

# **Functional Instruction Plan for Alice** **Learning how to use a fork**

## **I. Planning**

There are seven students in my Verbal Behavior Program placement ranging from age five to age eight. All seven of the students are diagnosed with varying forms of Autism. Approximately four out of seven students are able to verbally communicate. The other two students communicate using an augmentative communication device or sign language. Alice, age seven, is one of the students that receives instruction in this classroom. Alice loves to cuddle and hug the teachers and paraprofessionals. In addition, she always says “hi” and “by” when she sees someone familiar in the hallway. Alice is stubbornly independent and will only ask for help when she absolutely needs it. In her last IEP meeting, her mother discussed how she has been teaching Alice to microwave her own food for dinner. In addition, she mentioned that her main goal is to teach Alice to be independent so that she graduates from high school and is able to attend college.

The teacher, paraprofessionals and occupational therapist have expressed concerns with the low muscle tone in Alice’s hands. One of Alice’s IEP goals is to increase her fine motor skills and gross motor skills. In addition, Alice is learning to zip her coat independently with 100% accuracy. The teacher thought it would be best for me to work with Alice on using her fork, which is a basic functional skill. Often times, Alice resorts to using her hands to pick up her food; she tends to also enjoy picking the cheese off of her pizza. Thus, It generally takes Alice a long time to

pick up objects, use a pincer grasp or open up food items such as the covering on a plastic straw or the small cereal bowls. As a result, she takes a long time to begin eating her lunch. Thus, it seemed that learning to efficiently use a fork might help to increase the muscle tone in Alice's hands and decrease the amount of time she spends eating her food. I wrote many letters home to Mark's mother explaining my instructional plan before beginning baseline instruction and she seemed very receptive to this idea. I also encouraged her to practice with Alice at home.

On February 5, 2014, I conducted an assessment of Alice's ability to use her fork following a task analysis of three steps. I noticed that she was very inconsistent with using her fork. At times, she would use her dominant hand and pick up her food with her fingers. Out of ten trials, Alice successfully used her fork for 15 out of the 30 total steps in the task analysis. Thus, the percent of correct steps was 50%.

Overall, the implementation of this plan has been a team effort. Although the teachers and paraprofessionals did not take data on the days I was absent, they did manipulate her food so that she would have to use a fork. Both the paraprofessionals and the teacher made sure to report concerns or things they observed regarding her eating habits when I was not in the classroom. In addition, the teacher was very helpful in suggesting small changes to my plan along the way so that I would see better results.

## **II. Program Description**

### ***Objectives***

- Given a plate of food and a fork, Alice will be able to pick up a fork using her dominant hand, spear food item with the fork and place the

food in her mouth during lunch with 100% accuracy. 10 trials will take place at the beginning of the lunch period and instruction will follow.

### ***Learner Description***

Alice is seven years old and has been diagnosed with Autism. She can make short, verbal requests but often clips the endings of compound words. For example, when asking for “apple juice” she will say “apple.” She also has difficulty completing gross motor and fine motor tasks and often needs to be verbally prompted throughout gym class in order for her to remain motivated and standing. Despite her physical limitations, Alice is very independent when completing projects in the classroom, going up and down the stairs and opening her food during lunchtime. Her schedule consists of participating in the Verbal Behavior Program for the majority of the day, attending special (music, gym or art) and working with the speech, physical and occupational therapist throughout the month.

Alice does not have extensive medical conditions although the Speech Therapist suspects that Alice may have had a cleft palate when she was born. Alice has a very difficult time chewing due to the structure of her palate and thus takes a long time to eat hard foods. However, Alice is a strong eater and will try almost any and all foods. She especially likes to eat soft fruits and her favorite vegetable is celery.

Alice lives with her mom who works a full time job and also has intellectual disabilities. Her mother is very supportive of Alice and has taught her to be independent. However, Alice does require assistance in self-care skills and does not like when her mother washes her hair. Thus, bathing is a struggle.

Alice is a very kind-hearted, strong willed student who loves to be hugged. She does an excellent job coloring and completing projects in art class and will play with her peers in gym class. The paraprofessionals and the teachers continue to work with Alice on her participatory skills inside and outside of the classroom so that she will build her fine motor, gross motor and social skills over time.

