017), in their study, titled “specific learning disability: a 5year Study from India,” reported that the prevalence of SLD in India varies between 5% and 15% across different studies. Shan and Buch (2019) reported the prevalence of specific learning disability subtypes in Gujarat as dysgraphia at 7.4%, dyslexia at 8.6%, and dyscalculia at 7.1%.

A recent study titled "Prevalence and pattern of learning disability in India: a systematic review and meta-analysis" conducted by Joseph and Devu in the year 2022, revealed that the prevalence of LD among Indian children varies widely, ranging from 2.16% to 30.77% across the studies included in the review and meta-analysis.

The varying prevalence levels of Learning Disabilities (LD) in India and around the world highlight the significant impact of this issue. Even though the exact percentage may not be pinpointed, it is evident from studies that LD is a notable concern. The prevalence suggests that a considerable number of children, ranging from mild to moderate LD, may be effectively accommodated within regular classrooms. The regular teaching practices of mainstream teachers can seamlessly integrate these children, posing no challenges to their learning experiences.

Recognising this, the “Government of India, through its 2020 Samagra Shiksha initiative under the Ministry of Education, Department of School Education and Literacy, emphasises the improvement of education quality for all students”. This inclusive education approach advocates for various student-oriented activities, with a specific focus on the identification and assessment of Children with Special Needs (CWSN).

Inclusive Education

The document "Inclusive Education for Children with Special Needs" by Samagra Shiksha, Ministry of Education, Department of School Education and Literacy, Government of India (2020), highlights the commitment to enhance the overall quality of education for every student. The initiative supports various student-oriented activities, including the identification and assessment of Children with Special Needs (CWSN). The primary goal is to identify students with disabilities at the school level and assess their educational requirements. Additionally, the programme aims to sensitise and train general school teachers to effectively teach and engage CWSN in mainstream classrooms.

“Inclusive education for Children with Special Needs (CWSN) has been a significant focus of intervention under previous educational schemes such as Sarva Shiksha Abhiyan (SSA), Right to Education (RTE), and Rashtriya Madhyamik Shiksha Abhiyan (RMSA). Since the academic year 2018-19, Samagra Shiksha has prioritised enhancing the quality of education for all students, including CWSN, making it an integral component of the programme”. This component encompasses a range of student-oriented activities aimed at supporting CWSN, including identification and assessment, provision of aids and appliances, corrective surgeries, accessibility measures such as Braille books and large print materials, as well as therapeutic services. The objectives of this component include identifying children with disabilities, assessing their educational requirements, providing necessary aids and appliances, removing architectural barriers in schools, supplying teaching materials, medical facilities, vocational training, and guidance services, and sensitising general school teachers to effectively include CWSN in mainstream classrooms.

“NEP Recommendations highlight inclusive education through Samagra Shiksha (National Education Policy 2020 - Quality Education for Students and Teachers (QUEST), NEP Para3.1, pg 38)”. Inclusive education is a philosophy that ensures all students, regardless of their abilities or disabilities, are provided with meaningful opportunities to learn and participate in the educational environment. It promotes diversity, equity, and belonging by recognising and valuing the unique strengths and contributions of every individual. In an inclusive classroom, students with special needs are supported through tailored interventions, accommodations, and assistive technologies to ensure their full participation and success alongside their peers. This approach fosters a supportive and accepting learning environment where all students can thrive academically, socially, and emotionally. By embracing inclusive education practices, schools promote respect, empathy,

and understanding, preparing students to become compassionate and inclusive members of society. The scheme aims to ensure universal access to school education and provides support to all States and Union Territories (UTs) in implementing the recommendations of the National Education Policy (NEP) 2020.

According to UNICEF, inclusive education is the most effective way to give all children a fair chance to go to school, learn and develop the skills they need to thrive. It means real learning opportunities for groups who have traditionally been excluded – not only children with disabilities but also speakers of minority languages. Inclusive systems value the unique contributions students of all backgrounds bring to the classroom and allow diverse groups to grow side by side, to the benefit of all.

