

Assessment of Oral-Motor Functions During Non-Speech Tasks

This assessment will provide information regarding strength, stability, mobility, and differentiation of the oral structures.

Materials: mirror, tongue depressor, long plastic straw

Time: Allow 30 minutes to complete the assessment.

Instructions: Complete this assessment in sequence. Record the results by marking the bullet next to the response observed. You may want to highlight the possible indications next to the response to help you complete the profile on page 22.

Child's Name _____

Date _____

Clinician _____

Positions at Rest

Part of Body	Observations	Possible Indications
body/trunk	<input type="checkbox"/> straight and erect	good trunk support for speech production
	<input type="checkbox"/> slouched	correct this position before continuing with the assessment, during lessons check posture and body alignment
head and neck	<input type="checkbox"/> straight with the chin tucked	good stability of the head and neck
	<input type="checkbox"/> tilted with the chin up	poor head, neck stability, during lessons work with the child seated against a wall to encourage good alignment
mouth	<input type="checkbox"/> closed with the lips together	good lip pressure contact, adequate jaw stability
	<input type="checkbox"/> partly open, lips not touching	poor lip pressure contact, reduced jaw stability
	<input type="checkbox"/> open wide with the jaw lowered significantly	inadequate jaw stability, reduced oral muscle tone, poor lip pressure contact

Positions at Rest

Part of Body	Observations	Possible Indications
lips	▷ retracted in a smile position	stabilizing with the facial musculature due to reduced oral muscle tone and poor jaw stability, results in tightened cheek musculature
	▷ upper lip elevated	stabilizing with the muscles around the lips, reduced oral muscle tone, reduced jaw stability, results in tighter upper lip musculature
	▷ triangular shape	reduced jaw stability, poor lip pressure, poor differentiation of the oral structures
tongue	▷ unable to observe, lips closed, tongue in	check tongue stability and differentiation further
	▷ tongue down and forward	reduced muscle tone, poor jaw stability, limited vertical tongue control, poor differentiation of the tongue from jaw and parts of the tongue

Strength and Stability

Instructions	Observations	Possible Indications
JAW		
1. Have the child bite his teeth together. Place your fingers under the child's chin and have him try to open his mouth against your gentle resistance.	▷ able to push against resistance	adequate jaw strength
	▷ unable to push against resistance	inadequate jaw strength
2. Have the child hold his mouth open. Apply gentle resistance in the same manner in an attempt to close his mouth.	▷ able to push against resistance	adequate jaw strength
	▷ unable to push against resistance	inadequate jaw strength

Strength and Stability

Instructions

Observations

Possible Indications

JAW

3. Have the child open his mouth very slowly to a count of 5 holding each position for a count of 10. Repeat the same exercise while closing the mouth.

☞ able to hold each position without any extraneous head, body, facial or neck movements

adequate jaw stability, good differentiation of the jaw from the head/body

☞ able to open and close mouth slowly to a count of 5

good midrange control, adequate jaw stability

☞ unable to hold each position without extraneous movements

poor jaw stability

☞ unable to open and close mouth gradually

poor midrange control, reduced jaw stability

LIPS

1. Have the child hold the tongue depressor horizontally using only his lips. Then, pull on it gently.

☞ able to hold it in place without moving the lips

good lip pressure contact, good stability

☞ able to hold it in place, but with extraneous lip movement

questionable lip pressure contact, reduced stability

☞ unable to hold it in place, may use the teeth

reduced lip pressure contact, reduced stability

☞ able to hold onto the tongue depressor against resistance

good lip pressure contact and strength

☞ unable to hold onto the tongue depressor against resistance

poor lip pressure contact, reduced strength

2. Have the child hold a straw with his lips. The teeth should be together in a bite, but should not be holding the straw. The straw should be sticking straight out of his mouth. Then, pull on it gently.

