



TEACHER'S TRAINING MANUAL FOR

STUDENTS WITH LEARNING DIFFICULTIES



IMPLEMENTATION SUPPORT UNIT (ISU)

**DIRECTORATE OF ELEMENTARY AND SECONDARY EDUCATION
KHYBER PAKHTUNKHWA**

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CURRICULUM DEVELOPMENT TEAM

Manual Development Team

1. Mr. Muhammad Adil

Clinical Psychologist, Implementation Support Unit (ISU)
Directorate of Elementary & Secondary Education, Peshawar

2. Ms. Jameela Akhtar

Clinical Psychologist, Implementation Support Unit (ISU)
Directorate of Elementary & Secondary Education, Peshawar

3. Mr. Muhammad Ayaz

Assistant Director
Directorate of Elementary & Secondary Education, Peshawar

4. Ms. Syeda Umm-e-Laila Jaffry

Director Programs, Implementation Support Unit (ISU)
Directorate of Elementary & Secondary Education, Peshawar

Manual Review Team

1 Mr. Zulfiqar Khan

Principal, GHS Sheikh ul Bandi Abbottabad

2 Mr. Babur Bashir Khan

Subject Specialist, DCTE Abbottabad

- 3 Dr. Gul Nazir Khan**
Subject Specialist DCTE Abbottabad
- 4 Ms. Rafia Naz**
Av aid Officer DCTE Abbottabad
- 5 Dr. Shafaqat Hussain**
Subject Specialist DCTE Abbottabad
- 6 Dr. Imtiaz Ali**
Subject Specialist DCTE Abbottabad
- 7 Mr. Samiullah Marwat**
DPE & S DCTE Abbottabad
- 8 Dr. Saima Jadoon**
Subject Specialist DCTE Abbottabad
- 9 Mr. Jihad Muhammad**
R&D, BISE Abbottabad
- 10 Mr. Muzammil Islam**
Program Advisor, Association for Aid & Relief (AAR) Japan, Haripur
- 11 Ms. Sadia Sajid Awan**
Principal, RISE School of Inclusive Education Abbottabad
- 12 Ms. Sameena Kousar**
Director, SAM Special Education & Rehabilitation School Abbottabad
- 13 Ms. Waheeda Rehman**
Assistant Professor, Abbottabad University of Science & Technology

14 Dr. Summaiya Ahmad

Associate Professor, Department of Psychology , University of Peshawar

15 Dr. Hayat Muhammad

Assistant Professor, Department of Psychology , University of Peshawar

Under Supervision:

Mr. Jaffar Mansoor Abbasi

Director Curriculum & Teacher Education Khyber Pakhtunkhwa, Abbottabad

Mr. Muhammad Athar

Additional Director (Standards Setting Wing)

Directorate of Curriculum & Teacher Education Khyber Pakhtunkhwa, Abbottabad

Technical Facilitation:

1. Syed Fawad Ali Shah

Education Specialist, UNICEF

2. Ms. Momina Ahmad

Education Officer, UNICEF

Composers:

1. Mr. Sufian Matloob

Directorate of Curriculum & Teacher Education K.P Abbottabad

2. Mr. Ahsan Nazir

Directorate of Curriculum & Teacher Education K.P Abbottabad

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LIST OF ACRONYMS/ ABBREVIATIONS

1. KP	Khyber Pakhtunkhwa
2. DoE&SE	Directorate of Elementary & Secondary Education
3. UNICEF	United Nation International Children’s Educational Fund
4. DCTE	Directorate of Curriculum & Teachers Education
5. ISU	Implementation Support Unit
6. LDs	Learning Difficulties
7. IQ	Intelligence Quotient
8. ADHD	Attention Deficit Hyperactivity Disorder
9. ODD	Oppositional Defiant Disorder
10. OCD	Obsessive Compulsive Disorder
11. IDA	International Dyslexia Association
12. ASD	Autism Spectrum Disorder

PREFACE

Government of Khyber Pakhtunkhwa is committed to bring quality to the education system through systematic changes. The Elementary and Secondary Education Department Government of Khyber Pakhtunkhwa aims to ensure provision of quality education to the students who have learning difficulties. The Directorate of Elementary and Secondary Education, Khyber Pakhtunkhwa observed, the needs to build capacity of the teachers to deal with the children who have learning difficulties to achieve the desired objectives.

A committee of four members have been constituted to develop a draft teacher training manual. The committee members are Muhammad Ayaz, Assistant Director (DESE KP), Ms. Umm-e-Laila Jaffery, Director Program Implementation Support Unit (ISU), Muhammad Adil and Jameela Akhtar Psychologists ISU.

The Directorate of Elementary and Secondary Education, Khyber Pakhtunkhwa would like to acknowledge the technical support of Directorate of Curriculum and Teacher Education (DCTE) Khyber Pakhtunkhwa as they have thoroughly reviewed the manual and enriched it to ensure the provision of skills, competencies and knowledge to the teachers which will help them to identify the students having learning difficulties and implement classroom activities to cater the needs of the students.

We would also be thankful to Mr. Fawad Ali Shah Education Specialist United Nation International Children's Educational Fund (UNICEF), Ms. Momina Ahmed Education Officer UNICEF for their support for providing technical support and Education Cannot Wait for providing financial support. As this is the new initiative introduced in the education, department Khyber Pakhtunkhwa with the technical and financial support of UNICEF to improve teaching learning process in the classroom resulting in improvement Student Learning Outcome, which is prime objective of education department Khyber Pakhtunkhwa.

Dr. Hafiz Muhammad Ibrahim
Director,
Elementary and Secondary Education,
Khyber-Pakhtunkhwa

AGENDA OF TRAINING

3- Days Teachers Training Manual on Children with Learning Difficulties

		Contents	Timings
Day -1	Session 1	Registration and Recitation from the Holy Quran	09:00-10:30
		Welcome and Introduction	
		Fear and Expectation	
		Training Norms Setting	
		Pre- test	
	Tea Break		10:30-11:00
	Session 2	Learning Types of Learning Types of Behavioral Learning Factors Affecting Learning	11:00-12:20
	Session 3	Multisensory Learning Methods of Multisensory Learning	12:20-12:35 12:35 -01:00
	Prayer & Lunch		01:00-02:00
	Session 4	Age Wise Milestone (Reading, Writing & Listening)	02:00-03:30
		Recap of the Day	03:30-04:00
Day -2	Session 5	Contents	Timings
		Recitation from the Holy Quran/ Reflection of day-1	09:00-09:45
		Learning Difficulties & Symptoms	09:45-10:20
		Energizer Walk and Stop	10:20-10:25
	Tea Break		10:25-11:00
		Types and Causes of Learning difficulties	11:00-11:30
		Effective Teaching Skills with Students of Learning Difficulties	11:30-12:00
	Session 6	Learning Difficulties (Dyscalculia)	12:00-12:30
		Sign & Symptoms of (Dyscalculia)	12:30-01:00
	Prayer & Lunch		01:00-02:00
		Classroom Strategies for (Dyscalculia) Students	02:00-03:00

	Session 7	Learning Difficulties (Dysgraphia)	03:00-04:00
Day -3	Session 8	Contents	Timings
		Recitation from the Holy Quran/recap of day-2	09:00-09:45
		Signs & Symptoms of Dysgraphia	09:45-10:30
	Tea Break		10:30-11:00
	Session 9	Classroom Strategies for (Dysgraphia) Students	11:00-11:40
		Dyslexia & Its Types	11:40-12:00
		Sign & Symptoms of Dyslexia	12:00-12:30
		Prevalence of Dyslexia	12:30- 01:00
	Prayer & Lunch		01:00-02:00
	Session 8	Designing Classroom Activities for Dyslexia Students	02:00-03:00
		Comorbidity and Associated Difficulties	03:00-03:30
		Post-test	03:30-03:45
		Feedback of participants	03:45-04:00

Day 01			
Topic: Learning & Multisensory Approaches			
Learning Outcomes: <ul style="list-style-type: none"> – Understand the concept “Learning” – Explore the types of Learning – Enhance an understanding of Behavioral Learning – Elaborate the role of teacher in Learning – Prepare activities that help children for Learning – Discuss the Multisensory Learning Approaches – Describe the crucial role of Learning in early years – Enhance Writing, Reading and Listening Skills 			
Time	Activity	Procedure	Material Required
08:30 to 10:20	Registration	Distribute registration form among all the participants and ask them to fill the required data properly.	Registration form Ballpoint
	Recitation	Recite few verses from the Holy Quran	Any participant
	Welcome and introduction	<p>Ask the participants to get paired with the person next to them and introduce the partner by sharing the following information:</p> <ol style="list-style-type: none"> Name Designation & School Area belong to Subject Teaching experience Training experience Hobby <p>Invite each pair to come in front and introduce his / her partner.</p>	Notepad and ball pen

	Fears and Expectations (Activity 1.1)	<p>Distribute two different color cards (yellow and blue) and ask the participants to write their fear and expectations. Display the cards on two different charts (Yellow-Fear and Blue-Expectations).</p> <p>Discuss few fear and expectations with whole group.</p>	<p>Yellow and Blue Cards</p> <p>Permanent Markers</p> <p>2 Charts</p> <p>Masking tape</p>
	Training norms	<p>Share with the participants that it is vital to have some norms, so the participants follow the norms for smooth running of the training.</p> <p>Engage the participants by asking them to share any norm for the training. Norms for the training might be:</p> <ul style="list-style-type: none"> ○ Be punctual and regular (Activity -1.1) ○ Respect others' opinions ○ Turn off/silence the mobile phones ○ Wait for turn ○ Speak clearly and loudly so everybody can hear <p>Ask any volunteer from the participants to write the shared norms on chart and display in the training hall for reinforcement.</p>	<p>White Chart</p> <p>Marker</p> <p>Masking tape</p>
	Pretest	Distribute pretest among participants and instruct them to complete within 15 minutes. Collect the pretest and check later.	Pretest sheet
11:00 to 12:00	Learning / Types of Learning (Activity 2.1)	<p>Brainstorm</p> <p>Brainstorm on learning, its types and approaches to learning (to know the level and understanding of the participants) give input where necessary.</p> <p>Think-pair-share</p> <p>Divide the participants into pairs and ask them to discuss the needs and demands of the child ages 3-5.</p>	<p>Charts,</p> <p>Markers</p> <p>Presentation</p>

		<p>Participants' will discuss their understanding with their pair and share it with all. Give input accordingly.</p> <p>Group Work</p> <p>Divide the participants in six (06) groups. Ask three (03) groups to read learning & its types and three (03) groups to read factors of learning.</p> <p>Invite groups to present their work. Ask questions for further clarity and provide input accordingly.</p>	
12:00 to 12:10		Energizer	
12:10 to 01:00	Multisensory Learning (Activity 3.2)	<p>Ask participants to share their understanding about multisensory learning. Explain types of multisensory learning through presentation or charts.</p> <p>Group work</p> <p>Divide the participants into 5 groups. Assign 1 task to each group and ask them to design activities accordingly. Tasks are as follows:</p> <ol style="list-style-type: none"> 1. Develop five (05) activities that can help children learn, through visual and auditory learning. 2. List down five (05) different ways to teach a child with the help of tactile & kinesthetic learning. 3. Share and demonstrate five (05) Physical activities that we can use during sequential & Simultaneous learning. 4. List down 5 activities that we can use during logical & verbal learning. 	<p>White charts markers Clipboard</p>

		<p>5. Share 5 activities that can help children develop learning through direct experiences.</p> <p>Invite each group one by one for presentation.</p> <p>Conclude the session by giving input.</p>	
02:00 to 03:00	Reading Writing & Listening Domains (Activity 4.1)	<p>Ask participants to share their understanding about listening, writing domains of children</p> <p>Group work</p> <p>Divide the participants into groups. Assign 1 domain question to each group and ask them to design activities accordingly. Domains are as follow:</p> <ol style="list-style-type: none"> 1. (Listening) Develop activities that can enhance children listening domains. 2. (Reading) Develop and activities that can enhance children Reading domains. 3. (Writing) Develop and activities that can enhance children Writing domains. 	<p>Whiteboard</p> <p>Board marker</p> <p>Presentation Charts</p>
03:00 to 04:00	Recap of the day	<p>Ask the participants to recap the whole day activities.</p> <p>Ask them to write a reflection about their learning. based on the following questions:</p> <ul style="list-style-type: none"> ○ What did you learn from the session? ○ What was interesting, exciting and challenging for you? ○ How would you implement this learning in your own classroom? <p>Conclude the day by appreciating the participants' involvement in activities.</p>	

Day-01 Learning & Multisensory Approaches

Session 1: Introduction of Participants & Objectives of the Training

Time: 90 minutes

Objectives:

At the end of this session the participants will be able to:

1. Get familiar with each other.
2. Describe the objectives of the training.

Material. Charts, markers,

Activity-1.1: Introduction

- Welcome participants and invite a volunteer for recitation of some verses from The Holy Quran.
- Introduction of the participants.
- Share brief introduction of the training.
- Share the registration form and ask them to fill it in.
- Training norms.

Session 2: Introduction to Learning & Types of Learning

Time: 80 minutes

Objectives: At the end of this session the participants will be able to:

1. explain the concept of Learning
2. differentiate between different types of learning
3. explain the various key factors of learning
4. distinguish between various key themes of Learning

Material. Charts, markers, hand-outs (2.1, 2.2, 2.3)

Brainstorm

- Brainstorm on learning and its types (to know the level and understanding of the participants) and give input where necessary.

Think-pair-share

- Divide the participants into pairs and ask them to discuss the needs and demands of the child ages 3-5. Participants' will discuss their understanding with their partner and share it with all. Give input accordingly.

Presentation

- Give a detailed presentation on types of behavior learning.