***Prior Objectives/Prerequisite Skills***

Alice has the prerequisite skills necessary to use her fork during mealtime. Although she has low muscle tone in her hands, Alice is able to grasp objects with her left hand (preferred) and her right hand. In addition, she is able to stabilize her forearm when grasping materials and can open and close her hand slowly. In regards to eating, Alice is able to chew, bite, swallow and close her lips. In addition, she has a functioning gag reflex. In the past, Alice has been working with the teachers, paraprofessionals and occupational therapist on properly using a spoon to eat her applesauce and fruit cup during breakfast and lunch. She has proven that she is ready to use a fork without being verbally prompted by her teachers in the classroom.

***Related Skills and Next Objectives:***

Related to the skills of using her fork, it is important that Alice learns to chew her food and swallow her food before adding more into her mouth. Often times, Alice takes too big of a bite and then has a difficult time chewing and then swallowing her food; sometimes, she chokes or gags. Pacing her eating habits is something that we will be working on in addition to her fork instruction.

Similarly, Alice will practice verbally communicating her needs to the paraprofessionals when she needs something that is not at the lunch table or if she dislikes something that is on the lunch menu. Sometimes, Alice selects a lunch choice and then realizes she does not want to eat it. When this happens, she has a tendency to flip her entire plate of food. This also occurs when Alice is angry and is unable to express in words why she is angry. Self-regulation skills are an important component of eating that Alice will work on during her instructional period.

Lastly, Alice will work on practicing self-control and not feeling the need to get up from the table to throw away her trash every time she opens a new item. We will help shape this behavior so that she puts her trash in a pile and then transfers it to the garbage can at the end of instruction.

In the future, it is our goal that Alice will learn to use a knife as well as a fork and a spoon, so that she can cut up the food that is difficult to chew into smaller pieces. It is also our goal that Alice will be able to request items and open items with greater speed so that it doesn't take her longer than thirty minutes to eat her lunch.

***Dates:***

The instructional plan was written January 20, 2014 and revised January 29, 2014. Baseline data was collected on February 5, 2014 and February 10, 2014. Actual implementation of the Instructional Plan began on Tuesday, February 11, 2014 and I worked with Alice every Monday, Tuesday and Wednesday for approximately 15 minutes every day thereafter. Implementation ended April 2, 2014. The teachers and paraprofessionals worked with her on the days I was absent.

***Materials:***

Materials included a plastic cafeteria fork and Alice's lunch selection of that particular day. Her meals were manipulated so that even if a fork did not have to be used for that entree, her food was cut up into smaller pieces and a fork was provided for her.

***Reinforcers***

Although Alice enjoys edible tangibles such as sweet tarts or chocolate chips, I found it inappropriate to reward her with edible tangibles when she was in the midst of eating her lunch. Alice reacts positively to social praise, high fives, and hugs that I gave out intermittently throughout her ten feeding trials. I made sure to use behaviorally specific praises such as "Nice job taking small bites Alice!" or "Excellent job using your fork Alice!" Once Alice has made significant improvements, positive reinforcements will be lessened so that she does not become solely dependent on my verbal praising to complete the task.

**III. Rational**

Eating is one of the most basic, yet essential tasks for survival. In addition, using a utensil to eat food teaches self-regulation and proper manners. During baseline instruction on Wednesday, February 5, 2014, a hamburger was cut up into smaller pieces. Out of ten trials (three steps per each trial), Alice successfully used her fork 15 out of 30 steps for a percentage of 50% correct steps. On February 10, 2014, the second day of baseline data collection, Alice successfully used her fork 17 out of 30 steps for a total percentage of 56% correct steps.

This skill is extremely important for Alice because of her low muscle tone. Throughout the day, Alice is given very little opportunity to use her hands to complete basic tasks. Besides gym class, Alice generally sits her hand in her lap and does not move them voluntarily. Thus, gripping a fork and exercising her wrist and her forearm are necessary skills that she needs to practice if she wants to build her strength and muscle endurance. I also wanted to compliment the goals that Alice's mother is teaching her at home. Because her mother is concerned with Alice's independence, I thought that practicing her ability to use a fork whilst eating would further Alice's functional skillset.

