

#ChangeinkkTheConversation



Unlocking the Potential of Students with Learning Disabilities

Duffer ❌



Disruptor ✅





1 in 5 globally

Inventors. Entrepreneurs. Scientists. Architects. Technologists. Artists. Disruptors.





An estimated 200+ million
Indians live with a learning
disability.

Less than 10 million
Indians are identified.

A lost economic
opportunity.

In this picture, who has a Specific Learning Disability?



In this picture, who do you think has a Specific Learning Disability?



Let's understand Specific Learning Disabilities (SLDs)...

- Includes Dyslexia, Dyscalculia, Dysgraphia, Dyspraxia
- Differences in the way people's brain function, process and learn information
- Individuals with average or above average IQ
- Lifelong condition that runs in families
- Access to accommodations and assistive technologies help individuals excel through their lifetime
- Invisible disability- diagnosed through psychometric testing

Dyslexia struggles with language...

Developmental dyslexia (DD) is the most common learning disability. Dyslexia is the most recognized of reading disorders, however not all reading disorders are linked to dyslexia.

Some see dyslexia as distinct from reading difficulties resulting from other causes, such as a non-verbal cognitive deficit with vision or hearing, or poor or inadequate reading instruction. There are three proposed subtypes of dyslexia (auditory, visual and attentional), although individual cases of dyslexia are better explained by specific underlying neurological differences and co-occurring language disorders (e.g. attention-deficit/hyperactivity disorder, math disability, etc.). Although it is considered to be a specific language-based learning disability in the research literature, dyslexia also affects one's expressive language skills. Researchers at MIT found that people with dyslexia exhibit voice-onset time abnormalities.

**Dyslexia
accounts for
at least 80%
of all SLDs**

Dyscalculia struggles with math...

A.

$$100 + 100 = 200$$

~~10 + 10 = 16~~

$$6 + 5 = 8$$

$$2 + 3 = 5$$

B.

$$26 \times 25$$

~~5 \times 6 = 65~~

~~4 \times 2 = 8~~

$$6 + 5 = 11$$

$$3 + 3 = 6$$

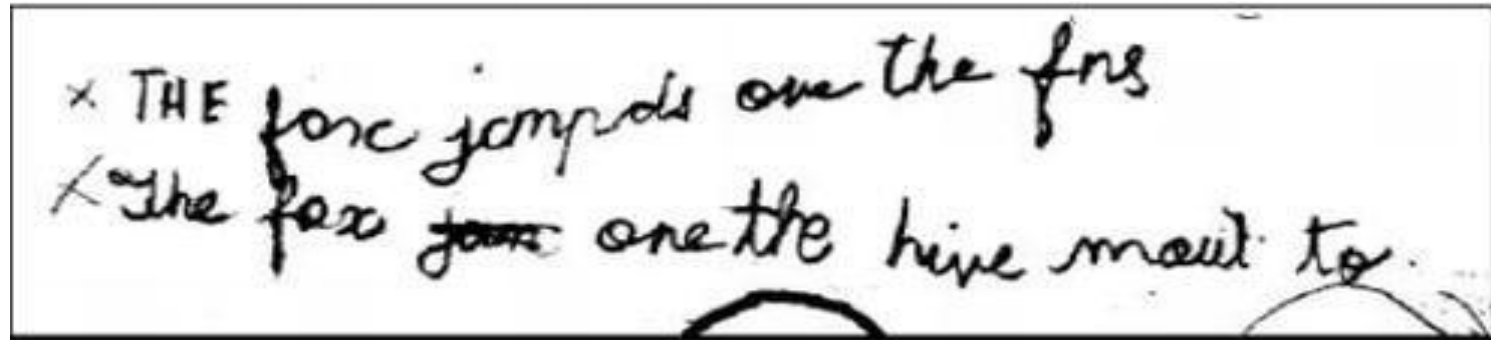
C.

