Inclusion of Students with Specific Learning Disabilities in Higher Education

ChangeInkk Foundation

Practitioner's Guidebook

Inclusion of Students with Specific Learning Disabilities in Higher Education

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ChangeInkk Foundation

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Creating Inclusive Learning Environments For All Students

Globally, it is estimated that **1 in 5 people are Dyslexic.**[1]
By this estimate, about 200 million individuals in India,
including about 35 million students, would have a
specific learning disability (SLD).
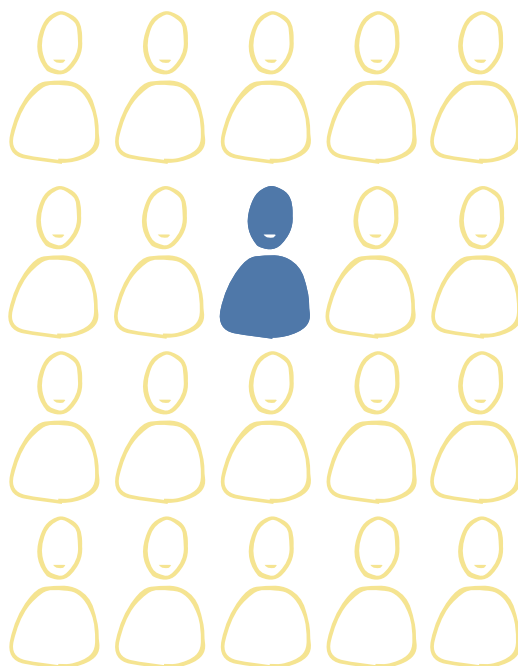
However, only
1 in every 20 people
with Dyslexia are identified

1 https://dyslexiaida.org/dyslexia-basics/

While students with SLDs struggle with language, literacy and numeracy - **they possess average to above-average intelligence.** Strengths of Dyslexic minds include strong leadership and communication skills, thinking creatively, and ideating unique solutions for problems. These unique qualities can contribute to groundbreaking ideas and unconventional approaches in various academic and professional disciplines.

Do you know what is common amongst visionary inventors like Albert Einstein, Henry Ford, and Steve Jobs? **They were all Dyslexics.** Their path-breaking innovations have impacted millions of people. Not many people are aware that a whopping 40% of all self-made millionaires are Dyslexic. **Clearly, there is a hidden genius in people who cannot spell it.**

Albert Einstein was expelled from school due to his 'rebellious' nature. **Like Einstein, millions of Dyslexic geniuses are simply misunderstood, hidden, ignored** in the institutions we have set up in our world. Imagine having the exact solution needed for a problem, but it being rejected because you approached it from a unique path?

Students with SLDs
possess average to
above average intelligence[2]

As educators, we have the opportunity to enable a league of innovators, changemakers, and leaders. Despite their intelligence, students with learning disabilities face many barriers to achieving their full potential - such as inadequate support and

2 https://www.madebydyslexia.org/wp-content/uploads/2021/08/Join-The-Dots-Workplace-Guide-1.pdf

accommodations in education, systemic biases, and negative stereotypes regarding disabilities. By undermining the Dyslexic potential, we are wasting talent. But with the right support, people with learning disabilities can succeed greatly in their life.

This handbook is a comprehensive guide for educators to understand what SLDs are, how they impact learning, and how to create an inclusive learning environment in higher education to harness the potential of all learners.

Remember:
Accommodations
do not mean reducing
academic rigour

We will provide guidance on how to:

1. Understand specific learning disabilities

How the Dyslexic Edge can shine in an inclusive university **2.**

3. Increase GER (Gross Enrollment Ratio) of students with SLDs

Create inclusive campus environments **4.**

5. A step-by-step guide on how to provide inclusive support

For higher education administrators:

1. How to create policies and practices that support students with specific learning disabilities and promote access and equity

How you can comply with the mandates of the National Education Policy (NEP, 2020) and the Rights of Persons with Disabilities Act (RPwD Act, 2016) **2.**

3. All India Council for Technical Education (AICTE) & University Grants Commission (UGC) Guidelines

Chapter 1

Understanding Neurodiversity & SLDs

i. What is Neurodiversity?

Neurodiversity refers to the natural variation in human brains and the different ways in which people process information. This variation is present in all individuals, regardless of whether or not they have a diagnosed learning disability.

Just by looking at them, it is impossible to tell who has a SLD
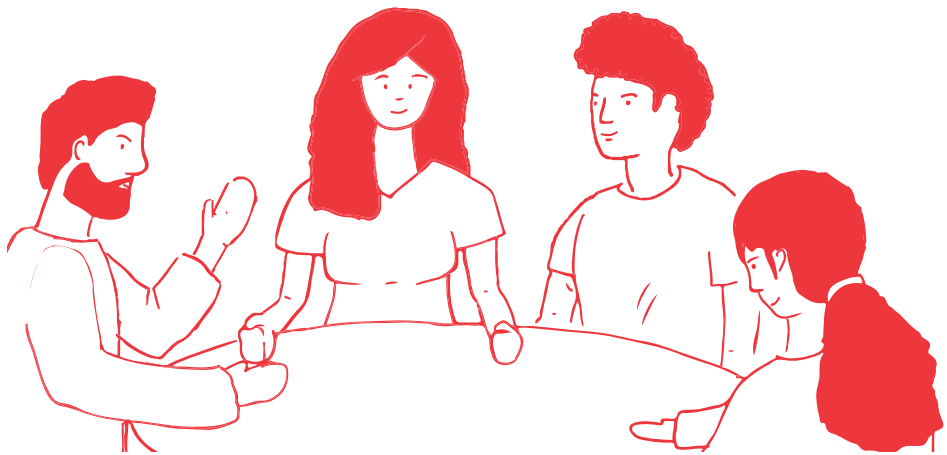
Neurodiversity is a
fundamental aspect
of human diversity & should be
celebrated & valued

ii. What are SLDs?

Specific Learning Disabilities is one of the 21 disabilities recognised by the RPwD act 2016. **Individuals with Specific Learning Disabilities (SLDs) have an IQ that is average or above average,** however, they struggle to process information and learn in areas such as reading, writing, and mathematical calculations. While there are many struggles, the many strengths have transformed the world we live in.

SLD's are often referred to as hidden/invisible disabilities because they are not always visible or immediately apparent. For an individual who has an SLD, this often affects their self-esteem and confidence.

It is a lifelong condition that can have a significant impact on a person's academic, social, and emotional functioning.

Key Indicators

1. SLDs are a lifelong condition that runs in families

It is an invisible disability - diagnosed through psychometric testing **2.**

3. Individuals with SLDs have an average or above average intelligence (IQ)

SLDs impact language abilities across all languages i.e., if you are diagnosed with Dyslexia in English, you will also have Dyslexia in Hindi and so on **4.**

5. No two Dyslexics are the same

What are the different kinds of SLDs & how do they manifest?

Dyslexia

Dyslexia struggles with language

Dyscalculia

Dyscalculia struggles with mathematics

Dysgraphia

Dysgraphia struggles with writing (fine motor skills)

Dyslexia

Dyslexia accounts for at least

80%

of all SLDs

Dyslexia is a language-based learning disability that affects a person's ability to read, write, and spell. Individuals with Dyslexia may struggle with understanding the structure of language, spelling, and to identify and manipulate sounds in words.

<p style="text-align:center;color:red;">Can you read this?</p>

"I have dyslexia" was extremely hard for me to say to anyone. It was like saying "I am stupid." I don't believe that I am stupid.

This is generally how a Dyslexic sees text -

These individuals often mirror images (p becomes b, d becomes q.), spell phonetically and may struggle with readings.

