An MDA Publication

October 2025

NEWSLETTER

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Friends,

October is Dyslexia Awareness Month, a time to celebrate the unique strengths of individuals with dyslexia while fostering understanding and support. We are excited to announce the launch of the dyscalculia kit designed to provide resources and strengths for those who struggle with numerical understanding. Over 50 schools have acquired them and their students are showing progress. As we embrace the spirit of Deepavali, a festival symbolising light and new beginnings, let us illuminate the path for those with learning differences. Together we can create a more inclusive environment where every learner thrives.

Please join us in spreading awareness, sharing resources and celebrating the diverse abilities that enrich our community. Happy Deepavali and a meaningful Dyslexia Month to all.

With warm regards,
D.CHANDRASEKHAR

Count On Me - A Summary

Count On Me is a maths remedial kit, designed to provide a supportive and effective scaffolding for primary school children, particularly those with dyscalculia, struggling to acquire maths skills. Dyscalculia is a specific learning disability characterised by persistent difficulties in arithmetic and numeracy, intelligence and educational opportunities notwithstanding. Complete with colorful worksheets and other work materials, this kit is instructive and enables learning. Importantly, the remedial learning, thus facilitated allows children to also self-evaluate their understanding.

This kit guides instruction to be tailored to individual needs. It consists of worksheets and materials that help learning both conceptual and procedural maths. It provides ideal support and allows students to explore various mathematical ideas in an engaging manner.

Count On Me is a user-friendly manual where each activity clearly states the skills being targeted. There are simple, clear and concise instructions, incremental in a sequential progression for learning each concept. The concepts are reinforced through repeated exposure and practice with various tools that illustrate them effectively.

Problems are connected to real-life situations that enhance understanding and relevance. Targeted intervention while learning addresses specific areas of difficulty. Interactive elements such as puzzles and games make learning more engaging. Regular feedback and evaluation help track progress and reinforces learning. This structured and supportive approach ensures that students develop a strong mathematical foundation, fostering confidence and competence.

The worksheets included in this kit, are divided into the four basic operations: addition, subtraction, multiplication, and division. They have been designed to progress gradually, first focusing on building essential pre-skills before moving on to more complex mathematical concepts. Each set follows a graduated structure while addressing essential foundational skills that aligns with universal acquisition of maths milestones.

Each set is further colour-coded, beginning with red, followed by yellow and green, and ending with blue. These colour-coded sets increase in complexity, building upon the skills acquired in the previous set. While the first three colours focus on teaching, remediation, reinforcement and fostering independence, the final blue set assesses fluency and accuracy. Once a student successfully completes the blue set, they are ready to move on to the next.

The worksheets come as booklets with skills and pre-skills required for learning concepts and problem solving. These serve as a guide for facilitators, helping them identify each student's strengths and areas of need. Once these areas are identified, facilitators can use concrete materials, games and practice exercises to remediate and reinforce learning. This approach makes learning more engaging and relatable for the student.

With its student friendly and progressive approach, the programme helps students achieve competence while developing skills not only in maths but also in reasoning and problem-solving. Thus, it aims to bridge gaps in understanding and foster confidence in tackling mathematical challenges. Consistent practice using these worksheets will not only enhance computational accuracy and conceptual clarity but also help develop critical thinking and analytical skills.

This programme aims at being a stepping stone towards mastering maths and unlocking each student's full potential.