$\begin{array}{r} 234 \\ 476 \\ \hline 910 \end{array}$	$\begin{array}{r} 426 \\ 210 \\ \hline 409 \\ 1350 \end{array}$	$\begin{array}{r} 410 \\ 309 \\ 303 \\ \hline 404 \\ 1,428 \end{array}$
$\begin{array}{r} 26 \\ \times 32 \\ \hline 52 \\ 792 \\ \hline 832 \end{array}$	$\begin{array}{r} 304 \\ 3080 \\ \hline 1824 \\ 040 \\ \hline 912 \\ 93,424 \end{array}$	

Dyscalculia is
present in
about 5% of
the population

Dysgraphia struggles with writing...

Diagnosed in childhood, affects a person's handwriting ability and fine motor skills.



The fox jumped over the fence.
The eagle flew over the high mountain top.



#Changeinkk TheConversation
about Learning Disabilities
#Speak4Dyslexia

SLDs struggle with daily life...

Poor self-esteem: Judgements about IQ based on reading & writing capabilities, spark emotions and frustrations.

Memory challenges: Can easily forget tasks and deadlines, especially when provided multiple instructions at once

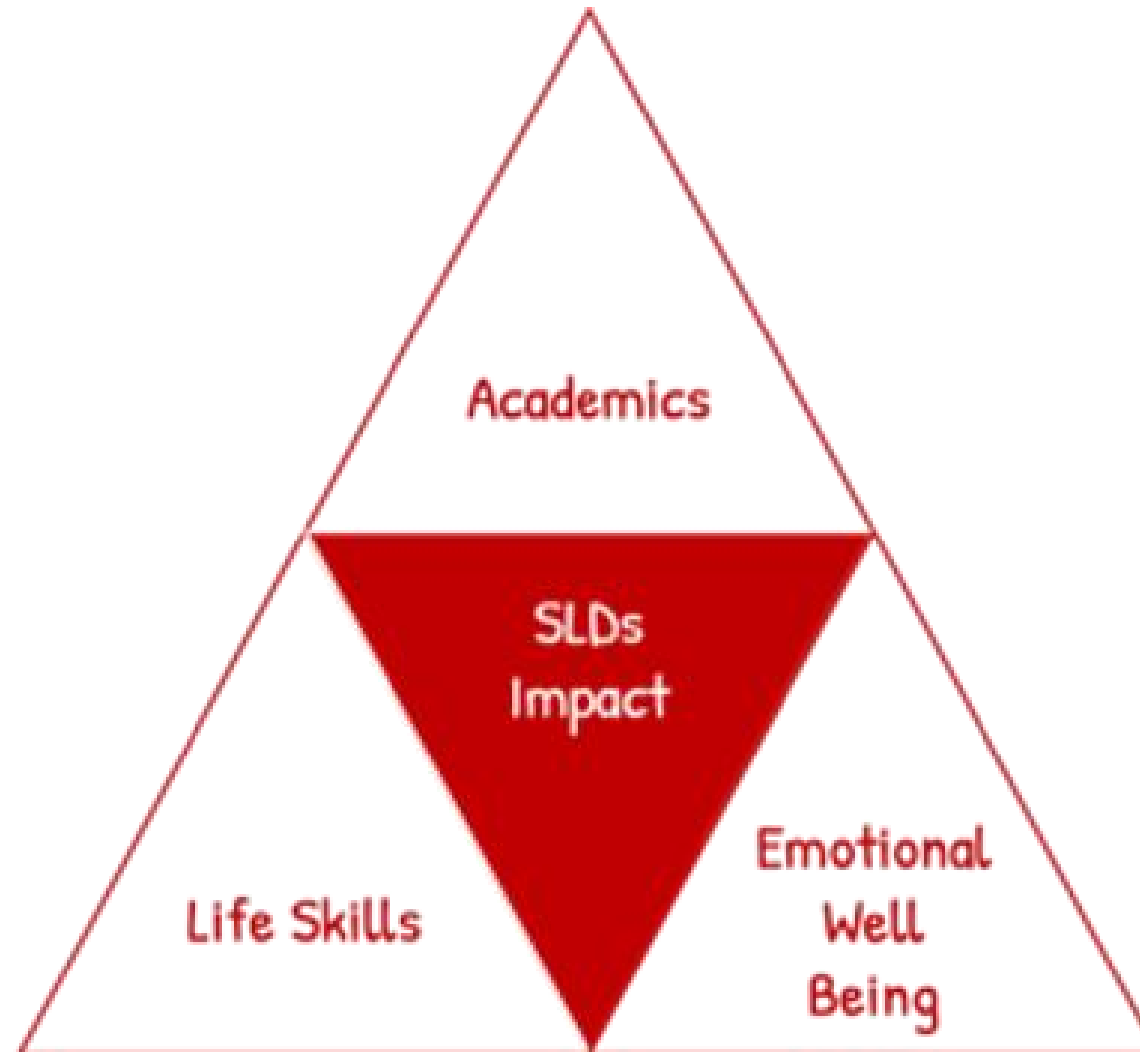
Sensitive to over-stimulation: Struggles with concentrating due to movement, sound, light