Dyscalculia

Dyscalculia is present in about

5%

of the population

Dyscalculia is a math-specific learning disability that affects a person's ability to understand and work with number-based information.

$$100 + 100 = 20$$
$$10 + 13 = 16$$
$$6 + 5 = 8$$
$$2 + 3 = 5$$
$$4 + 5 = 6$$

$$26 \times 25$$
$$5 \times 6 = 65$$
$$4 \times 2 = 8$$
$$6 + 5 = 11$$
$$3 + 3 = 6$$

$$\begin{array}{r} 234 \\ 436 \\ 210 \\ \hline 880 \end{array} \quad \begin{array}{r} 426 \\ 210 \\ 306 \\ 409 \\ \hline 1,350 \end{array} \quad \begin{array}{r} 410 \\ 309 \\ 307 \\ 404 \\ \hline 1,429 \end{array}$$

$$\begin{array}{r} 26 \\ \times 32 \\ \hline 52 \\ 78 \\ \hline 832 \end{array} \quad \begin{array}{r} 307 \\ 306 \\ \hline 1827 \\ 040 \\ 912 \\ \hline 93,424 \end{array}$$

This is how a person with Dyscalculia may solve mathematics problems.

Dysgraphia

Dysgraphia is a learning disability that affects fine motor skills. Individuals with Dysgraphia may generally struggle with writing.

I HAVE DSGRAFIA Somtims I st rUGGLE WIT WRITTYg, But I S+iL +RX MY Best.

This is what a person with Dysgraphia may write like. "I have Dysgraphia. Sometimes I struggle with writing, but I still try my best."

iii. Struggles & Strengths

The impact of SLDs goes beyond academics. It also affects one's executive functioning/life skills and emotional well-being.

Understanding
SLD Struggles:
3 Key Elements

SLDs always impact all three of these aspects of a student's life

A. Academic Performance

Even though having a SLD does not affect the person's intelligence or IQ, it does affect their academic results. There is a gap between written and oral performance. Written work may be poorly structured but oral expression is clear. They struggle with spellings, writing and completing tasks on time. This often results in educators and parents thinking that the child is being lazy or is a "slow learner." This is not true.
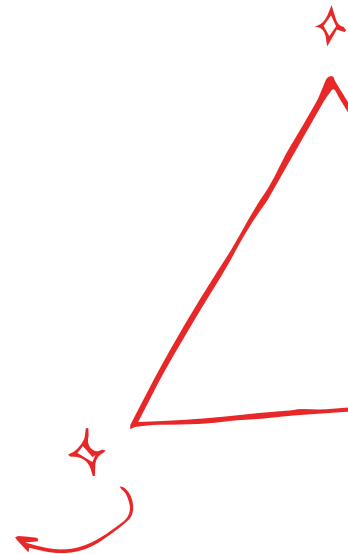
B. Executive Functioning or Life Skills

Executive function is a set of cognitive skills that include working memory, flexible thinking, and self-control. We use these skills to manage daily life. SLD troubles with executive functioning cause people to find it hard to focus, follow directions, and handle emotions. Short attention span and challenges with concentration, especially in noisy environments. Difficulty remembering information in order.

C. Emotional Well-being

All educators, parents and employers should be more aware of the impact that having an SLD has on mental health. Just as we are all unique in our reactions to challenge and adversity, the emotional repercussions of Dyslexia are unique to the individual. Being forced to process lots of written information without breaks is likely to lead to headaches, exhaustion, aches and pains (especially hands and fingers) and a desire to sleep excessively. Judgment around their intelligence and abilities leads to poor self-esteem, frustration, depression. Bullying can cause anxiety and social isolation.

How these struggles can manifest in your classroom

Difficulty in planning

Difficulty in writing research papers individually

Difficulty in submitting work on time

Gap in oral and written performance

Slow processing

Memory challenges

Poor self-esteem

Easily distracted in class due to overstimulation

Those with SLDs learn to hide their struggles in order to 'fit in' to the expected standard of a student. As an educator, you can play a pivotal role in creating an atmosphere of acceptance, where students with SLDs can confidently share their experiences. When educators and HEI administrators prioritize inclusivity, provide reasonable accommodation, and promote open dialogue, **it paves the way for students to unlock and harness their potential.**

It is important to note that each individual with an SLD is unique & may experience their disability differently
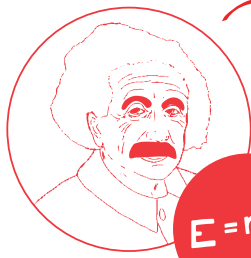
Albert
Einstein

Agatha
Christie

Steve
Jobs

Carol
Grieder

The Dyslexic minds of the likes of Albert Einstein, Carol Greider, Steve Jobs, Agatha Christie and so many others have developed path-breaking innovations and entrepreneurial ventures that have impacted every aspect of our lives.

Are you wondering how a mind that cannot process language in the **'normal way'**, can manage to make such a tremendous impact?

Dyslexic minds see the world differently. They think creatively, laterally, with a multi-sensory lens, often coming up with creative and out-of-the-box solutions for problems; **referred to as the "Dyslexic Edge!"**

Strengths of a Dyslexic Mind

Many individuals with Dyslexia are highly creative and innovative thinkers, with the ability to see patterns and make connections that others may miss. They may also have strong spatial reasoning skills, excellent problem-solving abilities, and an intuitive understanding of complex systems.

"Global studies have shown that the percentage of students with Dyslexia in the fields such as

engineering, arts & entrepreneurship

are over twice the percentage of individuals with Dyslexia in the general population."[3]

3 The Dyslexic Advantage: Unlocking the Hidden Potential of the Dyslexic Brain. Penguin Group

Some specific strengths of a Dyslexic mind are:

Visualizing

Innovating

Communication

Reasoning

Connecting

Problem Solving

Seeing the Big Picture

Thus, it is not surprising to learn that if something has changed the world, there is a high probability that there is a Dyslexic behind it.

40%

self-made millionaires
are Dyslexics

Challenging the assumed link between academic abilities and intelligence, Dyslexia is surprisingly common at the Massachusetts Institute of Technology (MIT), **to such an extent that Dyslexia is also known as the MIT disease.**[4] In the field of computer graphics and simulation, Dyslexic artists, scientists and technologists are often leading innovators.

Total revenue of just ten of the companies founded or co-founded by Dyslexic individuals was **$1 trillion in 2020, collectively employing over 1.5 million people.**[5]

The untapped potential of people with SLDs can cause a high-opportunity cost for the nation's progress, making it imperative to help them transition to higher education to drive innovation. It is hence essential to identify SLDs timely in a student's life.

4 https://mitadmissions.org/blogs/entry/dyslexia-at-mit1/
5 Data sourced from different company reports (2020)

iv. SLD Identification

As per the RPwD Act, diagnosis of SLDs can happen only in or after third grade or 8 years of age, whichever is earlier. Diagnosis of SLDs requires either:

A Pediatrician

A Psychiatrist

A Pediatric Neurologist

Clinical or Rehabilitation Psychologist

Diagnosis for SLDs is a 3-Step process:

Step 1

Assessment

Assessment to eliminate any visual or hearing impairments.

Step 2

IQ Assessment

IQ Assessment by Child psychologist/ Clinical psychologist/ Pediatric neurologist/ psychiatrist only if the IQ is determined to be average or above (>85), then Step 3 will be applied.

Step 3

SLD Assessment

SLD Assessment involves application of specific psychometric tests for diagnosing SLD and giving it a severity scale.

Once a benchmarked (40% or more) disability diagnosis is confirmed, a disability certificate and UDID card[6] can be issued by the competent authority. The disability certificate is needed to access any facilities, benefits, or concessions available under the government schemes for persons with disabilities.