Group Work

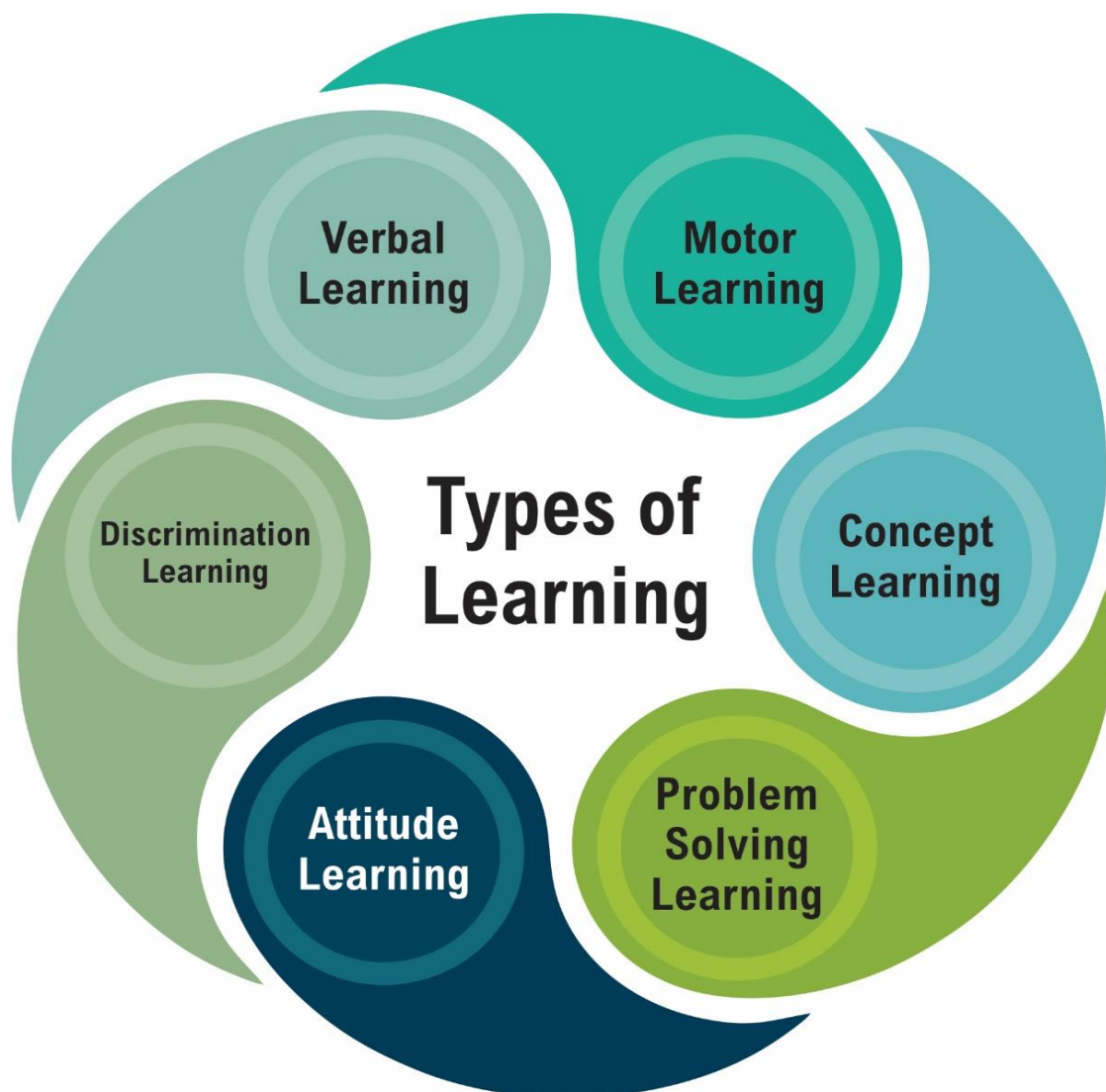
- Divide the participants in four (04) groups. Ask group one & three to read internal factors of learning and group two & four to read external factors of learning from hand-out (2.3) and make presentation on a chart.
- During group work facilitate the participants.
- After completion of the group work invite groups to present their work. Ask questions for further clarity and provide input accordingly.

Hand-out (2.1) Learning and its Types

Learning

Learning is a relatively permanent change in behavior that is the result of experience. It is the acquisition of information, knowledge, and skills. Human learning starts at birth and continues until death as a consequence of ongoing interactions between people and their environment.

Types of Learning



<https://keydifferences.com/difference-between-learning-and-education.html>

1. Motor Learning:

- Our daily activities like walking, running, eating, washing and cleaning etc must be learnt for ensuring a good life.
- These activities, to a great extent, involve muscular coordination.

2. Verbal Learning:

- It is related with the language which we use to communicate and various other forms of verbal communication such as symbols, words, languages, sounds, figures and signs.

3. Concept Learning:

- This form of learning is associated with higher order cognitive processes like intelligence, thinking, reasoning, etc., which we learn right from our childhood. Concept learning involves the processes of abstraction and generalization, which is very useful for identifying or recognizing things.

4. Discrimination Learning:

- Learning which distinguishes between various stimuli with its appropriate and different responses is regarded as discrimination stimuli.

5. Attitude Learning:

- Attitude shapes our behavior to a very great extent, as our positive or negative behavior is based on our attitudinal predisposition.

6. Problem Solving:

- Problem solving happens in classrooms when teachers present tasks or challenges that are deliberately complex and finding a solution for which is not straightforward or obvious. The responses of students to such problems, as well as the strategies for assisting them, show the key features of problem solving.

Hand-out (2.2) Types of Behavioral Learning

The Behavioral School of Thought founded by John B. Watson and highlighted in his seminal work, **“Psychology as the Behaviorist Views It”**, stressed on the fact that Psychology is an objective science, hence mere emphasis on the mental processes should not be considered because processes cannot be objectively measured or observed.

1. Classical Conditioning:

Developed by Pavlov, the process of learning in classical conditioning is described as a Stimulus-Response connection or association. Classical Conditioning was developed by Pavlov’s Classic Experiment, in which the food was used as the natural stimulus which was paired with the previously neutral stimulus (a bell in this case). By establishing an association between the Natural stimulus (food) and the Neutral stimulus (Bell Sound), the desired response could be elicited. After several repetition, the Neutral Stimulus (Bell Sound) becomes Conditioned Stimulus (CS) & elicit the same response (salivation) in the absence of Natural Stimulus (food). The response (salivation) that is elicited in the absence of Natural Stimulus (food) becomes Conditioned Response (CR).

2. Operant Conditioning:

Operant Conditioning is type of learning in which human learn to behave in such a way to obtain reward & avoid punishment. The theory is based on trial and error concept propounded by scholars like Edward Thorndike and later modified by B.F. Skinner. This theory stresses on the fact that the consequences of actions shape the behavior. The theory explains that the intensity of a response is either increased or decreased as a result of punishment or reinforcement. Skinner explained how with the help of reinforcement one can strengthen behavior and with punishment reduce or curb behavior. It was also analyzed that the behavioral change strongly depends on the schedules of reinforcement with focus on timing and rate of reinforcement.

There are two types of reinforcement (1) Positive Reinforcement (2) Negative Reinforcement. Positive Reinforcement occurs when response or behavior is strengthened because it is followed by presentation of rewarding stimulus for example if children cleans their room without being asked, you could appreciate and take them to the playground as a reward. Chances are that they will be more motivated to clean their room again.

Negative Reinforcement occurs when a response or behavior is strengthened by removal of aversive (unpleasant) stimulus for example you offer a child to remove extra chore

if he or she complete home work on time by the removal of extra chores the chances are that child will be more motivated to complete his or her homework on time.

3. Observational Learning:

The Observational Learning process was propounded by Albert Bandura in his Social Learning Theory, which focused on learning by imitation or observing people's behavior. For observational learning to take place effectively, four important elements will be essential: motivation, attention, memory and motor skill. For example students will learn to stop going out side of the classroom without permission by watching other student being punished.

Hand-out (2.3) Factors Affecting Learning

Internal Factors

Heredity:

A classroom instructor can neither change nor increase heredity, but the student can use and develop it. Some learners are rich in hereditary endowment while others are poor. Each student is unique and has different abilities. The native intelligence is different in individuals. Heredity governs or conditions our ability to learn and the rate of learning. The intelligent learners can establish and see relationships very easily and more quickly.

Status of students:

Physical and home conditions also matter: Certain problems like malnutrition (inadequate supply of nutrients to the body), fatigue (tiredness, bodily weakness) and bad health are great obstructions in learning. Apart from these physical conditions, some of the home conditions such as bad ventilation, unhygienic living, bad light, etc can adversely affect students' rate of learning.

Physical environment:

The design, quality, and setting of a learning space, such as a school or classroom, are critical to ensuring the success of learning. Classroom size, configuration, comfort level, fresh air, temperature, light, acoustics, furniture these all can affect student's learning. The tools used by both instructors and students directly affect how information is conveyed, from the display and writing surfaces (blackboards, marker boards, tack surfaces) to digital technologies. For example, If a room is congested or over crowded, it will increase the level of stress in the students as a result this stress will hinder the focus or attention of the students towards their educational activities.

External Factors:

Goals or purposes:

A goal is an aim or a desired result. Each and everyone has a goal. A goal should be set for each pupil according to the standard expected of him. There are two types of goals: immediate and distant goals. A goal that occurs or is done at once is called an immediate goal, those that take time to achieve are called distant goals. Immediate goals should be set for the young learners and distant goals for older learners. Goals should be specific and clear, so that learners could understand.

Motivational behavior:

Motivation is a reason for acting or behaving in a particular way. Motivation learners should be motivated so that they stimulate themselves with interest. This behavior arouses and regulates a student's internal energies.

Interest:

This is the feeling of wanting to know or learn about something. It encourages a student to move over tasks further. During teaching, the instructor must raise interests among students for the best learning. Interest is apparent (clearly observed or understood) behavior.

Attention:

Attention means consideration. It is concentration or focusing of consciousness upon one object or an idea. For an effective learning to take place attention is essential. Instructors must secure the attention of the student.

Fatigue:

Fatigue refers to the constant tiredness and weakness. Generally, there are three types of fatigue, i.e., muscular, sensory, and mental fatigue. Muscular and sensory fatigues are bodily fatigue. Mental fatigue is in the central nervous system. The remedy is to change teaching methods, e.g., use audio-visual aids, etc.

Emotional conditions:

Emotions are physiological states of being. Students who answer a question properly or give good results should be praised. This encouragement increases their ability and helps them produce better results. Certain attitudes, such as always finding fault in a student's answer or provoking or embarrassing the student in front of a class are counterproductive.

Speed, Accuracy, and Retention:

Speed is the rapidity of movement. Retention is the act of retaining. These three elements, speed, accuracy and selection depend upon aptitude, attitude, interest, attention, and motivation of the students.

Learning activities:

Learning depends upon the activities and experiences provided by the teacher, his/her concept of discipline, methods of teaching, and above all his/her overall personality.

Guidance:

Guidance refers to the piece of advice to solve problem. Every student needs guidance in some part or some time in life. Some need it continuously and some very rarely depending on the students' conditions. Younger learners need more guidance. Guidance involves the art of helping boys and girls in various aspects of academics, improving vocational aspects like choosing careers and recreational aspects like choosing hobbies. Guidance covers the whole gamut of learner's problems- learning as well as non-learning.

Session 3: Multisensory Learning

Time: 40 Minutes

Objectives: At the end of this session the participants will be able to:

- 1 Explain the concept of Multisensory Learning
- 2 Differentiate between different types of Multisensory learning
- 3 Explain three primary steps of multisensory teaching
- 4 Distinguish between different methods of learning style

Material. Charts, markers, hand-outs, (3.1,3.2) presentation

Brainstorm

Hand-out (3.1) Multisensory Learning

- Ask participants to share their understanding about multisensory learning. Explain types of multisensory learning through presentation or charts.

Group work

- Divide the participants into 5 groups. Assign 1 task to each group and ask them to design activities accordingly. Tasks are as follows:
 - i. Develop 5 activities that can help children learn, through visual & auditory learning.
 - ii. List down 5 different ways to teach a child with the help of tactile & kinesthetic learning.
 - iii. Share and demonstrate 5 Physical activities that we can use during sequential & Simultaneous learning.
 - iv. List down 5 activities that we can use during logical & verbal learning.
 - v. Share 5 activities that can help children develop learning through direct experiences.
 - vi. Invite each group one by one for presentation. Conclude the session by giving presentation.

Hand-out (3.1) Multisensory Learning

Multisensory learning is a kind of learning in which individual learn new ideas, skills by using their own senses. Multiple senses can engage students and struggling learners. A classroom teacher, educational therapist, or parent can employ multisensory instruction to help children grasp foundational reading skills, reading strategies, letter sounds, spelling patterns, alphabet letters, math concepts, and subject-based learning.

Three Primary Steps to Multisensory Teaching?

1. It is imperative to understand the different ways of learning or ways of processing information before planning your multisensory approach.
2. One must consider a number of direct instruction strategies that can accommodate many ways students can learn.
3. Students' skills should be assessed or evaluated using a variety of assignment options. Allowing students to choose comfortable ways of expressing their knowledge can increase motivation, attention, and improve long-term memory capacity.

Methods of Learning Styles:

There are 12 methods of learning or processing information when considering multisensory learning. They include visual, auditory, tactile, kinesthetic, sequential, simultaneous, reflective/logical, verbal, interactive, direct experience, indirect experience, and rhythmic/melodic. Although most students can learn in some capacity using a single one of the 12 multisensory learning approaches, when more than one sense is activated and students' unique profiles or preferences are accommodated, they often experience joy in the learning process and celebrate remarkable gains.

1) Visual Learning:

This method allows students to use their sense of sight to encode information or employ their internal ability to visualize classroom content.

- Seeing a diagram, web or flow chart
- Seeing an image
- Seeing a movie or video

2) Auditory Learning:

This method allows children to use their sense of hearing to process information by listening.

- Listening to a lecture
- Listening to a debate
- Listening to a story or audiobook
- Listening to a podcast

3) Tactile Learning:

This method allows students to learn by touching or manipulating objects.

- Touching and manipulating an artifact
- Conducting a hands-on experiment
- Copying or tracing diagrams or tables
- Making dioramas

4) Kinesthetic Learning:

Kinesthetic method helps students learn while moving or employing body movements.

- Role-playing scenarios or doing skits
- Participating in field trips
- Conducting interactive experiments

5) Sequential Learning:

This method allows students to learn the material in a specific order.

- Breaking down information into a series of steps

- Making flow charts
- Placing events in sequence on a timeline

6) Simultaneous Learning:

This method allows students to learn “the big picture,” or the overall message and how the detail is interrelated.

- Producing summaries
- Explaining the overall meaning
- Creating concept maps or webs
- Looking at a timeline to understand the overall relationships

7) Reflective/Logical Learning:

This method allows students to use their reasoning skills to solve problems and ponder over complex issues.

- Brainstorming solutions to dilemmas
- Analyzing material or lab work
- Offering reflective writing opportunities
- Conducting discussions that explore a deeper meaning

8) Verbal Learning:

This method allows students to learn information by talking about it.

- Breaking students into discussion groups
- Encouraging students to verbally rehearse their understanding of information

- Asking students to think aloud
- Meeting with students and questioning them about the material

9) Interactive Learning:

This method allows students to learn information in the company of other people.

- Organizing a group debate
- Breaking into small group activities
- Conducting a question-answer session
- Meeting with students after class and answering questions as they complete assignments.

10) Indirect Experience Learning:

This method allows students to learn from the experiences of others: vicarious learning.

- Learning from others' experiences
- Reading a biography
- Watching demonstrations

11) Direct Experience Learning:

This method allows students to learn through their own personal experiences.

- Conducting lab experiments
- Going on field trips
- Taking part in an apprenticeship program

12) Rhythmic/Melodic Learning:

This method allows students to see patterns or pair melodies and rhythm to the information they are learning.

- Suggesting patterns/themes across course content
- Pointing out songs that address the course themes
- Bringing in a musical piece that reflects a time period and creates a mood
- Using songs to memorize content

Worksheet (3.1) (Session-3)

MULTI-SENSORY PHONIC ACTIVITY,

1. Sand letter writing activity

Place a colored sand in a tray and write on it in the selective letter which is shown in picture, read it again and again, repetition is very important.

2. Play Dough

Take a play dough. Tell the student to make a Square, then tell the child to write a letter on it.

3. Scribbling

Draw a picture and paste on a paper according to picture. Place one more white paper and tell the child to scribble it.