#### **IV. Scheduling and Data Review Plan**

The teachers and paraprofessionals in the classroom require Alice to use a fork for all foods that are not considered "finger foods." In addition, Alice uses a fork when she is at home or out to dinner with her mother. Due to the fact that eating is a very important part of an individual's daily life, it is imperative that Alice learns when she should use her fork. In addition, using an eating utensil reinforces proper table manners and etiquette. Again, this is a basic functional skill that seven-year-olds should be aware of.

I attended Alice's school on Mondays, Tuesdays and Wednesdays beginning on January 6, 2014 and ending April 9, 2014. On Mondays, Tuesdays and Wednesdays, we completed instruction during Alice's lunch hour (11:30-12:00). Each day, I completed a task analysis sheet indicating whether or not she had used her fork independently and if not, what type of prompts were needed. The paraprofessional helped me to collect the data every day so that there were two

individuals watching her eat rather than just one. We discussed her progress at the lunch table while we were eating.

## **V. Arrangements**

Instruction was implemented at 11:30 every day and ended around 11:50. Initially, instruction took place in the classroom on a small round table. Alice was sitting next to five other peers, and I sat next to her so that she would be able to hear me over the talking of her peers. The food of the day was cut with a knife and given to Alice with a plastic fork. Towards the middle of February, the instructional arrangement changed and we began to eat in the far right corner of the lunchroom near the main office. The teacher and I decided it would be best to see how Alice practiced her skillset in a more natural environment, typical of a regular school day. Once again, Alice was sitting in a small group of three or four peers. However, instead of sitting next to Alice, I began to sit across the table so that she was eating with greater independence.

## **VI. Instructional Procedures**

The instructor cut up Alice' food into appropriate sizes and then handed her a plastic fork. If she used the fork independently, without being prompted, the instructor marked a + next to that individual trial. Ten trials were recorded on the data sheet per each observation. Reinforcement, in the form of verbal phrase or small hugs were given intermittently if the fork was used independently. A – sign was recorded if Alice failed to use her fork and the letter H, M or V was written next to the – sign. V indicated that Alice needed verbal prompting to remember to use her



fork; M indicated that the instructor had modeled how to use a fork and indicated that Alice required hand-over-hand assistance in order to use her fork properly.

## **VII. Task Analysis**

### Task Analysis

1. The student picks up the fork in dominant hand. If the student does not do this independently, teacher will give a verbal prompt. If student still does not use fork, the teacher will model.
2. Spears food item with fork. If the student does not do this independently, the teacher will give verbal prompt. If student still does not use fork, the teacher will model.
3. Takes food from the fork and places it in mouth. If the student does not do this independently, the teacher will give verbal prompt. If student still does not use fork, the teacher will model using her own fork and her own plate of food.

*The Task Analysis Chart is attached below.*

## **VIII. Measurement**

Measurement consisted of using a task analysis checklist for 10 different trials (3 steps each). Data was collected every Monday, Wednesday and Friday between the hours of 11:30 and 12:00, which is when the students would go to lunch. During data collection, I marked a plus or a minus next to each set of three steps in every trial. The student received a plus when she independently completed the step without a verbal prompt, modeling or hand over hand instruction from me. The student received a minus when she failed to complete the step independently and thus required verbal prompting, modeling or hand over hand instruction from me. At the end of each session, I counted the total number of correct steps across 10

eating trials. Then, the percentage of correct steps was calculated by dividing the number of total correct steps by the number of correct and incorrect steps across ten trials.

Inter-rater agreement was collected once during baseline instruction on February 10, 2014 and twice during the implementation of the instructional plan on February 25, 2014 and March 24, 2014. The inter-rate agreement collected during baseline was 26/30 or 87%. The inter-rater agreement collected on February 25<sup>th</sup> was 28/30 or 93% and on March 24<sup>th</sup> it was 29/30 or 96%. Inter-rate agreement was calculated by dividing the number of agreements by the number of agreement plus disagreements. Each time, the paraprofessional used the same checklist that contained the task analysis for used the fork. There were seven total times where we disagreed. However, our disagreement was always due to the fact that the paraprofessional marked a plus when the student used her hand to “place food in her mouth.” This misunderstanding was partially my fault due to the fact that I did not specify on the data sheet “places food in mouth with fork.”