Screening

While a formal diagnosis can be done only after 8 years, a screening process can be undertaken for early identification of a child at risk of SLD. The process is much like taking a child to get their eyes tested for poor vision after regular complaints of a headache.

6 UDID card see page 47

As part of the screening process, one must assess not just academic performance, but also the impact on daily life and emotional well-being. The screening must be done in the primary language of the student. You may have students who are unidentified and struggling. If you think a student may be at risk, talk to them and take initiative with screening/diagnosis.

Success Stories

Reading aloud and spelling words were always a challenge for Shilpa, and simple tasks like driving took her nearly a decade to master. But she discovered innovative ways to work through the challenges as problem-solving came naturally to her.

On the other hand, Vivek was always poor with grammar but he excelled in mathematics. He took the JEE twice, successfully clearing it in both attempts.

Like Vivek, Kunal too recounts struggling with learning language basics like ABCs, until the 5th grade. However, when presented with a math problem, he would quickly solve it mentally. Unfortunately, because he couldn't show the step-by-step working, his teachers assumed he had copied from his peers. Despite his exemplary mathematics skills, Kunal was labeled a cheater.

Shilpa Rao

Today, Shilpa Rao - the girl who couldn't spell - is an engineer and innovator who has headed the AI platform at TCS. She emphasizes the importance of the freedom to experiment and encourages individuals with Dyslexia to believe in themselves, as self-belief is key when others doubt you.

Vivek Khare

Vivek Khare, the boy who had difficulty writing a simple sentence, is now a graduate of IIT Kanpur and an angel investor behind many of India's leading startups, including the unicorn - Zomato.

Kunal Jhunjhunwala

Kunal Jhunjhunwala, the boy who couldn't read till Grade 5, today has an Executive MBA from TRIUM and is the Founder & MD of Airpay, one of India's leading Fintech's which employs 500+ across 5 countries!

Are you ready to champion the cause of inclusivity?

Things to remember:

Every individual is neurodiverse

People with SLDs always have average or above average intelligence

SLDs negatively affect students' academic results, executive functioning or life skills, and emotional well-being

Dyslexic strengths include creativity, reasoning, communication, and innovation

SLD's can only be identified after 8 years or grade 3, by a medical practitioner

Reflective Questions

1 In your journey as an educator, have you encountered students with struggles outlined in this chapter?

2 How aware are we of the specific challenges and needs that students with SLDs may face in higher education?

3 How can we create an inclusive and welcoming classroom environment that promotes the participation and engagement of students with SLDs?

The Power of Perseverance

"Remember you are unique…that is the most important thing…you think uniquely than other people."
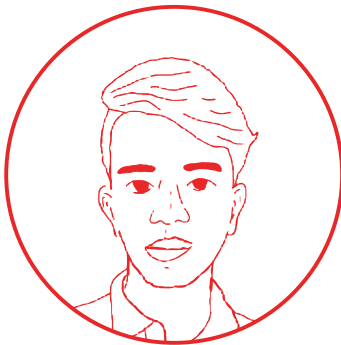
Sanjay V. Krishnan

Inventor - Custom Motorized Bicycle

Chapter 2

Regulatory & Policy Framework

What is India doing to tap into this critical resource pool of Dyslexic thinkers?

i. Rights of Persons with Disabilities (RPwD) Act, 2016:
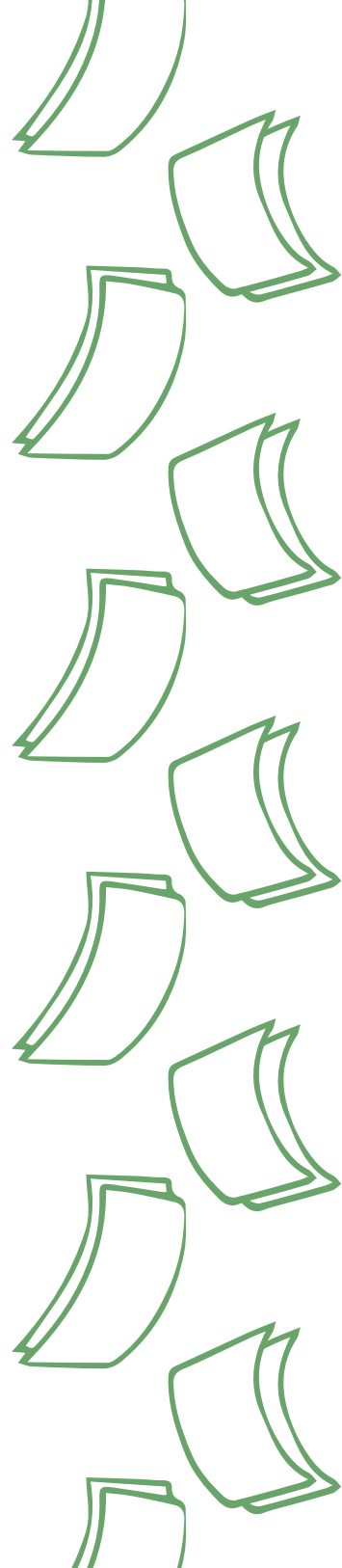
The Rights of Persons with Disabilities Act of 2016 recognises SLDs as a disability in India for the first time. The RPwD Act aims to ensure equal opportunities, protection of rights, and full participation for persons with disabilities (PwDs). Paragraph 2 of the Schedule of the RPwD Act 2016 defines SLD as:

"Specific learning disabilities" means a heterogeneous group of conditions wherein there is a deficit in processing language, spoken or written, that may manifest itself as a difficulty to comprehend, speak, read, write, spell, or to do mathematical calculations and includes such conditions as perceptual disabilities, Dyslexia, Dysgraphia, Dyscalculia, Dyspraxia and developmental Aphasia."

The RPwD Act, 2016 mandates **5% reservation for PwDs** in government and government-aided institutions

Unique Disability Identity Card (UDID)

One of the provisions of RPwD act is the creation of a Unique Disability Identity Card (UDID) which will serve as a single document for identification, verification, and validation of persons with disabilities across the country.

Apply for a UDID:

Go to the official website of the unique disability ID programme (UDID) at https://www.swavlambancard.gov.in/

Click on the register link to register yourself with your personal, disability, employment, and identity details.

Apply for a disability certificate and UDID card online by filling out the required information and uploading the necessary documents.

Submit your application and wait for the verification and approval process.

ii. National Education Policy (NEP), 2020

A Structured Method to Support Students with SLDs

The introduction of the new National Education Policy in 2020 (NEP '20) has accelerated the need for the creation of an 'inclusive education' system that caters to students with both visible and invisible disabilities. This policy is in complete consonance with the provisions of the RPwD Act 2016.

The Act mandates that children with disabilities (including those with learning disabilities) will be enabled to fully participate in the regular schooling process from the foundational stage to higher education, ensuring equitable access to quality education.

Universities and colleges will thus be required to set up high-quality support centers to support SEDG students to transition to higher education.

NEP 2020 emphasizes the necessity for sustainable inclusive reform at all levels of a student's educational journey:

Admissions Processes

Curriculum

Increasing Employability Potential of Higher Education Programmes

A shift towards holistic education is aimed at developing various competencies of students - **intellectual, aesthetic, social, physical, emotional, and moral in an integrated manner.** Developing inclusive learning environments will also contribute to higher GER (gross enrollment ratio) of students with SLDs!