4. Take a shaving cream

Show a picture of letter and tell them write and read again & again. Make a small story with the picture. Read in front of students, asked the question about the story in a friendly way.

Session 4: Age Wise Milestones (Reading, Writing & Listening)

Time: 60 Minutes

Objective: At the end of this session the participants will be able to:

- i) understand age-wise milestones regarding listening, speaking, reading, and writing.

Materials required: Writing board, markers, charts, masking tape, Handouts (4.1,4.2)

- Ask participants to share their understanding about listening, writing domains of children

Group work

- Divide the participants into 4 groups.
- Assign the following tasks to each group for presentation
 1. Group-A: develop activities to enhance listening domain
 2. Group-B: develop activities to enhance speaking domain
 3. Group-C: develop activities to enhance reading domain
 4. Group-D: develop activities to enhance writing domain
- Now ask one student from each group to come forward and present their work.
- Ask other groups for questions, if any.
- Finally, the facilitator will conclude the session by giving his/her own remarks.

Reading Writing & Listening Milestone

- ✧ Listening
- ✧ Speaking
- ✧ Literacy Skills-Reading, Writing

Age 3-4

Hand-out (4.1) Competency: Listening Skills Standard Child will listen to the stories, poems, respond appropriately and recognize different sounds in the environment.		
Learning Outcomes	Learning activities	Indicators
Listen attentively and with curiosity to the sounds	Teacher: <ul style="list-style-type: none"> ✧ Reads stories with pauses and sounds according to the characters. ✧ Sings phonic song “A A-ants on my arm” 	Child: <ul style="list-style-type: none"> ✧ Listens attentively and repeats after the teacher.
Recognises different sounds from the surroundings	Teacher: <ul style="list-style-type: none"> ✧ Makes them recognize sounds of vehicles, animals, birds from the surroundings ✧ Plays audio sounds and asks the children to guess the animal/bird. 	Child: <ul style="list-style-type: none"> ✧ Recognizes 03 sounds from the surrounding
Competency: Speaking Standard Child will articulate letters, words, and sentences with correct pronunciation.		
Learning Outcomes	Learning activities	Indicators
Share experiences verbally with peers, teachers and elders	Teacher: <ul style="list-style-type: none"> ✧ Creates a friendly environment where a child can speak freely ✧ Arranges discussions in circle time on an event/topic, festival, friend, picture or things around. ✧ Encourages children to share their personal experiences, likes/dislikes ✧ Arranges a trip to any tuck shop, where students may buy things of their choice and then share their experiences. ✧ In large circle engages children in conversation regarding any special events/celebrations and encourages them to talk about their daily 	Child: <ul style="list-style-type: none"> ✧ Engages in simple back-forth discussion with peers, teachers and elders

	<p>routine (previous day class and home activities) and listen to each other</p> <ul style="list-style-type: none"> ✧ Listen to the children attentively and wait for them to complete what they are saying ✧ Ask children to share stories or cartoon character they like the most. 	
Introduce self and siblings	<p>Teacher:</p> <ul style="list-style-type: none"> ✧ Help the children to introduce self and siblings. ✧ Provide opportunities to the children to talk about their family members. 	<p>Child:</p> <ul style="list-style-type: none"> ✧ Introduces self and siblings with confidence.
<p>Competency: Reading Skills Standard</p> <p>Child will differentiate between English and Urdu letters as well as read from “a to m” in English and “ا سے ز” in Urdu</p>		
Learning Outcomes	Learning activities	Indicators
Exhibits pre-reading skills	<p>Teacher:</p> <ul style="list-style-type: none"> ✧ Displays alphabets (Urdu, English) in the classroom. ✧ Designs and decorate print rich environment. ✧ Recites Naat ✧ Sings National songs. ✧ Recites poems ✧ Guides children how to handle book/notebook ✧ Enriches library corner with different pictorial and one line story books (If available) 	<p>Child:</p> <ul style="list-style-type: none"> ✧ Shows interest in reading activities
Recognizes Urdu Letters	<p>Teacher:</p> <ul style="list-style-type: none"> ✧ Displays chart/flashcards of Urdu alphabets in the class. ✧ Uses flashcards /boards/paper/blocks (if available) to help children to recognize Urdu letters 	<p>Child:</p> <ul style="list-style-type: none"> ✧ Recognizes Urdu letters.

Recognizes English letters	Teacher: <ul style="list-style-type: none"> ✧ Displays chart/flashcards of English letters in the class. ✧ Use flashcards /boards/paper/blocks (if available) to help children recognize English letters 	Child: <ul style="list-style-type: none"> ✧ Recognizes English letters.
Read Urdu letters “اے ز” with correct sounds	Teacher: <ul style="list-style-type: none"> ✧ Arranges activities/drill that helps a child read Urdu letters “اے ز” with correct sounds. 	Child: <ul style="list-style-type: none"> ✧ Reads Urdu letters “اے ز” with correct sounds
Read English letters from “a to m” with correct sounds	Teacher: <ul style="list-style-type: none"> ✧ Arranges activities/drill that helps a child read English letters from “a to m” with correct sounds 	Child: <ul style="list-style-type: none"> ✧ Reads English letters from “a to m” with correct sounds

Competency: Writing Skills Standard

Child will make different lines; scribble the letters and numbers to enhance writing skills.

Learning Outcomes	Learning activities	Indicators
Exhibits pre-writing skills	Teacher: <ul style="list-style-type: none"> ✧ Uses sand tray ✧ Engages children in coloring activities ✧ Provides children with scissors and newspaper and asks the children to cut pictures. ✧ Provides children shoe lace and beads and asks them to pour beads in the shoe lace 	Child: <ul style="list-style-type: none"> ✧ Holds pencil and crayons correctly
Traces different strokes and patterns to develop pre-writing skills	Teacher: <ul style="list-style-type: none"> ✧ Involves children in group activities to support pre-writing skills e.g. tracing different strokes with fingers such as curve, straight line, circle, zigzag, in a tray of sand, soil, flour/pulses, in the air etc. ✧ Helps children in tracing different patterns in correct formation on a paper with the help of a pencil or colours. 	Child: <ul style="list-style-type: none"> ✧ Traces strokes/patterns correctly with fingers/pencil ✧ Follows directions in tracing strokes/patterns correctly with finger/ pencil

Hand-out (4.2) Competency: Listening Standard Child will listen to the stories, poems, respond appropriately and recognize different sounds in the environment.		
Learning Outcomes	Learning activities	Indicators
A child will be able to listen attentively and respond appropriately	Teacher: <ul style="list-style-type: none"> ✧ Speaks with clear pronunciation and appropriate tone with pauses ✧ Encourages children to repeat what the teacher narrates ✧ Organizes activities like storytelling-, Naat, Hamd, poems/rhymes through which a child practices listening skills ✧ Asks questions in between and afterwards to observe how attentively a child is listening ✧ Organizes discussion and asks questions on different topics, things around, likes and dislikes, my pet, my home etc. ✧ Reads aloud jumbled words and asks children to repeat in the same sequence. ✧ Gives simple instructions and observes the children response. ✧ Points out thing's a child sees and hears, explains and shares the names. ✧ Exposes children to different sounds in their environment. ✧ Encourages children to guess the theme and characters of a story by showing cover/pictures. ✧ Makes role play and encourages children to ask questions for clarity ✧ Tells the title of the story and encourages children to narrate ✧ Is a role model and pays attention to what a child communicate 	Child: <ul style="list-style-type: none"> ✧ Listens attentively ✧ Follows instructions ✧ Recognizes different sounds ✧ Follows and respond to instructions and questions critically and with logic

Responds to poems, rhymes and songs actively and with Interest	Teacher: <ul style="list-style-type: none"> ✧ Involves children in singing age-appropriate poems, rhymes and songs with appropriate tone, actions and expressions. ✧ Sings poems, rhymes and songs using different play cards/masks etc. ✧ Encourages children to sing poems, rhymes and songs of their choice. 	Child: <ul style="list-style-type: none"> ✧ Sings poems, rhymes and songs with appropriate tone, actions and expressions
Recognize and differentiate between sounds in the environment	Teacher: <ul style="list-style-type: none"> ✧ Provides indoor and outdoor opportunities to help children listen and differentiate between sounds in the environment ✧ Encourages children to make different sounds of birds/animals and asks them to distinguish ✧ Makes a child understand different tones (low or high pitches) of material in the environment e.g. table, door, window etc. 	Child: <ul style="list-style-type: none"> ✧ Differentiates sounds in the environment ✧ Differentiates between pleasant sound and noise

Competency: Speaking Standard

Child will articulate letters, words, and sentences with correct pronunciation and make conversation confidently about matters of immediate and personal interest

Outcomes	Learning activities	Indicators
Correct Pronunciation	Teacher: <ul style="list-style-type: none"> ✧ Encourage children to articulate letters, speak simple words and sentences with correct pronunciation. ✧ Arrange language drills in a group where each child articulates different letters and speak new words like cat, ball etc. ✧ Involve children to describe any given picture or event in simple language with correct pronunciation. 	Child: <ul style="list-style-type: none"> ✧ Pronounce letters correctly. ✧ Speak word and sentences with correct pronunciation
Understand and communicate in a language	Teacher:	Child:

other than mother tongue (Urdu, English)	<ul style="list-style-type: none"> ✧ Demonstrate and encourage children to use simple language other than mother tongue in the classroom ✧ Create conducive and friendly learning environment by using simple language for interaction ✧ Encourage children to respond in a language other than the mother tongue ✧ Arrange simple group discussions in language other than the mother tongue on different topics ✧ Organizes activities to encourage children to communicate in a language other than the mother tongue such as role-play, picture description, presentation etc. ✧ Gives simple instructions in Urdu/English 	<ul style="list-style-type: none"> ✧ Understand and follow instructions in a language other than mother tongue.
Use simple English words and phrases for communication	<p>Teacher:</p> <ul style="list-style-type: none"> ✧ Give instructions in English (in the beginning, the teacher will give the instructions in Urdu and will repeat in English) ✧ Reads stories and shares unknown word meaning with the children ✧ Encourages the children to express basic needs using common words or phrases in English such as “May I go to drink water” “May I take colors from Art corner” etc. 	<p>Child:</p> <ul style="list-style-type: none"> ✧ Uses simple words in daily conversation with confidence and understanding
Use new vocabulary in conversation (Urdu, English)	<p>Teacher:</p> <ul style="list-style-type: none"> ✧ Introduce new words through different activities like showing flash cards, pictures and objects from the immediate environment ✧ Involves children in vocabulary games. ✧ Arrange activities for introducing and practicing new words on daily basis. 	<p>Child:</p> <ul style="list-style-type: none"> ✧ Speak/use at least 02 new words in a week

Exhibit self-confidence while speaking.	<p>Teacher:</p> <ul style="list-style-type: none"> ✧ Introduce activities which enhance speaking skills such as ask children to share about their routine, favorite sport/game, cartoon etc. ✧ Provide opportunity to each child to speak in front of the class. ✧ Encourage group discussions and dialogues on daily life topics. ✧ Arrange role plays ✧ Engage children in assembly procedures and make them present general knowledge, golden words, sing national songs etc. ✧ Help children to improve their communication skills like making eye contact, gestures and postures. ✧ Appreciate and praise children positively 	<p>Child:</p> <ul style="list-style-type: none"> ✧ Use gestures and postures properly while speaking/talking
<p>Competency: Reading Standard</p> <p>Child will recognize familiar words in simple text and understand how books are organized.</p>		
Learning Outcomes	Learning activities	Indicators
Knows that Urdu reading starts from right to left	<p>Teacher:</p> <ul style="list-style-type: none"> ✧ Guide children that Urdu is read from right to left. ✧ Arrange reading activities for a child that reinforces him/her in reading letters, words and sentences of Urdu in correct sequence. 	<p>Child:</p> <ul style="list-style-type: none"> ✧ Reads Urdu from correct side/sequence
Knows that English reading starts from left to right	<p>Teacher:</p> <ul style="list-style-type: none"> ✧ Guide children that English is read from right to left. ✧ Arrange reading activities for children that reinforce reading letters, words and sentences of English in correct sequence. 	<p>Child:</p> <ul style="list-style-type: none"> ✧ Reads English from correct side/sequence
Recognize Urdu letters	<p>Teacher:</p> <ul style="list-style-type: none"> ✧ Display chart/flashcards of Urdu letters in the class. 	<p>Child:</p> <ul style="list-style-type: none"> ✧ Recognizes Urdu letters.

	<ul style="list-style-type: none"> ✧ Use flashcards /boards/paper/blocks (if available) to help children to recognize Urdu letters 	
Recognize English letters	<p>Teacher:</p> <ul style="list-style-type: none"> ✧ Display chart/flashcards of English letters in the class. ✧ Use flashcards /boards/paper/blocks (if available) to help children to recognize English letters 	<p>Child:</p> <ul style="list-style-type: none"> ✧ Recognizes English letters.
Read Urdu letters with correct sounds	<p>Teacher:</p> <ul style="list-style-type: none"> ✧ Arranges activities/drill that helps a child to read Urdu letters with correct sounds. 	<p>Child:</p> <ul style="list-style-type: none"> ✧ Reads Urdu letters with correct sounds
Read English letters with correct sounds	<p>Teacher:</p> <ul style="list-style-type: none"> ✧ Arranges activities/drill that helps a child to read English letters with correct sounds 	<p>Child:</p> <ul style="list-style-type: none"> ✧ Reads English letters with correct sounds
Recognize familiar words in simple text	<p>Teacher:</p> <ul style="list-style-type: none"> ✧ Arrange activities in Urdu and English that makes children recognize familiar words in simple texts e.g. ask a child to underline the familiar words in a simple sentence/s. 	<p>Child:</p> <p>Recognizes familiar words in simple text both in Urdu/English.</p>
Competency: Writing Standard		
Child will write letters, simple words, name correctly and recognize similar words in a simple text.		
Learning Outcomes	Learning activities	Indicators
Can write Urdu and English letters.	<p>Teacher:</p> <ul style="list-style-type: none"> ✧ Arrange activities to facilitate children to write Urdu and English letters properly like asking a child to trace letters in sand tray, soil, flour, trace letters on dotted lines in the right direction 	<p>Child:</p> <ul style="list-style-type: none"> ✧ Writes Urdu and English letters in correct formation.
Can write his/her own name in Urdu and English.	<p>Teacher:</p> <ul style="list-style-type: none"> ✧ Facilitate children to write their name in Urdu and English. 	<p>Child:</p>

	<ul style="list-style-type: none"> ✧ Arrange activities reinforcing for a child to write his/her name in Urdu and English e.g. by providing letter cards of Child's name and asks a child to arrange these letters to make his/her name. ✧ Motivate children to write their name in Urdu and English with letter cards, trace in sand, write on board /paper etc. 	<ul style="list-style-type: none"> ✧ Writes his/her name in Urdu and English correctly.
Write simple words	<p>Teacher:</p> <ul style="list-style-type: none"> ✧ Facilitate children to write simple words like "cat, ball, bat, doll etc." in English and "Aam, Baba, Anaar etc." in Urdu e.g. by providing letter cards of simple words and asks a child to arrange these letters to make simple words 	<p>Child:</p> <ul style="list-style-type: none"> ✧ Writes simple words in Urdu and English correctly

