Early Literacy Screening Tool

by Jayashree Shanbal

Early Literacy Screening Tool (ELST)

Manual

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EARLY LITERACY SCREENING TOOL

MANUAL

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Contents

Early Literacy Screening Tool (ELST)

List of subtests and equipment required for screening tool

SI No.	Test	Equipment needed	Time Needed (in minutes)
1.	Auditory discrimination	Spoken	3
2.	Oral language • Comprehension • Expression	Plates 1, 2 & 3	6
3.	Verbal memory	Spoken	2
4.	Early literacy	Plate 4-14	4
5.	Phonological awareness	Spoken	4
6.	Reading	Plate 15 & 16	3
7.	Writing	Plate 17, pencil and paper	3
8.	Mathematics	Plate 18-21, pencil and paper	5

Equipment enclosed

• Score sheet

• Set of plates containing oral language comprehension, oral language expression, early literacy, reading and mathematics plates.

List of subtests and equipment required for Screening Checklist

Skills to be assessed-

1. Listening

2. Oral language

3. Verbal memory

4. Phonological awareness

5. Early literacy

Equipment enclosed

• Score sheet, pencil and paper.

Introduction

Earlier most of the research focused on assessing learning disability mainly in school age children. However since the need for early identification is increasing, emphasis on assessment has been made right from preschool years. Research has shown that the earlier children with potential reading difficulties can be identified, the easier it is to overcome their reading problems. New theoretical developments in dyslexia research suggested that it should be possible to identify both slow learners

and potential dyslexic children at the age of 3 or 4 years, in time to provide greater reading support. The current practice of evaluation in the educational system focuses on the outcome of a child's performance in classroom rather than on evaluation of pre-requisite skills for literacy acquisition. The pre-requisite skills necessary for literacy acquisition like listening, oral language, phonological awareness, verbal memory, early literacy, reading, writing and mathematics have to be assessed in order to reason out the consequence of any literacy failure in children. It is evident that these skills are mutually interactive with each other and play a major role in acquiring literacy skills.

Tests and tools for assessment of literacy have been developed in India by Educationists, Psychologists and Speech-Language Pathologists. But they provide information only on certain sub-skills of literacy. Most of the tests assess primary grade children. There are very few tests in Indian context which help in the early screening of those children with learning problems in pre schools. Thus, this hinders our process of early identification and management of children with learning disability. Hence, Early Literacy Screening Tool was developed to assess literacy skills of children with poor academic performance at the preschool level itself. This will further facilitate a detailed assessment for early intervention of such children with learning disability.

Features present in the tool

- Individual administration
- Clear color pictures and black and white print of alphabets and words
- Quick administration
- Rapid scoring
- Wide range use
- Limited specialized preparation needed by the examiner

Purpose and uses of ELST

The ELST is intended as a screening tool, for use routinely with in a school, for children from 3 to 6 years of age. This tool can be used by Speech language pathologists, clinical psychologists and teachers. It forms a valuable first step in deciding whether further full assessment is required or not. Assessing children as they enter Kindergarten is particularly important to determine the child's areas of strengths and needs so that the learning environment and activities can be modified to cater to their needs.

Layout of the manual

The manual consist of two parts:

This section consists of introduction to the test, preparation, testing procedures for ELST, scoring and detailed instructions on how to use each of the 8 tests in the screening tool and five skills to be assessed in the screening checklist. The manual gives information on the development of the screening tool and screening checklist to standardization, validation and outcomes of ELST. It also provides the information regarding scoring and interpretation of the test results.

Preparation, administration and scoring

General instructions

Examiners

ELST is designed for use by Speech language Pathologists and school professionals (teachers, special educators).

Administration time

Approximately 30 minutes.

Prior to testing

It is important to familiarize fully with ELST well before starting the test. This involves reading through this manual carefully, familiarizing with the procedure, scoring pattern and interpretation for each sub-test. It is to be noted that the present screening tool consists of different set of tests for three age groups separately (3-4 years, 4-5 years and 5-6 years). Hence, the examiner is expected to administer this screening tool according to the chronological age of the child. Also, the test instruction should be read in English language preferably, if the child is unable to understand the instructions, only then the examiner can explain it in the child's preferable language. However, the test items have to be read strictly in English language.

Instructions for test administration

Separate instructions are given for the tester and the subject. The length of the time required to establish a desired response will vary from child to child. If the child gives an incorrect answer, note down the response. Prior to proceeding to the next item explain why it was wrong and give the expected response.

General instructions for item administration

- Record the child's response for each of the item in the appropriate space on the score sheet.
- Positive reinforcement should be given for correct responses.
- Do not give any clues to elicit correct response from the child.E.g., by indicating through facial expression that the probable choice is correct or incorrect. Also, an alternate word should not be substituted for the target stimulus.
- Repeat the test items only once, if the child asks for repetition or when repetition appears to be needed.
- The child may take reasonable amount of time per test item to respond. Meanwhile encourage the child to respond appropriately. However if no response is obtained even after a minute then give the score as '0' and move on to the next item.
- If the child is responding too quickly without comprehending the instructions completely, ask the child to slow down and listen to the instructions again and respond appropriately.

Test setting

Preferably the test should be conducted in a quiet room with adequate light and proper ventilation to avoid fatigue and distraction. The examiner and the child should sit just opposite across the table as the stimulus book is kept on the table so that the examiner can observe the responses better. Developing a good rapport with the child is important. A few minutes of initial conversation prior to testing will usually accomplish this. The examiner should note the responses immediately, but not making it evident to the child. Audio recording of the test proceedings is desirable.

Instructions for subtest administration and scoring for Screening Checklist

The participants should be tested individually in a quiet, noise free room. The screening checklist should be administered before the screening tool. The screening checklist consists of five literacy skills- listening (three questions), oral language (seven questions), verbal memory (two questions), phonological awareness (two questions) and early literacy (six questions) with different number of items under each skill. The responses must be recorded on a response sheet in terms of 'yes', 'no'

and 'sometimes'. A score of '1' is allotted for correct response (yes), '0.5' for partially correct/ emergent response (sometimes) and '0' for incorrect response (no).

Instructions for subtest administration and scoring for Screening Tool

Sub test 1: Listening skills (LS) Auditory discrimination task

There is evidence that children at risk of learning disability are likely to have difficulty in discriminating minimal word pairs. This is tested here by getting them to discriminate between minimal word pairs which differ in place, manner or voicing features.

Instructions: Say, "I will be saying two words at a time. Tell me 'same' if you think that the two words I say are the same. Tell me 'not same/different' if the two words I say are not the same".

Practice:

Say the minimal word pairs given under practice item one by one. The child then says whether they are same or different. Only in the practice trial, tell the child whether they were right or wrong. Make sure you maintain a neutral tone in saying the words, so that the child cannot pick up any cues from your tone of voice. If the child says 'yes' then check by asking, 'do you mean they are the same?' similarly, if the child says

'No' ask 'Do you mean they are different?'