Gap in oral and written performance: They are good communicators but poor in writing skills.

Slow processing: Generally, take longer to process information, reading, writing

Difficulties in planning: Dyslexics often struggle with time management, which impacts their ability to plan tasks and manage deadlines

3 Aspects of Dyslexic Struggle



Screening and Identification

As per the RPwD Act, 2016, diagnosis of SLDs can happen only in or after third grade or 8 years of age, whichever is earlier.

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.
- 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.

Diagnoses

Diagnosis of SLDs requires either:

- A pediatrician
- A psychiatrist
- A Pediatric Neurologist or
- Clinical or Rehabilitation Psychologist.

Diagnosis for SLDs is a 3-Step process:

Step 1: Assessment

to eliminate any visual or hearing impairments.

Step 2: 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.

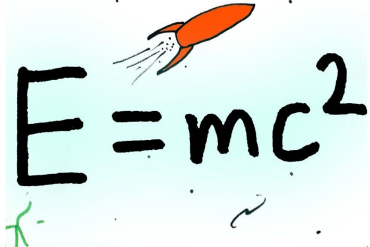
Step 3: SLD Assessment

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 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 PwDs.

Yet #DyslexicThinking
drives us all forward.

It powers our life...



Albert Einstein,
Nobel Laureate,
Physicist



Thomas Edison,
General Electric



Alexander
Graham Bell,
AT&T



Henry Ford,
Ford Motors



Wright
Brothers



Steve Jobs,
Apple

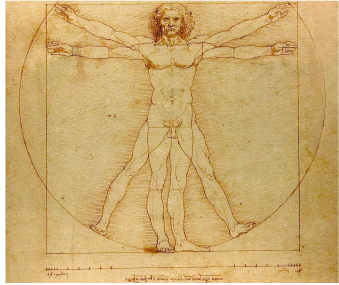


Bill Hewitt, HP



Helen Brooke
Taussig, Founder
of Pediatric
Cardiology

& our imagination.



Leonardo Da
Vinci



Walt Disney



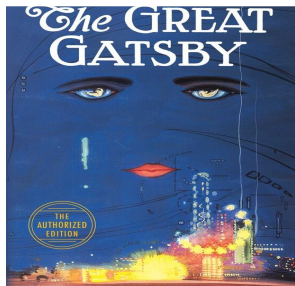
Steven
Spielberg



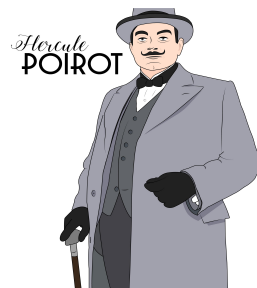
John Lennon



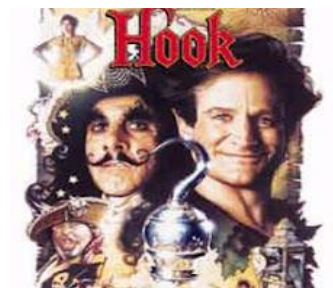
Cher



F. Scott
Fitzgerald



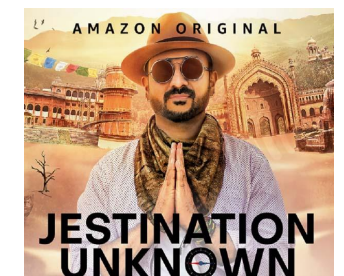
Agatha Christie



Robbin Williams

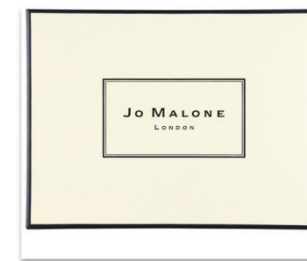


Tom Holland



Vir Das

It generates employment...