Day 02			
Topic: Learning Difficulties			
<ul style="list-style-type: none"> – Learning Outcomes – Construct knowledge about learning difficulties – Distinguish between learning difficulties – Describe learning activities to support a child having dyscalculia and dysgraphia – Identify teaching classroom strategies for dyscalculia students – Assess the signs and symptoms of students having dyscalculia – Discuss and get -in-depth understanding regarding dysgraphia 			
Time	Activity	Procedure	Material Required
09:00 to 09:45	Recitation	Start with recitation of few verses from the Holy Quran	Any participant
	Reflection	Randomly call any three participants to share their reflection on the previous day.	
09:45 to 10:30	Learning Disabilities / Difficulties (Activity 5.1)	Brainstorm <ul style="list-style-type: none"> • Ask “What is learning disabilities/ difficulties?” • What comes in your mind, when you heard term learning difficulties?” • Write the participants responses on writing board. • Discuss below LDs in detail to help the participants understand how a child suffers during class from the designed activities and teachers’ reactions: Dyslexia – Difficulty with reading Problems reading, writing, spelling, speaking Dyscalculia – Difficulty with mathematics Problems doing math problems, understanding time, using money	charts markers clipboard

		<p>Dysgraphia – Difficulty with writing</p> <p>Problems with handwriting, spelling, organizing ideas</p> <ul style="list-style-type: none"> • Causes of learning Difficulties <p>Group Work and Gallery Walk</p> <p>Ask the participants to read the learning disabilities / difficulties handout and develop a poster (Participants will develop posters in groups and will display on wall). Groups along with facilitator will do a gallery walk and will ask questions about the developed poster for further clarity.</p>	
10:05 to 10:30	Effective Teaching Skills	Share a presentation on effective teaching skills for students having learning difficulties	Presentation multimedia charts group discussion
11:00 to 01:00	Dyscalculia	<p>Introduce Dyscalculia & its Type</p> <p>Ask participant to share their experiences with dealing students having dyscalculia</p> <p>Group Work</p> <p>Form 05 groups. Ask each group to develop a story that can discuss the students having dyscalculia in your class room setting.</p> <p>Invite 2-3 groups to share their developed stories. Appreciate the participants' efforts and creativity.</p> <p>Give constructive feedback after each presentation.</p>	<p>Whiteboard marker</p> <p>Multimedia charts</p> <p>Permanent markers</p> <p>Clipboard</p>
02:00 to 03:00	Class room Strategies for Dyscalculia	<p>Chart / Multimedia Presentation</p> <p>Share a brief discussion about class room strategies for dyscalculia student.</p> <p>Group Work</p> <p>Ask the participants to read, discuss handout and present their group work. Conclude the discussion by</p>	<p>Charts</p> <p>Permanent markers</p> <p>Clipboard</p>

		clarifying the concept and its application at classroom level.	
03:00 to 04:00	Recap of the day	<p>Ask the participants to recap the whole day activities.</p> <p>Ask them to write a reflection about their learning based on the following questions:</p> <ol style="list-style-type: none"> 1. What did you learn from the session? 2. What was interesting, exciting and challenging for you? 3. How would you implement this learning in your own classroom? <p>Conclude the day by appreciating the participants' involvement in activities.</p>	

Session 5: Learning Difficulties

Time: 100 minutes

Objectives: At the end of this session the participants will be able to:

- i) Understand the concept of learning difficulties
- ii) Distinguish between different types of learning difficulties
- iii) Understand effective teaching strategies for students having learning difficulties.

Material required: Writing board, markers, charts, masking tape, handouts (5.1,5.2,5.3)

Activity 1:

Brainstorming

- Ask “What is learning difficulties” (LD)
- Discuss below LDs in detail to help the participants understand how a child suffers during class from the designed activities and teachers’ reactions:
- **Dyslexia** – Difficulty with reading
Problem in reading, writing, spelling, speaking
- **Dyscalculia** – Difficulty with mathematics
Problem in doing math problems, understanding time, using money
- **Dysgraphia** – Difficulty with writing Problems with handwriting, spelling, organizing ideas
- Causes of Learning Difficulties

Activity 2:

Group Work and Gallery Walk

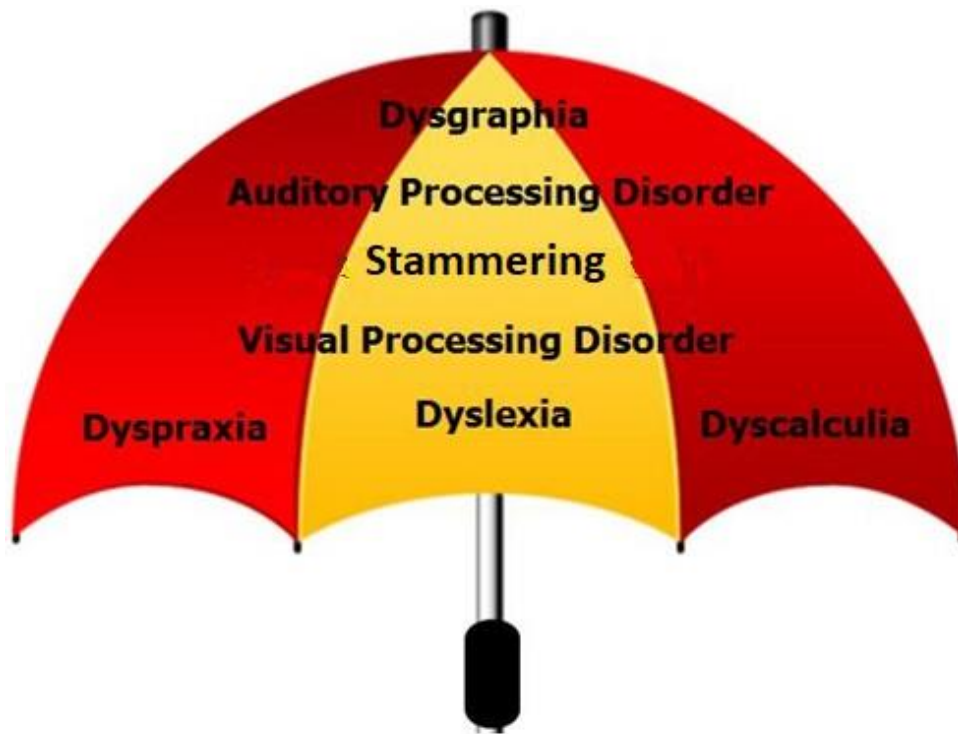
- Ask the participants to read the learning difficulties handout and develop a poster (Participants will develop posters in groups and will display on a wall). Groups along with facilitator will do a gallery walk and will ask questions about the developed poster for further clarity.

Activity 3:

Plenary Discussion

- Generate discussion about learning difficulties in schools by asking the following questions:
 - i. What are the prevailing teaching practices applied in our schools to deal students having learning difficulties?
 - ii. Which classroom practices are best for children having learning difficulties?
 - iii. How can schools magnify or diminish a conducive environment for students having learning difficulties?
- Lead the discussion by addressing all the questions one by one.
- Conclude the discussion by considering their responses and emphasize the need of early introduction of learning difficulties.

Hand-Out (5.1) Learning Difficulties



Learning difficulties, or learning disorders, are an umbrella term for a wide variety of learning problems. A learning difficulty is not a problem with intelligence or motivation. Children with learning difficulties have problems with reading, writing and/or mathematics.

Signs and symptoms of Learning Difficulties: Preschool age (3 years to 6 years)

- Problems in pronouncing words
- Trouble with finding the right word
- Difficulty in rhyming
- Trouble in learning the alphabet, numbers, colors, shapes, days of the week
- Difficulty in following directions or learning routines
- Difficulty in controlling crayons, pencils, and scissors, or coloring within the lines
- Trouble with buttons, zippers, snaps, learning to tie shoes

https://www.youtube.com/watch?v=yG_xSBsFMPQ

Signs and symptoms of Learning Difficulties: Primary School (7 years to 10 years)

- Face difficulty in learning the connection between letters and sounds
- Unable to blend sounds to make words
- Confuse in basic words when reading
- Slow to learn new skills
- Consistently misspells words and makes frequent errors
- Trouble in learning basic math concepts
- Difficulty in telling time and remembering sequence.

<https://www.youtube.com/watch?v=4UpVcnUsbic>

Signs and symptoms of learning difficulties: Middle School

- Difficulty with reading comprehension or math skills
- Trouble with open-ended test questions and word problems
- Dislikes reading and writing; avoids reading aloud
- Poor handwriting
- Poor organizational skills (bedroom, homework, desk is messy and disorganized)
- Trouble in following classroom discussions and expressing thoughts aloud
- Spells the same word differently in a single document

<https://www.youtube.com/watch?v=reRSfIML9iA>

Types of Learning Difficulties:

Faced problem in reading, writing, and math learning disabilities / difficulties are often grouped by school-area skill set. If a child is in school, the types of learning disorders that are most conspicuous usually revolve around reading, writing, or mathematics. **Learning difficulties** are an umbrella term for a wide variety of learning problems. Psychology professionals study seven learning disabilities / difficulties, out of which following are most important.

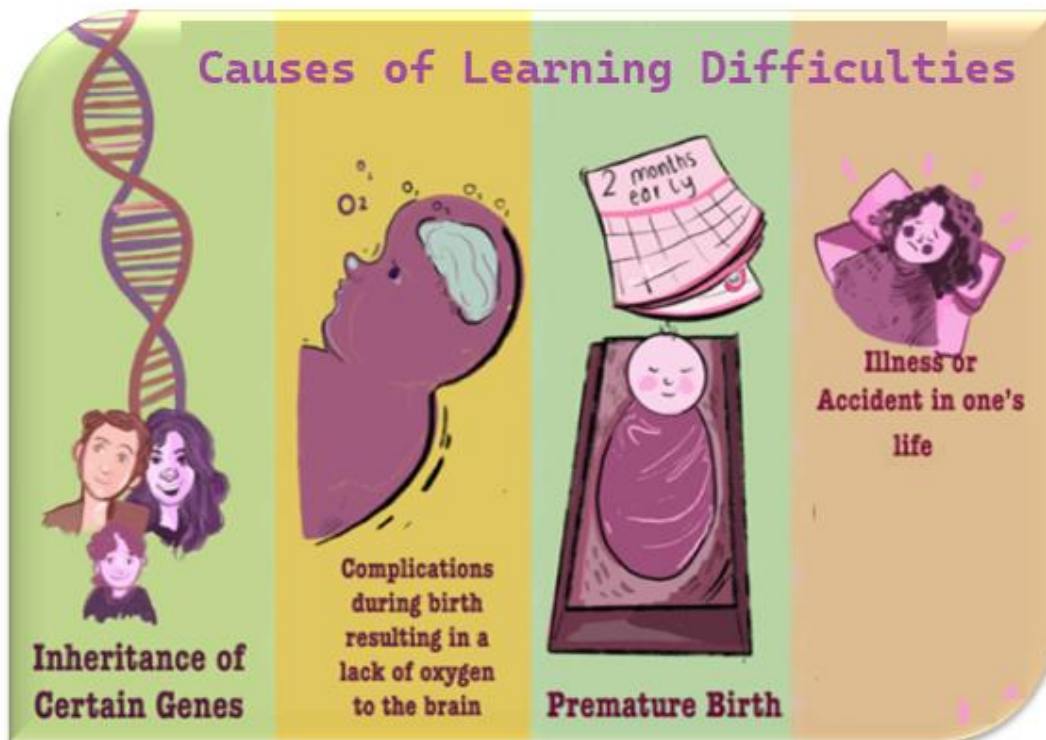
- ✓ **Dyscalculia.**
- ✓ **Dysgraphia.**
- ✓ **Dyslexia.**

<https://www.youtube.com/watch?v=reRSfIML9iA>

Hand-Out (5.2) Causes of Learning Difficulties

There is no single, specific cause for learning difficulties. However, there are some factors that could cause a learning difficulty:

1. **Heredity:** It is observed that a child, whose parents have learning difficulties, is likely to develop the same disorder.
2. **Illness during and after birth:** An illness or injury during or after birth may cause learning difficulties. Other possible factors could be drug or alcohol consumption during pregnancy, physical trauma, poor growth in the uterus, low birth weight, and premature or prolonged labor.
3. **Stress during infancy:** A stressful incident after birth such as high fever, head injury, or poor nutrition may lead to a learning difficulty.



Environmental Factors:

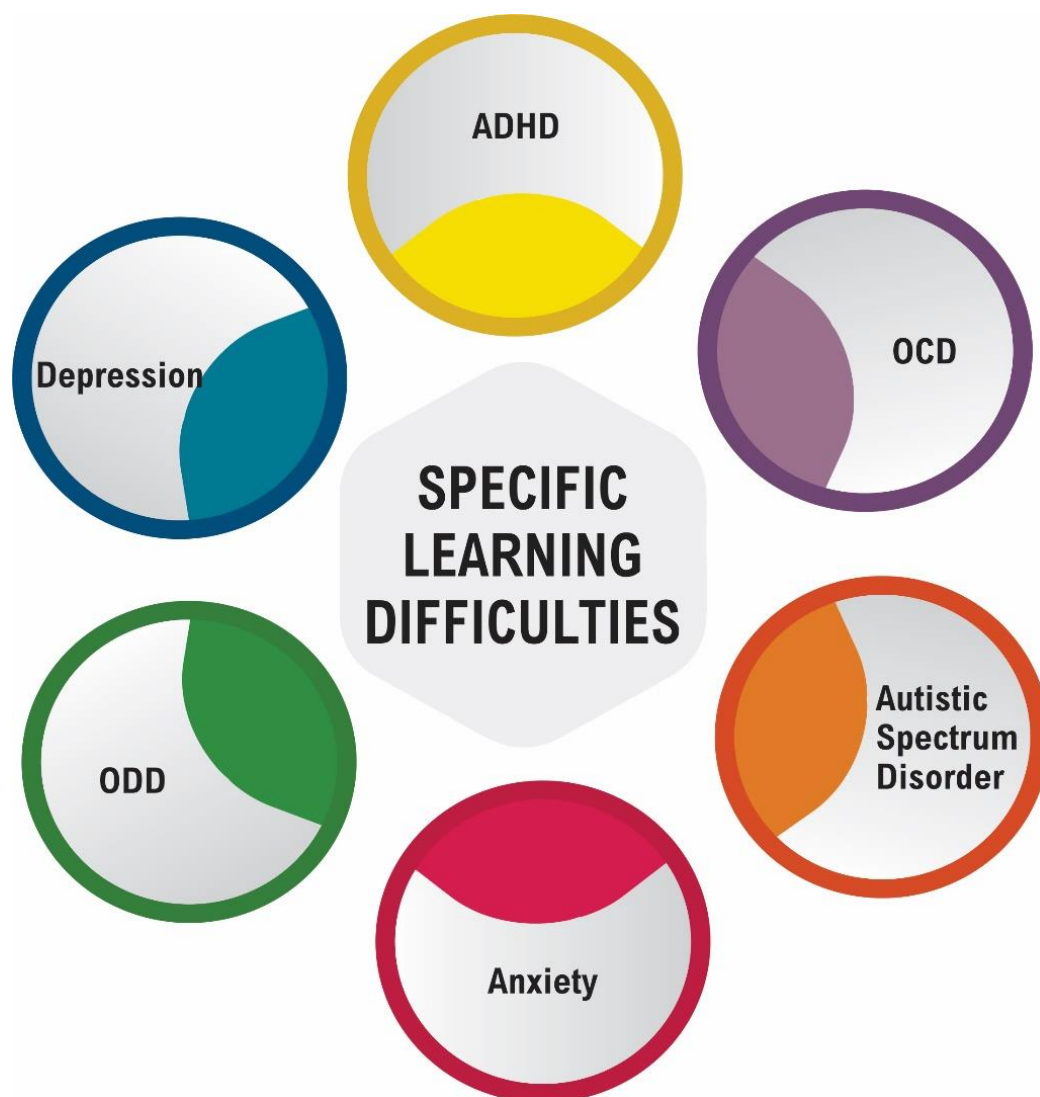
This includes:

1. Poor instruction to child
2. Lack of attention
3. Impoverished living conditions in life
4. Deficit in academic achievement

The inclination of learning difficulties to run in families suggests an association between the influence of environmental factors on children's early development in life and subsequent achievement in school.

