

APPENDIX A

INTERVIEW QUESTIONS

TEACHERS

1. What are your qualifications? Have you undergone any special training?
2. How many years of teaching experience do you have?
3. Do you attend refresher courses?

4. How many hours of learning takes place in the classroom?
5. How would you rate your student's communication skills after and before the intervention?

6. What are the problems that you encounter while training the children?
7. Does the learner understand any words and follow instructions?
8. Does the learner spontaneously say sounds and words?
9. Does the learner greet a person upon arrival or departure/?
10. Does the learner use gestures to express his needs and wants?

PARENTS

1. Do you teach your child at home?
2. How many hours do you spend with the child?
3. Do you see any improvement in your child after intervention?
4. Does your child communicate with members of your family?
5. Do you interact with the teachers at the centre?
6. Does your child spontaneously say sounds or words?
7. Does your child smile and make a sound in greeting people spontaneously?
8. Does your child make gestures with a few speech sounds?
9. Can your child repeat sounds or words?
10. How does your child let his needs and wants to be known?

APPENDIX B

RESEARCH INSTRUMENT - QUESTIONS AND DESCRIPTIONS OF THE PROFILE BAND FOR EVALUATION

SOURCE: Adopted from The Behavioural Language Assessment Form (Sundberg, M.L, And Partington, J.W, 1998:36).

SECTION A

Receptive Language

1. Motor Imitation

- a) Does the learner copy action?
1. Cannot imitate anybody's motor movements.
 2. Imitates a few gross motor movements modeled by others.
 3. Imitates several gross motor movements on request.
 4. Imitates several fine or gross motor movements on request.
 5. Easily imitate any fine or gross movements often spontaneously.

2. Matching –To-Sample

- b) Will the learner match objects, pictures and designs to presented samples?
1. Cannot match any objects or pictures to sample.
 2. Can match 1 or 2 objects or pictures to a sample.
 3. Can match 5 to 10 objects or pictures to a sample.
 4. Can match 5 to 10 colours, shapes or designs to a sample.
 5. Can match most items and match 2 to 4 block designs.

3. Receptive

- c) Does the learner understand any words or follow instructions?
1. Cannot understand any words.
 2. Will follow a few instructions related to daily routines.
 3. Will follow a few instruction to do actions or touch items.
 4. Can follow any instructions and point to at least 100 items, actions, persons or adjectives.

4. Letters and Numbers

d) Does the learner know any letters, numbers, or written words?

1. Cannot identify any letters, numbers or written words.
2. Can identify at least 3 letters or numbers.
3. Can identify at least 15 letters or numbers.
4. Can read at least 5 words and identify 5 numbers.
5. Can read at least 25 words and identify 10 numbers.

5. Receptive By Function Feature And Class

e) Does the learner identify items when given information about these items?

1. Cannot identify items when given information about them.
2. Will identify 10 items given 1 of 3 functions or features.
3. Will identify a few items given synonyms or common functions.
4. Will identify 100 items given 5 functions, features, or classes.
5. Will identify 100 items given 5 functions, features or classes

6. Labeling

f) Does the learner label or verbally identify any items or actions?

1. Cannot identify any items or actions
2. Identifies only 1 to 5 items or actions
3. Identifies 6 to 15 items or actions.
4. Identifies 16 to 50 items or actions.
5. Identifies over 100 items or actions and emits short sentences.

SECTION B

EXPRESSIVE LANGUAGE

1. Request

- a) How does the learner let his needs and wants be known?
1. Cannot ask for reinforcers, or engages in negative behaviour.
 2. Pulls people, points or stands by reinforcing items.
 3. Uses 1 to 5 words, signs or pictures to ask for reinforcing items.
 4. Uses 5-10 words, signs or pictures to ask for reinforcers.
 5. Frequently requests usually 110 Or more words, signs or pictures.