Main test: In the main test you should not say whether the response was right or wrong. You are expected to just note down right/wrong score on the response sheet. Repeat the words once only, if the child asks for repetition.

Score: Mark '1' for every correct and '0' for incorrect response.

Sub test 2: Oral Language Skills (OLS)

Language plays a crucial role in the development of early literacy skills. To develop reading and writing skills the child needs to comprehend the spoken language and understand how this spoken language is represented in written form. Hence, in the present tool tasks that assess receptive and expressive language skills were developed.

Sub test (i): Oral Language Comprehension

    a) **Following commands**

       Instruction: Say, "I will give out simple instruction. Please listen carefully and do as I say".

    b) **Answering yes/no in response to a question**

       Instruction: Say, "I will ask you a simple question, you will have to answer either yes or no accordingly".

    c) **Comprehension of preposition through pointing task**

       Instruction: Say, "I will show you a picture, you have to listen carefully and point to the correct picture".

Note: Practice items are provided for each of the above mentioned tasks. In these practice trials, make sure the child has understood the tasks and give feedback whether their response is correct or incorrect. In the main test do not give any feedback or any help to perform the task. Repeat the test items only once, if the child asks for repetition.

Score: Mark '1' for every correct and '0' for incorrect response.

Sub test (ii): Oral Language Expression

This subtest involves a picture description task (A lady cooking in the kitchen) where in the child is expected to describe the picture in complete sentences. This task is designed to elicit the following expressive language skills: Categorical naming (common objects), subject/verb indication and negation. If the expected answers are not elicited, the examiner should ask questions to elicit the same e.g., who is cooking? (Expected answer: Lady, Mother).

Note: The child should be instructed to describe the picture only in English language and the examiner is expected to use English language to elicit the response from the child. Also, practice item is not included for this particular subtest.

Instruction: Say, 'I will show a picture, you have to describe it in complete sentences'.

Score: Mark '1' for every correct and '0' for incorrect response.

Sub test 3: Verbal Memory (VM)

There is evidence that literacy acquisition difficulties are associated with poor memory for verbal material. Hence this is tested here by getting them to retrieve and recall specific words from their memory.

Sub test (i): Retrieval of a specific word.

Instructions: Say, "I will give certain clues to you. You have to guess the word using those clues".

Score: Mark '1' for every correct and '0' for incorrect response.

Sub test (ii) : Recall of specific set of words

Recall of words in random order

Instructions: Please listen to me carefully, memorize the words and repeat them back.

Recall of words in random order

Instructions: Please listen to me carefully, memorize the words and repeat them back in the same order as I say.

Score: Mark '1' for every correct and '0' for incorrect response.

Note: Practice items are provided for each of the above mentioned tasks. In these practice trials, make sure the child has understood the tasks and give feedback whether their response is correct or incorrect. In the main test do not give any feedback or any help to perform the task. Repeat the test items only once, if the child asks for repetition. The child is expected to repeat all the words as said by the examiner only then a score of '1' will be given.

Sub test 4: Early Literacy Skills (ELS)

Various investigators have opined that children's literacy success can be predicted from their early literacy skills. Therefore in this tool, two subtests which assess early literacy skills were included.

Sub test (i): Written language awareness

This subtest consists of four tasks which checks for various aspects of written language awareness.

a) **Identification of upper case alphabets**
   Instructions: Say, "Please point to the alphabet I say".

b) **Identification of lower case alphabets.**
   Instructions: Say, "Please point to the alphabet I say".

c) **Identification of first letter in a word**
   Instructions: Say, "Please point to the first letter in the word I say".

d) **Distinguishing scribbles ("writing") from pictures in drawings**

e) *Instructions:* Say, "Now I will show you some pictures, you have to point to the letters and pictures".

Score: Mark '1' for every correct and '0' for incorrect response

Sub test (ii): Environmental Print Awareness

This subtest consists of identification of common logos.

Instructions: Now I will show a picture, you will have to recognize it.

Score: Mark '1' for every correct, '0.5' for emerging response (if the child says chocolate or any other name of the chocolate) and '0' for incorrect response.

Sub test 5: Phonological Awareness Skills (PA)

There is strong evidence that slow learners and dyslexic children have difficulties in phonological skill- analyzing speech into the constituent sounds. Various studies have revealed that good readers are characterized by good phonological awareness skills, whereas poor phonological awareness skills characterize poor readers. Therefore in this tool, three tasks which assess phonological awareness skills were included.

Sub test (i): Phoneme blending

Instructions: Say, "I am going to say some words, spreading out the sounds. Guess the word I am saying".

Score: Mark '1' for every correct and '0' for incorrect response.

Sub test (ii): Phoneme Identification

Instructions: Say, "I want you to listen to just one sound in a word. Tell me the sound you hear at the beginning of each word I say".

Score: Mark '1' for every correct and '0' for incorrect response.

Sub test (iii): Phoneme Substitution

Instructions: Now let us play another game. I will give you a word. Listen to it carefully and change one phoneme to another as indicated by me and tell the whole new word.

Score: Mark '1' for every correct and '0' for incorrect response.

Note: Practice items are provided for each of the above mentioned tasks. In these practice trials, make sure the child has understood the tasks and give feedback whether their response is correct or incorrect. In the main test do not give any feedback or any help to perform the task. Repeat the test items only once, if the child asks for repetition.

Sub test 6: Reading Skills (RS)

There is evidence that children at risk of learning disability are likely to have difficulty in reading words and non words. Hence, these tasks are tested in the tool.

Instructions: Say, "I will show you some words, you will have to read them aloud".

Score: Mark '1' for every correct and '0' for incorrect response.

Note: Practice items are provided for both reading words and reading non words. In these practice trials, make sure the child has understood the tasks and give feedback whether their response is correct or incorrect. In the main test do not give any feedback or any help to perform the task. The examiner is expected to check for G-P-C skills for scoring (especially in non word reading task).

Sub test 7: Writing Skills (WS)

In the recent years, there has been growing evidence that writing skills in the preschool period affect the development of proficiencies in the elementary schools. Therefore in this tool, writing words to dictation task and copying words were employed.

Sub test (i): Words for Dictation

Instructions: Say, "I will tell you some words, you will have to write them".

Score: Mark '1' for every correct and '0' for incorrect response.

Subtest (ii): Words for copying

Instructions: Say, "I will show you some words, you will have to copy them as it is".

Note: There is no score for this task. The examiner is expected to note down errors in non linguistic parameters.

Sub test 8: Mathematical Skills (MS)

Early mathematical abilities have been found to be the strongest predictor of later school achievement. It is important to recognize vulnerable young children early in order to prevent them from developing arithmetic difficulties later on. Hence, in this tool three tasks which assess mathematical skills were taken.