Count On Me -
A Support for Primary School Children Struggling in Maths

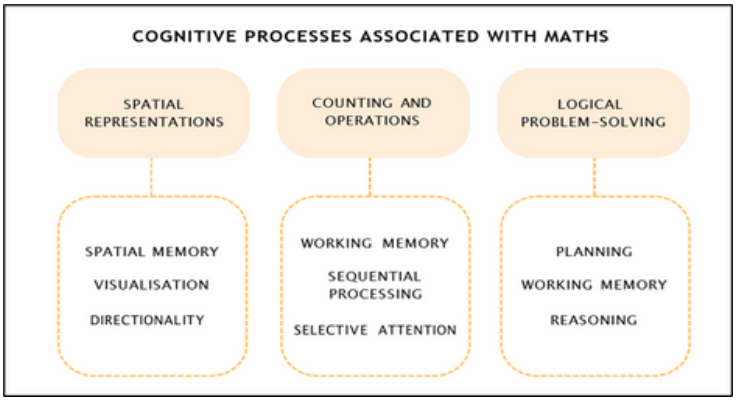
Mathematics involves problem solving, logical reasoning and critical thinking, and enables life skills like time management, budgeting and analysis of data. Despite this relevance 'Oh maths!'- is a common fear heard from many school going children. The reasons are many, ranging from poor fundamentals, a lack of interest, and fear of the subject. These disinterested children may actually be struggling with the maths work.

Dyscalculia is a specific learning disability characterised by persistent difficulties in arithmetic, despite typical intelligence, adequate educational opportunities, emotional stability, and motivation. It involves consistent difficulty in grasping numerical concepts, leading to struggle with mathematics.

Count On Me is a comprehensive solution that provides optimal support to children struggling with maths. The toolkit has proven to be a powerful learning resource for all students, making mathematics joyful, accessible, and deeply meaningful. It offers a unique blend of concrete learning tools, visual clarity, and interactive engagement.

Cognitive processes associated with maths

To understand the efficacy of the toolkit, it is important to understand what learning maths entails. Mathematical thinking relies on a range of cognitive processes. The graphic describes the connection between aspects of mathematics and the required skills and abilities.



To give a few examples:

- To solve 4 + 3, a child must first hold 4 in mind and then count three more. Processing (uses long term memory and procedural memory) and remembering (uses active working memory to hold the numbers) various counting sequences (uses sequential memory).
- Due to lapses in attention, there could be frequent errors in problem-solving due to misreading a sign/number or skipping a step.
- Operations like long division require key facts such as the base ten system, multiplication tables, and fundamental procedures stored in long-term memory. Students with difficulties in long-term memory may struggle to recall these facts and procedures and hence lack automaticity/fluency to do sums on division.

Teaching maths

The teaching-learning process is another determining factor for an individual's engagement with learning mathematics. Direct teaching, remedial teaching and diagnostic teaching are some of the teaching methodologies that enable a child to actively engage with the learning process.

Direct teaching is an instructional method used to teach specific academic skills. In this approach, facilitators present information clearly and systematically, engaging students without questioning or challenging them.

The philosophy of *remedial teaching* can be summarised as follows: 'When brain stimulating activities across the auditory, visual, tactile, motor and language areas are practiced in regular frequency, appropriate intensity and short durations, then we can create permanent changes in the neural network, thereby enabling effective learning.' It involves multimodal teaching approach using Multiple Intelligences. It stimulates memory and essential learning skills by including seeing, watching, listening, thinking, and doing. It provides multiple ways to understand, retain, and recall information while simultaneously activating different parts of the brain.

Diagnostic Teaching is a process that enables facilitators and students to identify, understand, and correct misconceptions in learning. Diagnosis involves investigating students' difficulties and their underlying causes, followed by targeted actions to support their learning.

How does Count On Me enhance learning

With its student-friendly and progressive approach, the programme helps students achieve fluency while developing skills not only in procedural maths but also in reasoning and problem-solving.

The programme approaches the teaching-learning process with a **Skill-Specific Focus** clearly delineating the **objectives** for each task thereby providing a roadmap for the knowledge and skills that the students acquire. **Diagnostic Teaching** enables observing students' patterns of difficulty and allows targeted intervention during the learning process. **Simplified instructions** for each task and **incremental steps** to solve problems makes it an achievable goal. **Visual aids** along with **interactive elements** like concrete manipulatives, puzzles and games help illustrate concepts to make them understandable, clear and memorable. Inclusion of **real-world applications** connect to relatable real-life situations enhancing understanding of the concepts. **Varied question types** catering to different learning-styles along with **repetition and practice** ensure effective reinforcement of concepts. Regular **feedback** and evaluations help track progress and reinforce learning.

