

Eliciting Language Samples for Analysis-Toddler

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ADMINISTRATION MANUAL

Eliciting Language Samples for Analysis- Toddler

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Introduction: ELSA-T

The *Eliciting Language Samples for Analysis – Toddler* version (*ELSA-T*) was developed at Boston University’s Center for Autism Research Excellence by Dr. Helen Tager-Flusberg and colleagues. ELSA-T is a set of simple play interactions used to collect and measure expressive language in young children with a range of different developmental abilities. ELSA-T is an adapted toddler version of the ELSA, which was created to address the need for expressive language outcome measures. ELSA-T utilizes a naturalistic and play based setting that aims to maximize the child’s opportunity to elicit language across a variety of fun and interactive activities. These activities fall into the most commonly used language elicitation contexts: conversation, play, and narrative to give children multiple, diverse opportunities to produce language. ELSA-T includes age-appropriate activities and language for young children.

Administration

ELSA-T takes between 15 and 25 minutes to administer. Administration time will vary depending on the age and developmental abilities of the child. Activities can be completed in any order. The length of the activity will vary based on the participant’s interest. A complete administration of ELSA-T requires administration of all 8 activities and the incorporation of at least 5 open-ended questions (please refer to the ELSA-T Administration Fidelity section of this manual for specific details pg.11).

If necessary, caregivers may be present during the administration. If caregivers are present during administration, they should be instructed not to interact or speak with their child. If their child interacts with them, the caregiver should direct their child back to the activity.

ELSA-T Materials

ELSA-T Materials kit includes the materials listed below (pg. 3). The materials were chosen based on their ability to facilitate play, elicit verbal comments, and to engage children of a wide age range. The materials chosen are non-gender conforming and readily accessible to anyone wanting to administer ELSA-T.



Cultural Adaptability of ELSA-T



ELSA-T is designed to be a naturalistic play-based activity. Having been developed in the Northeastern United States, some of these activities may not be well-suited for children in different regions and countries. We encourage administrators to adapt the activities in the ELSA-T to make them culturally appropriate. This can be easily done by reviewing the description of each activity to discover which distinct purpose each activity is trying to tap and creating a similar activity that would be more appropriate. We encourage administrators to share their adapted activities with us so that we can provide these adapted manuals to other administrators via our website (elsa@bu.edu). You can contact the ELSA-T team at elsacare@bu.edu .

ELSA-T Protocol

Activities:

I. Hide and Seek Animals

Description: *Hide and Seek Animals* is a task intended to elicit descriptions of hidden animals. This is used as a warm-up activity for the individual and administrator. Together the administrator and the child can search for the hidden animals. The animals (bird, dog, cat, hamster, and bunny) were chosen due to their familiarity and prominence in the child's outside environment. Additionally, the paper animals can be used as prompts for children who may benefit from visual assistance in finding and identifying the animals.



Materials:

3 Toy Animals

3 Laminated Paper Copies of Toy Animals

Set up and Instructions: Hide the 3D animals (at least 3 of the toy animals) ahead of time. We encourage the administrator to hide at least one animal in a location where the child will not be able to reach it and another in a spot that makes removing the animal difficult for the child. This allows for additional opportunities to elicit language from the child.

- Use the paper animals as visual prompts to ask the child to “find the match.”
- If the child is having difficulty finding the toy animal, use the paper animal as a visual guide and move it closer to where you have hidden the animal.
- If the child is still unable to locate the toy animal, you may verbally prompt them to the location of the animal. We do not want children to be distressed at any point during administration. ELSA-T is designed to be fun and interactive!

Suggested lines:

- Can you help me find the hidden animals?
- Where are the animals hiding?
- What do you see?
- Do you have a pet at home?
- Which animals are your favorite?

II. Apple Falling

Description: Apple Falling Activity is a joint gross motor activity that gives children an opportunity to interact with the administrator by labeling various parts of the tree. This activity is intended to elicit turn-taking between the administrator and child.

Materials:

- Paper tree set up: Paper tree, apple, and leaves
- Paper animals: Owl and Squirrel

Set Up and Instructions:

1. Hang your paper tree with apples and leaves on a wall. Hide the squirrel behind an apple. Place the owl so that it is peeking out of the center of the tree.
2. Hold the apples outward and in front of you.
3. Let the apples go after counting down.
4. For the 2nd time, wait before letting go again to give the child a chance to request.
5. Let the apples go another time.
6. Encourage the child to play with the apples or do the same with the leaves.