Role of teachers

Rao et al. (2017) emphasise that teachers in India play an essential role in shaping young minds positively, fostering scientific and humanistic attitudes, and instilling self-discipline. Beyond academic achievements, teachers embody qualities such as empathy, persistence, diligence, and sincerity. They are expected to maintain a research-oriented mindset, honesty, and flexibility, creating engaging classroom environments enriched with multimedia resources. Employing methods like the Socratic dialogue, teachers encourage curiosity and critical thinking, motivating students with constructive feedback. Effective teachers adopt student-centred approaches, employing inductive teaching methods and holding students accountable for their learning. Encouraging collaborative projects and discussion groups, teachers promote civic responsibility, setting positive examples through their actions.

Shrabanti Gayen (2017) in a study "Role of teachers in the changing scenario in Indian society," underscores that teachers in modern India go beyond traditional roles, facilitating child-centric education and integrating technology in classrooms. They play a crucial role in continuous assessment and holistic student development through formative evaluations. Additionally, teachers contribute significantly to school management, fostering supportive learning environments and participating in policy formulation. This multifaceted role demands constant adaptation and innovation, aligning with societal and technological advancements for students' benefit.

Teachers' involvement in the educational journey positions them uniquely to identify learning disabilities (LD) early on. Being closely connected to the educational process, they

are well-positioned to observe the student's academic performance and can often recognise learning challenges early on. Unlike health personnel, who face the impracticality of screening millions of students for specific learning disabilities (SLDs), teachers have a unique advantage in detecting and addressing these issues in a more personalised and accessible manner.

Primary teachers (PRTs) in India are educators responsible for teaching children from grades one to five. Primary school teachers are henceforth denoted as primary teachers (PRTs). PRTs play a particularly crucial role in this process, as they engage with children during their formative years, a time when they are highly impressionable and developing foundational skills. By establishing daily routines and providing a structured environment, primary teachers help children adapt to school life and develop essential habits. Their close interactions with young students enable them to observe early signs of learning difficulties and provide tailored support. Therefore, the recognition and understanding of learning disability by school teachers could significantly contribute to the early identification and effective management of children facing these challenges. Hence, evaluating teachers' knowledge and perspectives on learning disability is pertinent, as highlighted by Javaid in 2022. The research carried out by Ghimire et.al (2017), revealed that 30.5% of teachers were able to identify learning disabilities in their students. This highlights the need for increased knowledge and training for teachers in identifying learning disabilities. Moreover, the significance of knowledge in the identification of LDs is underscored by various studies. Research consistently demonstrates that teachers equipped with a deep understanding of learning disability play a major role in early identification and fostering a supportive educational environment.

Teachers serve as the cornerstone of inclusive education, playing a multifaceted and pivotal role in ensuring the success of all students. They are tasked with creating inclusive classrooms where diversity is celebrated, and every student feels valued and supported. This involves fostering a sense of belonging among students, promoting positive peer interactions, and cultivating an environment where differences are embraced. Teachers must differentiate instruction to meet the diverse needs of students, adapting teaching methods, materials, and assessments accordingly. They identify individual strengths, challenges, and learning preferences, collaborating with colleagues and support staff to develop and implement tailored support plans. Additionally, teachers build strong relationships with students based on trust, respect, and empathy, creating a safe space where students feel

empowered to learn and grow. Advocating for inclusive practices, teachers challenge stereotypes, raise awareness, and promote the rights of students with disabilities within their schools and communities. Engaging in continuous learning and reflection, teachers seek to enhance their knowledge and skills in inclusive education, ensuring that every student has the opportunity to succeed and thrive in their learning journey. According to Gagare (2018), teachers, parents, and schools play essential roles in promoting inclusive education. Encouraging diverse peer interactions, utilising online resources, fostering friendships, collaborating on Individualised Education Plans (IEPs), understanding legal rights, and training teachers to support students with disabilities are key steps in ensuring an inclusive and supportive learning environment for all students.

Need for an assessment scale.