Comorbidity

Children with learning difficulties are at a higher-than-average risk for attention problems or disruptive behavior. Up to 25 percent of children with reading difficulty also have ADHD. Conversely, it is estimated that between 15 and 30 percent of children diagnosed with ADHD have a learning difficulty. The conditions which can cause learning difficulties are following:



Hand-Out (5.3) Effect Learning Style or Teaching Style with Students of Learning Difficulties:

VISUAL	Tips for Visual Learner
<p>VISUAL</p> <ul style="list-style-type: none"> • Use visual objects such as graphs, charts, pictures, to seek information • Can read body language well and has a good perception of aesthetics • Be able to memorize and recall information • Tend to remember things that are written down • Learn better in lectures by watching them 	<p>Tips for Visual Learner</p> <ul style="list-style-type: none"> • Turn notes into pictures, charts, or maps • Avoid distractions (windows, doorways, etc.) • Learn the big picture first and then focuses on the details • Make mind and concept maps instead of outlines • Colors and codes parts of new concepts in your notes • Use flash cards when trying to study vocabulary
Auditory	Tips for Auditory Learner
<p>Retain information through hearing and speaking</p> <ul style="list-style-type: none"> • Often prefers to be told how to do things and then summarizes the main points to help with memorization • Notices different aspects of speaking • Often has talents in music and may concentrate better while soft music playing in the background 	<p>Record lecture and then listen to them</p> <ul style="list-style-type: none"> • Repeat material out loud and in their own words • Discusses materials in study groups • Reads textbooks aloud • Listens to wordless background music while studying
Kinesthetic	Tips for Kinesthetic Learner
<ul style="list-style-type: none"> • Likes to use the hands-on approach to learn new material • Is generally good in mathematics and science 	<ul style="list-style-type: none"> • Takes study breaks often

<ul style="list-style-type: none"> • Would rather demonstrate how to do something rather than verbally explains it • Usually prefers group work more than others 	<ul style="list-style-type: none"> • Learns new material while doing something active (e.g., reads a textbook while on a treadmill) • Chews gum while studying • Works while standing • Tries to take classes with instructors who encourage demonstrations and fieldwork
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Session 6: Dyscalculia

Time: 100 minutes

Objectives: At the end of the session, the participants will be able to:

- Describe the concept of Dyscalculia
- Understand sign and symptoms of dyscalculia.
- Become aware and understand effective class room strategies for dyscalculia students.

Materials: Charts, markers, hand-out, (6.1, 6.2) worksheet, sticky notes, presentation with the help of multimedia.

Activity

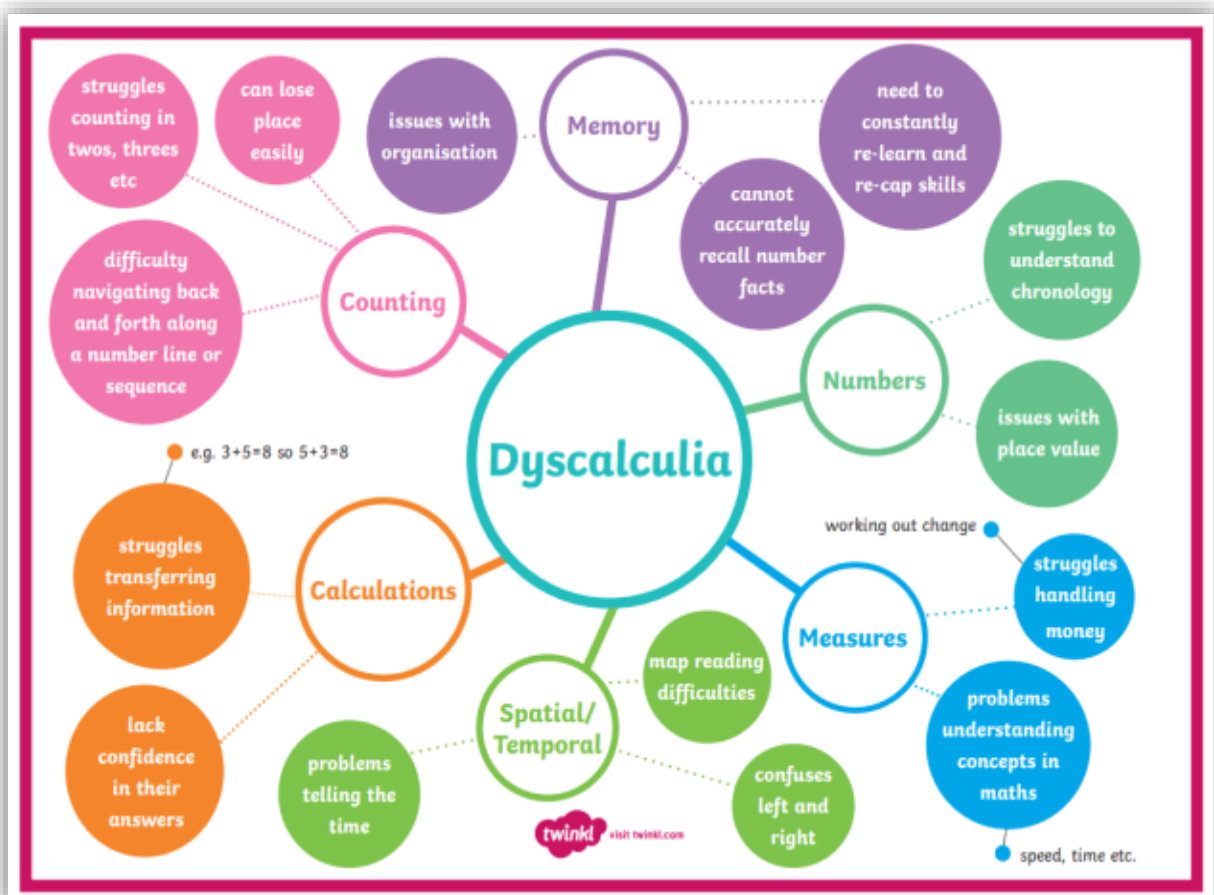
- Introduce Dyscalculia & its Types
- Ask participants to share their experiences with dealing students having dyscalculia

Group Work

- Give participants the check list of dyscalculia and conclude that the students having mentioned signs and symptoms are suffering from dyscalculia.
- Form five (05) groups. Ask each group to develop a story that can discuss the students having dyscalculia in your class room setting.
- Invite group two and three to share their developed stories. Appreciate the participants' efforts and creativity.
- Give constructive feedback after each presentation.
- Ask the participants to read and discuss classroom strategies for Dyscalculia from hand-out (6.2).
- At the end of the activity, ask 3-4 groups to share their understanding about dyscalculia related strategies.
- Conclude the discussion, key points of the session.

Hand-out (6.1) Learning Difficulties in Math (Dyscalculia)

Dyscalculia is a learning difficulty that impairs an individual's ability to understand and process numerical information in a typical way. Common symptoms of dyscalculia include difficulty in calculation, fact, number sense and mathematical reasoning. It also includes difficulty in linking numbers and symbols to amount and direction, making sense of money or telling time. A child with a math-based learning difficulty may struggle with memorization and organization of numbers, operation signs, and number “facts” (like $5+5=10$ or $5\times5=25$). Children with math learning difficulty might also have trouble with counting principles (such as counting by twos or counting by fives) or have difficulty telling time.



Signs and symptoms of Dyscalculia: Preschool

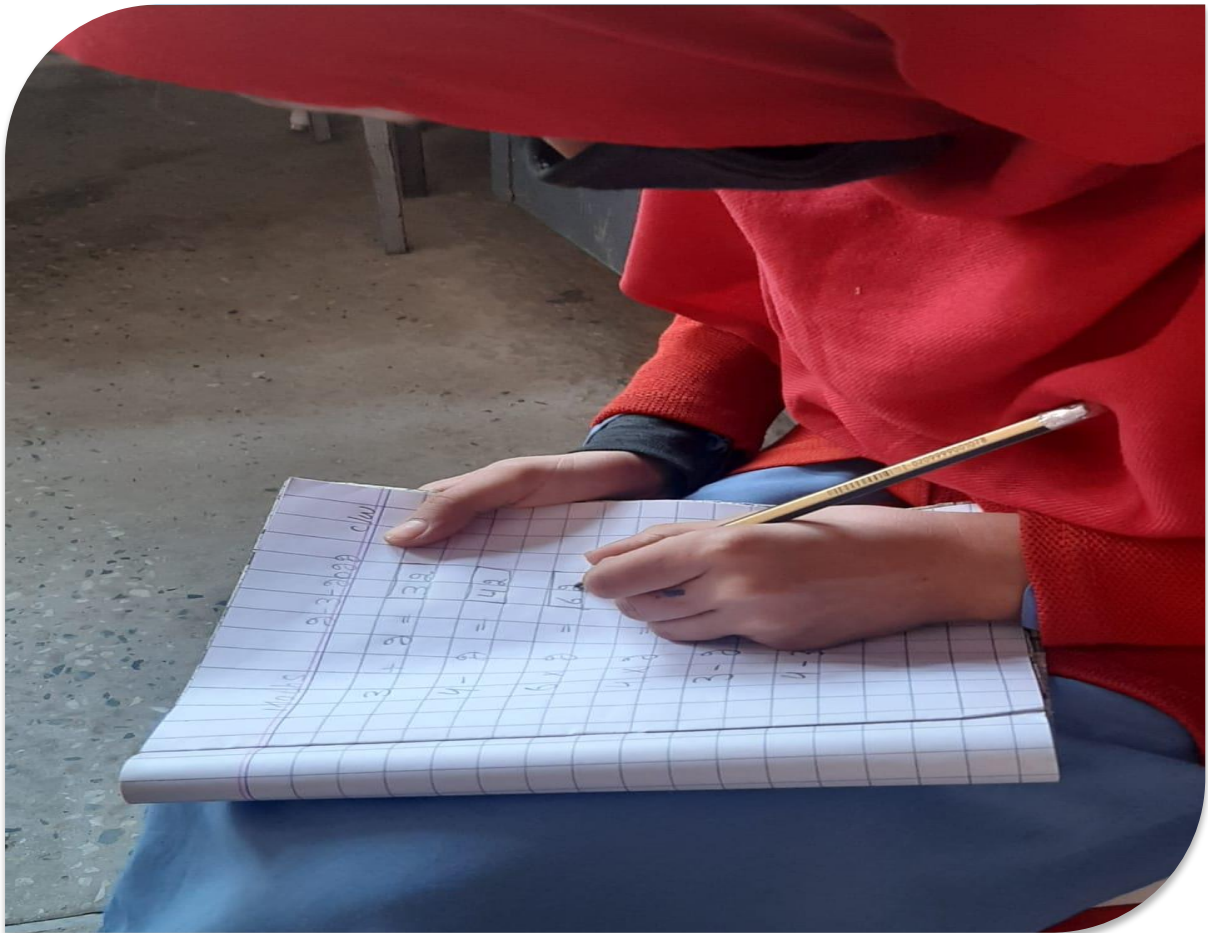
- May find it hard to learn to count by **10s, up to 100**
- Can have trouble counting each object in a group
- Difficulty in understanding a number
- Can be seen to describe any group with the same amount.
- Difficulty in writing and recognizing numbers **up to 20**
- Skipping numbers while counting
- Inability to recognize patterns and sort items by size, shape or colours .



<https://youtu.be/OnJlGMgqBes>

Signs and symptoms of Dyscalculia: Primary school

- Difficulty in counting **2s, 5s and 10s**.
- Unable to do basic mathematical calculations mentally.
- Difficulty in recognizing basic mathematical signs such as plus and minus.
- Difficulty in understanding the concept of more than or less than.
- Struggles in remembering basic math's facts like **$10+10 = 20$ $1+1=2$ add $0 = 20$**
- Does not make the connection between related math fact or fact families **like $5+5=10$, so $10-5= 5$**
- Has trouble recognizing numerals
- Does not understand left and right



<https://www.youtube.com/watch?v=GRJS-jeZ7Is>

Signs and symptoms of Dyscalculia: High school

- Struggle in using math in real life, for example, doubling a recipe for making it for more people.
- Trouble in understanding tables, maps and charts.
- Hesitant in doing activities that require a good sense of speed, distance like running or learning to drive.



<https://www.youtube.com/watch?v=GRJS-jeZ7Is>

Hand-Out (6.2) Class Room Strategies for Dyscalculia Students

- Arrange proper lighting system for students living with dyscalculia.
- Give material relevant to calculating digits for dyslexia students.
- Create separate worksheets for word problems and number problems.
- Highlight or circle key words and numbers on word problems.
- Allow extra time on tests.
- Give step-by-step instructions and have the student repeat them.
- Provide charts of math facts or multiplication tables.
- Use visual aids or manipulative when solving problems.
- Use an extra piece of paper to cover up most of what's on a math sheet or test to make it easier to focus on one problem at a time.
- Give more space to write problems and solutions.
- Break down worksheets into sections
- Review what the student already learned before teaching new skills.
- Let the student write out charts or draw sketches to solve problems.
- Use graph paper to help line up numbers and problems.
- Give the student a list of the math formulas taught in the class.
- Use like coins, blocks, and puzzles to teach math ideas.
- Use attention-getting phrases like, "This is important to know because...."
- Use concrete examples that connect math to real life.
- Check in frequently to make sure the student understands the work.
- Use graphic organizers to organize information or help break down math problems into steps.
- Allow use of fingers and scratch paper.
- Use diagrams and draw math concepts.
- Present activities that involve all sensory modalities – auditory, visual, tactile, and kinesthetic.
- Use colored pencils to differentiate problems. Offer manipulative throughout instruction. Teach students to draw pictures of word problems. .
- Use materials such as games for practice, which are interactive and motivational.

- Use small numbers of math facts per group for mastery, and frequently practice with mixed groups. Emphasize "reverses," or "turnarounds" (**e.g., $1 + 2/2 + 1$, $1 \times 2/2 \times 1$**) in vertical, horizontal, and oral formats.