Sub test (i): Number concept

Instructions: Say, "I will give you some tasks you have to answer them accordingly".

Score: Mark '1' for every correct and '0' for incorrect response.

Subtest (ii): Simple Addition

Instructions: Say, "I will give you two numbers, you will have to add them and write the answer".

Score: Mark '1' for every correct and '0' for incorrect response.

Sub test (iii): Simple subtraction

Instructions: Say, "I will give you two numbers, you will have to subtract them and write the answer".

Score: Mark '1' for every correct and '0' for incorrect response.

Development, establishment of norms and validation of the ELST

Test construction

Initially test items for early literacy screening tool was developed by reviewing journals, books, internet and age appropriate academic books. The compiled material was rated by five Speech Language Pathologists. They were expected to rate the test items on a five point rating scale for the 14 parameters listed. E.g.: Simplicity of the test material, familiarity of the test stimuli etc.

Stimulus book construction

The stimulus book consisted of 21 plates which contained one set of illustration per plate. Each of the colour drawings had approximately the same eye appeal (intensity and complexity of details). Only for testing the written language awareness in the early literacy subtest, two distracters were use (identification of upper case alphabet, lower case alphabet and first letter in a word)

Preliminary field testing

Using this material, a pilot study was conducted on a group of 20 children in the age range of 3-6 years. After analyzing the piloted data, the test items which were most relevant was chosen to form the test materials for the final administration of the test.

Establishment of norms

Ninety typically developing children in the age range of 3-6 years participated in the study. All children studied *in schools with English as the medium of instruction and* were selected randomly from schools in different localities of Mysore city. They were sub divided into three groups with an inter age interval of one year (3-4 years, 4-5 years and 5-6 years). Each sub group comprised of thirty subjects including 15 boys and 15 girls.

The subjects for this study were selected based on the following criteria:

- Native speakers of Kannada, being reared in an urban ambient environment of Kannada.
- Belonging to middle socio economic status.
- Exposed to English language in their school set up.
- Schools which followed similar teaching methods.
- who passed the WHO Ten-Question Disability Screening checklist (cited in Singhi, Kumar, Prabhjot & Kumar, 2007) which screens for any speech, language and hearing deficits.

The scores were coded and then subjected to statistical analysis. From the scores obtained, mean, standard deviation were calculated for each age group. Passing criteria of 60% was set for all the skills considering that minimum of 60% of the subjects had to perform each of the tasks correctly.

Validation of the tool

After analyzing the data, items which passed 60% set criteria were listed separately according to the age range. This final tool was administered on 30 children in the age range of 3-6 years (5 males and 5 females in each age group) and 15 children at risk for learning disability. Responses were noted down in the scoring sheet. The test items which are relevant to the particular age group for Screening Tool and Screening Checklist are depicted in the Table 1 and Table 2. Mean Scores and SD of literacy skills for Screening Tool and Screening Checklist are given in Table 3 and Table 4.

Scoring and Interpretation

The screening tool has eight tests which assesses various aspects of literacy skills. Each test consists of different subtests and test items given separately for each age group. Child's response on each item was given a score of '1' for correct response, '0' for incorrect/no response. Only for the test items under environmental print awareness a score of '1' for correct response, '0.5' for emerging response and '0' for incorrect/no response was allotted. The maximum attainable score in each test for the three age groups for Screening Tool is listed in Table 1.

Table 1: The maximum attainable score for the three age groups in Screening Tool

Sl. No.	Test	Maximum Attainable score		
		3-4 years	4-5 years	5-6 years
1	Listening	–	6	6
2	Oral Language	2	2	6
3	Verbal Memory	4	5	6
4	Early Literacy	4	6	6
5	Phonological	–	--	3
6	Reading	–	--	5
7	Writing	–	--	2
8	Mathematics	1	2	5
	Total score	11	21	39

Note: "- -" indicates those skills which are not applicable for that particular age group.

Table 2: The maximum attainable score for the three age groups in Screening Checklist

Sl. No.	Test	Maximum Attainable score		
		3-4 years	4-5 years	5-6 years
1	Listening	3	3	3
2	Oral Language	4	4	6
3	Verbal Memory	2	2	2
4	Phonological Awareness	-	-	2
5	Early literacy	2	6	6
	Total Score	11	15	16

Note: "- -" indicates those skills which are not applicable for that particular age group.

From the validation data, Mean and standard deviation scores were calculated for each age group for all the tests separately and is tabulated in Table 3 for screening Tool and Table 4 for Screening Checklist.

Table 3: Mean and SD scores for various literacy tests in the age range of 3-6 years for screening tool

Sl. No.	Tests	3-4 years		4-5 years		5-6 years	
		Mean	SD	Mean	SD	Mean	SD
1	LS	--	--	5.90	0.31	6.00	0.00
2	OLS	1.80	0.42	1.90	0.31	5.70	0.67
3	VM	3.70	0.67	5.00	0.47	5.80	0.42
4	ELS	3.75	0.35	5.75	0.48	6.00	0.00
5	PA	--	--	--	--	2.30	0.67
6	RS	--	--	--	--	3.90	1.10
7	WS	--	--	--	--	1.80	0.42
8	MS	1.00	0.00	2.00	0.00	4.20	0.78

Note: "- -" indicates those skills which are not applicable for that particular age group.

Table 4: Mean and SD scores for various literacy tests in the age range of 3-6 years for screening Checklist

Sl. No.	Tests	3-4 years		4-5 years		5-6 years	
		Mean	SD	Mean	SD	Mean	SD
1	LS	3.00	0.00	3.00	0.00	3.00	0.00
2	OLS	4.00	0.00	4.00	0.00	5.60	0.83
3	VM	1.90	0.31	2.00	0.00	2.00	0.44
4	PA	--	--	--	--	1.70	0.40
5	ELS	1.90	0.31	5.4	0.84	6.00	1.94

Note: "- -" indicates those skills which are not applicable for that particular age group.
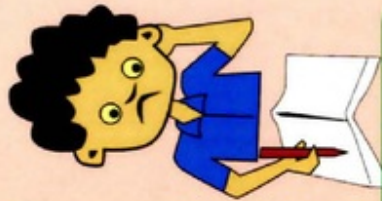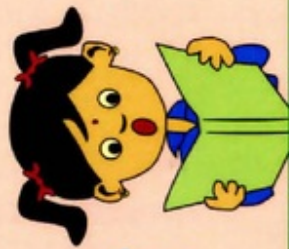
Early Literacy Screening Tool (ELST)

