



TEACHING STRATEGIES FOR HELPING STUDENTS WITH DYSCALCULIA

Training syllabus

Dyscalculia Defined: Dyscalculia is a learning disability in math. People with have trouble with math at many levels. They often struggle with key concepts like bigger vs. smaller. And they can have a hard time doing basic math problems and more abstract math.

Watch this 4-minute video on dyscalculia: <https://youtu.be/IezO567SKNM>

Below is training place for 2 days training on math's strategies for teaching with low performance in math.

Day 1: 24th July 2023

- Introduction:
 - Specific Learning Difficulties in Math (Dyscalculia).
 - Characteristics of Children with Learning Differences in Math.
 - How does math learning differences (Dyscalculia) manifest itself in the classrooms?
 - Connection between Dyslexia and Dyscalculia. What is the connection between language-based challenges and Math? How does reading affect Math?
 - How to identify/screen children with learning difficulties in Math.
- How do children learn Math? Stages of learning Math
 - Concrete Representational Abstract Model; Theoretical Background.
- What are the Math Readiness Concepts?
- Theoretical outline and Frame work to be discussed on Day 1.

Day 2: 25th July 2023

Teaching Strategies for Math to be discussed on Day 2 in the following areas:

- Math Readiness Skills/Pre Math-Skills:
 - Classification/Sorting/Grouping
 - Ordering & Seriation
 - Sequencing/Sequential Thinking
 - One To One Correspondence
 - Problem Solving Skills & Critical Thinking Skills.
 - Spatial Orientation and Temporal Skills.

- Processing Skills (Visual & Auditory Processing)
- Numeracy:
 - Counting,
 - Recognizing Number Symbols,
 - Greater than/less Than,
 - Number Bonds,
 - Place Value,
 - Number Sequencing,
 - Ascending/Descending Orders
- Place Value
- Math Operations
 - Addition
 - Subtraction
 - Multiplication
 - Division
- Fractions
- Geometry
- Time
- Problem Solving & Critical Thinking.

- **Math Resources:**
 - Online & digital tools like manipulatives.
 - Games & activities
 - How to make math fun and engaging.

<https://www.ctcmath.com/how-it-works>

<https://www.reflexmath.com/>

<https://www.elephantlearning.com/>

<https://www.imaginelearning.com/products/math/illustrative-mathematics/>

<https://www.assessingmathconcepts.com/>

<https://home.xtramath.org/>

<https://aopsacademy.org/>

<https://www.zearn.org/>

<https://mathgeekmama.com/lego-multiplication-division/>

<http://mathperspectives.com/>

<https://mathigon.org/>

Resources/Materials

https://www.amazon.com/hand2mind-Manipulative-Individual-Practice-Homeschool/dp/B086MNBF52/ref=asc_df_B086MNBF52/?tag=&linkCode=df0&hvadid=416638584393&hvpos=&hvnetw=g&hvrnd=15501489189204864066&hvppone=&hvpstwo=&hvgmt=&hvdev=c&hvdvcmdl=&hvllocint=&hvllocphy=9032043&hvtargid=pla-908264211071&ref=&adgrpid=93602482973&th=1

https://www.amazon.com/ETA-hand2mind-Assorted-Counters-Patterns/dp/B016DUZWYO/ref=sr_1_4_sspa?crid=11DM6XO6CBFLF&keywords=math%2Bcolor%2Btiles&qid=1680721337&sr=8-4-spons&spLa=ZW5jcmlwdGVkUXVhbGlmaWVyPUEyUVhOWTRHVDU0SjhKJmVuY3J5cHRlZElkPUEwODY4OTczMllyTTZXM09HNU9PNSZlbnNyeXB0ZWZWRBZElkPUEwNzc1NDIyMkoYMEIzSjZUOERUSCZ3aWRnZXROYW1lPXNwX2F0ZiZlY3Rpb249Y2xpY2tSZWRpcmVjdCZkb05vdExvZ0NsaWNrPXRydWU&th=1