2. Vocal Play

- b) Does the learner spontaneously say sounds and words?
1. Does not make any sound (mute).
 2. Makes a few speech sounds at a low rate.
 3. Vocalizes many speech sounds with varied intonations.
 4. Vocalizes frequently with varied intonation and says a few words.
 5. Vocalizes frequently and says many clearly understandable words.

3. Vocal Imitation

- c) Will the learner repeat sounds or words?
1. Cannot repeat any sounds or words.
 2. Will repeat a few specific sounds or words.
 3. Will repeat or closely approximate several sounds or words.
 4. Will repeat closely or approximate many different words.
 5. Will clearly repeat any words or even sample phrase.

4. Greeting

- d) Does the learner greet a person on arrival or on departure?
1. Will take no notice or show no reaction.
 2. Will look at the person or wave in imitation.
 3. Will hold up arms in greeting and wave.
 4. Will smile and make a sound in greeting spontaneously.
 5. Easily says good morning, bye-bye (plus name).

5. Gesture

e) Does the learner use gestures to express his needs and wants?

1. Cannot use gestures.
2. Gestures frequently with limited sounds.
3. Makes gestures with a few speech sounds.
4. Gestures frequently together with speech sounds.
5. Makes very few gestures and vocalizes clearly.

SECTION C

SOCIAL DEVELOPMENT

1. Cooperation With Adults.

a) How easy is it to work the child?

1. Always uncooperative, avoids work engages in negative behaviour.
2. Will do only brief and easy response for a powerful reinforce.
3. Will give 5 responses without disruptive behaviour.
4. Will work for 10 minutes at a table without disruptive behaviour.
5. Works well for 10 minutes at a table without disruptive behaviour.

2. Conversational Skills

b) Can the learner fill in missing words or answer questions?

1. Cannot fill in missing words or parts of songs.
2. Can fill in a few missing words or provide animal sounds.
3. Can fill in 10 non reinforcing phrases or answer at least 10 simple questions.
4. Can fill in 20 phrases or answer 20 questions with reinforcers.
5. Can answer at least 30 questions with reinforcers.

3. Adult Interaction

c) Does the learner initiate and sustain interaction with adults?

1. Does not initiate interaction with other adults.
2. Physically approaches adults to initiate an interaction.
3. Readily asks adults for reinforcers.
4. Verbally interacts with adults with prompts.
5. Regularly initiates and sustains verbal interaction with adults.

4. Peer Interaction

d) Does the learner initiate and sustain interaction with other children?

1. Does not initiate interaction with peers.
2. Physically approaches peers to initiate interaction.
3. Readily asks peers for reinforcers.
4. Verbally interacts with peers and prompts.
5. Regularly initiates and sustains verbal interaction with peers.

SECTION A

RECEPTIVE LANGUAGE

1. Motor Imitation

The purpose of this area is to determine if the child can physically imitate motor movements modelled by adults. Children acquire a number of skills through imitation of adults and other children. Strong imitation skills can be valuable to a non-verbal child in that they can acquire sign language quickly as a form of communication. Motor imitation can also foster the development of vocal imitation. Imitation is also important to the development of play skills and social interaction.

Band	Description	Characteristics
1.	Cannot imitate anybody's motor movement	Cannot imitate any motor movements modeled by others. May not attend to others or show interest in the action emitted by others.
2.	Imitate a few gross motor movements modeled by others	Gross motor movements such as jumping, clapping, running and raising up the arms are easier to imitate. May emit a few imitative responses when prompted. Many imitate movements modeled by peers or observed while watching tv or videos.
3.	Imitate several gross motor movements on request	Has acquired some imitating responses, thus can teach skills such as kicking, twirling around, falling down, climbing stairs etc. May have difficult time imitating small motor movements and may not spontaneously imitate others,
4.	Imitate several fine and gross motor movements on request.	Can imitate a variety of fine and gross movements. Has strong imitative repertoire. Needs prompts to imitate. Specific training to imitate responses. Needs
5.	Easily imitate fine or gross movements often spontaneously.	Strong imitative repertoire seen. Can easily imitate the motor behaviour of others. Emit behaviour spontaneously. New behaviours can be imitated correctly on first try. Imitation occurs without prompts.