<https://youtu.be/nKD6FvG0Jec>

<https://youtu.be/ZmlW0KCwOpo>

<https://youtu.be/ea5-Sle5l7m>

Day 03			
Topic: Introduction to Dysgraphia and Dyslexia			
Learning Outcomes <ul style="list-style-type: none"> – Distinguish between dysgraphia and dyslexia – Develop activities to support a child struggling with dysgraphia and dyslexia – Provide a conducive learning environment for children with dysgraphia and dyslexia. 			
Time	Activity	Procedure	Material Required
09:00 to 09:45	Recitation	Start with recitation of few verses from the Holy Quran	Any participant
	Reflection	Randomly call any 3 participants to share their reflection on the previous day.	
09:45 To 12:00	Introduction to dysgraphia	<p>Power Point Presentation are Chart Presentation</p> <p>Share a presentation on dysgraphia / signs & symptoms.</p> <p>Share a presentation and discussion on effective class room strategies for student having dysgraphia.</p> <p>Group Work</p> <p>Divide the participants in two (02) groups Ask group one to prepare a chart on signs & symptoms of student having dysgraphia.</p> <p>Participants of group two are ask to write five (05) class room strategies for student having dysgraphia.</p>	Charts Permanent Markers Presentation
12:00 to 03:00	Introduction to dyslexia	<p>Power Point Presentation are Chart Presentation</p> <p>Share a presentation on dyslexia / signs & symptoms.</p> <p>Share a presentation and discussion on effective class room strategies for student having dyslexia.</p>	Charts Permanent Markers

		Group Work Divide the participants in two (02) groups Ask group one to prepare a chart on signs & symptoms of student having dyslexia. Participants of group two are ask to write five (05) class room strategies for student having dyslexia.	
03:00 to 03:15	Reflection	Anonymous Feedback Collect written reflections and randomly distribute among participants for checking. Collect and read participants reflection.	Participants reflection notebooks Pen
03:15 to 03:30	Posttest	Take posttest.	
03:30 to 04:00	Closing Ceremony	Invite participants to share their reflection about the 3 days training journey. Invite chief guest for certificate distribution and for sharing views about the training program Concluded with vote of thanks.	

Session 7: Dysgraphia

Time: 100 minutes

Objectives: At the end of the session, the participants will be able to:

- Describe the concept of Dysgraphia
- Understand signs and symptoms of Dysgraphia.
- Understand effective class room strategies for Dysgraphia students.

Materials: Charts, markers, hand-out, (7.1, 7.2) worksheet, sticky notes, presentation with the help of multimedia

Power Point Presentation / Chart Presentation (Dysgraphia)

- Share a presentation on dysgraphia / signs & symptoms.
- Share a presentation and discussion on effective class room strategies for student having dysgraphia.

Group Work

- Divide the participants in two (02) groups ask group one to prepare a chart on signs & symptoms of student having dysgraphia with the help of hand-out (7.1)
- Ask the group two to write five (05) class room strategies for students having dysgraphia with the help of hand-out (7.2)
- During the group work guide and facilitate the participants.
- At the end of the task invite each group to present their assigned task.
- After the group presentation provide them with a feedback.

Chart / Multimedia Presentation

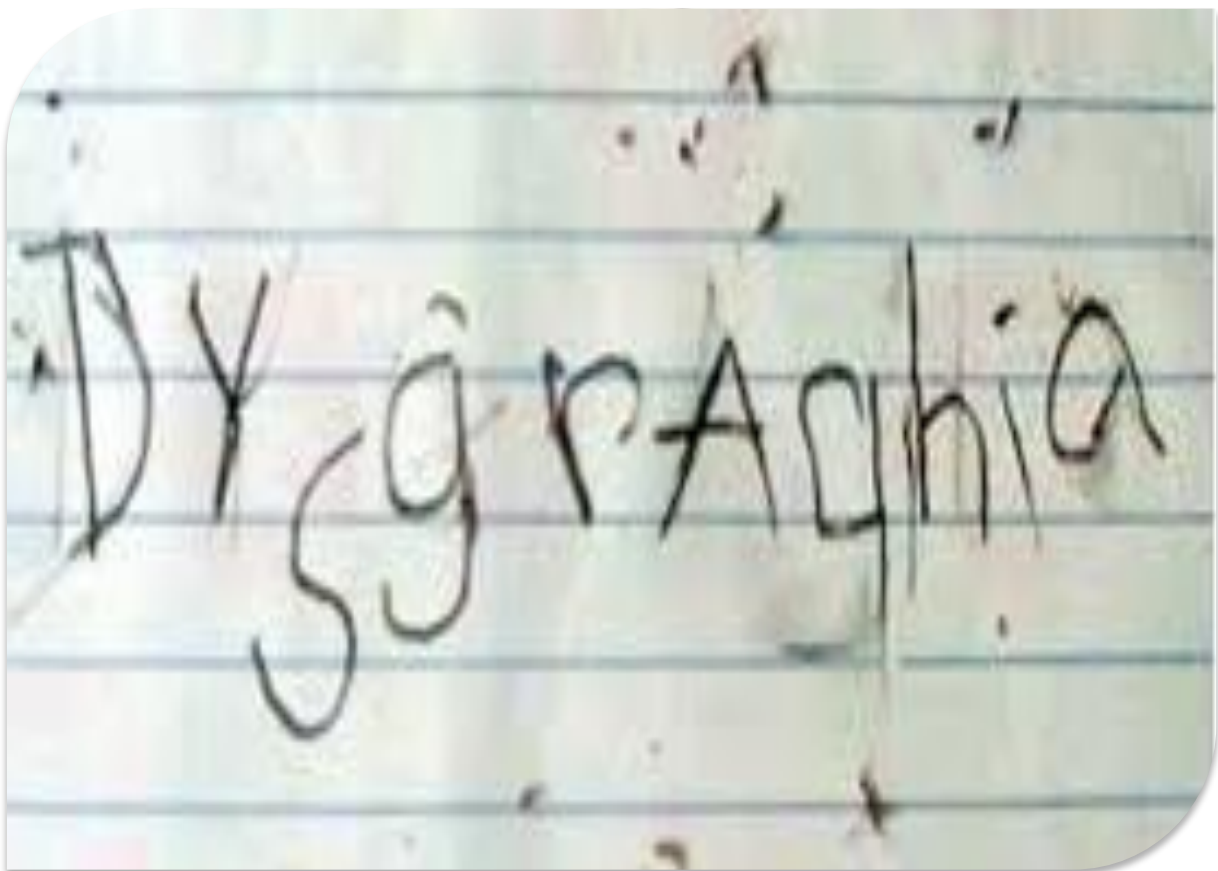
- Share a brief discussion about class room strategies for Dysgraphia student.

Group Work

- Ask the participants to read, discuss handout and present their group work.
Conclude the discussion by clarifying the concept and its application at classroom level.

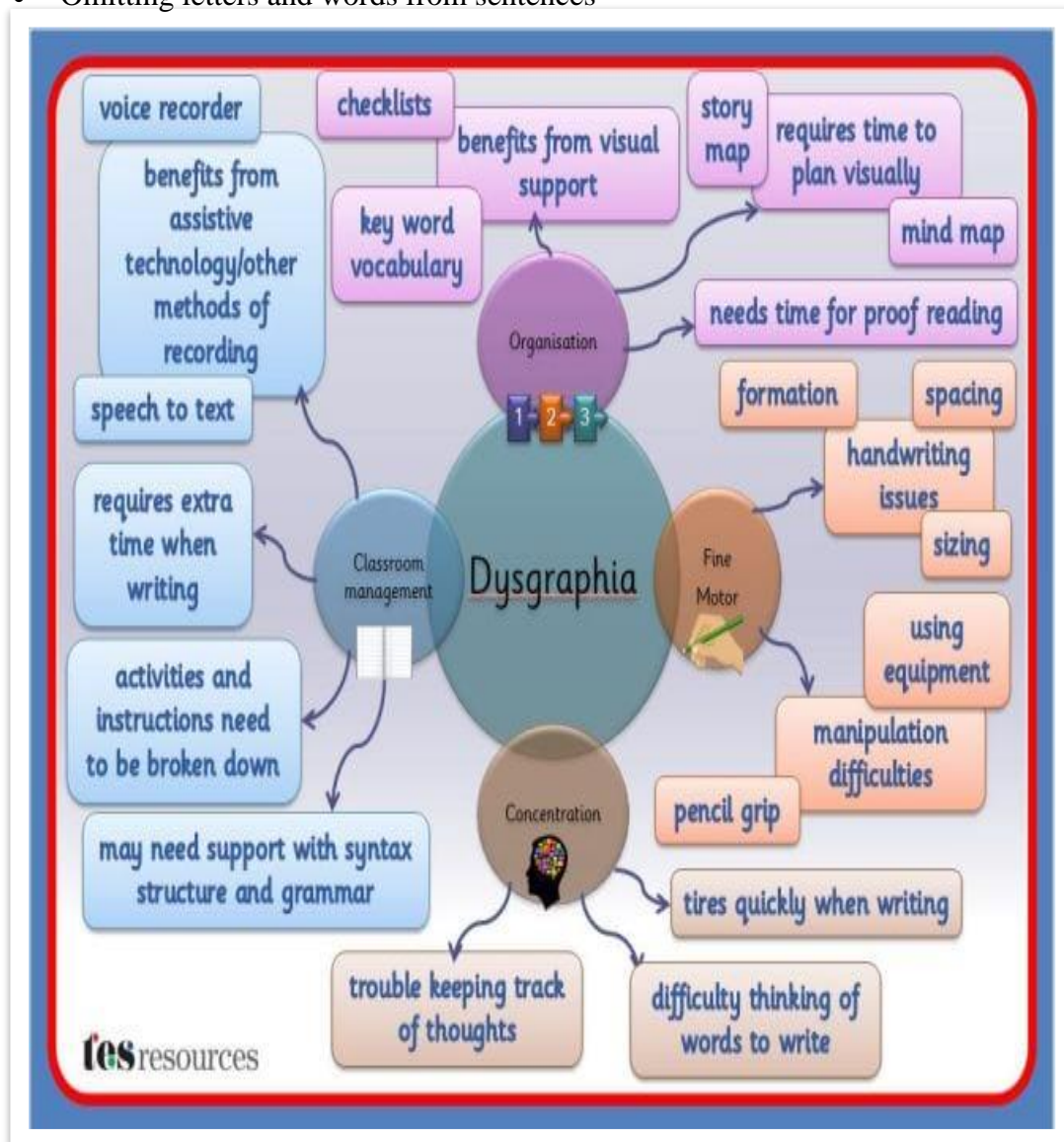
Hand-Out (7.1) Learning Difficulties in writing (Dysgraphia)

Learning difficulties in writing can involve the physical act of writing or the mental activity of comprehending and synthesizing information. Basic writing disorder refers to physical difficulty forming words and letters. Expressive writing disability indicates a struggle to organize thoughts on paper. Symptoms of a written language learning difficulties revolve around the act of writing. They include problems with: neatness and consistency of writing accurately copying letters and word-spelling consistency, writing organization and coherence.



Signs and Symptoms:

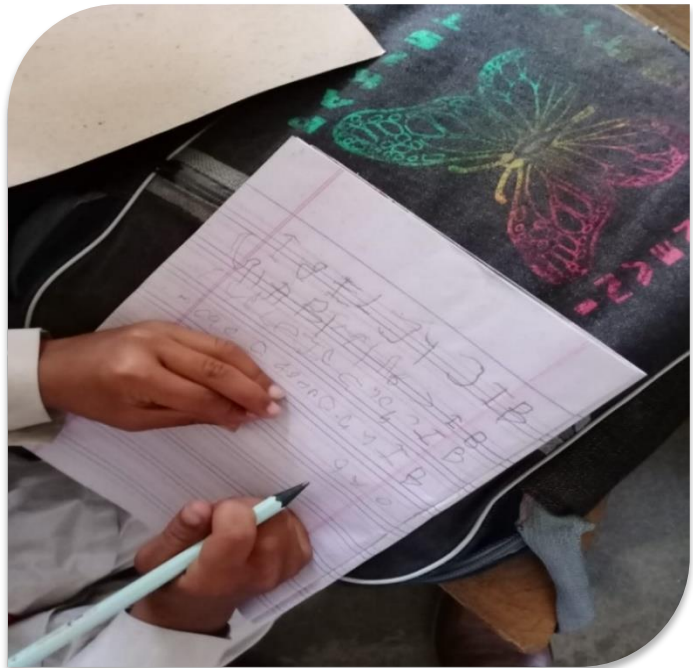
- Incorrect spelling and capitalization
- Mix of cursive and print letters
- Inappropriate size and space of letters
- Difficulty copying words
- Slow or labored writing
- Difficulty visualizing words before writing them
- Unusual body or hand position when writing
- Tight hold on pen or pencil resulting in hand cramps
- Watching your hand while you write
- Saying words aloud while writing
- Omitting letters and words from sentences



<https://www.youtube.com/watch?v=4XCoskqzGfA>



Teachers play an important role in the development of **3-5 year olds'** emergent writing by encouraging children to communicate their thoughts and record their ideas (Hall et al. 2015). In some early childhood classrooms, however, emergent writing experiences are almost non-existent. One recent study, which is in accord with earlier research, found that 4 and 5 year olds (spread across 81 classrooms) averaged just two minutes a day either writing or being taught writing (Pelatti et al. 2014). This article shares a framework for understanding emergent writing and ties the framework to differentiating young children's emergent writing experiences.



Hand-Out (7.2) Classroom Strategies for students having dysgraphia:

- Experiment with chair and desk size (ensure proper height and posture).
- Provide a slanted writing surface (use a 4 in. binder as a slant board).
- Provide opportunities for activities that require one-handed manipulation. (Painting, erasing, and sky-writing) to establish hand dominance.
- Use an enlarged copy or one with wider margins and/or triple-spaces lines.
- Color code, where to stop and start on paper or use colored paper.
- Experiment with different types of lined papers (raised lines, colored lines, extra space between lines, graph paper)
- Use writing instruments that are easier to handle or grasp (primary – larger pencils; intermediate – mechanical pencils; weighted pencils).
- Stabilize paper to prevent writing surface from moving using tape, clipboards, sticky notes, and glue sticks.
- Use specialized materials to enlarge or change the shape of writing tools (different shapes of pencil grips).
- Provide both written and oral directions for the same activity.
- Reduce workload, e.g., solve every other math problem.
- Minimize the number of problems per page.
- Enlarge worksheets.
- Provide graph paper to keep number problems lined up – allow one block for each number.
- Highlight math signs, key words in math problems or instructions
- Provide classroom charts that specify tasks for structuring the writing process.
- Provide extra time for writing assignments.
- Playing with clay to strengthen hand muscles.
- Keeping lines within mazes to develop motor control.
- Connecting dots or dashes to create complete letter forms.
- Create a Writing Space.
- Create Writing Worksheets.
- Provide proper lighting system for dyslexia students.