An assessment scale is a crucial tool in the educational landscape, particularly for identifying and addressing learning disabilities in students. It serves as a structured and systematic method for evaluating various aspects of a child's learning abilities, behaviours, and academic performance. The primary purpose of an assessment scale is to detect early signs of learning difficulties, allowing for timely interventions and support to ensure that every student has the opportunity to succeed. Early intervention improves academic outcomes and boosts a child's self-esteem and confidence, reducing the risk of long-term negative effects on their educational journey.

Assessment scales are typically used by psychologists, doctors, and other trained professionals who specialise in diagnosing and addressing learning disabilities. These experts have the expertise to comprehensively evaluate a student's needs. However, many people may hesitate to seek out a doctor for screening due to stigma or fear of diagnosis. This is where teachers play a crucial role. Since teachers interact with students daily and are familiar with their learning patterns and behaviours, they are well-placed to use an assessment scale in a non-threatening and supportive environment. When teachers administer these assessments, the process is more accessible and less intimidating for students and their families, encouraging early detection and intervention. With an assessment scale, teachers can systematically identify students who may be at risk for LDs, ensuring that no child falls through the cracks. This tool allows teachers to make informed decisions about the need for further evaluation, specialised instruction, or referral to additional support services.

By using an assessment scale, teachers can create a more inclusive classroom environment, where all students have access to the resources and support they need to thrive. The scale also promotes consistency across classrooms and schools, ensuring that all students are evaluated using the same criteria, which is crucial for fairness and equity in education.

Ultimately, an assessment scale empowers teachers to take proactive steps in addressing learning disabilities, contributing to the success and well-being of their students.

Teachers' Knowledge Attitude Practices (KAP) on Learning Disability

Teachers' knowledge about learning disabilities is essential for several reasons. Firstly, understanding the characteristics and manifestations of various learning disabilities enables teachers to recognise and support students who may be struggling academically or behaviourally. By having this knowledge, teachers can provide targeted interventions and accommodations to help students access the curriculum and achieve academic success.

Secondly, teachers with knowledge of learning disabilities can create inclusive and supportive learning environments where all students feel valued and understood. They can adapt teaching strategies and materials to meet the diverse needs of students, promoting equity to ensuring that every learner has the opportunity to thrive.

Additionally, teachers play a central role in advocating for students with learning disabilities and collaborating with other professionals, such as special education teachers, psychologists, child therapists and parents, to develop individualised education plans (IEPs) and support plans. Having a solid understanding of learning disabilities empowers teachers to effectively communicate with stakeholders and advocate for the resources and support services that students need to succeed.

Furthermore, teachers' knowledge about learning disabilities helps to reduce the stigma and misconceptions surrounding these conditions. By promoting awareness and understanding among students and colleagues, teachers can create a more inclusive school culture that celebrates diversity and fosters empathy and acceptance.

In 2017, Ghimire emphasised the important role teachers play in identifying children with learning difficulties, being the first to recognise challenges in school children. However, Ghimire noted a lack of knowledge regarding these conditions, attributing it to insufficient awareness and the absence of specialised training courses for teachers in

identifying learning difficulties. In the year 2018, Deb underscored the crucial role of schools and teachers not only in identifying children with LDs but also in integrating them into society. He emphasised that these responsibilities extend beyond identification to ensure the active participation of these children in the broader community. In the most recent perspective from 2021, Madhamani and Joseph highlighted that teachers play a key role in the early identification and management of LD, being the first to notice signs when children begin their school education. They emphasised that early identification and effective management are crucial to preventing discrimination among these children.

According to Kim, Ross and Smith (1964-67), the KAP theory posits that changes in human health behaviour occur through three consecutive processes: acquiring the correct knowledge, developing attitudes, and adopting behaviours or practices. In this context, many studies have shown that the KAP has a relationship.