People with SLDs are one of the SEDGs that NEP emphasizes upon. The National Education Policy 2020 (NEP '20) proposes a structured method to effectively implement support services for students with SLDs at all HEIs as follows:

Steps to be taken by Governments
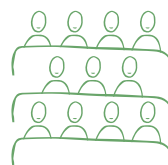
Earmark suitable funds for the education of SEDGs

Set clear targets for higher Gross Enrollment Ratio for SEDGs

Provide more financial assistance and scholarships to SEDGs in both public and private HEIs

Conduct outreach programmes on higher education opportunities and scholarships among SEDGs

Develop and support technology tools for better participation and learning outcomes

Steps to be taken by All HEIs (National & State)
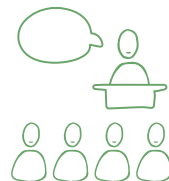
More financial assistance & scholarships

Conduct outreach & ensure inclusive admission processes

Make the curriculum inclusive

Ensure all buildings & facilities are disabled-friendly

Develop bridge courses, provide counselling & support

Ensure sensitization of faculty, counsellor & students

Strictly enforce all no-discrimination & anti-harassment rules

Develop Institutional Development Plans for action on increasing SEDGs participation

iii. Regulator Mandates

ज्ञान-विज्ञान विमुक्तये

UGC

University Grants Commission (UGC) is a statutory organization of the Govt of India, for the coordination, determination and maintenance of standards of teaching, examination and research in university education.

The mandates of UGC guideline titled **'Accessibility Guidelines and Standards for Higher Education institutions and Universities'** are summarized on the following pages:

School to Higher Education Transition

1. Providing transition support from school to college or graduation to post graduation.

2. Step-by-step guidelines of each administrative aspect, support through imparting plus-curricular skills like independent-living, social interaction etc.

Admission Processes

1. Admission announcements to be sent in accessible formats, and to include information on inclusivity resources of the institute.

2. At the time of joining the institution, a Need Assessment Board shall conduct a formal assessment of the specific needs of students with disabilities.

UGC : Student Life on Campus

Infrastructure

1. Universal Accessibility in Built Infrastructure: Including classroom illumination, acoustics, and accessible signage on campus.

Support & Scholarships

1. Students to be regularly provided accessible information and support regarding applications to various government, private or other scholarships or schemes.

Curriculum

1. Allow students to focus on particular parts of a topic, transition support during timetable, choice in assignments and optional breaks in class.

Exam Accommodation

1. Alternate modalities for examination and evaluation; or alternate/adapted question papers.

2. Quiet, distraction-free examination area

3. Breaks during exam, exam given by page or by section, step-by-step guidelines for examination.

Assistive Technology

1. Institute must ensure that every student with a disability is provided the required Assistive Technology. This must be accompanied with appropriate training so that they can fully utilize the Assistive Technology devices.

Office of Learning Support & Disability Support Ecosystem

1. Creation of Equal Opportunity Cell (EOC) or similar units to promote a culture of inclusivity.

Placement & Career Advice

1. HEI's to assist and support students with disabilities to gain successful employment upon degree completion, ensuring that various notifications regarding employment schemes, dates, application, etc are made available in accessible formats.

2. Creating awareness of inclusive employment and potentials of persons with disabilities across both prospective employers.

UGC : Implementation

Faculty & Admin Sensitisation

1. Staff must be provided with proper training workshops to understand the needs of students with disabilities.

2. Creating a climate of inclusion, constant reinforcement of inclusive culture, using the right language.

Inclusive Pedagogy

1. As per students needs, faculty may bring modifications or adaptations in the teaching-learning process in terms of volume of work, time, support, level of difficulty, participation and physical adaptation.

Awareness & Advocacy

1. Creating awareness of potentials of persons with disabilities across prospective employers; generating awareness on Assistive Technology solutions, awareness & inclusivity training for academic content producers.

Funding

1. Each HEI needs to develop its own administrative framework to undertake action.

Governance

1. UGC initiated creation of Equal Opportunity Cell (EOC) at HEIs. To strengthen these units, HEIs shall follow guidelines prescribed by UGC and comply with role and functions defined for such units. A person with disability should preferably be the coordinator/convenor of such a cell/unit.

AICTE

All India Council for Technical Education (AICTE) is a national-level apex advisory body that surveys the facilities available for technical education in India.

The mandates of AICTE guidelines titled **'AICTE Guidelines for Inclusive Education for all including Persons with Disabilities'**, are summarized on the following pages:

Admission Processes

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1. Promote admission of PwDs in technical institutions.

2. Providing accommodations & streamlining admissions process for students with SLDs

AICTE : Student Life on Campus

Infrastructure

1. Assistive Technology hardware, clear lighting and sound amplification systems.

Support & Scholarships

1. Financial assistance through scholarships, sponsorships to be provided through Disability Support Unit (DSU) at HEIs.

Curriculum

1. In-class support, use of technology, accessible study material.

Exam Accommodation

1. Provision of scribes, extension of time up to 20 minutes, 20-50% objective type questions in exam

2. Permission and arrangements to use computers to write exam, separation of answer scripts for evaluation.

AICTE : Student Life on Campus

Assistive Technology (AT)

1. AT to be made available for students with SLDs throughout their study years. Regular follow-up with students to ensure ease of usage of AT devices.

Office of Learning Support & Disability Support Ecosystem

1. Mandates creation of an Equal Opportunity Facilitation Cell (EOFC) in all AICTE approved HEIs.

2. Disability Support Unit (DSU) to admit and provide support such as financial assistance, counselling, and training of trainers. Centre for Learning Diversity (CLD) to support students with SLDs.

Placement & Career Advice

1. Placement and support services, employer sensitization, Internship and career advancement activities.

AICTE : Implementation

Faculty & Admin Sensitisation

1. Proposes SWAYAM courses to train a large number of teachers on 'accommodation solutions' for students.

2. Disability database management system, implementation and monitoring of standards of accessibility.

Inclusive Pedagogy

1. Universal Design Techniques - Content to be available in all formats.

2. Communication skill-training of teachers.

Awareness & Advocacy

1. Awareness and advocacy programs for SLD students aspiring to pursue higher education.

2. Awareness on disability rights and reservation policies; community outreach programs.

AICTE : Governance

Research

1. Encourage student projects, research on disability issues and challenges. Investment in R&D of Assistive Technology.

Funding

1. Institutes to create a separate budgetary head covering the expenditure towards activities promoting inclusion of PwD.

2. Cells to be funded in terms of required resources and trained manpower.

Governance

1. AICTE mandates creation of Equal Opportunity Facilitation Cells (EOFC) in all HEIs.

2. The circular acknowledges the comprehensive UGC guidelines for HEIs and suggests that institutions take cognizance of the same while implementing AICTE guidelines.

NTA

National Testing Agency (NTA) is an autonomous testing organization to conduct entrance examinations for admission/fellowship in higher educational institutions.

NTA mandate titled **'Guidelines for conducting written examination for Persons with Benchmark Disabilities'** include:

1. Candidate to be able to opt for their own scribe/reader/lab assistant

2. Candidate to choose mode of examination (online/offline), or recording the answers

3. Compensatory time of at least 20 minutes per 1 hour of examination

4. Use of assistive devices

5. Seating arrangement keeping in mind distraction-free environment

6. Reading material to be provided in accessible format

7. Alternative objective questions in lieu of subjective questions

Kate Currawalla

President and Founder,
Maharashtra Dyslexia Association

Excerpts from the Dyslexic Mind Conference 2021

Kate talks about an incident with a student, Rohit (name changed), recounting the effect that accommodations can have. In university, Rohit struggled with reading and writing, navigating schedules, systems, lectures, and making friends. He spent as little time as possible at college in his first term.

Although he was to receive extra time during exams, due to a lack of coordination he was told to vacate his seat for the next exam in that classroom. However, the principal intervened, taking Rohit to his office, and ensuring a comfortable space to complete his paper, with the reassurance that he could take as much time as needed without interruptions. This act of understanding and validation had a profound impact - it boosted his confidence, gave Rohit a sense of belonging and equal opportunity. This support transformed his college experience, leading him to advocate for himself and even excel as the editor of the student newsletter which won multiple awards!