& drives innovation & productivity.



A neurodiverse employee helped develop a technical solution, which led to \$40 million in savings for the company!



J.P.Morgan

Neurodiverse employees make fewer errors & are 90% -140% more productive than neurotypical employees.



Saved 3.5 million+ hours & \$300 million for the company through innovative solutions for business process optimization during the pandemic

How does a mind that can't
process language, make such
an impact?



“ I simply wouldn't be where I am today if I wasn't Dyslexic. In the real world, Dyslexia can be a huge advantage. Many people with Dyslexia have great imaginations, creativity and problem-solving skills. ”

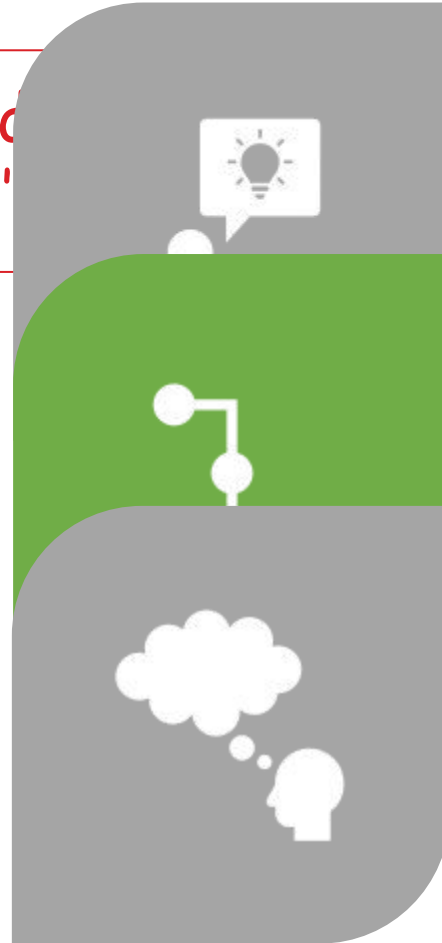
Sir Richard Branson, Founder,
Virgin Group

Dyslexics think differently...

Even the OECD (OECD) has mapped the skills and competencies needed for the 'Society of the Future' in the World Economic Forum's 'Future of Jobs' report.



Reasoning

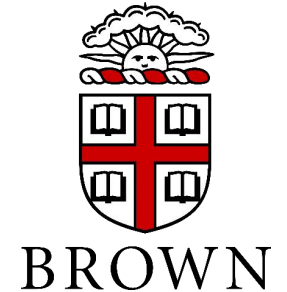
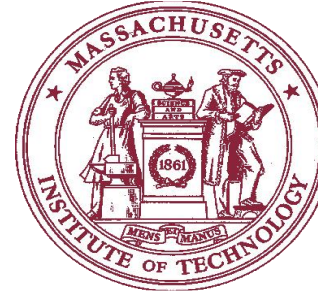


Problem Solving

Top universities are welcoming students with SLDS....



Dyslexia is so common at the Massachusetts Institute of Technology – that it is locally also known as the “MIT disease”!