2. Matching to Sample

The ability to match pictures, designs and shapes to identical samples reveals a child's ability to attend to visual stimuli, discriminate between differing stimuli and emit specific motor behaviours,

Band	Description	Characteristics
1.	Cannot match any objects or pictures to a sample	Cannot match identical objects or pictures to provide samples. Engages in self stimulation such as flapping, twirling or object stimulation.
2.	Can match 1 or 2 objects or pictures to a sample	May match a few objects or pictures together but requires prompting and reinforcement
3.	Can match 5 to 10 objects or pictures to a sample	Readily matches several common objects and pictures to a sample. Readily matches if the stimuli is of personal interest e.g. ball, Disney characters. Fails to match a sequence of coloured blocks. Fails to match items that are not exactly identical e.g. different coloured cups. Emits negative behaviours.
4.	Can match 5 to 10 colours, shapes or designs to a sample.	Able to match a variety of stimuli to each other such as colours, shapes, variety of pictures and objects. Performs tasks willingly. Enjoys the tasks. Unsuccessful with matching blocks.
5.	Can match most items and match 2 to 4 block designs.	Able to match to a wide variety of stimuli at all times. Able to complete block designs. Able to match objects to pictures, line drawings to pictures and sort specific items e.g. food vs animals.

3. Receptive

A child's ability to understand and act upon specific words or phrases indicates receptive language.

Band	Description	Characteristics
1.	Cannot understand any words	Does not react to any words emitted by adults. Does not evoke a correct response to simple instructions such as stand up, sit, jump, come here. Exhibits a wide variety of negative behaviours such as tantrums, whining and social withdrawals
2.	Will follow a few instructions, related to daily routines,	Can follow instructions without contextual clues e.g. come here, raise your arms ,clap hands. Follow verbal instructions when prompted. Follow instructions in the context of ongoing activities e.g. throw it away – after drying his hands with proper towel.
3.	Will follow a few instructions to do actions or touch items.	Able to follow instructions to engage in specific behaviour out of context e.g. jump, sit, clap. Able to touch or pick up a few specific items or pictures when asked to do, (e.g. take the ball, touch the book) but may require extensive prompting. May evoke negative behaviour when asked to carry out complicated task such as pointing to an item presented in an array of items.
4.	Can follow many instructions and point to at least 25 items.	Can discriminate between a wide variety of object, pictures and people Able to distinguish items that are similar to each other e.g.dog and cat. Can comply with the instructions without much prompting or negative behaviour. Can follow instructions given by different settings e.g. can you dance ? Go get your book
5.	Can point to at least 100 items, actions, persons or adjectives.	Can easily distinguish between various items such as objects, pictures, people, colours etc. Able to acquire new receptive skills fast. Able to generalize to different items and people. May require prompts. May emit negative behaviour.

4. Letters And Number

Children learn to identify letters and numbers before they have to label objects.

Band	Description	Characteristics
1.	Cannot identify any letters, numbers or written words.	Unable to identify any letters or numbers
2.	Can identify at least 3 letters or numbers	Able to label or receptively identify a few letters or numbers.
3.	Can identify at least 15 letters or numbers	Able to label or receptively identify several letters or numbers. Has a good discrimination skill
4.	Can read at least 5 words and identify 5 numbers	Able to read when written words are shown..
5.	Can read at least 25 words and identify 10 numbers	Able to match to a wide variety of stimuli at all times. Able to complete block designs. Able to match objects to pictures, line drawings to pictures and sort specific items e.g .food vs animals. May be able to read the number of words. Able to identify 10 numbers. May benefit with the use of written words.

5. Receptive by Function, Feature and Class

A child can react to an object when given the name of the object but not when told something about the object or when given a verbal instruction. It is important that a child be able to correctly respond to the many variations of verbal instructions that are related to everyday objects and actions.