Suggested lines:

- What do you see?
- What can we do with these?
- What animals do you see in the tree?
- How many apples did you pick?
- Label the parts of the tree

III. Picnic Adventure

Description: The Picnic Adventure is a pretend play activity that gives children the opportunity to engage in familiar tasks while incorporating animals into the activity.



Materials:

- Fruit basket
- Assorted Fruit
- The toy animals from Hide and Seek Activity

Set Up and Instructions:

- Set up a picnic area with the assorted fruit and vegetables and a basket.
- Take turns feeding the toy animals from the Hide and Seek Activity.
- Fill the basket with the food
 - *You can also use the paper apples from the tree during this activity.

Suggested lines:

- What should (animal) eat?
- What does (animal) like best?
- What is happening?
- The animals are hungry, what should we do?
- What is your favorite fruit?

IV. Bath Time

Description: Bath time is a loosely-structured pretend play activity in which the child and administrator can interact in an activity that is familiar to the child. Additionally, the administrator and the child can express their creativity through stimulating and engaging toys.

Materials:

- Toy animals
- Small towel x2
- Sponge x2
- Small plastic shampoo bottles
- Bathtub
- “Pretend Water” (blue scarves or blue blocks)
- Bubble bottle (no-spill)



Set Up and Instructions

1. The bath should be set up prior to the start of administration.
2. The administrator can begin the Bath Time activity by suggesting that the animals are dirty. This may come naturally following the Picnic Adventure but it can take place at any point during the administration.
3. Suggest bathing the animal.
4. Take turns giving the toy animals a bath.
5. Turn it into a bubble bath by incorporating the bubbles.

Suggested lines:

- What should we do next?
- What should we put in the bathtub?
- What animal should we give a bath?
- Does the animal like to take baths?
- What is happening?

V. Craft Time

Description:

Craft Time is a creative activity that gives the child the opportunity to express their preferences with materials of their choosing. For this activity you should have two craft activity options. Providing options for the child allows for more opportunities to elicit language. This activity allows for the child to express themselves in a creative environment. Only one craft should be completed during this activity.

Materials:

Craft Option One:

- Coloring pages
- Stamping markers

Craft Option Two:

- Play-doh
- Rollers
- Cutting tools
- Cookie cutters



Set Up and Instructions:

1. Provide the child with a choice of the markers or Play-doh.
2. Demonstrate how to use any materials if the child is unsure of how to use them.
3. Hold materials at a distance from the child to allow for the opportunity for the child to request for the materials.
4. Allow the child to freely engage with the materials while using verbal prompts to elicit language.

Suggested lines:

- Do you want to color with markers or play with Play-doh?
- Do you want red or blue?

- What picture do you want to color?
- What picture should I color?
- Do you like to color?
- What are you making/coloring?

VI. Turtle Toss

Description: Turtle Toss is a gross motor activity that allows for opportunities for requesting and turn-taking. Depending on the child's ability, administrators can keep score, position themselves further back when tossing the bean bag, or count and add up the points together.

Materials:

- Tootles Turtle Toss Set
 - A bean bag board with numbers
 - Two colored bean bag options



Set Up and Instruction:

1. Set up the turtle board.
2. Position the child in front of the board (the administrator should be able to determine the most appropriate spot for the child to play from).
3. Demonstrate how to throw the Velcro bean bag onto the turtle.
4. Verbally ask the child what color bean bag they would like.

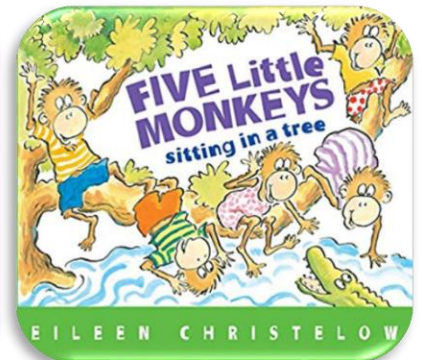
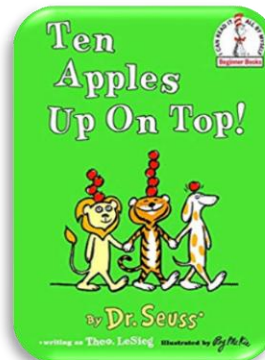
Suggested lines:

- Do you want the red or the green (bean bags)?
- Do you want to go first or second?
- Who should go now?
- What number did I land on?
- What should we do now?

Storybook Time

Description: The Storybook Activity is a narrative activity that allows for discussion between the child and administrator. This can include discussing the characters, what is happening, etc. This activity will vary based on each child. Some children prefer to read themselves, while others will need you to read the book to them. The primary goal of every activity is to elicit language. If the administrator is reading to the child, the administrator should pause throughout the story and ask questions.