☞ able to hold the straw in place without moving the lips

good lip pressure contact, adequate stability

☞ unable to hold the straw in place without extraneous lip movements

reduced stability, questionable lip pressure contact

☞ able to maintain hold against resistance

good lip strength

☞ unable to maintain hold

reduced lip strength

Strength and Stability

Instructions	Observations	Possible Indications
LIPS		
3. Have the child puff up his cheeks while keeping the air inside his mouth.	<ul style="list-style-type: none"> ▷ keeps air in the cheeks ▷ air is released from inside the mouth 	<p>good lip pressure contact and strength</p> <p>inadequate lip pressure contact and strength</p>
TONGUE		
1. Have the child stick out his tongue and hold in place for as long as possible up to 30 seconds.	<ul style="list-style-type: none"> ▷ holds tongue still and pointed without extraneous movements, and without resting the tongue on the lower lip ▷ tongue is flat and, or resting on the lower lip 	<p>adequate muscle tone in the tongue, good tongue stability</p> <p>reduced muscle tone in the tongue, reduced tongue stability</p>
2. Apply gentle resistance with a tongue depressor to the child's protruded tongue tip by pushing inward toward the mouth.	<ul style="list-style-type: none"> ▷ adequate resistance ▷ inadequate resistance 	<p>good tongue strength</p> <p>reduced tongue strength</p>
3. Apply gentle resistance with a tongue depressor to the child's protruded tongue tip by pushing downward on the tip.	<ul style="list-style-type: none"> ▷ adequate resistance ▷ inadequate resistance 	<p>good tongue tip strength</p> <p>reduced tongue tip strength</p>
4. Apply gentle resistance with a tongue depressor to the child's protruded tongue on each side by pushing in sideways.	<ul style="list-style-type: none"> ▷ adequate resistance ▷ inadequate resistance 	<p>good lateral tongue strength</p> <p>reduced lateral tongue strength</p>
5. Apply gentle resistance with a tongue depressor to the child's tongue inside his mouth by pushing down on the blade.	<ul style="list-style-type: none"> ▷ adequate resistance ▷ inadequate resistance 	<p>good tongue strength</p> <p>reduced tongue strength</p>

Strength and Stability (continued)

Instructions	Observations	Possible Indications
TONGUE		
6. Apply gentle resistance with a tongue depressor to the child's tongue inside his mouth by pushing down on the tip.	☐ adequate resistance	good tongue tip strength
	☐ inadequate resistance	reduced tongue tip strength
7. Apply gentle resistance with a tongue depressor to the child's tongue inside his mouth by pushing backward on the tip.	☐ adequate resistance	good tongue strength
	☐ inadequate resistance	reduced tongue strength

Mobility and Differentiation

Instructions	Observations	Possible Indications
JAW		
1. Have the child open and close his mouth in a slow, controlled manner.	☐ opens smoothly without lateral movements	good vertical jaw control and mobility
	☐ does not open smoothly	poor vertical jaw control and mobility
	☐ head and/or body movement accompanies jaw	poor differentiation of the head/body from the jaw
2. Have the child move his jaw laterally in a slow, controlled manner.	☐ able to move jaw from side to side	good lateral jaw control
	☐ unable to move jaw from side to side	tightened facial muscles, poor lateral jaw control
	☐ extraneous head or facial movements	poor differentiation of the head from the jaw
3. Have the child move his jaw in a circular pattern in a slow, controlled manner.	☐ able to move jaw in a circular pattern	good jaw control and mobility
	☐ unable to move jaw in a circular pattern	poor jaw control and mobility

Mobility and Differentiation

Instructions	Observations	Possible Indications
CHEEK & LIPS		
1. Have the child round his lips, keeping his teeth together in a bite.	› able to round lips	good mobility and control of the muscles around the lips, good differentiation of the lips from the jaw
	› unable to round lips	tightened cheek/lip musculature, reduced lip mobility
	› rounds lips with teeth apart	poor differentiation of the lips from the jaw
2. Have the child retract his lips, keeping his teeth together in a bite.	› able to retract lips with teeth together	good control and mobility of the cheek and facial musculature, good differentiation of the jaw from the cheek and lips
	› unable to retract lips	reduced control and mobility of the cheek and facial musculature, poor differentiation of the jaw from the cheek and lips
	› retracts lips with teeth apart	poor differentiation of the lips from the jaw
3. Have the child frown while maintaining his teeth together in a bite.	› able to frown while maintaining jaw closure (keeping teeth together)	good control and mobility of the facial/lip musculature, good differentiation of the jaw from the cheek and lips
	› unable to frown	reduced control and mobility of the facial/lip musculature
	› frowns with mouth open	poor differentiation of the jaw from the cheek and lips