Band	Description	Characteristics
1.	Cannot identify items based on information about them.	May identify items when the name of the item is said. Cannot identify items when items are described. Can discriminate between a number of items. Cannot respond when the verbal instruction is changed e.g. instead of naming the item ‘cup’ describe its feature that (it has a handle), function you drink from it, or class (dishes) of the item.
2.	Will identify a few items, given synonyms or common functions.	Able to correctly respond to common descriptors of some items with little training. Able to evoke correct responses when synonyms are used. e.g. touch a kitty. Will enable a child to respond to a picture of a cat.
3.	Will identify 10 items given. 1 of 3 functions or features.	Able to identify a number of items when given either the functions of the items or features of the items.
4.	Will identify 25 items given 4 functions, features or classes.	Able to receptively identify an item when given the class to which the item belonged.e.g. able to touch a car when asked to touch a toy.
5.	Will identify 100 items given 5 functions, features or classes.	Easily identifies a wide variety of items of items and actions when given various information about those items or actions.

6. Labelling

Labelling requires a child to talk. It is a difficult skill as a child needs to give a correct word and also have a vocal control to independently pronounce the word.

Band	Description	Characteristics
1.	Cannot identify any items or actions	Cannot verbally name common items. May be able to ask for things they want, repeat words and distinguish between items. May emit negative behaviour e.g. whining, crying, hitting to escape task.
2.	Identifies only 1 to 5 items or actions..	Able to name highly reinforcing objects and activities, such as the parents, pets, foods or certain types of play or toys.
3.	Identify 1 to 15 items or actions.	Can identify easily common items e.g. dog, cat, ball, car, book, shoe. Responses immediately. Does not make any errors. Does not require prompts. Responses incorrectly if variations of the items are used or unfamiliar adults get the child to name items.
4.	Identifies 16 to 50 items or actions	Able to identify many variations of the same object e.g. types of cars, pictures of cars .Responds correctly to different adults without prompts or negative behaviour. Begins to spontaneously identify items and actions in his environment.
5.	Identifies over100 items or actions and emits short sentences.	Able to label items and actions quickly. Acquires new words.

SECTION B

EXPRESSIVE LANGUAGE

1. Request

The purpose of this area is to determine how the child gets her needs and wants known.

Typical children acquire this skill quickly however some children do not learn how to use words

Band	Description	Characteristics
1.	Cannot ask for reinforcers or engages in negative behaviour	Completely nonverbal-do not indicate they are hungry, thirsty or needs assistance. Gets the desired reinforcers himself or reinforcers are regularly provided. Uses negative behaviours as a way to get what they want.
2.	Pulls people, points or stands by reinforcing items.	Pulls adults to the reinforcer e.g. to the door, the tub the refrigerator, pointing to a desired item or standing by what they want. Occasional negative behaviour is seen e.g. a child may pull an adult to a car, but when told they can't go for a ride, they may show tantrums.
3.	Uses 1-5 words, signs or pictures to ask for reinforcers.	May have a few words or signs. May point to or exchange a few pictures to obtain reinforcements e.g. up, eat, ball etc. May have difficulty to use phrases such as 'I want' and 'I can'.
4.	Uses 5-10 words, pictures or signs to ask for reinforcers.	Acquires the ability to request e.g. asking for cookies. Easier to teach new words, prompts not required. Occurs under a variety of situations.
5.	Frequently requests using 10 new words, pictures or signs to ask for reinforcers.	Has strong requesting repertoire, uses phrases such as 'I want' and 'Can I'.

2. Vocal Play

Typical children engage in substantial amount of vocal play or babbling. Vocal activity is important because it strengthens the vocal chords and allows for random mixture of sounds that could produce words that adult may react to and reinforce. Substantial vocal play for a non verbal child can be a good predictor for the easy development of vocal imitation and other types of behaviour.