Teachers' attitudes toward teaching children with learning disabilities (LD) significantly influence the educational outcomes and experiences of LD students. Positive attitudes characterised by patience, empathy, and flexibility create an inclusive and supportive learning environment where students feel valued and empowered to succeed. Conversely, negative attitudes may perpetuate stigma and barriers to learning, hindering the academic and socio-emotional development of LD students. Therefore, fostering positive attitudes among teachers through professional development, awareness-raising initiatives, and collaborative support networks is essential for promoting inclusive education and enhancing the educational opportunities of children with LD.

Knowledge and attitude must translate into effective teaching practices. Teachers need to implement evidence-based instructional strategies, adapt teaching methods to meet the diverse needs of students with LD and create inclusive learning experiences that promote student engagement and success. Classroom teaching practices of teachers in supporting the learning needs of children with LDs are the linchpin in a child's academic life. Effective teaching practices for LD students often involve individualised instruction, differentiated assignments, and the use of multisensory teaching methods. Teachers may implement specialised strategies such as breaking tasks into smaller steps, providing visual aids, using repetition and reinforcement techniques, and offering frequent opportunities for practice and review. Additionally, creating a supportive and inclusive classroom environment where students feel accepted, valued, and encouraged to participate actively is

essential. Collaborating with special education professionals, involving parents in the educational process, and regularly monitoring student progress are also important components of effective teaching practices for LD students. Knowledge, attitude, and practice regarding learning disabilities (LD) are essential for teachers because they directly impact the educational experience and outcomes of students with LD. On the whole, teachers who possess knowledge, positive attitudes, and effective practices related to LD are essential because they have the expertise and commitment needed to support the diverse learning needs of students with LD, create inclusive classrooms, and ensure that all students have the opportunity to reach their full potential.

Socio-demographic influences

Socio-demographic markers, such as age, gender, education, and lifestyle, underscore the diversity among teachers and offer valuable insights into how they perceive and approach learning disabilities. These factors, encompassing lifestyle choices, skills, and personality traits, shape individuals' experiences, behaviours, and attitudes. Age, gender, socio-economic status, education, marital status, family structure, type of school and educational qualification are commonly used markers to analyse and understand patterns, trends, and disparities within populations. These markers are integral to research, policy-making, and social planning, as they help address the specific needs and challenges of different groups. Similarly, understanding personal factors in socio-demographic markers is crucial in fields like human development and behavioural sciences. By studying socio-demography, it becomes possible to gain a comprehensive understanding of the complex interplay between individual, family, and societal influences on growth and development. This knowledge helps identify disparities, informs targeted interventions, and fosters the creation of a more equitable and supportive environment for all. As Lichtenberg (2010) noted, socio-demographic traits can impact an individual's ability to acquire knowledge.

Inspecting the impact of socio-demographic markers on teachers' knowledge, attitudes, and practices towards learning disabilities is essential for several reasons. Age, for example, correlates with both experience and empathy. Older teachers, with years of teaching behind them, may exhibit higher levels of empathy due to their accumulated experience. In contrast, younger teachers often bring fresh perspectives, enthusiasm, and a willingness to learn, making them more proactive in integrating children with learning disabilities into regular classrooms.

Geographical location is another key factor. Teachers in urban and rural areas differ in their exposure to diversity, access to resources, support services, classroom dynamics, and cultural factors. Urban teachers, who often work in more diverse environments with better resources and support services, tend to have a deeper understanding of learning disabilities. On the other hand, rural teachers may face challenges due to limited resources and fewer opportunities for specialised training, which can affect their ability to effectively support students with learning disabilities. Family structure also plays a role. Teachers from joint families may have more exposure to learning disabilities through interactions with a broader network of family members. These interactions provide opportunities to discuss and share experiences related to LDs, leading to a deeper understanding of the condition.

Experience significantly impacts teachers' knowledge, attitudes and practices (KAP). Teachers with longer careers are more likely to have encountered students with diverse needs, enhancing their ability to address learning disabilities. They are also more likely to have opportunities for in-service training, which further improves their teaching skills. Similarly, teachers with higher qualifications possess a more advanced understanding, enabling them to better support students with learning disabilities. Continuous professional development ensures that teachers stay informed about current research, allowing them to refine their practices and create more inclusive learning environments.