Mobility and Differentiation

Instructions	Observations	Possible Indications
CHEEK & LIPS		
4. Have the child alternately round and retract his lips while maintaining his teeth together in a bite.	<ul style="list-style-type: none"> ☐ able to round and retract lips without jaw movement ☐ round and retracts with jaw opening and closing ☐ unable to round and retract lips 	<ul style="list-style-type: none"> good cheek lip control and mobility, good differentiation of the jaw from the cheek and lips reduced cheek lip control and mobility, poor differentiation of the jaw from the cheek and lips poor cheek/lip control and stability
5. Have the child raise his top lip while maintaining his teeth in a bite and with a neutral position of the lower lip.	<ul style="list-style-type: none"> ☐ able to raise lip ☐ raises lip with mouth opening ☐ raises lip with some vertical movement of the lower lip 	<ul style="list-style-type: none"> good mobility and control of the upper lip, good differentiation of the jaw from the lips, good differentiation of the top lip from the bottom lip poor differentiation of the lip from the jaw, reduced mobility and control of the upper lip poor differentiation of the top lip from the bottom, reduced control and mobility of the upper lip
6. Have the child open his mouth and pull his bottom lip in while his top lip and jaw remain stationary.	<ul style="list-style-type: none"> ☐ able to draw in lip with no jaw movement ☐ draws in lip with jaw movement ☐ unable to draw lower lip in 	<ul style="list-style-type: none"> good control and mobility of the bottom lip, good differentiation of the lower lip from the top lip and of the lower lip from the jaw reduced lower lip control and mobility, poor differentiation of the lower lip from the jaw poor lower lip control and mobility

Mobility and Differentiation

Instructions	Observations	Possible Indications
CHEEK & LIPS,		
7. Have the child keep his teeth together in a bite and pull back the corner of his lips on one side of his face.	<ul style="list-style-type: none"> ▷ able to retract one side with no jaw movement 	<p>good cheek, lip mobility, good differentiation of one side of the cheek, lip musculature from the other side, good differentiation of the cheek, lip from the jaw</p>
	<ul style="list-style-type: none"> ▷ retracts one side with jaw opening 	<p>poor differentiation of the cheek/lip from the jaw, reduced control and mobility of the cheek/lip musculature</p>
	<ul style="list-style-type: none"> ▷ retracts one side with accompanying movements on the other side 	<p>poor differentiation between parts of the cheek, lip musculature, reduced control and mobility</p>
TONGUE		
1. Have the child point his tongue and move it in and out of his mouth in a slow, controlled manner.	<ul style="list-style-type: none"> ▷ in and out without jaw movement, tongue does not touch lower lip 	<p>good forward/back tongue control, good differentiation between the tongue and jaw and the tongue and the lips</p>
	<ul style="list-style-type: none"> ▷ in and out with jaw movement 	<p>poor differentiation between the tongue and the jaw, reduced forward/back tongue control and mobility</p>
	<ul style="list-style-type: none"> ▷ in and out with support by the lips 	<p>poor differentiation between the tongue and the jaw, reduced tongue control and mobility</p>
	<ul style="list-style-type: none"> ▷ unable to move in and out or tongue moves in and out with extraneous movements 	<p>poor tongue control and mobility</p>

Mobility and Differentiation

Instructions

TONGUE,

2. Have the child point his tongue and move it from side to side outside his mouth in a slow, controlled manner.

Observations

☐ side to side without jaw movement or lip support

☐ side to side with jaw movement

☐ side to side movement with lip support

☐ unable to move laterally

3. Have the child point his tongue tip to his alveolar ridge, hold and then lower it behind his bottom teeth while maintaining a wide, open mouth.