<https://youtu.be/WMfl5kqSWmk>



Session 8: Dyslexia

Time: 160 minutes

Objectives: At the end of the session, the participants will be able to:

- Describe the concept of Dyslexia
- Understand sign & symptoms of Dyslexia
- Aware and understand support effective class room strategies for Dyslexia students.
- Understand comorbid & Associated factors of Dyslexia

Materials: Charts, Markers, Hand-out,(8.1, 8.2, 8.3) Worksheet, Sticky Notes, Presentation

Activity-1: Power Point Presentation / Chart Presentation

- Share a presentation on dyslexia / signs & symptoms.
- Share a presentation and discussion on effective class room strategies for students having dyslexia.

Group Work

- Divide the participant in two (02) groups Ask group one to prepare a chart on sign & symptoms of student having dyslexia.
- Participants for group two are ask to write five (05) class room strategies for students having dyslexia with the help of the hand-out

Activity-2: Effective Classroom Strategies of Dyslexia

- Divide participants in to five (05) groups.
- Ask groups to read “ classroom strategies for dyslexia process” with the help of hand-out (8.1).
- Give 20 minutes for this work.
- At the end of this work ask each group to fill the worksheet (8.1)
- After completion of worksheet invite groups to present their work with the help of their filled worksheet turn by turn.
- Invite one volunteer from participants to draw the following table on writing board.

Group	Strategies applied in classroom	Strategies that can't be applied in classroom	Most liked strategies	Most disliked strategies
1				
2				
3				
4				
5				

- Ask volunteer to fill in the table along with the presentation of each group.
- After presentation of all groups find out the groups perception about classroom strategies for dyslexic problems with the help of filled table.
- At the end conclude activity with some important points of session.

Activity-3: Comorbidity at Associated Difficulties

- Divide participants into five (05) groups
- Write following tasks on writing board
 - **Group 1** ----- self-image
 - **Group 2** ----- depression
 - **Group 3** ----- physically and socially immature
 - **Group 4** ----- anger
 - **Group 5** ----- family problems
- Ask each group to read assigned task given in comorbidity and associated difficulty with the help of hand-out (8.3).
- Give fifteen (15) minutes to each group to read their assigned task and discuss with each other and write key points in their notebooks.
- Ask each group to discuss with each other and take previous experiences/incident related to your assigned task.
- Anyone member of each group present his/her previous experiences or stories with other groups turn by turn.
- After presentation of all groups conclude the important points of activity.

Hand-Out (8.1) Learning Difficulties in Reading (Dyslexia)

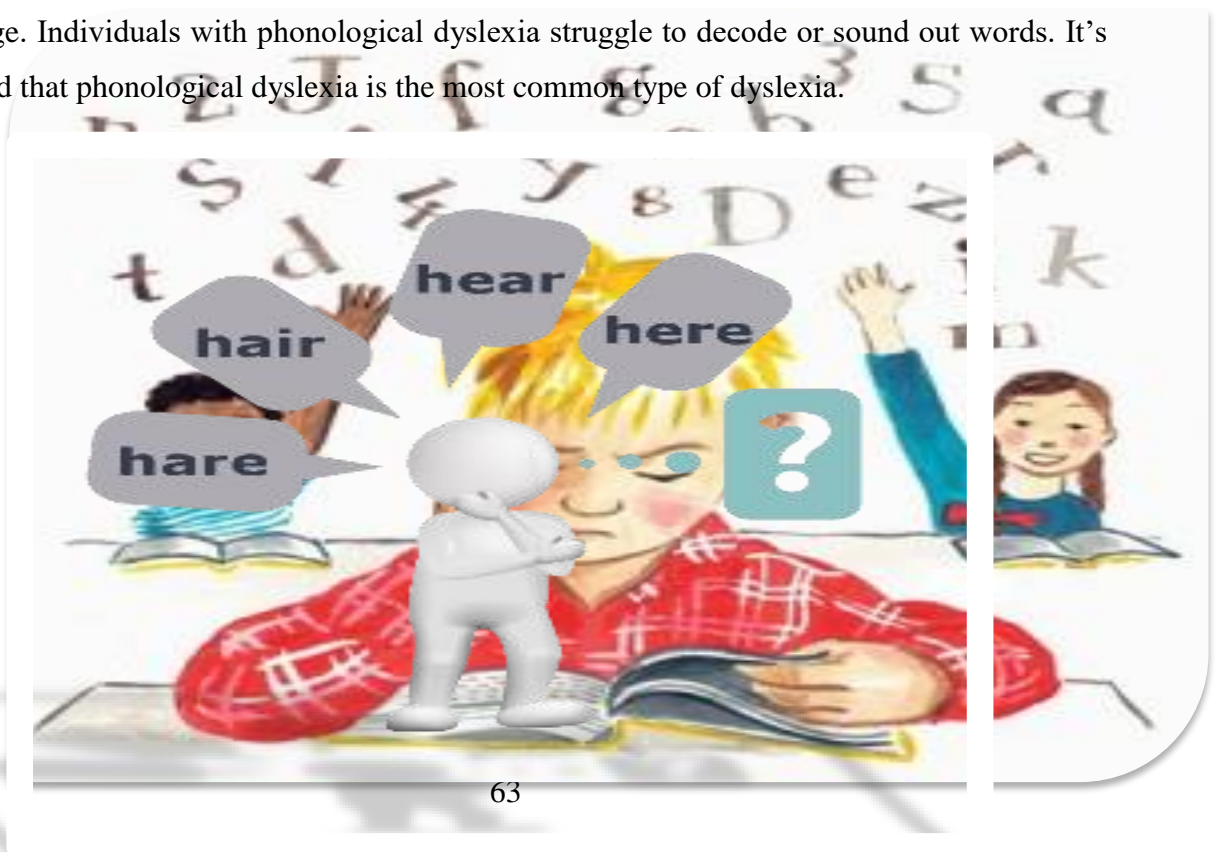
Dyslexia is a specific learning difficulty that is neurobiological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Moreover, consequences may include problems in reading comprehension and reduced reading experience that can impede growth of vocabulary and background knowledge”, according to The International Dyslexia Association, 2002.

Types of Dyslexia

If your child struggles with reading, sounding out words, or understanding what they’ve read, they may have a learning difficulty called dyslexia. Estimates regarding the prevalence of dyslexia state that between 5% and 20% of the population experience reading challenges. In order to find the most effective teaching strategies, it’s essential to be able to identify the problem early and understand that there are several types of dyslexia. (IDA, 2002)

Phonological Dyslexia

This type of dyslexia is the one that comes to mind when someone mentions the word dyslexia. It deals with difficulties in matching sounds to symbols and breaking down the sounds of language. Individuals with phonological dyslexia struggle to decode or sound out words. It’s believed that phonological dyslexia is the most common type of dyslexia.



Rapid Naming Dyslexia

People who struggle with the ability to rapidly name colors, numbers, and letters when presented with them may have rapid naming dyslexia. This type of dyslexia may be linked to both reading speed and the processing speed for reading. Individuals with rapid naming dyslexia can say the names of the colors, numbers, and letters, but it often takes them much longer to come up with the correct word.

Double Deficit Dyslexia

A person with double deficit dyslexia struggles with two aspects of reading. These two aspects often include naming speed and identifying the sounds in words. This type of dyslexia is a combination of rapid naming and phonological and is not uncommon.

Surface Dyslexia

An individual who can sound out new words with ease but fails to recognize familiar words by sight may have surface dyslexia. In this case, experts believe that the brain fails to recognize what a word looks like in order to process the word quickly. This type of dyslexia affects words that need to be memorized because they don't sound how they are spelled, making it more difficult to sound them out. Other names for surface dyslexia include visual or dyseidetic dyslexia. It's not uncommon for an individual with dyslexia to also have both phonological and surface dyslexia.

Visual Dyslexia

When a child struggles to remember what they saw on a page, they may have visual dyslexia. This type affects the visual processing, making it so that the brain doesn't get the complete picture of what the eyes see. Visual dyslexia will affect the ability to learn how to spell or form letters because both require the brain to remember the correct letter sequence or shape, impacting the learning process.

Primary Dyslexia

If the dyslexia results from a genetically inherited condition, it is considered primary dyslexia. A child whose parents have dyslexia increases the chance that they will also have dyslexia.

Interestingly enough, dyslexia does seem to have a familial connection with even more prevalence among males, especially left-handed ones

Secondary Dyslexia

When brain development issues occur in the womb, causing a neurological impairment may result in dyslexia. Both primary and secondary dyslexia are developmental because the disability is present at birth.

Acquired Dyslexia

When a traumatic brain injury or disease affects the brain's centers responsible for language processing, they can sometimes develop dyslexia. This type of dyslexia is also referred to as trauma dyslexia because it's caused by trauma to the brain and is the only type of dyslexia.

Signs and symptoms of Dyslexia: Preschool Children

- Delay in learning to talk
- Difficulty with rhyming
- Poor auditory memory for nursery rhymes
- Difficulty adding new vocabulary words
- Trouble in learning, naming letters and numbers and remembering the letter in his/her name
- Inability to recall the right word Kindergarten and First Grade (many of the previously described behaviors remain problematic)
- Difficulty breaking words into smaller parts, or syllables
- Difficulty remembering the names of letters and recalling their corresponding sounds
- Difficulty decoding single words (reading single words in isolation)

<https://www.youtube.com/watch?v=lkOd0GFu5k0>

Signs and symptoms of Dyslexia: Primary School

- Difficulty recognizing common sight words
- Difficulty decoding single words

- Difficulty reading fluently (e.g., reading is slow, inaccurate, and/or without expression)
- Difficulty decoding unfamiliar words in sentences using knowledge of phonics
- Reliance on picture clues, story theme, or guessing at words
- Difficulty with written expression
- Difficulty reading aloud (e.g., fear of reading aloud in front of classmates)
- Avoidance of reading (particularly for pleasure)
- Difficulty reading fluently
- Acquisition of less vocabulary due to reduced independent reading

<https://www.youtube.com/watch?v=lkOd0GFu5k0>

Signs and symptoms of Dyslexia: High School

- Difficulty with the volume of reading and writing work
- Difficulty reading fluently
- Difficulty decoding unfamiliar words in sentences using knowledge of phonics
- Difficulty with written assignments
- Tendency to avoid reading

<https://www.youtube.com/watch?v=lkOd0GFu5k0>



Prevalence of Dyslexia

About 13–14% of the school population globally has severe condition of dyslexia that qualifies them for special education. Current studies indicate that one half of all the students which qualify for special education are classified as having learning disabilities. About 85% of those students have primary learning disabilities in reading and language processing. About 15–20% of the populations as a whole have some of the symptoms of dyslexia, including slow or inaccurate reading, poor spelling, poor writing, or mixing up similar letters, sound or words. (Moats, Dakin, 2008). The current estimated prevalence of dyslexia in Pakistani students is 40 % which is comparatively higher than in already estimated prevalence of 2% to 15% in South Asian study (e.g., India, 2011) and 2% to 17% in global general prevalence due to lack of knowledge and on time diagnosis (Farzana & Najma, 2020).

MYTH

- People with dyslexia cannot read.
- Individuals with high intellectual ability cannot have dyslexia.
- Dyslexia is seeing things backwards.
- Dyslexia is a rare disorder.
- Dyslexia cannot be diagnosed until at least third grade.
- Children will outgrow dyslexia.
- More boys than girls have dyslexia.
- All struggling readers have dyslexia.
- Young children who reverse letters (e.g., b for d) have dyslexia.
- The type of instruction used can cause dyslexia.

FACT

- Most learn to read at some level, although they read slowly.
- Intelligence doesn't predict dyslexia. Many highly intelligent people have dyslexia.
- Dyslexia is more complex than seeing letters and numbers backwards.
- Approximately 5% to 8% of the population has mild to severe dyslexia.
- At-risk symptoms for dyslexia may be identified in individuals as young as 5.
- Dyslexia is a lifelong disorder, but there are interventions that can help improve reading.
- Present estimates indicate that the prevalence rate for boys is only slightly higher than for girls.
- Many other reasons rather than dyslexia may cause reading problems such as low intellectual ability, poor oral language, attentional problems, poor instruction, and limited education opportunities.
- Beginning writers often reverse letters but most will master these letter-sound correspondences with practice. Letter reversals are associated with dyslexia, not all individuals with dyslexia will reverse letters.
- Dyslexia is a neurobiological disorder that is not caused by ineffective instruction.

How Many People Have Dyslexia?



In the general population, anywhere from 15-20% (around 30 million people in the United States) have some signs of dyslexia. That's 1 out of every 5 students!



In general, 70 to 80% of individuals with poor reading skills are likely dyslexic.

Co-occurrence of the Dyslexia

- 20-40% of the people with dyslexia are also having dyscalculia.
- 20-55 % of people with developmental language disorder are dyslexic.
- 10-20% of people with dyslexia are having an anxiety disorder.
- 2-14% of people with dyslexia are having a depression.
- 8-18% of people with dyslexia are having an attention deficit and/or hyperactivity disorder .

Myths and Facts about Dyslexia

Hand-Out (8.2) Classroom Strategies for Dyslexic Persons

- Provide a quiet area for reading activities.
- Use books on tape, and books with large print and big spaces between lines.
- Provide a copy of class notes to student.
- Allow alternative forms for book reports.
- Have students use both visual and auditory senses when reading text.
- Present material in small units.
- Use graphic organizers to connect ideas.
- Read and share stories with students.
- Provide students with chapter outlines or study guides that highlight key points in their reading.
- Announce reading assignments well in advance.
- Offer to read written material aloud, when necessary.
- Share informational texts and invite students to wonder about the new ideas presented.
- Point out ways in which reading is important in everyday life (e.g., on labels, instructions, and signs).
- Teach students how books are organized.
- Use stories that have predictable words and words that occur frequently in the text.
- Label objects in classroom.
- Help students notice the letters in the environmental print that surrounds them.
- Engage students in activities that help them learn to recognize letters visually.
- Teach students to attend to the sounds in language.

- Model and demonstrate how to break short sentences into individual words.
- Have students clap out syllables and listen for and generate rhymes.
- Focus on activities that involve sounds of words, not on letters or spellings.
- Model specific sounds, and ask students to produce each sound in isolation.
- Teach students to blend, identify sounds, and break up words into sounds.
- When teaching the letters of the alphabet, activities should be explicit and unambiguous.
- When teaching decoding, begin with small, familiar words.
- Model sounding out words, blending the sounds together, and saying the word.
- Have students read new stories and reread old stories every day to build fluency.
- Engage students in discussion of reading topics that are of interest.
- Provide high interest reading selections whenever possible.
- Model comprehension strategies and provide students with guided assistance.
- Point out how titles, headings, and graphics reveal main ideas and tell what a book is about.
- Teach students to identify main ideas presented in the text, as well as the supporting details.
- Point out unfamiliar words, revisit them, and explore their meaning.
- Teach students to use contextual clues to figure out meanings of unfamiliar words.
- Build background for reading selections and create a mental scheme for text organization
- Set a purpose for reading – to gain meaning from text.

https://youtu.be/0f8Dujj_T40

<https://youtu.be/otSb3HMftTg>

<https://youtu.be/hq3vfOn1lf0>



Accommodating Students with Dyslexia in All Classroom Settings

Teaching students with dyslexia across settings is challenging. Both general education and special education teachers seek accommodations that foster the learning and management of a class of heterogeneous learners. It is important to identify accommodations that are reasonable to ask of teachers in all classroom settings. The following accommodations appear reasonable and provide a framework for helping students with learning problems achieve in general education and special education classrooms. They are organized according to accommodations involving materials, interactive instruction, and student performance.