	Description	Characteristics
1.	Does not emit any sounds.	Does not babble or emit any phonemes. May scream, cry, emit sounds but not speech sounds. Hard to reinforce. Seems unhappy and sullen.
2.	Make a few speech sounds at a low rate.	Makes a few recognizable sounds although not often and without much variation. Makes sounds when excited or prompted to speak. Sounds made do not indicate that a child is having fun. E.g. smiling, laughing often makes the same sounds with the same intonation.
3.	Babbles many speech Sounds with varied intonation	Emits a number of speech sounds –variation, intonation, volume and pitch. Babbles frequently but understandable words are rare. Rate of babbling and variation of speech sounds is lower than a typical child.
4.	Babbles frequently with varied intonation and says a few words.	Babbles and engages in vocal play frequently. Emits a few recognizable words. Substantial variation in vocal behaviour especially emitted while engaged in play time e.g. talking to the toys. Sounds made are not recognizable as words.
5.	Babbles frequently and says many clearly understandable words..	Strong vocal play repertoire demonstrated through mixture of sounds and recognizable words when engaging in daily activities. Appears to be attempting to communicate. Appear to be sure of what is being said although it may not be understood by adults. Easy to reinforce and gets excited easily

3. Vocal Imitation

A child's ability to repeat sounds and words is important to language acquisition. If a non-verbal child cannot repeat sounds or words it may be difficult to teach him vocal communication.

	Description	Characteristics
1.	Cannot repeat any sounds or words,	Unable to repeat any sounds or words. May not babble much. May exhibit negative behaviour when attempts are made to repeat sounds.
2.	Will repeat a few specific sounds or words.	Can repeat a few sounds or words e.g.mama, bye but not willingly. Needs extensive prompting and strong reinforcers. May display some negative behaviour when asked to engage in tasks..
3.	Will repeat closely several sounds and words.	Able to repeat a number of different sounds and words. Can easily repeat sounds and words or commands. Do not require much prompting or reinforcement. Does not engage in negative behaviour to escape or avoid task Does repeat sounds or words learnt frequently.
4.	Will repeat or closely Approximate many different words.	Able to repeat a wide variety of words without prompts, strong reinforcers or negative behaviour. Enjoys copying sounds be it from peers or words heard on tv or as a video.
5.	Will clearly repeat any word, or even simple phrase.	Can easily repeat almost any word. Can spontaneously repeat words or phrases.

4. Greeting

Greeting a person on arrival or departure shows a polite attitude on the part of the speaker. This is an important skill that a child has to master.

	Description	Characteristics
1.	Will take no notice or show reaction	Ignores the existence of others..
2.	Will look at the person or wave in imitation.	Stares at unfamiliar people. Occasionally smiles or waves in imitation. Needs reinforces and prompts to acjnowledge people.
3.	Will hold up arm in Greeting and waving.	Smiles readily. Hold up arms in greeting with prompts. Waves in imitation.
4.	Will repeat or closely approximate many different words.	Can repeat greetings with prompts. Cannot differentiate the time of the day.
5.	Easily says Good Morning or bye bye (plus name).	Able to greet a person with prompts. Cannot differentiate the times of the day.

5. Gesture

Typical children engage in a substantial amount of gesture and speech to express themselves better. Gesture will enable a non-verbal child to express his wants and at the same time be understood by adults.

Band	Description	Characteristics
1.	Cannot use gestures. Does not understand gestures used by others.	Does not understand gestures used by others. Does not use gestures..
2.	Make a few gestures at a slow rate.	May use gestures occasionally depending on needs. Most often resorts to pointing at the item. May show negative behaviour to avoid tasks.
3.	Makes gestures with a few Speech sounds.	May use speech sounds and point at the item or persons e.g. say 'car 'and at the same time points at a car or says 'teacher' pointing at a teacher. May make wrong gestures which may hinder communication.
4.	Gestures frequently Together with speech sounds.	Use gestures to express oneself frequently. Most often correct gestures are used . Communication can be established.
5.	Makes very few gestures and vocalizes clearly.	Vocalizes clearly with occasional gestures.