☐ moves tip up and down without jaw movement

☐ moves tip up and down with vertical jaw movements

☐ unable to place tip on the alveolar ridge

☐ unable to raise and lower tongue tip

Possible Indications

good lateral tongue control and mobility, good differentiation between the tongue and the jaw

poor differentiation between the tongue and the jaw, reduced lateral tongue mobility

poor tongue control and mobility, poor differentiation between the lips and the tongue

poor lateral tongue control and mobility

good vertical tongue tip control and mobility, good differentiation of the tongue from the jaw

poor differentiation of the tongue from the jaw, reduced vertical tongue tip control and mobility

poor vertical tongue tip control and mobility

poor vertical tongue tip control and stability

Mobility and Differentiation

Instructions	Observations	Possible Indications
TONGUE,		
4. Have the child pull his tongue back and up into his mouth with the tip flat and the sides of his tongue touching his upper molars.	<ul style="list-style-type: none"> ↳ easily able to assume and hold this position ↳ unable to easily assume this position 	<p>good vertical control and mobility with the back of tongue</p> <p>poor vertical control with the back of the tongue; reduced differentiation of the back of the tongue from the tip, blade and sides; and reduced lateral tongue stability</p>
5. Have the child lift his tongue blade to his hard palate with an open mouth.	<ul style="list-style-type: none"> ↳ lifts and holds without any extraneous movements ↳ lifts with vertical jaw movement ↳ unable to lift and hold 	<p>good vertical tongue control and mobility; good differentiation of the tongue from the jaw</p> <p>poor differentiation of the tongue from the jaw, reduced vertical tongue control and mobility</p> <p>reduced vertical tongue control and mobility, reduced differentiation of the tongue from the jaw</p>
6. Have the child cup his tongue in his mouth.	<ul style="list-style-type: none"> ↳ cups the tongue easily without rounding the lips ↳ cups tongue with lip rounding ↳ unable to cup tongue 	<p>good vertical control and mobility of the sides of the tongue, good differentiation between the lips and the tongue</p> <p>poor differentiation of the tongue from the lips, reduced control and mobility of the sides of the tongue</p> <p>poor control and mobility of the sides of the tongue</p>

Part II: Speech Tasks

Instructions

LIPS

1. Have the child say long *u*, hold and then long *e*, hold. Observe lip and jaw movements.

Observations

▷ good movement in the lips, able to hold the position without excess jaw movement

▷ minimal lip movement, excess jaw movement

Possible Indications

good lip control and mobility, good differentiation of the lips from the jaw

reduced lip control and mobility, reduced differentiation of the lips from the jaw

2. Have the child open his mouth wide and say "puh, puh" slowly as many times as he can. Observe lip and jaw movement.

▷ very little jaw movement

▷ great deal of jaw movement

good jaw stability, good differentiation of the lips from the jaw

reduced jaw stability, reduced differentiation of the lips from the jaw

▷ vocalizations are smooth and coordinated

good lip control and mobility

▷ vocalizations are choppy or approximate

reduced lip control and mobility

TONGUE

1. Have the child open his mouth and say "tuh, tuh, tuh" slowly as many times as he can. Observe the tongue and jaw.

▷ the tongue tip and sides of the tongue are elevated, jaw movement is minimal

▷ sound is produced with the blade of the tongue

▷ sound is produced with excess jaw movement

good tongue tip mobility and control, good jaw stability, good differentiation of the tongue from the jaw and of the tip from the body of the tongue

poor tongue tip control and mobility especially for elevation and retraction

reduced stability of the jaw, reduced mobility of the tongue tip, reduced differentiation of the tongue from the jaw

Part II: Speech Tasks, continued

Instructions

TONGUE,

2. Have the child open his mouth wide and say "ticket, ticket, ticket" as many times as he can. Observe the tongue and jaw.