Kate notes that although the RPwD Act 2016 recognises SLD struggles and mandates support for students with SLDs, negative attitudes and beliefs have not changed about whether students like Rohit are capable of pursuing higher education. She brings to light the Medical Council's Guidelines stating that

students with Dyslexia cannot be admitted to medical courses, and the legal battle that it took to reverse that.

Kate discusses that unfortunately by self-identifying as someone with an SLD, you become the prime target of bias. While there's no dearth of vision and planning in leaders among education - according to her this vision needs to flow down to lecturers, staff, college community as a whole. It is the institutions responsibility to provide the right environment and opportunity for students to succeed.

"Anything less, & it is we who have failed them."
- Kate Currawalla

Things to Remember

RPwD Act, 2016: Formally recognizes SLDs and mandates 5% (including SLDs) reservation for the PwD category for government & government-aided institutions.

NEP 2020: Aligned with the RPWD Act 2016, it ensures equitable access to quality education for students with disabilities. To support the transition of SEDG students to HEIs, universities & colleges are required to prioritize inclusion & set up high-quality support centers.

The UDID card is a single document for identification, verification, and validation of persons with disabilities across India

Higher Education regulators such as UGC and AICTE provide detailed mandates for HEI's to ensure inclusive and accessible education for students with SLDs throughout university life, right from admissions to graduation.

Reflective Questions

1 How many of the mandates out of the RPwD Act, 2016, NEP 2020, NTA Guidelines, UGC Accessibility Guidelines and AICTE Guidelines are you implementing?

2 Are you familiar with the available Assistive Technologies and resources that can enhance the learning experience for students with SLDs?

3 How can you adapt your teaching methods to cater to different learning styles and provide multiple means of representation, expression, and engagement?

4 Are you actively seeking feedback from students with SLDs to understand their unique needs and making the necessary adjustments to the teaching approach?

The Power of Perseverance

"I was in an inclusive school. They gave me in-class help as well as remedials outside of the classroom. Dyslexia was a hindrance initially, but after thorough research [regarding mandated accommodations] I was able to get admission into medical college through the PwD quota!"
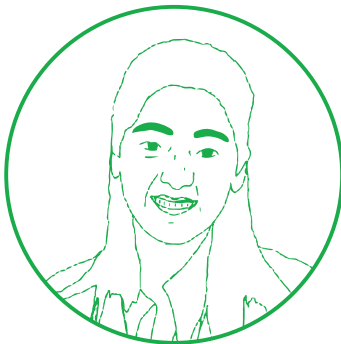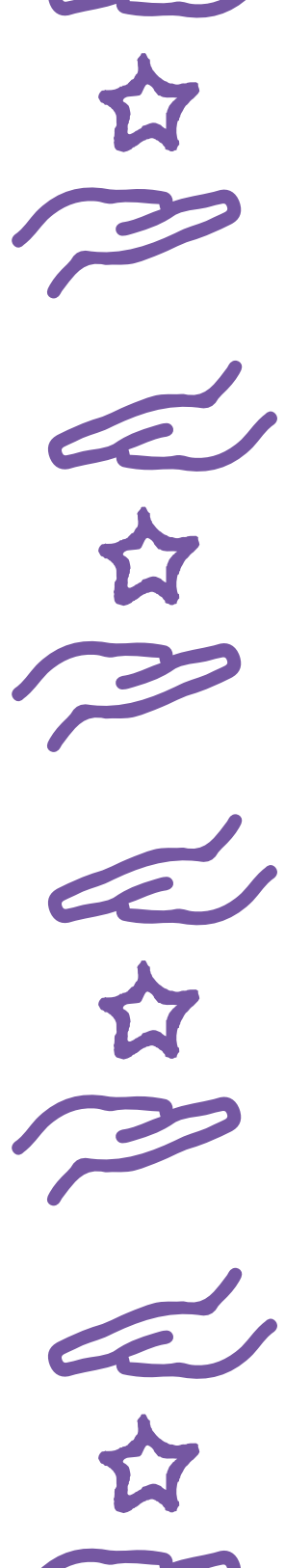
Suhana Bhutani

Second-year Medical Student

Diagnosed with Dyslexia in Class 1, went ahead and opted for Science.

Chapter 3

Accommodation & Support

i. Transition to Higher Education

Transitioning from school to college is a milestone. However, for students with SLDs, this transition can be particularly challenging. Reading, writing and comprehension are commonly considered essential parts of university education, but these can marginalize students with SLDs. Students planning to move out of their homes face additional struggles of managing life independently. Parents may also have anxieties about their child coping with rigor of curriculum and whether accommodation received in school and support received at home will translate to university as well.
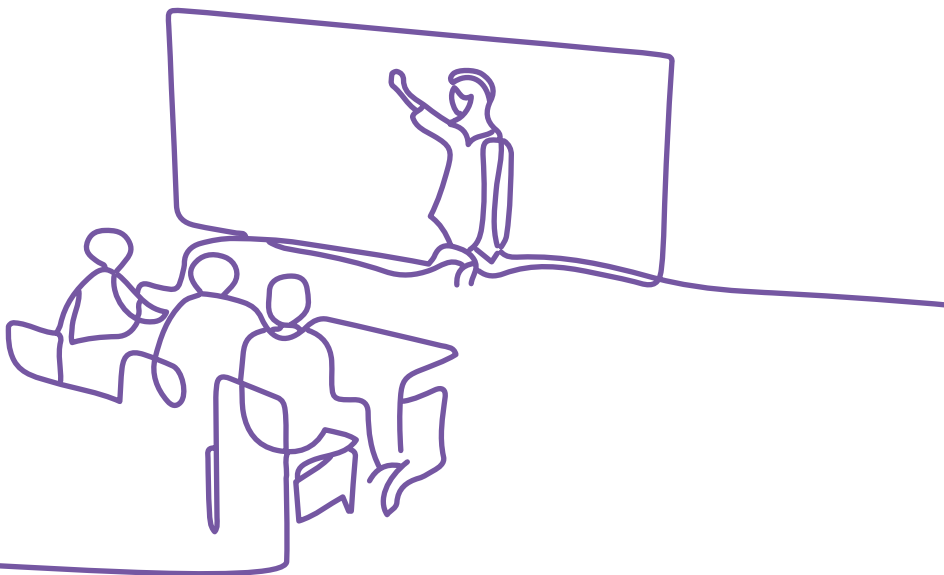
Transition Support

It is important to understand that support is more than providing accommodations. The aim of providing support in universities is to level the playing field, allowing students to showcase their true potential without reducing the rigor of academic instruction. For instance, students with weak eyesight are allowed to wear spectacles, without it being considered an unfair advantage over students who don't need to wear spectacles.

The following pages highlight the struggles of transitioning to higher education and the support they can be provided.

Academic Struggles

Struggles

In-classroom - Reading, Writing, Comprehension problems

Curriculum - Overwhelming coursework, assignments, deadlines, lack of inclusive methods of evaluation

Out of classroom - Difficulty managing time, prioritizing tasks, missed deadlines

Support

1. Electronic textbooks in accessible formats (National Digital Library as a resource)

2. Audio/Digital Materials

3. Course materials in accessible format (Such as SWAYAM content), Recordings

4. Instructional Aids and Services: Note Takers/Scribes/Tabs or laptops for note taking, recording of lectures.

1. Alternative assignment deadlines

2. Enforcement of accommodations like - exams with compensatory time, readers, scribes, distraction-reduced setting, clarification of questions

1. Tutoring, Academic Counseling Support, Buddies

Campus-Life Struggle

Struggles

Difficulty with self-advocacy (claiming rights, accommodations) without adequate support or guidance

Stigma and Discrimination - From peers, professors, and even family.