Procedural reliability was collected twice on February 24, 2014 March 24, 2014. The paraprofessional held the fidelity of checklist, observed me in the lunchroom and recorded whether or not I conducted the eight steps successfully. The results were calculated by counting up the total number of correct teacher behaviors divided by the total number of teacher behaviors that could have been performed. Procedural reliability was 100% on February 24, 2014 and March 24, 2014.

## **IX. Monitoring/Program Changes**

The instructional plan was monitored at the conclusion of each session. Reliability could have been checked more often, but was above where it needed to be on three separate

data points. I initially set the criterion at 100% because I believed that Angie would be able to make steady progress over a period of three months. Baseline initially started at 56% and increased to 96% towards the end of the instructional plan implementation. Thus, she never reached criterion. Although, there were many fluctuations as seen throughout the graph. There was a steady decline from March 2, 2014 until March 17, 2014 that was most likely due to the type of food Angie was eating on those specific days. However, improvement increased from March 25, 2014 to March 31, 2014. Proper fork use depended on the setting as well as the type of food that was cut into pieces.

Two changes were made within Angie's instruction plan between the time the plan was implemented and the final day of data collection. The first change occurred on February 22, 2014 when we began to sit down in the regular lunchroom on the first floor of the building instead of the classroom. The second change occurred on February 26, 2014. I began to notice that Angie tended to use her fork a lot when I was sitting right next to her, but not as much when I was not present. Thus, I decided that the remainder of my data collection would take place with Angie sitting on one side of the table and me observing from the opposite end of the table. Again, the percentage of steps fluctuated from 30% to 90% on some days probably because my direct presence was no longer acting as an outside reinforcer.

## **X. Maintenance and Extension**

The paraprofessionals, the teacher and myself will implement maintenance of Angie's instructional plan. I will continue to work with her in the lunchroom over the next few weeks whilst sitting removed from the table to see if Angie is able to remind herself of when to use a fork when I am not present. In addition, I plan on

making multiple copies of her instructional plan as well as my data collection chart so that the teacher and the paraprofessionals in the classroom can continue to implement instruction at least every Monday, Tuesday and Wednesday when I am no longer at my placement. When criteria (100%) is reached, the paraprofessionals will continue to manipulate her food twice a week so that she continues to use the skills she has learned.

The paraprofessionals and the teacher within the classroom will also implement extensions of the fork instruction. Now that Angie is able to use a spoon and a plastic fork, it is important that she is able to generalize these skills when using a metal spoon or fork that she may use at a restaurant or at home. In addition, she will eventually learn to cut up her food and use these utensils to make a simple meal. My ultimate goal is for Angie to learn how to use a spoon, knife and fork while also using these utensils to prepare simple foods such as a peanut butter and jelly sandwich or macaroni and cheese.

## **XI. Results**

This program was implemented for 22 days including the two baseline data points, over a three-month period (February-April). I do not think this was an adequate amount of time for instruction, which could be part of the reason why Angie did not achieve criterion.

The percentage of correct steps achieved during baseline was 50% and 56% respectively. Between March 3, 2014 and March 12, 2014, Angie's percentage stayed above 60% for 5 data points. This was probably because it was on these days that Angie was eating foods that required a fork. On days



5. Percent Correct Steps										
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## Fidelity of Checklist: Fork Instruction

**Procedural reliability was 100% on February 24, 2014 and March 24, 2014**

**Name:**

**Date:**

<b>1. Did you conduct a preference assessment prior to each session to learn what the student is motivated to do or obtain? (Stickers, magazine, sweet tarts, snakes)</b>	Y	N
<b>2. Did you manipulate the food environment so that student had to use her fork?</b>	Y	N
<b>3. Did you administer errorless procedure to teach targeted letters? (0-prompt time delay)</b>	Y	N
<b>4. Once the student gave a correct response without prompting (prompt, transfer, check) did you deliver reinforcement?</b>	Y	N
<b>5. Did you use a least to most prompt hierarchy when correcting (verbal, modeling, hand over hand)</b>	Y	N
<b>6. If the student made an error, did you correct it immediately?</b>	Y	N

<b>7. Did you position yourself so that you weren't becoming part of the reinforcement procedure (sitting across the table instead of next to)</b>	Y      N
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