For this activity you should have two storybook options to allow for additional opportunities to elicit language and express preferences. Only one storybook should be read during this activity.



Materials:

- Two storybook options
 - Ten Apples Up On Top
 - Five Little Monkeys

Set Up and Instructions:

1. Present the two book choices to the child and have them choose “which one?”
 - Administrators should only read one book with the child.
2. Read the book in its entirety together.
3. The administrator should have previously read the book and prepared questions to ask the child during the reading.
4. Following the storybook reading, we encourage the administrator and child to discuss the book.

Suggested lines:

- Which book do you want to read?
- What do you see?
- What is happening here?
- How many apples/monkeys?
- What part did you like best?

VII. Snack

Descriptions: Snack is a highly reinforcing activity which contains many opportunities for requesting. The child should be presented with multiple snack and drink options to allow for requesting. Snack is also an opportunity for administrators to have conversations with the child about their interests.

Materials:

- 2 drink options
- 2 snack options



Set Up and Instructions:

1. Suggest having a snack
2. Present the two snack options
3. Present the two drink options
4. Engage the child while also giving them the opportunity to finish their snack

Suggested lines:

- Which snack do you want?
- Would you like a drink?
- What is your favorite food?
- What is your favorite thing to eat at a restaurant?
- What foods do you not like?

Preparation, Transitions, and Clean Up

Preparing for ELSA-T Administration

Before Administration:

Administrators should review the ELSA-T Administration materials available on our website, elsa@bu.edu. This includes, reading the ELSA-T Administration Manual in its entirety, viewing the ELSA-T instructional video, and reviewing the example videos of gold-standard ELSA-T administrations.

Additionally, before administration, the administrator should check with the caregiver to ensure the child does not have any dietary restrictions. If the child does have allergies, the administrator should provide an appropriate snack.

Suggested Lines:

We encourage administrators to review the suggested lines before administration. It is important during ELSA-T to incorporate at least 5 open ended questions during administration. Reviewing these lines will best prepare administrators to incorporate these suggested lines into their administration. This allows for high levels of fidelity amongst administrations. More information on suggested lines and fidelity can be found on pg. 11.

Setting:

ELSA-T can be administered on the floor or at a table. Optimum administration would be in a small enclosed room. If this is not possible, administrators should best use their environment to limit the child's distractions.

If necessary, caregivers may be present during the administration. If caregivers are present during administration, they should be instructed not to interact or speak with their child. If their child interacts with them, the caregiver should direct their child back to the activity.

Recording Administrations:

ELSA-T administration should be video or audio recorded. Although both video and audio recording are helpful, we prioritize video recording of the samples. We suggest recording your ELSA-T administration for a variety of reasons, including for the purposes of real time coding of the language sample, but also for additional research purposes and to ensure the quality of data and assessment administration.

Transitions and Clean Up:

Transitions and Clean Up:

Transitions and cleaning up between activities provide additional opportunities to interact and chat with the child. These opportunities allow for the administrator to clean up and prepare for the next activity while simultaneously providing opportunities to engage the child in a conversation about his/her interests and everyday activities.

ELSA-T is intended to be a fun and interactive set of activities. Administrators should be creative with their time and language and take the opportunity to get to know and enjoy playing with the child!

Suggested lines include:

- What did you like the most?
- Are you having fun?
- Can you help me?
- What are you doing today?
- What did you do before you came here?

Other personalized questions based on the administrator's interactions with the child can be used.

ELSA-T Administration Fidelity

Assessing ELSA-T administration fidelity should be completed after the administrator has studied the administration manual, watched the instructional video, practiced the protocol, and completed ELSA-T administration under supervision. Once the administrator has administered 3 consecutive ELSA-T's achieving a fidelity score of at least 90%, they will be 'certified' reliable.

There are 8 segments in ELSA-T: Apple Falling, Picnic Adventure, Hiding and Seek Animals, Bath Time, Snack, Craft Time, Turtle Toss, and Storybook Time. Administration fidelity will be scored based on the administrator administering (or attempting to administer) each segment (8 points) and using a minimum of 5 open-ended utterances directed toward the child across at least 3 different activities (5 points). The maximum score is 13 points. Fidelity of administration should be monitored for every administrator at regular intervals over the course of the study.

Below is a form that you can use to keep track of administration fidelity scores.

Instructions: Give 1 point per administered activity. Give up to 5 points for at least 5-open ended administrator utterances across 3 different activities. Fidelity of administration should be at least 90%.