The programme includes worksheets and concrete manipulatives.

Worksheets

The worksheets included in this kit have been designed to progress gradually, first focusing on building essential pre-skills before moving on to more complex mathematical concepts. These worksheets serve as a guide for facilitators, helping them identify each student's strengths and areas of need. Once these areas are identified, facilitators can use concrete materials, games, and additional practice exercises to remediate and reinforce learning.

The worksheets are divided into the four basic operations: addition, subtraction, multiplication, and division. Each set is further colour-coded, beginning with red, followed by yellow and green, and ending with blue. While the first three colors focus on teaching, remediation, reinforcement, and fostering independence, the final blue set assesses fluency and accuracy.

Concrete Manipulatives

When used alongside the worksheets, these materials help students develop a concrete understanding of computational processes, laying a strong foundation for mathematical concepts. This set consists of both three-dimensional and two-dimensional manipulatives, addressing **visual perception, number sense, computation concepts**, and **mathematical operations.**

This structured and supportive approach ensures that students develop a strong mathematical foundation, fostering confidence and competence in the subject.

Click here to watch a video about the different aspects of the kit.

A Foreword

K V Subrahmanyam, Dean of Studies, Chennai Mathematical Institute

CHENNAI MATHEMATICAL INSTITUTE

K. V. Subrahmanyam
Dean of Studies
June 20 2025.

CountOnMe is an aptly named kit, meant to provide just the kind of sup- portive and effective environment that primary school children struggling to acquire math skills need. Curated with thought and love by the team from the Madras Dyslexia Association, it comes with some delightfully coloured worksheets and material that incorporate learning tools and strategies which educators and parents can rely on, to help children with dyscalculia and un- derperforming school children overcome their anxiety at doing mathematics and bring back the joy in working out mathematics problems.

Concepts are graded and each concept has its own set of activities and work- sheets. Teaching material and worksheets are further colour coded red, yellow green, blue - from the easy to the more difficult, allowing the educator to diagnose the exact learning problem and offer targeted, gradual, remedial learning. The educator introduces a new concept using red work sheets con- taining simple problems and concrete material. With practice, the student gains familiarity with the concept. Students progress is then monitored via yellow worksheets. Problems in these worksheets are designed so that con- cepts learned earlier are reinforced, even as the child learns to solve more complex problems related to the concept which is being taught. Nuances within the concept are then introduced via a mix of easy and more difficult problems in green worksheets. This allows the educator to gauge whether the understanding of the concept has been internalized or whether the child needs more practice with problems in the red and yellow sheets. Finally the child is left to independently explore the problems in the blue work- sheets. On completion of the entire set of worksheets, the child's strengths and weaknesses with respect to this particular concept are documented, and a readiness for the next concept is evaluated.

The first three worksheets incorporate visual cues, design, stories and other sensory activities to facilitate alternative approaches to learning the concept. This is especially important for children with dyscalculia who usually have strong creative abilities in art and music. Instructions are simple and come with visual cues, and questions are in different formats to cater to multiple learning styles and needs.

I believe such a gradual and varied approach to remedial learning will help children evaluate their own understanding. At a later stage if the children are confused about using a concept learned earlier, with a little help from the educator, they can then be guided to return to the worksheets and redo them on their own. This cycle of reinforced learning guided by the children's own self-evaluation of their learning is critical to the goal of achieving fluency in learning mathematical concepts.

As a father of a child who had dyslexia and difficulties with numeracy I would have loved to have such a kit for my child. It would have made my daughter's learning journey as she navigated the world of numbers and word problems involving numbers much more joyous.