Stimulus Book
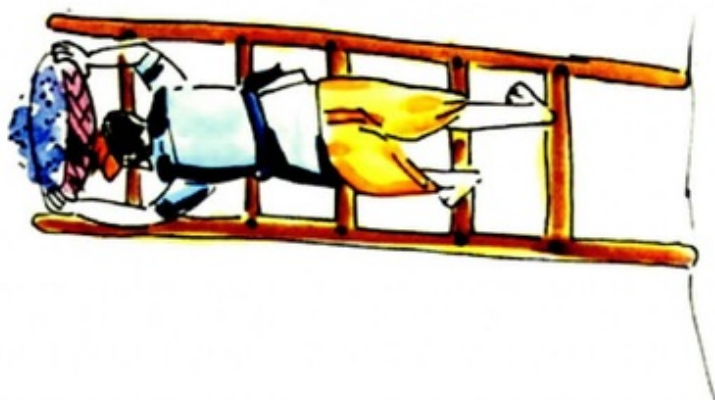
Plate 1

Plate 2

Plate 3

Plate 4

B F m

Plate 5

a c D

Plate 6

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Plate 7

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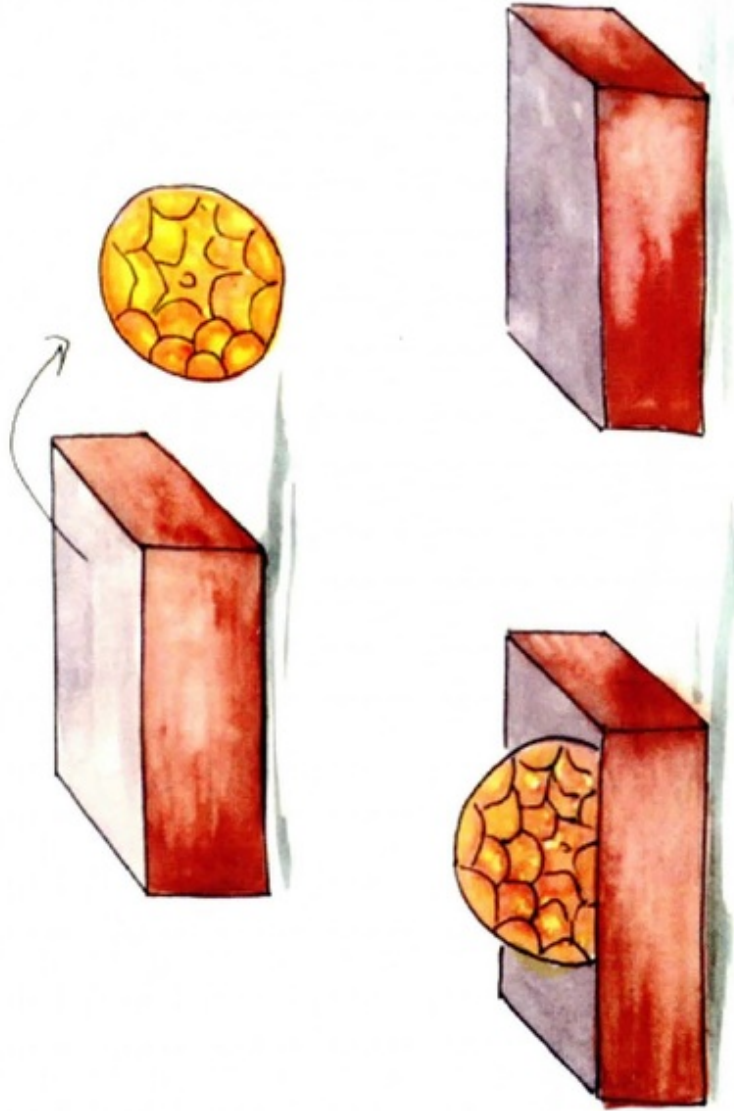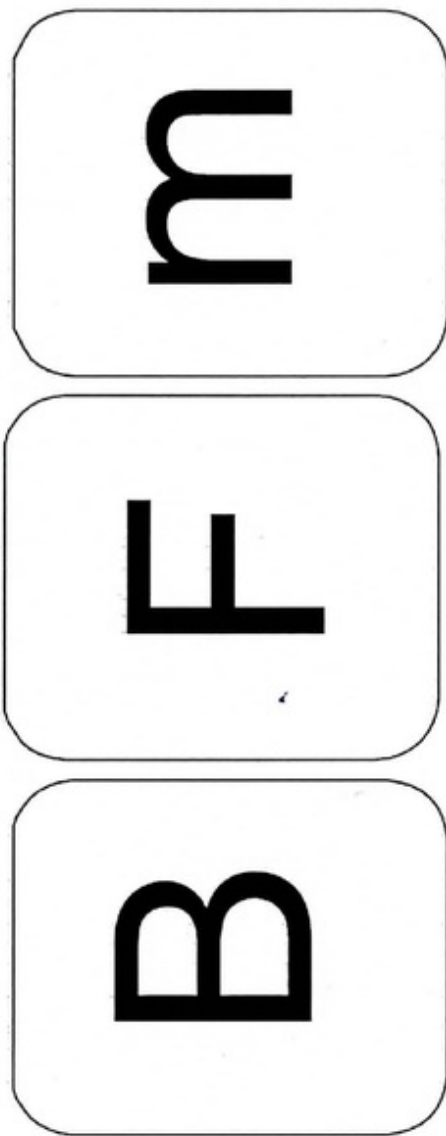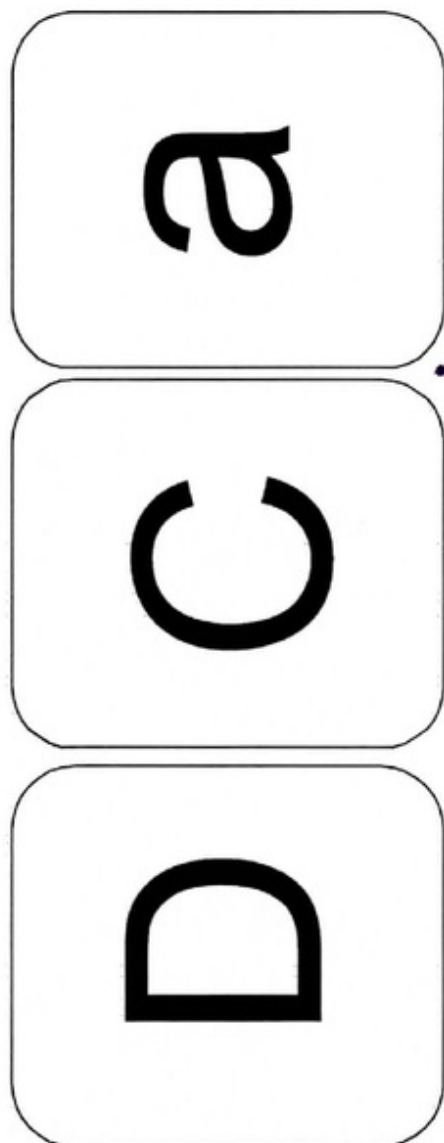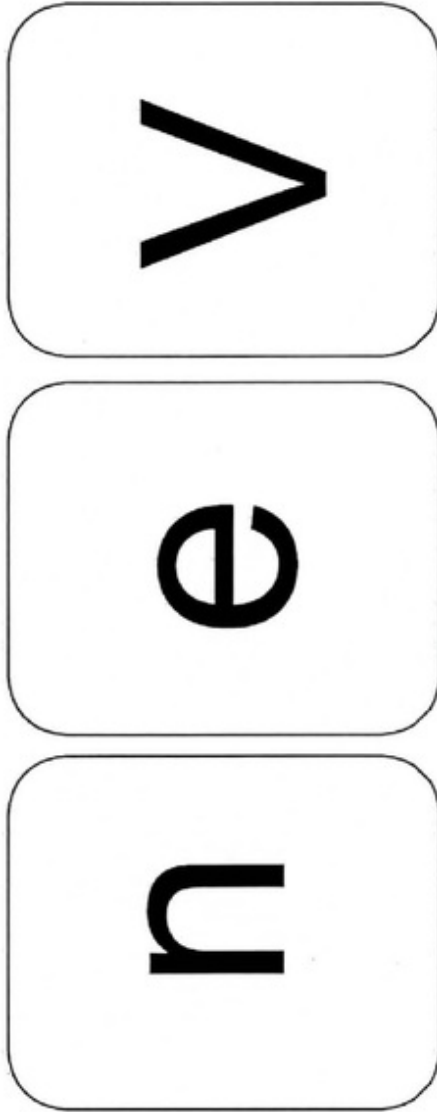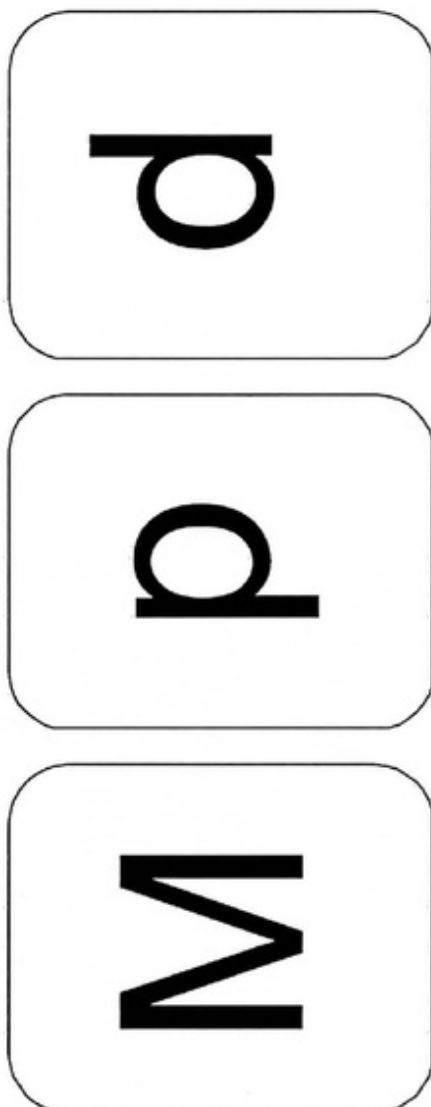
Plate 8