ELICITING LANGUAGE SAMPLES FOR ANALYSIS-TODDLER

Activity:	✓	Examples of Open-ended Prompts	✓
Apple Falling Activity		What can we do with these?	
		Where would you put these leaves on this tree?	
		What happens to the leaves in the fall?	
		What do you like doing during the fall?	
		What animals do you usually see hiding in trees?	
Picnic Adventure		What should we do with all this fruit?	
		The animals are hungry. What should we do?	
		What are your favorite kinds of foods?	
		What foods do you not like eating?	
		What foods should we feed this animal?	
Hiding and Seek Animals		Where are the animals hiding?	
		Which animals are your favorite?	
		What kind of pets do you have at home?	
		Why was the animal hiding over there?	
		Where would you hide the animals?	
Bath Time		The animals are dirty. What should we do?	
		What should we put in the bathtub?	
		What is your favorite thing about bath time?	
		You put the animal in the tub and what do you do next?	
		The animals are all wet. Now what do we do?	
Snack		What are some other snacks you like to eat or one's you don't like to eat?	
		What did you have for breakfast today?	
		What's your favorite meal of the day (breakfast, lunch, or dinner) and why?	
		Can you guess what my favorite snacks are?	
		What types of things do you like drinking when you have a snack?	
Crafts Time		What would you like to draw?	
		Tell me about your picture!	
		What do you think I should draw?	
		What's happening with your picture now?	
		What kinds of arts and crafts do you like doing?	
Turtle Toss		Where can we set up the game?	
		How do you think we play the game?	
		What do we need to play the game?	
		What do we do now?	
		Who goes next?	
Storybook Time		What are your favorite kinds of books to read?	
		What's happening here?	
		What did you like the most about this book?	
		Which characters did you like and why?	
		Why was that your favorite part of the book?	
Total Activity Points:	/8	Total Open-ended Prompts:	/5

Add up the points from above: + = <- Your fidelity score out of 13

References:

- Barokova, M., Hassan, S., Lee, C., Xu, M., Tager-Flusberg, H. (2017, May). *A new approach for eliciting expressive language samples: ELSA*. International Soc for Autism Research, Montreal, Quebec.
- Barokova, M. & Tager-Flusberg, H. (2018). Commentary: Measuring language change through natural language samples. *Journal of Autism Development and Disorders*, 49, 1-20.
- Barokova, M, & Tager-Flusberg, H. (2019, March). *The influence of conversational partner on expressive language in children and adolescents with ASD*. Poster presented at the meeting of the Society for Research in Child Development, Baltimore, Maryland.
- Barokova, M., Hassan, S., Lee, C., Xu, M., & Tager-Flusberg, H. (2017, May). *A new approach for eliciting expressive language samples ELSA*. Poster presented at the meeting of International Society for Autism Research, San Francisco, California.
- La Valle, C., Barokova, M., Raymond, L., Johnston, E., Manon, K., & Leano, J. (2020, March). *Language assessment in toddlers with ASD: Can measures derived from natural language samples replace scores from standardized tests and parent reports?* Poster to be presented at the Meeting on Language in Autism, Durham, North Carolina.
- DeMyer, M.K., Barton, S., Demyer, W.E., Norton, J.A., Allen, J., & Steel, R. (1973) Prognosis in autism: A follow-up study. *J of Autism and Childhood Schizophrenia*, 3: 199-245.
- Howlin, P., Goode, S., Hutton, J., Rutter, M. (2004). Adult outcome for children with autism. *J Child Psychol Psychiatry*, 45(2): 212-229.
- Kjelgaard, M.M. and Tager-Flusberg, H. (2001) An investigation of language impairment in Autism: Implications for genetic subgroups. *Lang Cogn Process* 16(2-3): 287-308.
- Paul, R., & Cohen, D.J. (1984). Outcomes of severe disorders of language acquisition. *J of Autism and Developmental Disorders*, 14: 405-422.
- Scarborough, H., Rescorla, L., Tager-Flusberg, H., Fowler, A., & Sudhalter, V. (1991). The relation of utterance length to grammatical complexity in normal and language-disordered groups. *Applied Psycholinguistics*, 12: 23-45.

Tager-Flusberg, H., Rogers, S., Cooper, J., Landa, R., Lord, C., et al. (2009). Defining spoken language benchmarks and selecting measures of expressive language development for young children with Autism Spectrum Disorders. *J Speech Lang and Hearing Res*, 52:643-652.

Venter, A., Lord, C., Schopler, E. (1992). A follow-up study of high-functioning autistic children. *J Child Psychol Psychiatry*, 33(3): 489-507.