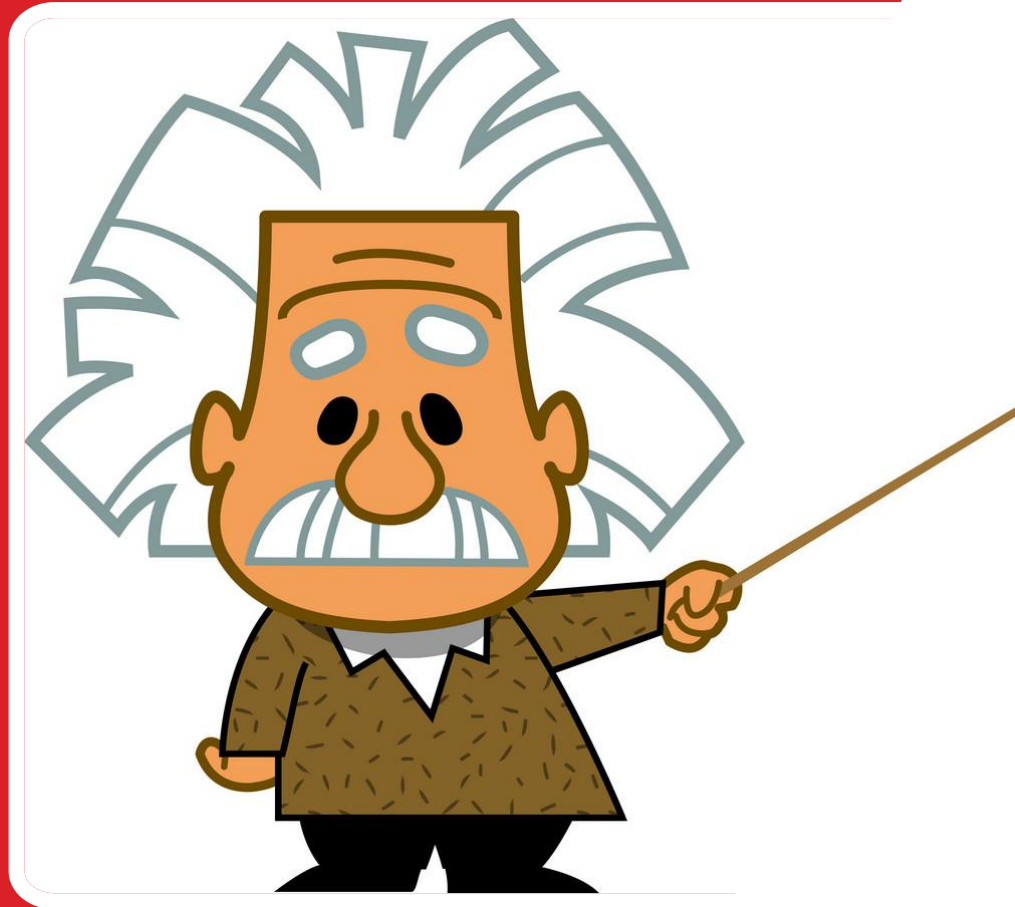
Dr. Nicholas Negroponte, Dyslexic & Founder of MIT Media Lab and the One Laptop per Child Association

Yet #DyslexicThinking
drives us all forward.



Ms. Kate Currawalla,
President and Founder,
Maharashtra Dyslexia Association

Dyslexics are resilient. With the right support, they find ways to cope & succeed



Over 80% of Dyslexics attribute their success to their “Dyslexic Thinking”

40% of world’s self-made millionaires

Top 10 companies founded by Dyslexic contributed over \$1 trillion to the global economy in 2020

Inclusion in companies could lead to GDP increasing by 1.2% annually.

By 2027, 25% of Fortune 500 companies will actively recruit neurodiverse talent to improve business performance.



And yet only...

3% believe that Dyslexia is a positive trait

1 in 20 gets identified

35% higher chance of dropping out

73% of Dyslexics hide their disorder from employers

Let's navigate this gap...

Dyslexia is common at the Massachusetts Institute of Technology – to the extent that it is also known as the MIT disease!

A total of 7 neurodivergent students enrolled into IITs in 2023...



Are you ready to unlock the potential the next Dyslexic Disruptor?

Admissions. Academic Support. On-campus Support. Assistive Tech. Employment Opportunities.



Struggles of transitioning to HEI

On Campus Life

Disclosure & self-advocacy
Bullying, rejection, isolation and stonewalling from the peers
Managing daily tasks independently
Need for support systems

Academic Life

Coping in the classroom: reading, writing, note-taking, etc
Managing “academic tasks” – planning, timely submissions, exams
Academic planning
Balancing academic and college-life pressures

Emotional Well-being

Risk of low self-esteem and depression
Overwhelmed with managing new environment
Peer pressure, high levels of anxiety and risk of over-stimulation

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

Right of Persons with Disability Act, 2016

Formally recognized as a disability in India for the first time in 2016.