Bat

Plate 9

Tree

Plate 10

THAT'S GREAT! LET'S SEND IT TO 'BUZZY' GRAN,
AND SEE HOW MUCH YELL PAY US FOR IT!

Plate 11

22

Plate 12

No, it is next Monday

Do we have science test tomorrow?

Plate 13

Plate 14

Plate 15

Dog

Bap

Plate 16

Dar
Nat
Ant
Cap
Bag

Plate 17

Walk

Knife

Cough

Cat

Book

Table

Plate 18

Plate 19

Plate 20

$$4$$
$$+\ 5$$
$$\overline{}$$

Plate 21

$$4 - 2 =$$

Early Literacy Screening Tool (ELST)

Score sheets

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SCREENING CHECKLIST (3-4 Years)

This subsection has to be filled by the parents/ caregivers/ teachers/ interviewer on observation.

Test material	Yes	No	Some times
I. LISTENING SKILLS • Attends to all what is said. • Looks in the direction of the speaker or sound. • Responds appropriately to direct requests.			
II. ORAL LANGUAGE • States information Name Family information • Uses age appropriate vocabulary. • Uses speech rather than gestures to express self.			
III. VERBAL MEMORY • Memorizes the names of most of his/her classmates. • Remembers/retrieves verbal sequences (e.g. days of the week, alphabet)			
IV. EARLY LITERACY DEVELOPMENT • Can the child recite first ten alphabets? • Follows left to right orientation.			

OVERALL SCORE

	Skills	Max. Score	Score	Remarks
I.	Listening skills	03		
II.	Oral language skills	04		
III.	Verbal memory	02		
IV.	Early literacy development	02		
	Total Score	11		

I. ORAL LANGUAGE SKILLS

Subtest 1: Oral language comprehension

Following commands

Instruction: Say, "I will give out simple instruction. Please listen carefully and do as I say".

Practice item: 'Stand Up'

'Clap your hands'

Subtest 2: Oral Expression (Show Plate 3)

Instruction: I will show a picture, you have to describe it in complete sentences.

Check the following using this picture stimulus. If the expected answers are not elicited, the examiner should ask questions to elicit the same. Score of one should be given if any one of the expected answer is elicited.

- Labels common objects correctly. (expected answers: plate, spoon, vessel, stove, cooker)

Maximum Score: 2

II. VERBAL MEMORY

Subtest 1: Retrieval of a specific word.

Instructions: I will give certain clues to you. You have to guess the word using those clues.

Practice item: It is an animal. It has big ears and a long trunk. (Expected answer: Elephant)

- It is an animal. It barks/says bow-bow. (Expected answer: Dog)

Subtest 2: Recall of specific set of words

Instructions: Please listen to me carefully, memorise the words and repeat them back.

a) **Recall of words in random order**

Practice item: Book, Van

- School, Park.
- Table, Car, Parrot.

b) **Recall of words in random order**

Practice item: Pen, Ball

- Fan, Pencil.

Maximum Score: 4

III. EARLY LITERACY DEVELOPMENT

Subtest 1: Written language awareness

a) **Identification of upper case alphabets.**

Practice item: 'B' (show Plate 4)

Instructions: Say, Please point to the alphabet 'C'. (Show Plate 5)

- D
- C
- a

b) **Distinguishing scribbles ("writing") from pictures in drawings.**

Practice item: (Show Plate 10)

Instructions: Now I will show you some pictures, you have to point to the letters and pictures.