Podolsky et al. (2019) highlighted that teaching expertise is positively correlated with students' academic progress. As teachers gain more experience, their students tend to perform better, not only in standardised tests but across various indicators of success. Additionally, teachers are more effective when working in nurturing and collaborative environments. Shah and Udgaonkar (2018) found that both experience and age positively influence teaching effectiveness. Similarly, Essa and EI-Zeftawy (2015) identified a positive correlation between age, years of experience, and strategies for supporting students with learning difficulties. Their findings suggest that as teachers spend more years in the profession, their knowledge and understanding of how to support students with learning difficulties also increase.

Recognising the influence of socio-demographic markers on teachers' knowledge, attitudes, and practices (KAP) towards LDs is crucial. By understanding how these factors shape educators' approaches and behaviours, the quality of support provided to students with LDs can be significantly improved.

Scope of the study

The scope of this study centres on the development and standardisation of a Handy Assessment Scale specifically designed for primary school teachers. As the primary caretakers of students' academic and social development, teachers are uniquely positioned to notice subtle signs of learning difficulties. This study aims to empower teachers by providing them with a practical tool to recognise and address learning disabilities (LD) early on, within a regular classroom setting. By focusing on the accessibility, effectiveness, and practicality of the assessment scale, the study seeks to bridge the current gap in tools available for teachers for the early identification of LD.

The outcomes of this study hold significant promise for diverse stakeholders. Policymakers will benefit from insights into the scale's efficacy, potentially informing policies that support widespread adoption. Educationalists can use the findings to enhance teaching practices, ensuring effective early identification and intervention for students with LD. Implementers, including school administrators, will gain valuable strategies for the seamless integration and successful utilisation of the assessment scale. Ultimately, this study contributes to the advancement of inclusive education, aligning with broader goals of creating accessible and supportive learning environments for diverse student needs.

Rationale of the study

Learning disabilities (LD) often go unrecognised due to a lack of awareness, which leads to significant adverse outcomes for affected children. If these disabilities are not addressed promptly, students may become school dropouts or perform poorly academically. Early identification and intervention are crucial, as they help children succeed in school and manage life better. Therefore, empowering teachers to recognise early warning signs of LD is imperative. Teachers, being the frontline caretakers, are in a unique position to observe and identify children with learning disabilities early on, which can lead to timely and effective intervention.

In India, the prevalence of LD is significant, with approximately five students in every average-sized class being affected (Shelia Saravanabhavan, 2010). UNESCO's Mahatma Gandhi Institute of Education for Peace and Sustainable Development (2020) estimates that 10-12% of the school-going population in India has learning disabilities. The Government of India's 2020 report on Inclusive Education for Children with Special Needs emphasises the importance of improving education quality for all students and the necessity

of early intervention. It highlights the need for awareness, positive attitudes, and specialised training for teachers to effectively identify and support CWSN.

The research underscores the critical role of schools and teachers in identifying and managing learning disabilities. Deb (2018) highlights the importance of schools in not only recognising LD but also integrating affected children into society. Ghimire (2017) points out that teachers are often the first to notice learning difficulties due to their direct interaction with students, yet they lack the necessary knowledge and training. Ali et al. (2019) and Shari and Vranda (2015) similarly note the insufficient awareness and practical application skills among teachers regarding LD.

Thus, there is a pressing need to develop an assessment scale that equips primary school teachers with the tools to identify children with learning disabilities effectively. This will ensure early intervention, better academic performance, and overall improvement in the quality of life for these children.