"As 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.**"

Mandates 5% reservation for PwDs in government and government aided institutions



New Education Policy 2020

This Policy is in complete consonance with the provisions of the RPWD Act 2016

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

New Education Policy 2020



Steps to be taken by Government

- Earmark suitable funds for the education of SEDGs
- Set clear targets for higher GER 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 National HEIs

- More financial assistance and scholarships
- Conduct outreach and provide scholarships
- Make admissions processes & 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 SEDS participation.

Existing Regulatory & Policy Mandates

UGC Guidelines

Transition support from school-to-college & graduation-to-post graduation

Providing support throughout the admission process through accessible application processes and formats (meeting WCAG guidelines)

Providing counselling support, induction and orientation

Need Assessment Board shall formally assess the specific needs of PwDs

Scholarships and schemes



AICTE Guidelines

Promote admissions of students with SLDs under PwD category

Streamline admission processes

Provide admission accommodations for students with SLDs

Scholarships and sponsorships through Disability Support Unit (DSU)



NTA Guidelines

Candidate to be able to opt for their own Scribe/reader/lab assistant

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

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

Use of Assistive devices

Seating arrangement keeping in mind distraction-free environment

Reading material to be provided in accessible format

Alternative objective questions in lieu of subjective questions.





Dr Sally Shaywitz

Dr. Sally Shaywitz, Yale University

Audrey G. Ratner Professor of Pediatrics (Neurology); Co-Director, Yale Center for Dyslexia & Creativity

a totally different image of what it is.

Inclusion at Leading Institutions



Massachusetts Institute of Technology: Disability & Access Services Office (DAS)



Yale University: Yale Center for Dyslexia & Creativity



University of California, Berkeley: The Office Disability Access & Compliance, Disabled Students' Program



Stanford University: Office of Accessible Education & Center for Teaching and Learning (CTL)