Feelings of shame, embarrassment, and isolation - causing lack of networks and socialization.

Executive Functioning - Balancing academic and social life, time management.

Support

1. Availability of accommodations based on need-assessment at the time of admissions

2. Students that have appeared in entrances with accommodations should be included in the PwD quota. During counselling, they must not be discouraged from taking admission

3. Availability of on-campus champions & buddies to advocate

1. Mental health support; faculty capacity building, assigning campus buddies

1. Counselling Support

2. Coaching and Academic Planning Support

Struggle with Access to Support

Struggles

Financial Burden - extra cost of assistive devices, tutors, etc.

Especially difficult for students from low-income families.

Assistive Technology - Not knowing how to operate the assistive devices

Digital inaccessibility of course material

Support

1. Schemes/Scholarships to provide resources to students with SLD, such as SAKSHAM (AICTE)

1. Demonstration and training to enable AT usage

1. Assistance in making academic course material accessible

Employment
& Opportunity
Struggles

Inaccessibility of information on placements, internships, scholarships.

Lack of inclusivity, discrimination from employers during placements due to SLD.

Support

1. Providing all information related to placements, internships, scholarships in digitally &
otherwise accessible formats

2. Placement cell and employer sensitization on potential of students with SLDs

3. Relaying information to students about inclusive employers

Jim Wice

Director,
Accessibility & Disability Resources,
Wellesley College

Excerpts from the Dyslexic Mind Conference 2021

Mr. Wice encourages engagement with educators working with Kindergarten to Grade 12 students to raise students who are college ready. He notes that it can be helpful for institutes to benchmark other institutions and educators who are supporting

students in the right way, network with them, and learn from them.

Regarding alternative ways of evaluation, Mr. Wice believes that "folks with average to above average intelligence may just need a different way of being assessed." He emphasizes that educators should aim to level the playing field, and help students find mediums to display their knowledge.

The Power of Perseverance

"I often felt confused & distracted during written exams even though I knew all the answers. But the day I asked for a scribe, my grades improved. My confidence grew after I was diagnosed with Dyslexia in school"

Anika Bhatia

Class 12
Student

Went from questioning her ability to focusing on her strengths.

With a better understanding of accommodations, our next section will look closely at Assistive Technology as it often lies at the core of learning support.

ii. Assistive Technology

Assistive technology (AT) is to a student with SLD, what contact lenses or glasses are for people with visual impairment – it is essential for them to act at full potential.

In today's digital age, technology plays a critical role in improving learning outcomes. It is therefore very important that technological interventions on campuses are accessible for those who require it to navigate their struggles with learning. AT helps with the teaching-learning process as it enables an educator to deploy inclusive teaching strategies whilst helping a student grasp better catering to multiple learning styles at once.

Large
Display

Alternative
Mouse

Hearing
Aids

Adaptive
Keyboard

Zooming
Tools

Visual
Aids

Speech
To Text

Text to
Speech

IAaBbC

Accessible
Apps

Augmentative
Communication

What is Assistive Technology?

1. It can be any device, software, or equipment that helps people with disabilities learn, communicate, or function better

AT helps people who learn and think differently, work around their challenges like reading, writing, calculating, breaking down complex concepts, time management, etc. **2.**

3. It can help students learn better, assist adults do their daily tasks and perform better at university and work.

AT should be seamlessly integrated into an individual's life **4.**

The various kinds of technical AT components are as follows:

Reading

1. Display control

2. Controls for animated (moving) content

3. Highlighting Text

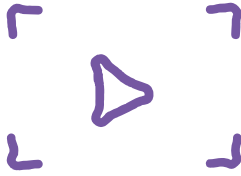4. Optical Character Recognition (OCR)

5. Text to Speech

Writing

1. Speech to text (Dictation)

2. Spell check & grammar check

3. Word prediction

4. Digital white board access

Assistive Technology is readily available & more often than not it is simple, intuitive solutions.
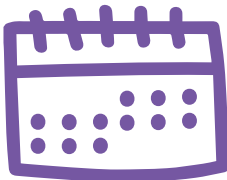
Watching

1. Audio description

2. Provide pre-recorded lectures

3. QR code directing to the video link

4. Closed captioning

Listening

1. Audio control (play/ pause/ volume/speed)

2. Foregrounding

3. Sign Language translator

Organizing

1. Alarm docks for time management/ reminders

2. Calculators for daily transactions

3. Calendars for planning & deadline management

Tech Accessibility Checklist

Given below is a checklist that demonstrates how several accessibility functionalities benefit not just students with SLDs but all disabilities! As a practitioner and/or as an educator this could be your key to inclusive, accessible pedagogy.

Reading

Types of E-Learning Content

PDF books,text in video, websites, e-assessments, e-assignments, e-meetings, chatbot interaction

Accessibility Features

- [ ] 1. Text-to-speech
- [ ] 2. OCR for documents, worksheets and PDFs (coverts off line to on line)
- [ ] 3. Display control - text size, font, contrast, colors, zoom
- [ ] 4. QR codes on hard copies directing to e-content
- [ ] 5. Highlighting text

Writing

Types of E-Learning Content

E-assignments, E-assessments: document, pdf, presentation

Accessibility Features

- [ ] 1. Speech-to-text
- [ ] 2. Word prediction
- [ ] 3. Spell check & grammar check
- [ ] 4. QR codes on hard copies directing to e-content
- [ ] 5. Text-to-speech

Listening

Types of E-Learning Content

Videos, podcasts, audiobooks, recorded classes

Accessibility Features

- [ ] 1. Audio speed control
- [ ] 2. Audio control (play/pause and volume control)
- [ ] 3. Foregrounding audio
- [ ] 4. QR codes on hard copies directing to e-content
- [ ] 5. Sign language translation (Human/AI)
- [ ] 6. Closed Caption

Did you know? Assistive Technology is in-built into the operating systems of the world's 3 tech giants - Google, Microsoft, and Apple! Oftentimes, enabling these and offering a basic tutorial helps students navigate learning-oriented difficulties seamlessly.

Google

- Google Voice Typing
- Adobe Acrobat OCR & PDF software
- Google Lens
- Google Calendar
- Chrome search-by-voice feature

- Google Docs features: speech recognition, advanced spell checking, bibliography creation
- Dark Mode

Microsoft

- Windows Speech Recognition (in-built fool on Windows)
- Dictate (within Office 365)
- Microsoft Learning Tools - Office 365
- Adobe Acrobat OCR & PDF software

- Outlook calendar
- Immersive Reader
- Syllabification
- Comprehension mode
- Focus mode
- Enhanced dictation
- Dark Mode

Apple

- Mac Dictation (in-built tool on MacOS and iOS)
- Speech Controller or Speak Selection
- Typing Feedback
- Safari Reader

- Scribble
- Dark Mode
- Guided Access
- VoiceOver
- Voice Control
- Live Text OCR

Things to Remember

Transition to higher education is a particularly challenging time for students with SLDs

Struggles of individuals with SLD in higher education include academic stress, struggles with campus-life, access to disability support, scholarships, and employment opportunities

Support is possible for all of these struggles

Assistive Technology aids the teaching-learning process by enabling educators to facilitate an inclusive classroom, while also helping students learn better

Reflective Questions

1 What accommodations & modifications can be incorporated into teaching practices to support students with SLDs in accessing & understanding course material?

2 Have you explored the full range of Assistive Technology options available to support students with SLDs?

3 Are you providing adequate training & support to faculty members to effectively utilize assistive technology in their teaching?

4 Does the department/university regularly reflect on the effectiveness of the accommodations and strategies we employ and make adjustments based on student feedback and outcomes?