The attention to detail in design, art and visual and sensory cues in this kit is exemplary. What I also liked is the emphasis in the worksheets on speaking the language of mathematics. I believe learning tools such as CountOnMe are essential for children who struggle with dyscalculia. This kit is a wonderful enabler and will certainly help a child with dyscalculia to overcome their fear of numbers and make the learning of mathematics the happy process which it should be.

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What is it like for an adult to have dyslexia in today's world?

Usha Ramakrishnan
Consultant: Emotionally Intelligent Parenting, Teaching, Leadership & Management, Former Chairperson, Vidya Sagar Chennai

To get an insight I conversed with bright adults with dyslexia in their early 20s, 30s, 40s and 50s. They responded with enthusiasm and sincerity. Their attitudes were remarkable.

We started with challenges they face in the workplace. Matter-of-factly, they all said the challenge continues into adulthood. It's extra challenging as the disability is hidden and their social skills and command over spoken language present a different picture. ‘It’s like being alone in a crowd and none the wiser,’ one said.

Difficulties included following rapidly spoken instructions, tasks related to reading, spelling, writing, documenting, connecting creative thoughts to paper, coordinating multitude of thoughts, and making project reports. They were tedious, stressful and daunting.

One of the most frustrating aspects for a person who could conceptualise and plan strategies effortlessly and speak it too was, penning it down for proposal writing. Routines smother them. It was a challenge to not get through in an interview despite obvious ability because of marks.
What was exciting was their continuing this train of thought with self-discovered solutions. Use of Assistive Technology and team work headed the list. From using Dictaphones for follow through on rapidly spoken multiple instructions, text to speech apps, audiobooks, MP3s for reading, spell check and keyboarding for spelling and writing; to using mind maps, visualisation, GPS apps, notepad reminders in tablets, iPhones and androids for planning; they were tech savvy. One of them said with age he employed his own strategies and was reading better.

Working in a team, was a remarkable ‘win-win’ strategy. The dyslexic adult did the thinking and planning; the non-dyslexic did the writing. It built a vibrant team spirit and moved the vision to operations. They understood the impact of the difficulty on their work, prioritised their difficulties, reasoned it through and found resources that suited them as they encountered the difficulty.

They used effective alternates and ‘reasonable accommodations’ to suit their unique ways of decoding, encoding and metacognition. Strategies

and Assistive Technology increased their work output, reduced the stress of having to rely only on reading, spelling and writing in order to perform and allowed creativity of the intelligent dyslexic to flow.

Recent research in neurosciences shows that the dyslexic brain performs reading related tasks differently. We need to respect this and use alternates that help bypass difficulties of a normal method right from childhood. Assessments must lead to enabling rather than limiting a different intelligence and potential.

Programmes for children with dyslexia should include central executive function activities of problem solving in real life situations. It would be valuable for them through life.

The next point focused on what enabled them to find their own solutions to their challenges. As one (different ages, backgrounds locales) they said it was belief in their abilities. All the adults first spoke of the adverse effect of early negative experiences in their lives, when they felt lost and overwhelmed; left alone to fend for themselves; worthless and humiliated, when treated harshly by adults who did not understand. They spoke candidly. The youngest, in his twenties, was the only one who spoke about his difficulty being identified early by his parents. However, he said, they focused on medical intervention to try to fix it. Two of them identified the difficulty in themselves as teens. Having an assessment and understanding themselves correctly gave them relief. Things fell into place. It changed their lives.

They spoke of the enormous amount of effort it required for them to motivate themselves, pull themselves up from feelings of worthlessness that they had been scripted with. And then they spoke of what helped them over come it. They spoke with gratitude of people who were with them at critical moments. Who believed in them, nurtured them despite not knowing about dyslexia. Who showed them new vistas of non-academic learning where they found abilities which built their confidence which greatly restored their self-esteem in their impressionable years.