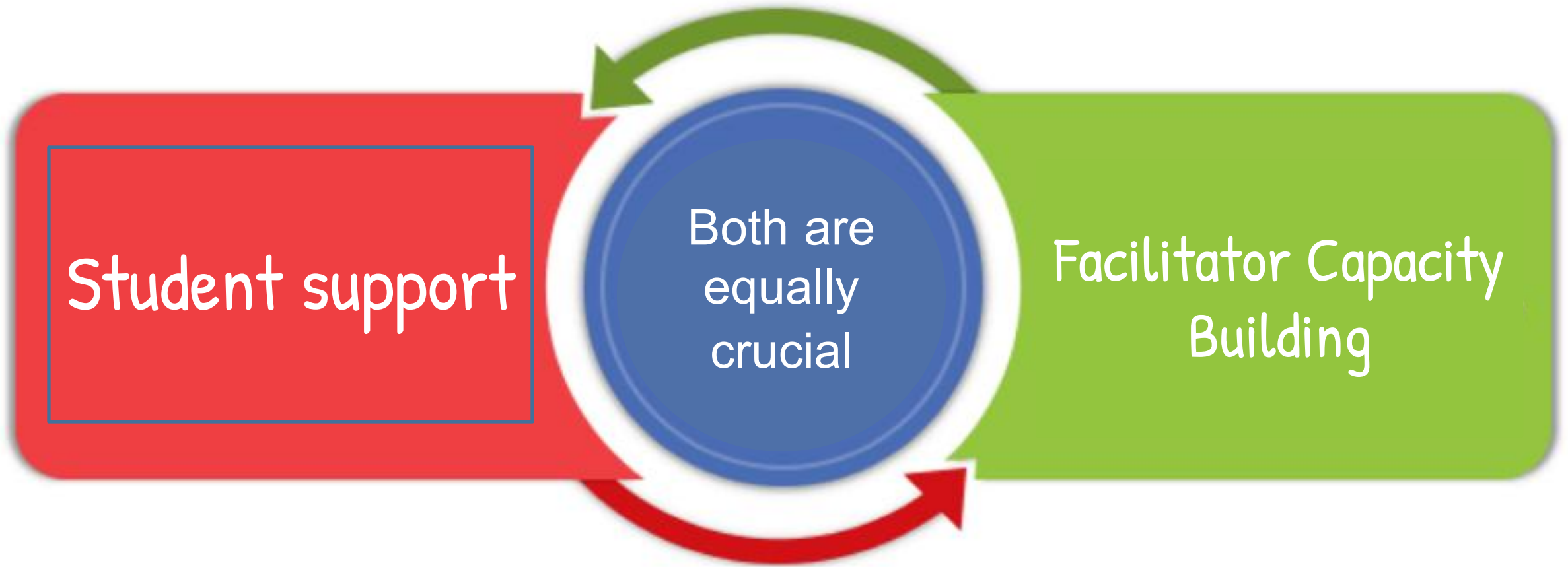


IIM, Bangalore: Office of Diversity & Inclusion, Center for Teaching & Learning



Ashoka University: Office of Learning Support

It is a 2 Prong Approach



Pillars for SLD Inclusion in HEIs



Admissions

Admitting students with SLDs in the PwD category

Accommodations for entrance exams (scribes, compensatory time, preferential seating)

College Readiness & Counselling available throughout the admission process

Admission personnel trained for SLD needs

Scholarships

Academic Support

Course Material in accessible formats

Instructional Aids and Services: Note Takers/Scribes/Devices

Alternative assignment deadlines

Accommodations; compensatory time, readers, distraction-reduced setting, clarification of questions

Tutoring; counselling, support; buddies

On-campus support

Counseling Support, coaching and academic planning support

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

Availability of on-campus champions to advocate.

Mental Health Support; Faculty Capacity building, Assigning campus buddies.

Access to Resources

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

Demonstration of AT usage

Assistance in making academic course material accessible

Employment & Opportunities

Providing all information related to placements, internships, scholarships in digitally and otherwise accessible formats

Employer sensitization on potential of students with SLDs

Relaying information to students about inclusive employers.



Pillars of Global Best Practices

- Consultations; personal learning
- Reasonable case-by-case accommodation
- Awareness and advocacy
- Coordinating stakeholder

Counselling Support



- Curriculum adjustments; inclusive pedagogy
- Modifying learning environments and policies regarding

Academic Support



- Consultations on assistive technology options
- Makes assistive tech available for student and faculty

Assistive Technologies



- R & D for SLDs
- YCDC Dyslexia Interventions and longitudinal studies
- The McGovern Institute for Brain Research

Research



A large, dark blue brushstroke graphic that fills the central area of the slide. It has a rough, textured appearance with many fine, white, hair-like strokes extending from the edges. A thin, light blue rectangular border is superimposed over the brushstroke, framing the text.

Ms. Maria Grazia Bevere
Learning Support Coordinator
King's College

**Remember: When inclusive classrooms
are designed well, interventions for
students with SLDS, help ALL students
learn better**

Where should

Where can you begin?



1

Start at the Beginning: Inclusive Admissions, Increasing PwD Category Enrollment, Tracking Success Stories



2

Sensitization and Awareness: Faculty, Administration and Students



5

Consciously Building a Culture of Inclusion



3

Accommodations under the 2Cs: Classrooms and Curriculum



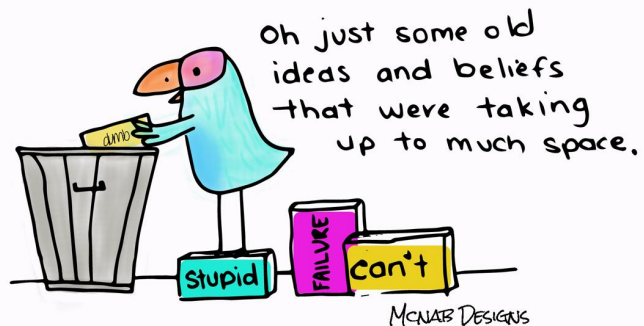
4

Centers of Support: Creating a Disability Support Unit/Equal Opportunity Facilitation Cell/Center of Learning Diversity



**Don't miss out on the genius
of the next**

What are you
throwing away?



Thank-you.

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