Observations

- sound is produced with only the tongue tip up and pointed with the lateral margins of the tongue down
- says word with minimal jaw movement, tongue shifts position from tip to back
- says words in a choppy, uncoordinated manner or with excess jaw movement

Possible Indications

- reduced lateral tongue stability
- good tongue mobility, good differentiation of the tongue parts, good differentiation of the jaw from the tongue
- reduced differentiation of the parts of the tongue, reduced control and stability of the tongue, poor differentiation of the tongue from the jaw

Student Profile Sheet

Child's Name _____

Date _____

This form may be used after completing the assessments to compile your observations and to develop a profile of the student. The profile can then be used to help you establish goals and/or write reports.

Instructions: Fill in the corresponding information in each category from the Possible Indications you highlighted on the assessment form.

Lips

position at rest: _____

strength/stability: _____

mobility: _____

separation (differentiation): _____

speech sound errors: _____

Tongue

strength/stability: _____

mobility: _____

separation (differentiation): _____

speech sound errors: _____

Jaw

strength, stability: _____

mobility: _____

separation (differentiation): _____

Speech Production

Body

- differentiation of the head from the body
- differentiation between the mouth and the head

Does the child's *body* move excessively during speech production?

yes no

Does the child's *head* move excessively during speech production?

yes no

Jaw

- midrange jaw control
- jaw stability

The child's jaw movements:

- are graded with movements primarily in the midrange
- opens and closes in full excursions

The child's jaw:

- stays in midline
- moves asymmetrically

Lips

- cheek and lip retraction

Do the child's lips appear to remain in a smiling position?

yes no

- cheek and lip mobility
- differentiation of lips from jaw

Are a variety of lip movements evident?

yes no

Describe _____

Are the child's lip movements symmetrical?

yes no

Assessment *continued*

Child's Name _____

- lip pressure
- lip closure

Can the child say /b/, /p/, and /m/ sounds?

yes no

- lip mobility

Do the child's lips round for vowel sounds such as long /o/ and long /u/?

yes no

Tongue

- muscle tone
- tongue mobility

The child's tongue is:

- in her mouth
- out of her mouth

Can the child elevate her tongue tip?

yes no

Is the child able to say /t/, /d/, and /n/ sounds?

yes no

Is the child able to say /k/ and /g/ sounds?

yes no

- differentiation of tongue from jaw
- differentiation between the parts of the tongue

The child is able to sequence sounds in:

- one-syllable words
- multisyllabic words
- phrases

The child is able to reduplicate sounds in:

- words
- phrases

Does the child's speech intelligibility decrease as the length and complexity of the sentence increases?

yes no

Comments _____

Performing Oral-Motor Movements

Jaw

- **differentiation of the mouth from the head**

Can the child open and close his mouth without moving his head? yes no

- **jaw stability**

Can the child open his mouth a little at a time to a count of 5? yes no

Can the child hold his mouth open at midrange? yes no

Lips

- **lip pressure and strength**

Can the child keep his mouth closed with his lips together for a count of 5? yes no

- **lip mobility**

Can the child round lips and hold? yes no

Can the child smile and hold? yes no

Can the child alternately round lips and smile slowly? yes no

Can the child repeat the above three exercises while keeping his teeth together in a bite? yes no

- **differentiation between the lips**

Can the child bite his top lip? yes no

Can the child bite his bottom lip? yes no

Tongue

- **tongue stability, tongue mobility, differentiation between the tongue and the jaw**

The child can:

- open his mouth, stick out his tongue, and hold
- hold his tongue out without touching his lips
- move his tongue from side to side
- move his tongue from side to side without touching his lips
- move his tongue from side to side without moving his jaw

The child can:

- move his tongue tip up and down outside his mouth
- move his tongue tip up and down inside his mouth
- move his tongue tip up and down outside his mouth without moving his jaw
- elevate the body of his tongue inside his mouth
- click his tongue
- hold a tongue position for a count of three

Comments _____

Assessing Oral-Motor Skills with Varied Food Textures

1. Semi-solid

Jaw

- **jaw stability**
- **level of chewing skills**

Does the child's jaw open at a midrange level to accept the spoon? yes no

Does the child's jaw open symmetrically? yes no

How does the child's jaw move after the food is presented?

- up and down
- laterally
- diagonally
- rotary