Accommodations Involving Materials

Students spend a large portion of the school day interacting with materials. Most instructional materials give teachers few activities or directions for teaching a large class of students who learn at different rates and in various ways. This section provides material accommodations that enhance the learning of diverse students. Frequently, paraprofessionals, volunteers, and students can help develop and implement various accommodations. Material accommodations include the following:

Use a tape recorder. (Old terminology)

Many problems with materials are related to reading disabilities. The tape recorder often is an excellent aid in overcoming this problem. Directions, stories, and specific lessons can be recorded on tape. The student can replay the tape to clarify understanding of directions or concepts. Also, to improve reading skills, the student can read the printed words silently as they are presented on tape.

Clarify or Simplify Written Directions.

Some directions are written in paragraph form and contain many units of information. These can be overwhelming to some students. The teacher can help by underlining or highlighting the significant parts of the directions.

- Rewriting the directions is often helpful. For example: Original directions:
- This exercise will show how well you can locate conjunctions.
- Read each sentence.
- Look for the conjunctions.
- When you locate a conjunction, find it in the list of conjunctions under each sentence. Then circle the number of your answer in the answer column.
- Directions rewritten and simplified: Read each sentence and circle all conjunctions.



Present a Small Amount of Work.

The teacher can tear pages from workbooks and materials to present small assignments to students who are anxious about the amount of work to be done. This technique prevents students from examining an entire workbook, text, or material and becoming discouraged by the amount of work. Also, the teacher can reduce the amount of work when it appears redundant. For example, the teacher can request the student to complete only odd-numbered problems or items with stars by them, or can provide responses to several items and ask the student to complete the rest. Finally, the teacher can divide a worksheet into sections and

instruct the student to do a specific section. A worksheet is divided easily by drawing lines across it and writing go and stop within each section

Block out Extraneous Stimuli.

If a student is easily distracted by visual stimuli on a full worksheet or page, a blank sheet of paper can be used to cover sections of the page not being worked on at the time. Also, line markers can be used to aid reading, and windows can be used to display individual math problems.

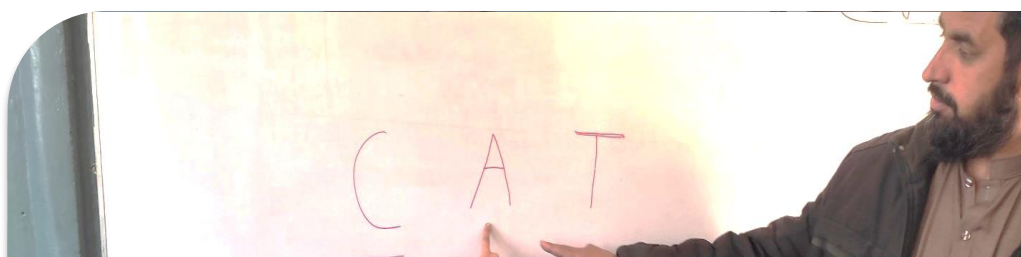


Highlight Essential Information.

If an adolescent can read a regular textbook but has difficulty finding the essential information, the teacher can mark this information with a highlight pen.

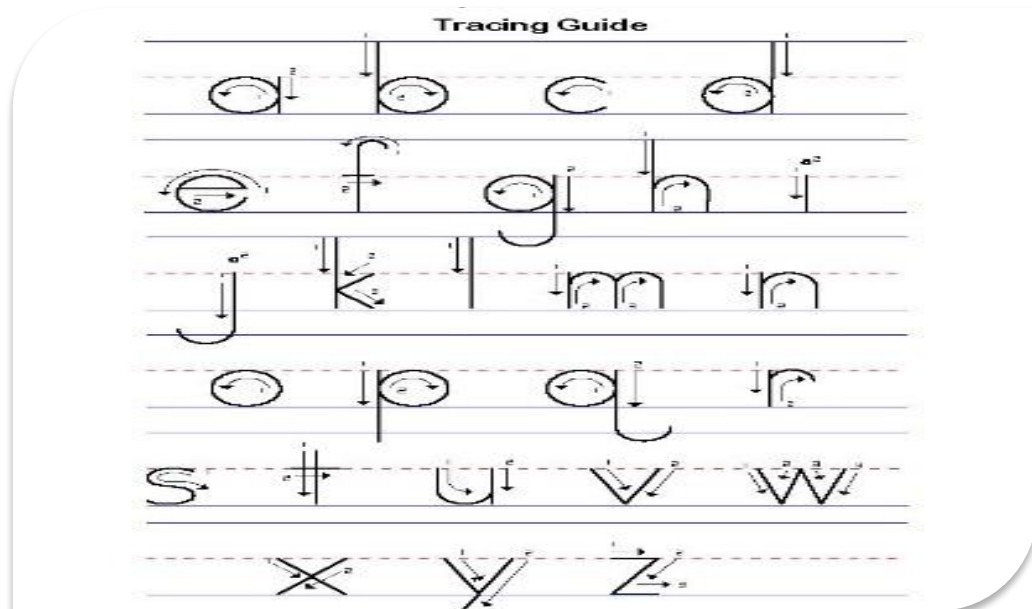
Locate Place in Consumable Material.

In consumable materials, in which students progress sequentially (such as workbooks), the student can make a diagonal cut across the lower right-hand corner of the pages as they are completed. With all the completed pages cut, the student and teacher can readily locate the next page that needs to be corrected or completed.



Provide Additional Practice Activities.

Some materials do not provide enough practice activities for students with learning problems to acquire mastery on selected skills. Teachers then must supplement the material with practice activities. Recommended practice exercises include instructional games, peer teaching activities, self-correcting materials, computer software programs, and additional worksheets.



Provide a Glossary in content areas.

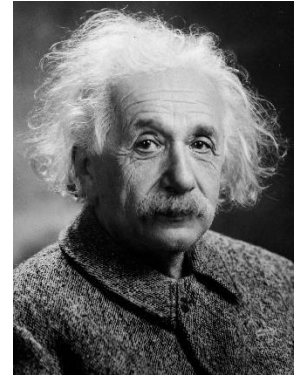
At the secondary level, the specific language of the content areas requires careful reading. Students often benefit from a glossary of content-related terms.

Develop Reading Guides.

A reading guide provides the student with a road map of what is written and features periodic questions to help him or her focus on relevant content. It helps the reader understand the main ideas and sort out the numerous details related to the main ideas. A reading guide can be developed paragraph-by-paragraph, page-by-page, or section-by-section.

Note:

Albert Einstein was the famous Scientist who was awarded with the noble Prize for his theory, also suffered from Dyslexia during childhood.



Hand-Out (8.3) Comorbidity and Associated Difficulties

Self-Image

Dyslexia can also affect a person's self-image. Students with dyslexia often end up feeling "speechless" and less capable than they actually are. After experiencing a great deal of stress due to academic problems, a student may become discouraged about continuing in school. If children succeed in school, they will develop positive feelings about themselves and will believe that they can succeed in life. If children meet failure and frustration, they feel that they are inferior to others, and that their effort makes very little difference. Instead of feeling powerful and productive, they perceive that their environment controls them. They feel powerless and incompetent. Researchers have learned that when typical learners succeed, they credit their own efforts for their success. When they fail, they tell themselves to try harder. However, when learners with dyslexia succeed, they are likely to attribute their success to luck. When they fail, they simply see themselves as stupid. Research of Passe (2006) also suggests that these feelings of inferiority develop by the age of 10. After this age, it becomes extremely difficult to help the child develop a positive self-image.

Depression

Depression is also a frequent complication in dyslexia. Depressed children and adolescents often have different symptoms than do depressed adults. The depressed child is unlikely to be lethargic or to talk about sad feeling. Instead he or she may become more active or misbehave to cover up the painful feelings. In the case of masked depression, the child may not seem obviously unhappy. However, both children and adults who are depressed tend to have three similar characteristics: They tend to have negative thoughts about themselves, that is, a negative self- image. They tend to view the world negatively. They are less likely to enjoy the positive experiences in life. This makes it difficult for them to have fun. Most depressed youngsters have great trouble imagining anything positive about the future. The depressed child with dyslexia not only experiences great pain in his present experiences, but also foresees a life of continuing failure.

Physically and Socially Immature

Dyslexic children may be physically and socially immature in comparison to their peers. This can lead to a poor self-image and less peer acceptance. Dyslexics' social immaturity may make

them awkward in social situations. Many dyslexics have difficulty reading social cues. They may be oblivious to the amount of personal distance necessary in social interactions or insensitive to other people's body language. Dyslexia often affects oral language functioning. Affected persons may have trouble finding the right words, may stammer, or may pause before answering direct questions. This puts them at a disadvantage as they enter adolescence, when language becomes more central to their relationships with peers.

Anger

Many of the emotional problems caused by dyslexia occur out of frustration with school or social situations. Social scientists have frequently observed that frustration produces anger. This can be clearly seen in many dyslexics. The obvious target of the dyslexic's anger would be schools and teachers. However, it is also common for the dyslexic to vent his anger on his parents. Mothers are particularly likely to feel the dyslexic's wrath. Often, the child sits on his anger during school to the point of being extremely passive. However, once he is in the safe environment of home, these very powerful feelings erupt and are often directed toward the mother. Ironically, it is the child's trust of the mother that allows him to vent his anger. However, this becomes very frustrating and confusing to the parent who is desperately trying to help their child. The tension between the expectation of independence and the child's learned dependence causes great internal conflicts. The adolescent dyslexic uses his anger to break away from those people on which he feels so dependent. Because of these factors, it may be difficult for parents to help their teenage dyslexic. Instead, peer tutoring or a concerned young adult may be better able to intervene and help the child.

Family Problem

Like any person impairment condition, dyslexia has a tremendous impact on the child's family. However, because dyslexia is an invisible impairment, these effects are often overlooked. Dyslexia affects the family in a variety of ways. One of the most obvious is sibling rivalry. Non-dyslexic children often feel jealous of the dyslexic child, who gets the majority of the parents' attention, time, and money. Ironically, the dyslexic child does not want this attention. This increases the chances that he or she will act negatively against the achieving children in the family. Specific developmental dyslexia runs in families. This means that one or both of the child's parents may have had similar school problems. When faced with a child who is having school problems, dyslexic parents may react in one of two ways. They may deny the existence of dyslexia and believe if the child would just buckle down, he or she could succeed. Or, the parents may relive their failures and frustrations through their child's school experience.

This brings back powerful and terrifying emotions, which can interfere with the adult's parenting skills.

Worksheet (8.1) for Activity 2 (Session-8)

Instructions

Read carefully 38 classroom strategies for Dyslexic Problems in your group and answer the following questions.

Q1. How many strategies you are already applying in your classroom?

Answer

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Q2. How many strategies you are not applying in your classroom?

Answer

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Q3. Write at least 5 to 7 strategies you would like to apply in your class rooms.

Answer

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Q4. Write three to four strategies you would not like to apply in your classroom.

Answer

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TIPS FOR TEACHERS
<ul style="list-style-type: none">• The teacher should stay very organized.• The teacher should know that each and every student is unique.• Instruction given to the student should be easy, simple and understandable.• Provide regular feedback to a student.• Concentrate on child's strength, not weakness.• Provide them Role Models.• Be a good listener.• Clarify your goals.• Use positive reinforcement.• Use play therapy.• Keep student motivated.• Give them time.

TIPS FOR BRAINSTORMING FOR LEARNING DIFFICULTIES
<ul style="list-style-type: none"> ○ Use of balloon (different colors) ○ Tracking activities ○ Use of visual jump-starts ○ Alphabet games ○ Name recognition activities through my learning basket ○ Matching the object activities as they are mostly visual learner. ○ Play dough ○ Sand tray activities ○ Sorting, matching stacking by use of different modalities blocks, strings, Beads, flashcards. Use of cartoons/poster colour ○ Listening holy verses (specially Surah Al-Rehman) ○ Use of music as therapy ○ Scribbling /circle time ○ Videos using multimedia system
TIPS OF PHYSICAL ACTIVITY FOR LEARNING DIFFICULTIES
<ul style="list-style-type: none"> ○ Basic Sports skills ○ Walking on toes ○ Walking on straight line ○ Walking in zigzag <p>Poem and storytelling activities</p> <ul style="list-style-type: none"> ○ Picnic and recreational activities by asking questions about certain environments like surrounding <p>Activities to teach a child to learn discipline /turn-taking weight, etc</p>

**3 Days Training on Teacher's Manual for Children Having
LEARNING DIFFICULTIES
POST – TEST**

Participant Name: _____ **School Name:** _____

Venue: _____ **Date:** _____

- 1. Human Learning Starts at _____.**
 - a. Birth
 - b. Age of Five
 - c. Adults
 - d. All of the Above

- 2. There are _____ types of Learning.**
 - a. Two
 - b. Five
 - c. Six

- 3. Difficulty in reading is called _____.**
 - a. Dysgraphia
 - b. Dyspraxia
 - c. Dyslexia

- 4. Multisensory teaching has _____ Steps.**
 - a. Two
 - b. Three
 - c. Four
 - d. None of the Above

- 5. Difficulty in Writing is _____.**
 - a. Dyslexia

- b. Dysgraphia
 - c. Dyscalculia
 - d. All of the Above
- 6. Problem in Writing, Spelling and Reading is called _____.**
- a. Dyscalculia
 - b. Learning difficulties
 - c. Dyspraxia
 - d. All of the above.
- 7. Difficulty in counting is called _____.**
- a. Dyscalculia
 - b. Dysgraphia
 - c. Dyslexia
 - d. Dyspraxia
- 8. Dyslexia is related with _____.**
- a. Problem in reading
 - b. Problem in Calculating
 - c. Problem in writing
 - d. All of the above.
- 9. Which of the following is an example of learning difficulties? _____**
- a. Mental Retardation
 - b. Dyslexia
 - c. ADHD
 - d. All of the Above
- 10. Learning difficulties is a lifelong challenge _____**
- a. True
 - b. False

References

- Pelatti, C. Y., Piasta, S. B., Justice, L. M., & O'Connell, A. (2014). Language-and literacy-learning opportunities in early childhood classrooms: Children's typical experiences and within-classroom variability. *Early Childhood Research Quarterly*, 29(4), 445-456.
- Basics, I. D. (2002). Internet. International Dyslexia Association.
- Moats, L. C., & Dakin, K. E. (2008). Basic facts about dyslexia & other reading problems. International Dyslexia Assoc
- Ashraf, F., & Najam, N. (2020). An epidemiological study of prevalence and comorbidity of non-clinical Dyslexia, Dysgraphia and Dyscalculia symptoms in Public and Private Schools of Pakistan. Pakistan Journal of Medical Sciences, 36(7), 1659.
- Alexander - Passe, N. (2006). How dyslexic teenagers cope: an investigation of self - esteem, coping and depression. *Dyslexia*, 12(4), 256-275.