https://www.amazon.com/ETA-hand2mind-Linking-Cubes-Manipulative/dp/B01CIGIF3C/ref=sr_1_3_sspa?crid=1UA520CWUV4AB&keywords=blue%2Bunifix%2Bcubes&qid=1680721369&sr=8-3-spons&ufe=app_do%3Aamzn1.fos.18630bbb-fcbb-42f8-9767-857e17e03685&spLa=ZW5jcmlwdGVkUXVhbGlmaWVyPUFRNE5IT1JHV1hRWE8mZW5jcmlwdGVkSWQ9QTA1OTAyMDE4QjA3WVBDWEg1MlYmZW5jcmlwdGVkQWRJZD1BMDA1MTC1MzE1S1VVREhJlV1UxMVQmd2lkZ2V0TmFtZT1zcF9hdGYmYWN0aW9uPWNsaWNrUmVkaXJlY3QmZG9Ob3Rmb2dDbGljaz10cnVl&th=1

https://www.amazon.com/dp/B08RDVRTSV/ref=redir_mobile_desktop?encoding=UTF8&aaxi tk=823299768d20ed71f387768a2ccb13e&content-id=amzn1.sym.7dd77237-72be-4809-b5b5-d553eab7ad9d%3Aamzn1.sym.7dd77237-72be-4809-b5b5-d553eab7ad9d&hsa_cr_id=5676093490101&pd_rd_plhdr=t&pd_rd_r=57f3f98f-1a42-4082-a791-d91e48381e73&pd_rd_w=o67Mj&pd_rd_wg=q121L&qid=1680721402&ref=sbx_be_s_sparkle_lsi4d_asin_1_img&sr=1-2-9e67e56a-6f64-441f-a281-df67fc737124&th=1

https://www.amazon.com/LMC-Products-Toddlers-Preschool-stringing/dp/B07W XK8NWP/ref=sr_1_3_sspa?crd=1MO9FTLFAOA5U&keywords=strings%2Band%2Bbeads&qid=1680721473&srefix=strings%2Band%2Bbeads%2Caps%2C179&sr=8-3-spons&spLa=ZW5jcnlwdGVkUXVhbGlmaWVyPUEzNk4yN0RCVjdMN0xNjM VuY3J5cHRlZElkPUEwMzgxNjc0M0cySVpYOTFGSjg1MiZlbnNyeXB0ZWRBZElkPUEwNzEzMzE1M08xNEExKMUU0WFE4VSZ3aWRnZXROYW1lPXNwX2F0ZiZhY3Rpb249Y2xpY2tSZWRpcmVjdCZkb05vdExvZ0NsaWNrPXRydWU&th=1

https://www.amazon.com/BRABURG-Base-Ten-Blocks-Set/dp/B08JLYL5M5/ref=sxin_25_pa_sp_search_thematic_sspa?content-id=amzn1.sym.c8697a08-4071-4b95-a6c6-18057bcdb898%3Aamzn1.sym.c8697a08-4071-4b95-a6c6-18057bcdb898&crd=HH1HEXEB3L60&cv_ct_cx=math+cubes&keywords=math+cubes&pd_rd_i=B08JLYL5M5&pd_rd_r=89b2c444-b902-4813-b282-1315ce89ae43&pd_rd_w=ZrIJX&pd_rd_wg=wxKBA&pf_rd_p=c8697a08-4071-4b95-a6c6-18057bcdb898&pf_rd_r=96BF8NYRW1J18ZX9845V&qid=1680721519&sbo=RZvfv%2F%2FHxDf%2BO5021pAnSA%3D%3D&srefix=math+%2Caps%2C159&sr=1-3-364cf978-ce2a-480a-9bb0-bdb96faa0f61-spons&psc=1&spLa=ZW5jcnlwdGVkUXVhbGlmaWVyPUEzOVNZWEJlPQ1M2ODZlJmVuY3J5cHRlZElkPUEwMDgwMjQ4MUhKV0RGSDVUTkg2RiZlbnNyeXB0ZWRBZElkPUEwMTUwOTE3MzQ0QjU0UDhOMlIzTCZ3aWRnZXROYW1lPXNwX3NIYXJjaF90aGVtYXRpYyZhY3Rpb249Y2xpY2tSZWRpcmVjdCZkb05vdExvZ0NsaWNrPXRydWU=