- Picture 1(Show Plate 11)
- Picture 2 (Show Plate 12)

Subtest 2: Environmental Print Awareness

Instructions: Now I will show a picture, you will have to recognize it.

Practice item: (Show Plate 13)

Picture 1 (Show Plate 14)

Maximum Score: 4

IV. MATHEMATICAL SKILLS

Subtest 1: Number concept

Instructions: Say, "I will give you some tasks you have to answer them accordingly".

1. Count and say (Show Plate 18)

Maximum Score: 1

Case Name: No: Date:

Age/Gender: Examiner:

Note: No response (NR), Incorrect response (IR), Elicited response (ER), Correct response (CR)

I. Oral Language Skills

Skills	Item	NR/IR (0)	ER (0.5)	CR (1)	Total	Remarks
Comprehension	1					
Oral Expression	1					

II. Verbal Memory

Skills		Item	NR/IR (0)	ER (0.5)	CR (1)	Total	Remarks
a)	Retrieves a specific word.	1					
b)	Shows no problems in learning names of people or places.	1 2 3					

III. Early Literacy Development

Skills		Item	NR/IR (0)	ER (0.5)	CR (1)	Total	Remarks
a)	Identification of upper case alphabets	1					
b)	Child distinguishes scribbles ("writing") from pictures in drawings.	1 2					
c)	Child recognises logos	1					

IV. Mathematical Skills

Item	Maximum score	Obtained score	Remarks
1	1		

OVERALL SCORE

Skills	Max. Score	Score	Remarks
1. Oral language skills	02		
2. Verbal memory	04		
3. Early literacy development	04		
4. Mathematical skills	01		
Total Score	11		

SCREENING CHECKLIST (4-5 Years)

This subsection has to be filled by the parents/ caregivers/ teachers/ interviewer on observation.

Test material	Yes	No	Some times
I. LISTENING SKILLS • Attends to all what is said. • Looks in the direction of the speaker or sound. • Responds appropriately to direct requests.			

II. ORAL LANGUAGE
 	
• States information
  Name
  Family information
• Uses age appropriate vocabulary.
• Uses speech rather than gestures to express self.			

III. VERBAL MEMORY • Memorizes the names of most of his/her classmates. • Remembers/retrieves verbal sequences (e.g. days of the week, alphabet)			
IV. EARLY LITERACY DEVELOPMENT • Can the child recite first ten alphabets? • Can the child write the first letter of his/her name? • Child uses terms like "word", "letter", and "alphabet" • Copies simple shapes appropriately. • Reproduces simple shapes from memory. • Follows left to right orientation.			

OVERALL SCORE

	Skills	Max. Score	Score	Remarks
I.	Listening skills	03		
II.	Oral language skills	04		
III.	Verbal memory	02		
IV.	Early literacy development	06		
	Total Score	**15**		

SCREENING TOOL (4-5 years)

I. AUDITORY DISCRIMINATION SKILLS

Instructions: Say, "I will be saying two words at a time. Tell me 'same' if you think that the two words I say are the same. Tell me 'not same/different' if the two words I say are not the same".

Note: "B" and "E" indicate that the beginning and ending consonant is different respectively. Whereas "M" indicates that that the medial vowel is different.

Practice item: run-gun, dog-dog, cub-cup

Sl. No	Target syllable position	Test item
•	B	Pig-dig
•	E	Pat-pad
•	E	Tag-tan
•	M	Cut-cat
•	M	Tip-tap
•	B	Best-nest

Total score: 06

II. ORAL LANGUAGE SKILLS

Subtest 1: Oral language comprehension

a) Following commands

Instruction: Say, "I will give out simple instruction. Please listen carefully and do as I say".

Practice item:'Stand Up'

Clap your hands.

Subtest 2: Oral Expression (Show Plate 3)

Instructions: I will show a picture, you have to describe it in complete sentences.

Check the following using this picture stimulus. If the expected answers are not elicited, the examiner should ask questions to elicit the same. Score of one should be given if any one of the expected answer is elicited.

- Labels common objects correctly. (expected answers: plate, spoon, vessel, stove, cooker)

Maximum Score: 2

III. VERBAL MEMORY

Subtest 1: Retrieval of a specific word.

Instructions: I will give certain clues to you. You have to guess the word using those clues.

Practice item: It is an animal. It has big ears and a long trunk. (Expected answer: Elephant)

- It is an animal. It barks/says bow-bow. (Expected answer: Dog)

Subtest 2: Recall of specific set of words

Instructions: Please listen to me carefully, memorise the words and repeat them back.

a) **Recall of words in random order**

Practice item: Book, Van

- School, Park.
- Table, Car, Parrot.

b) **Recall of words in random order**

Practice item: Pen, Ball

- Fan, Pencil.
- Zoo, Market, Temple.

Maximum Score: 5

IV. EARLY LITERACY DEVELOPMENT

Subtest 1: Written language awareness

a) **Identification of upper case alphabets.**

Practice item: 'B' (show Plate 4)

Instructions: Say, Please point to the alphabet 'C'. (Show Plate 5)

- D
- C
- a

b) **Identification of lower case alphabets.**

Practice item: 'e' (Show Plate 6)

Instructions: Please point to the alphabet'd'. (Show Plate 7).

- M
- d
- p

c) **Identification of first letter in a word.**

Practice item: 'Bat' (Show Plate 8)

Instructions: Please point to the first letter in the word 'Tree' (Show Plate 9).

d) **Distinguishing scribbles ("writing") from pictures in drawings.**

Instructions: Now I will show you some pictures, you have to point to the letters and pictures.

Practice item: (Show Plate 10)

- Picture 1(Show Plate 11)

- Picture 2 (Show Plate 12)

Subtest 2: Environmental Print Awareness

Instructions: Now I will show a picture, you will have to recognise it.

Practice item: (Show Plate 13)

Picture 1 (Show Plate 14)

Maximum Score: 6

V. MATHEMATICAL SKILLS

Subtest 1: Number concept

Instructions: Say, "I will give you some tasks you have to answer them accordingly".