The Power of Perseverance

"Don't shy away from sharing your disability with people. It is important for educators to cater to each individual student's needs, & include accommodations in their daily lesson plans."
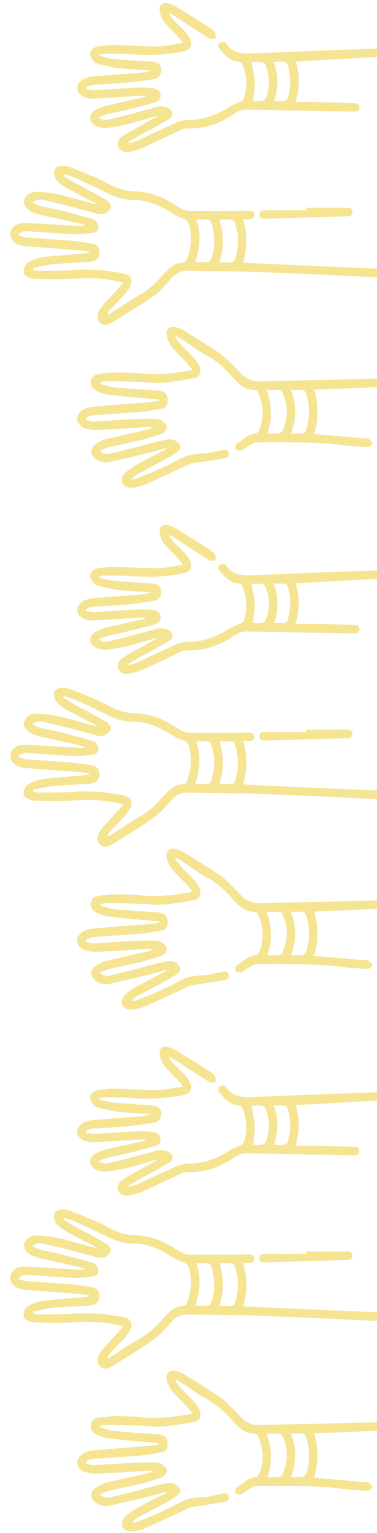
Ishaan Sethi

Policy
Professional

Diagnosed with Dyslexia during his Masters
at Oxford University

Chapter 4

Best Practices

i. National & Global Higher Education Institution Leaders

Do you know what sets these leading universities apart? **The answer lies in their commitment to inclusivity: all of them accommodate Dyslexia!**

They understand that students with Specific Learning Disabilities (SLDs) have unique needs and strengths that deserve recognition and support.

How do these universities ensure that students with SLDs thrive academically? What strategies have they implemented to create an inclusive environment where these students can excel? By examining their best practices, we can gain valuable insights into how to foster a supportive and empowering educational setting for students with SLDs.

Dr. Sally Shaywitz

Audrey G. Ratner Professor of Pediatrics;
Co-Director, Yale Center for Dyslexia

Excerpts from the Dyslexic Mind Conference 2021

She strives to educate faculty about Dyslexia, recognizing that even the brightest and most accomplished individuals may hold outdated beliefs. Through conferences and individual interactions, they foster understanding and have found that there are faculty members who themselves are Dyslexic,

breaking stereotypes and promoting inclusivity in the academic community.

Sharing a victory on advocacy, she shares that at the Yale Centre for Dyslexia & Creativity, they witnessed a lot of Dyslexic students struggling to perform well on their foreign language requirement courses. This was taking time away from courses they could actually excel at; Dr. Sally worked to waive this language requirement partially, substituting it with a cultural knowledge-based course.

How can we implement these successful practices within our own educational institutions?

1. Create a framework based on the mandates and recommendations from the UGC & AICTE outlined in the previous chapters

Adapt the best practices outlined in this chapter, developing a roadmap to provide the necessary accommodations and support for students with SLDs **2.**

Accomodations by International & National Universities

Let's now delve deeper and explore the practices that have made these universities renowned for accommodating Dyslexia and other SLDs.

Counselling Support

1. Ensures access to support

2. Additional tutoring

3. Advocacy for reasonable accommodations

Academic Support

1. Alternative Exams with extended time, readers, scribes, distraction reduced setting, clarification of exam questions

2. Alternative Materials: Electronic Textbooks, Audio Materials, Course Materials with enlarged font, Recordings

3. Instructional Aids and Services: Note Takers

4. Works towards faculty capacity building

Assistive Technology

1. Consultations on assistive technology options

2. Demonstration of assistive technology and their usage

3. Assistance in making academic course material accessible

Research

Accomodations : International

Massachusetts Institute of Technology	Stanford University	Yale University	University of California, Berkeley
✓	✓	✓	✓
✓	✓	✓	✓
✓	✓	✓	✓
✓	✓	✓	✓
✓	✓	✓	✓
✓	✓	✓	✓
✓	✓	✓	✓
✓	✓	✓	✓
✓			
✓	✓	✓	✓
✓	✓	✓	✓

Accomodations : National

(Members of Inclusive University Alliance)

Counselling Support

1. Ensures access to support

2. Additional tutoring/Remedial support

3. Advocacy for reasonable accommodations

Academic Support

1. Alternative Exams with extended time, readers, scribes, distraction reduced setting, clarification of exam questions

2. Alternative Materials: Electronic Textbooks, Audio Materials, Course Materials with enlarged font, Recordings

3. Instructional Aids and Services: Note Takers

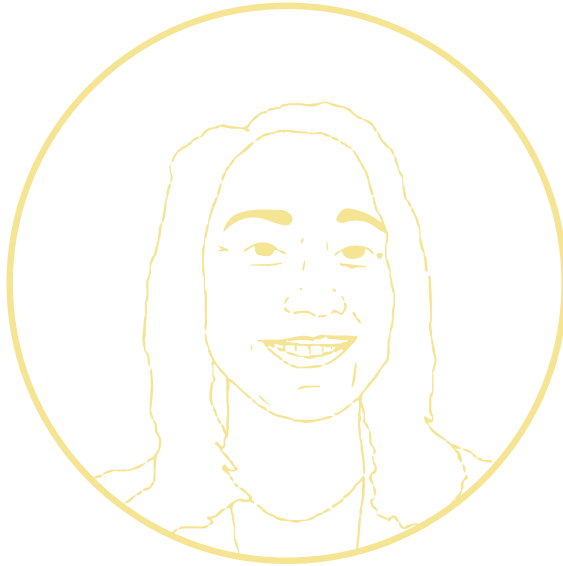4. Works towards faculty capacity building

Assistive Technology

1. Consultations on assistive technology options

2. Demonstration of assistive technology and their usage

3. Assistance in making academic course material accessible

Accomodations : National

Indian Institute of Technology Kanpur	Indian Institute of Technology Madras	Indian Institute of Technology Bangalore
✓	✓	✓
	✓	
	✓	✓
	✓	
	✓	
✓	✓	✓
✓	✓	
✓	✓	✓

Counselling Support

1. Ensures access to support

2. Additional tutoring/Remedial support

3. Advocacy for reasonable accommodations

Academic Support

1. Alternative Exams with extended time, readers, scribes, distraction reduced setting, clarification of exam questions

2. Alternative Materials: Electronic Textbooks, Audio Materials, Course Materials with enlarged font, Recordings

3. Instructional Aids and Services: Note Takers

4. Works towards faculty capacity building

Assistive Technology

1. Consultations on assistive technology options

2. Demonstration of assistive technology and their usage

3. Assistance in making academic course material accessible

Research

Accomodations : National

Ashoka University	Indian Institute of Management Bangalore	St. Xaviers Mumbai
✓	✓	✓
✓	✓	✓
✓	✓	✓
✓	✓	✓
✓	✓	✓
✓		✓
✓	✓	✓
✓	✓	✓
	✓	
✓	✓	✓
	✓	

Ms. Marie Saddlemire

Assistant Director,
Academic Center for Excellence,
Bryant University

Excerpts from the Dyslexic Mind Conference 2021

During discussions about universal design (UD) with their faculty, it became apparent that only focusing on disability, posed challenges as they saw it as a limited group of students. However, when they approached the concept at a university-wide level, its broader impact resonated, and it was accepted as a beneficial

approach for not just students with disabilities but all students with various learning styles.