Research gap

While there are standardised screening tools available, their usage is typically restricted to scientific researchers. This limitation arises because these tools often require specialised training for proper administration and interpretation. Additionally, when it comes to curriculum-based assessment, the challenge is exacerbated by the fact that different education boards, such as central and state boards, adhere to distinct academic curricula, making it difficult to implement a uniform assessment system. Bandla et al. (2017) employed Raven's Progressive Matrices, MISIC, and the NIMHANS index for the identification of learning disabilities, highlighting the multifaceted approach researchers employ for assessment purposes. Scaria et al. (2023) utilised the National Institute of Mental Health and Neurosciences (NIMHANS)-SLD index and the Grade Level Assessment Device (GLAD) for identifying Specific Learning Disabilities (SLD). Relevance of these tools was frequently restricted within English-medium schools. In the context of the Indian educational landscape, children in Indian cities often learn through English, the primary medium of instruction, which is frequently not their mother tongue. Bilingualism, a distinctive feature of the Indian educational system, exacerbates challenges for dyslexic individuals. Liss Maria Scaria (2023) highlights that these tools can be effectively utilised by trained psychological researchers, but their accessibility is limited, particularly in non-English medium educational settings. Interestingly, Scaria points out the

absence of a screening tool tailored for teachers, highlighting a critical gap in tools accessible to educators for identifying SLD in the classroom setting. This underscores the pressing need for the development of practical and teacher-friendly screening tools for effective identification and intervention at the primary school level. Despite the existence of various tools for trained professionals, there seems to be a gap when it comes to tools tailored for primary school teachers to use in their classroom settings that could be easily accessible and user-friendly but also cater to teachers' knowledge and ability to identify learning disabilities effectively.

Hence, the development of a “Handy assessment scale for primary school teachers to identify LD” in normal classroom setup becomes important for early identification.

Statement of the problem

The investigation is prompted by several key points that highlight the pressing issue of Learning Disabilities (LD) going unrecognised due to a lack of awareness.

- Lack of awareness: Learning Disabilities often go unnoticed because of a widespread lack of awareness regarding their signs and symptoms among teachers.
- Potential consequences: Without timely recognition and intervention, children with LD face the risk of becoming school dropouts or performing poorly in their academics, impacting their long-term educational and personal outcomes.
- Importance of early identification: Early identification is crucial as it paves the way for early intervention, offering children the opportunity to succeed in school and better cope with life's challenges.
- Empowering teachers: There is a significant need to empower teachers to identify the early warning signs of learning disabilities. Teachers, being the front-line caretakers, have a crucial position in the educational journey of students.
- Teachers as front-line caretakers: Given that teachers are at the forefront of education, they need to recognise children with LDs and intervene early to enhance the academic and personal development of these students.

The subject of developing an assessment scale specifically tailored for primary school teachers to be used in their classroom setup is undertaken in this investigation to address these critical points. The aim is to provide teachers with a practical and accessible tool to recognise and intervene early with children experiencing learning disabilities, ultimately fostering improved academic and personal outcomes.

Research Objectives

The study aims to establish both primary and secondary objectives, which are outlined as follows.

Primary Objective

- To develop an Assessment Scale for primary school teachers to identify children with Learning Disability.

Secondary Objectives

- To assess the levels and interaction of Knowledge, Attitude and Practice (KAP) of the primary school teachers on learning disability.
- To conduct a Sensitisation Programme for primary school teachers on Learning Disability and to examine its effects on Knowledge Attitude Practice (KAP) on learning disability
- To explore the socio-demographic determinants of KAP of the primary school teachers on learning disability.

Research Hypothesis

H_a1: The developed Assessment Scale will have sufficient model fit indices indicating the goodness of fit

H_a2: The developed Assessment Scale will have sufficient validity and reliability

H₀3: There will be no interaction between Knowledge Attitude Practice (KAP) of primary school teachers (PRTs) on Learning Disability (LD)

H₀4: There will be no influence of socio-demographic markers on the knowledge of PRTs on LD

H₀5: There will be no influence of socio-demographic markers on the attitude of PRTs on LD

H₀6: There will be no influence of socio-demographic markers on the practice of PRTs on LD

H₀7: Sensitisation programme will not have a significant change in the KAP of primary school teachers on LD

H_a1 and H_a2 are framed based on alternate hypotheses H₀3, H₀4, H₀5, H₀6 and H₀7 are framed based on the null hypothesis.