- Count and say (Show Plate 18)

- Point to the coin when asked. (Show Plate 19)

Maximum Score: 2

SCORE SHEET- SCREENING TOOL (4-5 Years)

Case Name: No: Date:

Age/Gender: Examiner:

Note: No response (NR), Incorrect response (IR), Elicited response (ER), Correct response (CR)

I. Auditory discrimination skills

Skills	Item	NR/IR (0)	ER (0.5)	CR (1)	Total	Remarks
Auditory Discrimination	1 2 3 4 5 6					

II. Oral Language Skills

Skills	Item	NR/IR (0)	ER (0.5)	CR (1)	Total	Remarks
Comprehension	1					
Oral Expression	1					

III. Verbal Memory

Skills	Item	NR/IR (0)	ER (0.5)	CR (1)	Total	Remarks
a) Retrieves a specific word.	1					
b) Shows no problems in learning names of people or places.	1 2 3 4					

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IV. Early Literacy Development

	Skills	Item	NR/IR (0)	ER (0.5)	CR (1)	Total	Remarks
a)	Identification of upper case alphabets	1					
b)	Identification of lower case alphabets.	1					
c)	Child points to the first letter in a word.	1					
d)	Child distinguishes scribbles ("writing") from pictures in drawings.	1 2					
e)	Child recognises logos	1					

V. Mathematical Skills

Item	Maximum score	Obtained score	Remarks
1	1		
2	1		

OVERALL SCORE

Skills	Max. Score	Score	Remarks
1. Listening Skills	06		
2. Oral language skills	02		
3. Verbal memory	05		
4. Early literacy development	06		
5. Mathematical skills	02		
Total Score	21		

SCREENING CHECKLIST (5-6 Years)

This subsection has to be filled by the parents/ caregivers/ teachers/ interviewer on observation.

Test material	Yes	No	Some times

• LISTENING SKILLS
 	
  I. Attends to all what is said.
  II. Looks in the direction of the speaker or sound.
  III. Responds appropriately to direct requests.			

• ORAL LANGUAGE
 	
  • States information
 	
  Name
  Age
  Birthday
  Family information
  • Uses age appropriate vocabulary.
  • Uses speech rather than gestures to express self.			

• VERBAL MEMORY
 	
  II. Memorizes the names of most of his/her classmates.
  III. Remembers/retrieves verbal sequences (e.g. days of the week, alphabet)			

• PHONOLOGICAL AWARENESS SKILLS
 	
  I. Can the child say 3 words which start with the phoneme /k/?
  II. Can the child blend phonemes and say a whole new word? Example: /k-æ -t/ says /kæt/.			

• EARLY LITERACY DEVELOPMENT
 	
  • Can the child recite first ten alphabets?
  • Can the child write the first letter of his/her name?
  • Child uses terms like "word", 'letter', and "alphabet"
  • Copies simple shapes appropriately.
  • Reproduces simple shapes from memory.
  • Follows left to right orientation.			

OVERALL SCORE

	Skills	Max. Score	Score	Remarks
I.	Listening skills	03		
II.	Oral language skills	06		
III.	Verbal memory	02		
IV.	Phonological Awareness	02		
V.	Early literacy development	06		
	Total Score	**19**		

I. AUDITORY DISCRIMINATION SKILLS

Instructions: Say, "I will be saying two words at a time. Tell me 'same' if you think that the two words I say are the same. Tell me 'not same/different' if the two words I say are not the same".

Note: "B" and "E" indicate that the beginning and ending consonant is different respectively. Whereas "M" indicates that that the medial vowel is different.

Practice item: run-gun, dog-dog, cub-cup

Sl. No	Target syllable position	Test item
1.	B	Pig-dig
2.	E	Pat-pad
3.	E	Tag-tan
4.	M	Cut-cat
5.	M	Tip-tap
6.	B	Best-nest

Total score: 06

I. ORAL LANGUAGE SKILLS

Subtest 1: Oral language comprehension

a) Following commands

Instruction: Say, "I will give out simple instruction. Please listen carefully and do as I say".

Practice item: Stand Up

Clap your hands.

b) Answering yes/no in response to a question

Instruction: Say, "I will ask you a simple question, you will have to answer either yes or no accordingly".

Practice item: Do you eat breakfast in the afternoon?

Do you go to sleep at night?

c) Comprehension of preposition through pointing task

Instruction: Say, "I will show you a picture, you have to listen carefully and point to the correct picture".

Practice item: Show me the picture where the man is climbing up the ladder (Show Plate 1).

Show me the picture where the ball is out of the basket. (Show Plate 2)

Total score: 03

Subtest 2: Oral language expression (Show Plate 3)

Instructions: Say, 'I will show a picture, you have to describe it in complete sentences'.

Check the following using this picture stimulus. If the expected answers are not elicited, the examiner should ask questions to elicit the same. Score of one should be given if any one of the expected answer is elicited.

- Labels common objects correctly. (expected answers: plate, spoon, vessel, stove, cooker)
- Uses subject/verb appropriately (expected answers: Lady, mother, cooking)
- Uses negation correctly. Is mother making chapathis? (Expected answer :no, she is
- making rice/ sambar)

Total score: 03

II. VERBAL MEMORY

Subtest 1: Retrieval of a specific word.

Instructions: I will give certain clues to you. You have to guess the word using those **clues.**

Practice item: It is an animal. It has big ears and a long trunk. (Expected answer: Elephant)

- It is an animal. It barks/says bow-bow. (Expected answer: Dog)
- It is blue in colour. We see sun, moon and stars in it. (Expected answer: Sky)

Subtest 2: Recall of specific set of words

Instructions: Please listen to me carefully, memorise the words and repeat them back.

a) Recall of words in random order

Practice item: Book, Van

- School, Park.
- Table, Car, Parrot.

b) Recall of words in random order

Practice item: Pen, Ball

- Fan, Pencil.
- Zoo, Market, Temple.

Total score: 06

IV. EARLY LITERACY DEVELOPMENT

Subtest 1: Written language awareness

a) Identification of upper case alphabets.

Instructions: Say, Please point to the alphabet 'C'. (Show Plate 5)

Practice item: 'B' (show Plate 4)

- D
- C
- a

b) **Identification of lower case alphabets.**

Instructions: Please point to the alphabet'd'. (Show Plate 7).

Practice item: 'e' (Show Plate 6)

- M
- d
- p

c) **Identification of first letter in a word.**

Instructions: Please point to the first letter in the word 'Tree' (Show Plate 9).

Practice item: 'Bat' (Show Plate 8)

d) **Distinguishing scribbles ("writing") from pictures in drawings.**

Instructions: Now I will show you some pictures, you have to point to the letters and pictures.

Practice item: (Show Plate 10)

- Picture 1(Show Plate 11)
- Picture 2 (Show Plate 12)

Subtest 2: Environmental Print Awareness

Instructions: Now I will show a picture, you will have to recognize it.

Practice item: (Show Plate 13)

- Picture 1 (Show Plate 14)

Maximum Score: 6

V. PHONOLOGICAL AWARENESS

Subtest 1: Phoneme Blending

Instructions: I am going to say some words, spreading out the sounds. Guess the word I am saying. Example: If I say 'f-at', you say 'fat'. If I say 'm-ug', you say 'mug'.

- m-at

Subtest 2: Phoneme Identification

Instructions: I want you to listen to just one sound in a word. Tell me the sound you hear at the beginning of each word I say.

Example: If I say 'car', the first sound in the car is /k/. In Nest, the first sound is /n/

- Time-/t/

Subtest 3: Phoneme Substitution

Instructions: Now let us play another game. I will give you a word. Listen to it carefully and change one phoneme to another as indicated by me and tell the whole new word.