Simple accommodations like the following can help all students:

1. Adding captions to videos can greatly benefit English language learners, helping them understand classroom content more easily.

2. Providing note-taking technology also aids students who struggle with writing quickly due to SLDs/limited English fluency.

By promoting this approach university-wide, they can, and have created a more inclusive environment that benefits all students.

Things to Remember

Designing curricula, courses and campuses with accessibility and accommodations in mind means creating an environment that is more intuitive and feature-rich; everybody benefits, not just students with SLDs

Students with SLDs are not limited by their disabilities; they possess unique strengths and abilities that can contribute to groundbreaking ideas, becoming the pioneers of tomorrow

Reflective Questions

1

How can you collaborate with support services or coordinating units/offices to ensure that students with SLDs receive appropriate accommodations and support?

How can you spread awareness amongst students with SLDs, about the available support services for them?

2

The Power of Perseverance

"I failed the International Baccalaureate in school due to a lack of support. But as soon as I was able to formally request for additional support in college - I felt that I had more of an equal opportunity. The dedicated disability support center at NYU is extremely inclusive & respectful & provides academic, mental health, & various other kinds of support, no questions asked."

Dipti Balwani

Educationist,
Masters Student at New
York University

Graduated with honors in the undergraduate Psychology program despite being diagnosed with Dyslexia in college.

Chapter 5

Where to Begin

Where should you begin?

Now that you are convinced with all-things inclusion, let's get you started with steps that are achievable and not overwhelming!

ChangeInkk Foundation's 5 Easy-to-Implement Steps:

1. Start at the beginning: Inclusive Admissions, Increasing PwD Enrollment, Tracking Success Stories

Sensitization and Awareness: Faculty, Administration, Staff and Students **2.**

3. Accommodations under the 2Cs: Classrooms & Curriculum, Develop a holistic inclusion strategy that addresses diverse student needs, faculty capacities, curriculum design & accommodations

Governance: Create a Disability Services Committee/Office of Learning Support/ Equal Opportunity Cell. Appoint a nodal team to coordinate this. **4.**
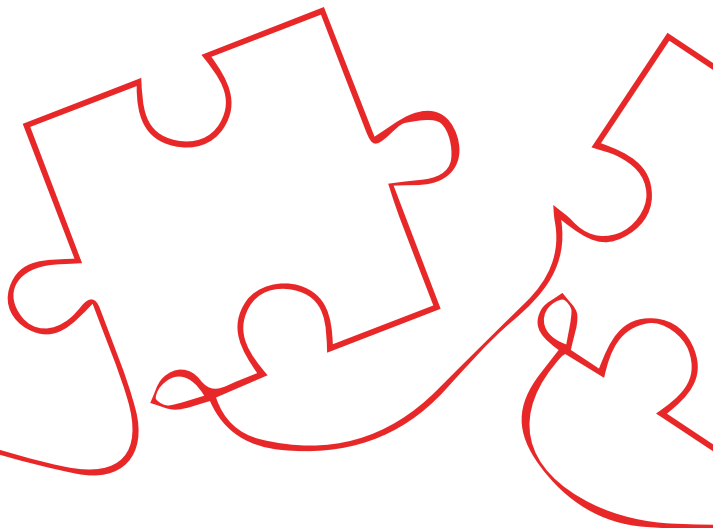
**5.** Consciously building a culture of inclusion that celebrates diversity

Are you ready to take up this empowering challenge?

Let's join forces to create a more equitable and accessible educational landscape where students with SLDs are not written off, rather, where their unique abilities are recognized, nurtured, and celebrated, along with their peers.

Together, we can create a ripple effect of positive change that will impact not only the lives of these extraordinary individuals but also the future of our society as a whole.

You wouldn't want to miss out on the genius of the next groundbreaking pioneer, would you?
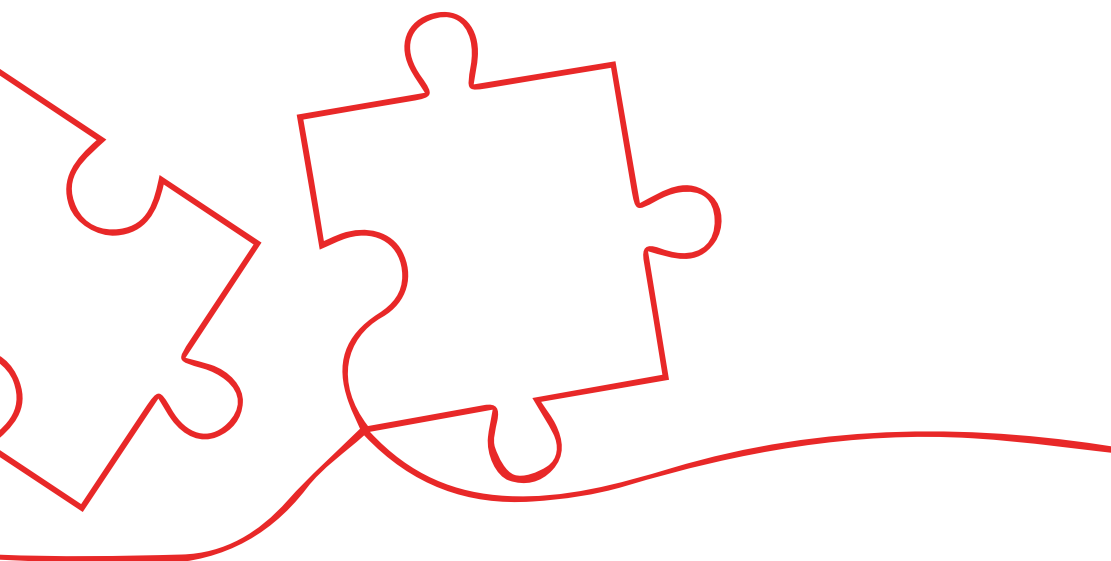
Aknowlegements

We would like to express our gratitude to all the contributors, organizations and individuals who came together to help create this Practitioner's Guidebook: Inclusion of Students with Specific Learning Disabilities in Higher Education and shared their valuable insights with us for the creation of this document.

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We would also like to thank Ashoka University and Director, Office of Learning Support, Reena Gupta for their indispensable contributions and ongoing support.

Video & Document References

Higher Ed. - Practitioners' Perspective Playlist

https://youtube.com/playlist?list=PLe2bUbsjYaue_I_GV49Catap7r651FA7J

https://youtube.com/playlist?list=PLe2bUbsjYauc2KMkI6YpA7jONNqE_lFuD

Stories of Perseverence Playlist

https://youtube.com/playlist?list=PLe2bUbsjYaucbFDjvGqeW5C4JleFqw0cR

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ChangeInkk Foundation

At ChangeInkk Foundation we strongly believe that without the contributions of individuals with Specific Learning Disabilities, India will not grow to become a $5 trillion economy. After all, 40% of the world's self-made millionaires are Dyslexics and #DyslexicThinking has powered most innovations that have changed our world!

So, we are working hard to break the stigma surrounding Specific Learning Disabilities (SLDs) and are raising awareness around the many strengths of Dyslexic minds. We are actively building inclusive ecosystems that support them - from cradle to career.

Write to us at:

info@changeinkk.org

This handbook is a comprehensive guide for educators to understand what SLDs are, how they impact learning, and how to create an inclusive learning environment to harness the potential of all learners.

ChangeInkk Foundation

changeinkk.org