In hindsight, they feel, this bank of unconditional love and appreciation they received became the pole vault that enabled them to motivate themselves further in their own adult lives.
Those who were married spoke of the valuable support they receive from their spouses who just felt ‘they could

do it'. This further built confidence and honed their abilities. I watched them with their children - doting and nurturing - it made a circle. They were reaching out with the same love they had received. One of them said the early knocks one received makes one better equipped to face new hurdles.

Psychosocial development must be nurtured. Only when the child can trust, feel loved, is allowed independence, initiative and, given opportunities to develop competence in areas that they are intelligent in will they be better equipped to find their own identity in the teen years, and form intimate relationships with others in the adult years. And later on, reach out to others.

This confidence also enabled self-discoveries of their potential in order to pursue studies or work options they had abilities and aptitudes for. The profile of intelligences among the younger adults was apparent in their career choices.

Alongside this, their resilience, awareness of their strengths and weaknesses and compassion for others stood out. Unique Multiple Intelligences profiles were apparent. Adult dyslexics face challenges of a different kind. They also have unique profiles of intelligences. When, as children, self-esteem is nurtured, when they are made aware of their strengths along with difficulties, when they are not shamed for being different, when assessment and intervention programmes focus on holistic development and are updated with advances in user friendly technology and neuro-scientific findings, the adults they will grow into will be charmingly and valuably different.

When dyssemia, ADHD, NVLD, and other SLD coexist with dyslexia different sets of challenges will be apparent, but that calls for a different article.

Happenings at MDA

Ananya Learning & Research Centre

The children settled into the academic year, not just with a new pedagogy but also with a new set of friends. It was heartening to see this spirit.

In keeping with tradition and to foster secularism, the children celebrated:

- Ganesh Chaturthi
- Onam
- Milad-un-Nabi
- Teacher's day

- Independence Day - An Craft Fest was held as a part of the celebrations. It was an experiential learning on money transactions. The young artists of Ananya unleashed their creativity at the fest showcasing their talents and making it a truly memorable day.

Students of Ananya Learning & Research Centre participated in Soroptomist and returned with many rewards and appreciations.

- Won 2 prizes for art
- Special appreciation for skit
- Best actor award
- Overall second runners up

After School Remediation

Both physical and online classes were resumed. To build their camaraderie, online celebrations and events were held.

Training

New academic sessions, newly recruited academic staff. Schools were keen on training the teachers on various aspects of dyslexia in order to empower the teachers to provide appropriate support to the children with dyslexia in their schools. Two programmes on Early Intervention, 6 programmes for primary school teachers, and 1 programme for middle school teachers were conducted. In addition to this, 4 programmes on Wonder Exercises, were conducted.

Resource Rooms

We welcome 10 new schools who have signed up with Madras Dyslexia Association to set up and manage Resource Rooms; this includes a school from Gangtok. We are happy to provide support across the country, beyond the boundaries of our state.

Conferences and Events

Lakshmi Hariharan moderated a panel discussion in an event held by Cognizant Foundation

MDA launched the remedial kit for dyscalculia in the presence of heads of schools, special educators and mathematics teachers. This provided a forum to showcase the kit and explain how to use it to the schools. It is an important teaching aid to support children with difficulties in maths.
Links to a few of the press coverages is given below:

https://www.newindianexpress.com/good-news/2025/Sep/21/count-on-me-when-kids-are-at-sixes-sevens

https://www.thehindu.com/news/national/tamil-nadu/math-made-fun-madras-dyslexia-association-launches-toolkit-to-make-math-easier-for-children-with-dyscalculia/article70034689.ece

Lata Vasanth (Head, Training, MDA) and Lakshmi Hariharan (Head, Resource Rooms, MDA) were honoured with the Teaching Excellence Award by the Lions Club of Madras Park Town. They were the only two recipients working with children with disabilities – a true testament to their dedication and impact in this important area.