Example: If I Say the word 'goat' by changing the /g/ to /b/ it becomes 'boat'.

- Hat-mat (change /h/ to /m/)

Maximum Score: 03

VI. READING

Instructions: Say, "I will show you some words, you will have to read it aloud".

Practice item: **Dog (word), Bap (non word)** Show Plate 15

Note: Check for G-P-C skills for scoring.

Show Plate 16

1. Ant
2. Cap
3. Bag
4. Dar
5. Nat

Maximum Score: 05

VII. WRITING SKILL

Subtest 1: Words for dictation

Instructions: Say, "I will tell you some words, you will have to write them.

1. Cat
2. Book

Maximum Score: 2

Subtest 2: Words for copying

Task: Show Plate 17 and ask the subject to copy the words.

1. Cat
2. Book
3. Table
4. Walk
5. Knife
6. Cough

VIII. MATHEMATICAL SKILLS

Subtest 1: Number concept

Instructions: Say, "I will give you some tasks you have to answer them accordingly".

1. Count and say (Show Plate 18)
2. Point to the coin when asked. (Show Plate 19)

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3. Tell the answers to the follwing

   How many days are there in a week?

Subtest 2: Simple Addidtion (Show Plate 20)

Instructions: Say, "I will give you two numbers, you will have to add them and write the answer".

1. Say the answer

   $4 + 5 =$

Subtest 3: Simple Subtraction (Show Plate 21)

Instructions: Say, "I will give you two numbers, you will have to subtract them and write the answer".

1. Subtract and write

   $4 - 2 =$

Maximum Score: 5

SCORE SHEET- SCREENING TOOL (5-6 Years)

Case Name: **No:** **Date:**

Age/Gender: **Examiner:**

Note: No response (NR), Incorrect response (IR), Elicited response (ER), Correct response (CR)

I. AUDITORY DISCRIMINATION SKILLS

Skills	Item	NR/IR (0)	ER (0.5)	CR (1)	Total	Remarks
Auditory Discrimination	1 2 3 4 5 6					

II. ORAL LANGUAGE SKILLS

Skills	Item	NR/IR (0)	ER (0.5)	CR (1)	Total	Remarks
Comprehension	1 2 3					
Oral Expression	1 2 3					

III. VERBAL MEMORY

Skills	Item	NR/IR (0)	ER (0.5)	CR (1)	Total	Remarks
a) Retrieves a specific word.	1 2					
b) Shows no problems in learning names of people or places.	1 2 3 4					

IV. EARLY LITERACY DEVELOPMENT

Skills	Item	NR/IR (0)	ER (0.5)	CR (1)	Total	Remarks
a) Identification of upper case alphabets	1					
b) Identification of lower case alphabets.	1					
c) Child points to the first letter in a word.	1					
d) Child distinguishes scribbles ("writing") from pictures in drawings.	1 2					
e) Child recognises logos	1					

V. PHONOLOGICAL AWARENESS

Skills	Item	NR/IR (0)	ER (0.5)	CR (1)	Total	Remarks
a) Phoneme Blending	1					
b) Phoneme Identification	1					
c) Phoneme Substitution	1					

VI. READING SKILL

Skills	Item	NR/IR (0)	ER (0.5)	CR (1)	Total	Remarks
Reading words	1 2 3 4 5					

VII. WRITING SKILLS

Skills	Item	NR/IR (0)	ER (0.5)	CR (1)	Total	Remarks
	1 2					

VIII. MATHEMATICAL SKILLS

Item	Maximum score	Obtained score	Total	Remarks
1	1			
2	1			
3	1			
4	1			
5	1			

OVERALL SCORE

Skills	Max. Score	Subject's Score	Remarks
I. Auditory discrimination skills	06		
II. Oral language skills	06		
III. Verbal memory	06		
IV. Early literacy development	06		
V. Phonological awareness	03		
VI. Reading skill	05		
VII. Writing skills	02		
VIII. Mathematical skills	05		
Total Score	39		

AIISH GENESIS AND GROWTH

The All India Institute of Speech and Hearing is a premier institute in the country imparting training in the field of Speech and Hearing. Established on 9th August 1965 as an autonomous organization, AIISH caters to manpower generation in the field, promoting research and providing rehabilitation services in the area. The institute is located on a sprawling area of 32 acres (two campuses) in Mysore. The institute is registered as a Society under the Societies Registration Act XXI of 1860 (Punjab Amendment Act, 1957)) and its functioning as an autonomous body under the aegis of the Union Ministry of Health and Family Welfare.

Established primarily as a training insttite, it started training programs at postgraduate level in 1967 followed by B.Sc . (Speech and Hearing) in 1968. The institute now offers three Diploma programs: Diploma in Hearing Aids and Ear mould technology (DHA & ET), Diploma in training the Young Hearing Impaired (DTYHI), Diploma in Language, Hearing and Speech through distance mode (DHLS); two graduate programs: Bachelors in Audiology, Speech and Language Pathology (BASLP) and B.S. Ed (Hearing Impairment); three Master programs (M.Sc. in Audiology, M.Sc. in Speech-Language Pathology and M.S.Ed. in Hearing Impairment); two PG Diploma courses (PG Diploma in Forensic Sciences and Technology, Clinical Linguistics for SLPs); two doctoral programs (Ph.D. in Audiology and Speech-Language Pathology); and Post Doctoral Fellowships. The institute also conducts short-term training and orientation programs for professionals in allied specialties.

AIISH is recognized as a reputed organization for training manpower in the field of speech and hearing and related areas throughout the country. The institute has been recognized as a Centre for Excellence in the area of Deafness (WHO), a s a Centre for Advanced Research (UGC) and a s a Science and Technology Institute (DST). The institute is affiliated to the University of Mysore for the award of degrees. The academic programs of the institute have the recognition of the Rehabilitation Council of India, a statutory body in the area of rehabilitation sciences. The institute is wholly financed by the Government of India. The functioning of the institute is under the direction of the Executive Council with the Hon'ble Union Minister for Health and Family Welfare as the Chairman and the Hon'ble Ministry of Health and Family Welfare, Government of Karnataka as Vice-Chairman. The other statutory bodies of the institute are the Finance Committee and the Academic Committee.

The Early Literacy Screening Tool (ELST) was developed as part of the research project sponsored by the AIISH Research Fund (ARF). It has been observed that throughout decades of research conducted in the area of dyslexia, the key to success for any child with dyslexia in terms of remediation is early identification. Although there are tools available for identification of young children at risk for dyslexia in other languages and cultures, lack of tools in the Indian context always left the professionals in the country with queries and doubts in remediation of such children. ELST is one such tool which will serve as a boon to SLPs in India for early identification of children at risk for dyslexia.

Early Literacy Screening Tool

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