SECTION C – SOCIAL DEVELOPMENT

1. Cooperation With Adults

Many nonverbal children are unwilling to cooperate with the requests made by adults. This is mainly because adults frequently make children do things that they do not want to do e.g. sit in a chair, go to bed. The degree of cooperative behaviour maybe more severe with a child who cannot talk or understand a language.

	Description	Characteristics
1.	Always uncooperative, Avoids work and engage in negative behaviour.	Non verbal. Avoid eye contact. Negative behaviour-crying, hitting, Self-injuries behaviour and self destructive behaviour.
2.	Will do only one brief and easy response for a powerful reinforcer.	Simple response. Needs a lot of prompting and powerful reinforcers. Grabs the reinforcers and attempts to get away from the adult. Negative behaviour prominent when asked to comply with tasks.
3.	Will give five responses Without disruptive Behaviour.	Works a few tasks without disruptive behaviour. Needs powerful reinforcers. Can work for short periods. Negative behaviour if long work periods. Workable-attentive and responsive.
4.	Will work for 5 minutes without disruptive behaviour..	Able to work for extended period of time. Follow instructions Needs break after short intervals. Easy to get back to task. Less reinforcement needed to keep on working.
5.	Works well for 10 minutes at a table without disruptive behaviour.	Shows strong cooperative repertoire. Can sit at a table and work with an adult or tasks for extended period of time.

2. Conversational Skills.

These are important skills for social interaction as well as for the acquisition of academic skills. This component is important to ensure that the child is responding to the testers's words and not to objects.

	Description	Characteristics
1.	Cannot fill-in missing words and parts of songs.	Cannot fill-in missing words from song. Able to identify a number of objects and ask for some reinforcers..
2.	Can fill in a few missing words or provide the sounds of animals..	Able to verbally respond to some of the words and phrases related to favourite activities or reinforcers, such as video, TV shows and songs. Able to associate common objects and sounds such as animal sounds.
3.	Can fill in 10 non-reinforcing phrases or answer 10 questions..	Able to fill in phrases relating to reinforcing words e.g. Can you say cat when asked to name an animal that gives the sound meow. Able to answer common 'WH' questions such as What do you eat? And What is your name?
4.	Can fill in 20 phrases or can answer 20 questions with variation.	Able to fill in a number of statements and answer questions relating to everyday life. Can answer quickly without prompts. Able to name a variety of items in a particular class,e.g.if asked to name some food, the child can provide a variety of food, and in different order and time.
5.	Can answer at least 30 questions with variations..	Able to correctly respond to specific questions such as How are you? Where do you live? And what do you like to watch on tv? Able to answer with some variation.

3. Adult Interaction

Children with language delays also have obvious social deficits. This is because social behaviour involves language.

	Description	Characteristics
1.	Does not initiate interaction with others.	Not interested in other people. Engages in negative behaviour when interaction is forced.
2.	Physically approaches adults to initiate an interaction...	Approaches familiar people but rejects interaction. May interact with adults and important people in life.e.g. parents. Never interacts with unfamiliar people.
3.	Readily asks adults for Reinforces.	Approaches adults and asks for reinforces. May interact with several adults.
4.	Verbally interacts with adults with prompts.	May interact with adults when prompted. Attempts to interact with adults.
5.	Regularly imitates and sustains verbal interactions with adults...	Look for adults to play and talk with them without prompts.

4. Peer Interaction

Children with language delays also have obvious social deficits. This is because social behaviour involves language.

	Description	Characteristics
1.	Does not initiate interaction with others.	Not interested in other people. Engages in negative behaviour when interaction is forced.
2.	Physically approaches adults to initiate an interaction...	Approaches familiar people but rejects interaction. May interact with adults and important people in life.e.g. parents. Never interacts with unfamiliar people.
3.	Readily asks adults for Reinforces.	Approaches adults and asks for reinforces. May interact with several adults.
4.	Verbally interacts with adults with prompts.	May interact with adults when prompted. Attempts to interact with adults.
5.	Regularly imitates and sustains verbal interactions with adults...	Look for adults to play and talk with them without prompts.