



*Nashoba Learning Group Curriculum Database*  
*Teaching this Skill*

**Skill:** Safety Skills

**NLG Curriculum Database folder name:**

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**Definition of Skill:**

The student can demonstrate a variety of safety skills. Specific skills include:

**Respond to fire/carbon dioxide alarm:** The student will independently attend to the alarm, exit the building and wait at the agreed upon meeting place for the rest of the group.

**Respond to emergency personnel:** The student will follow directions given by emergency personnel (don't move your head, lie down, put pressure here, etc.). The student will allow emergency personnel to provide first aid, perform diagnostic tests and measure vital signs. The student will respond to questions from emergency personnel (What is your name? Where do you live? What hurts? etc.), either verbally or with a communication device. If the student is unable to respond to questions, he/she will give the emergency personnel an information card or device screen with his/her emergency information and diagnosis (the information included will be specific to the student and should be determined by the family for privacy/confidentiality reasons).

**Respond to law enforcement:** The student will follow directions given by law enforcement (stop, hands up, drop it, slow down, show me your ID, etc.). The student will respond to questions from law enforcement (What are you doing? What is your name? Where do you live? etc.), either verbally or with a communication device. If the student is unable to respond to questions, he/she will give the officer an information card or device screen with his/her emergency information and diagnosis (the information included will be specific to the student and should be decided by the family for privacy/confidentiality reasons).

**Implement basic first aid procedures:** The student will recognize a situation that requires basic first aid intervention on self or another person and will implement basic first aid procedures to resolve the situation (splinter – take out with tweezers and clean well, small cut – clean well and band-aid, bump/bruise – apply ice, large cut- apply pressure with gauze to stop bleeding and seek adult help, bone or joint injury- keep the limb still and seek adult help, bloody nose- tilt head forward, apply pressure by pinching nose).

**Identify medical emergency and seek help.** The student will recognize a situation that requires immediate adult help and will seek and find that help or call 911.

**Avoid dangerous situations:** The student will recognize and avoid a variety of dangerous situations by walking away and informing an adult of the situation. Examples of dangerous/emergency situations may include: a person attempting to lure him/her, a fire, driver

driving erratically, people fighting/arguing, a car accident, a person having a medical emergency (heart attack, stroke, seizure etc.)

**Use the phone:** The student will dial a specified phone number (including 911), state his/her name, location and current activity/problem as well as answer questions from the person on the phone.

**Cross the street:** The student will look for a cross walk or traffic light in the nearby area. He/she will walk to the crosswalk or traffic light and wait for a break in traffic or the light to signal it is safe to walk. He/she will look left, right and left again to ensure that there are no cars and it is safe to cross. He/she will walk across the street at an appropriate pace. Alternatively, student will learn to cross the street only when signaled by caregiver.

**Avoid getting lost:** The student will stay within 15 feet of his group/buddy unless he/she has permission to be further away. If he/she becomes separated from the group, he/she will recognize this and walk to and remain in the agreed upon meeting place. If he/she has access to a phone, he/she should call the group leader and tell/describe to the group leader where he/she is. If there was not an agreed upon meeting place and he/she does not have access to a phone, he/she should locate an adult and inform the adult that he/she needs help, either verbally, with a communication device or by handing the person an information card with his/her emergency information and diagnosis (the information included will be specific to the student and should be decided by the family for privacy/confidentiality reasons).

**Avoid household hazards:** The student will demonstrate knowledge of a variety of potential household hazards and strategies to avoid them. Examples may include: safe use of cleaning chemicals (refrain from ingesting and spraying on self, mixing products with bleach and ammonia, store properly, etc.), use appliances safely, avoid fire hazards (too many appliances on one outlet, refrain from leaving candles burning, putting items on a radiator etc.), keep doors locked and when to open the door, etc. Note: Kitchen safety skills are discussed in the NLG Food Preparation Skills write-up.

**When this skill is learned, the student will be able to:**

Demonstrate a variety of safety skills. Specific skills include:

- |  |                                       |
|--|---------------------------------------|
| ▪ Respond to fire/carbon dioxide alarm       | ▪ Avoid dangerous situations          |
| ▪ Respond to emergency personnel             | ▪ Use the phone                       |
| ▪ Respond to law enforcement                 | ▪ Cross the street                    |
| ▪ Implement basic first aid procedures       | ▪ Avoid getting lost, seek assistance |
| ▪ Identify medical emergencies and seek help | ▪ Avoid household hazards             |

### **Generalization of skill is defined as:**

The student will be able to perform each skill with various peers/group leaders, in multiple settings, with supervision faded. Note that supervision should never be completely removed unless the student can demonstrate the capability to identify and react to all these situations, including problem solving, with complete independence.

### **This skill serves as a prerequisite to:**

These are core safety skills for increasing independence and autonomy at home as well in the community. The ability to demonstrate these skills serve as prerequisites to more advanced independent living skills, such as using public transportation, spending any part of the day unsupervised, and living independently.

### **Prerequisites skills needed to successfully learn this skill**

**Respond to fire/carbon dioxide alarm:** The student must be able to hear an alarm. He/she must be able to follow multi-step chains of directions cued by a signal. He/she must be able to stand up and walk at a quick but controlled pace. He/she should be able to problem solve through impediments that may arise during an evacuation, such as an out of order elevator or a blocked exit. He/she must be able to wait in a specified location for a designated amount of time.

**Respond to emergency personnel:** The student should be able to communicate either verbally, with a device, or with an information card, his/her emergency information (name, age, birth date, phone number, address, parent/caregiver name and phone number and any other relevant information, such as diagnosis and best way to communicate). He/she should be able to follow a variety of one step directions as well as answer questions about him/herself and current activities. He/she must be able to tolerate without inappropriate behavior another person providing first aid, assessment of vital signs and diagnostic procedures. Using systematic desensitization procedures with frequent practice opportunities when there is not an actual crisis is essential so that the student can be successfully helped during a crisis.

**Respond to law enforcement:** The student should be able to communicate, either verbally, with a device, or with an information card, his/her emergency information (name, age, birth date, phone number, address, parent/caregiver name and phone number and any other information the person cares to share, such as diagnosis and best way to communicate). He/she should be able to follow a variety of one step directions as well as answer questions about him/herself and current activities.

**Implement basic first aid procedures:** He/she must be able to attend to his/her own state to recognize first aid is needed. He/she should be able to respond to discrimination training to identify basic situations that need basic first aid procedures and true medical emergencies. Alternatively, he/she should be taught to seek adult help for all potential situations. He/she should be able to learn locations for supplies, open packaging, apply sufficient pressure/force to use tweezers, apply adhesive, apply pressure. He/she should be able to wash his/her hands thoroughly. He/she should be able to learn multi-step behavior chains.

**Identify Medical Emergencies and seek help:** He/She must be able to attend to his/her own state to recognize a medical emergency. He/she must be able to respond to discrimination training to discriminate between basic situations and medical emergencies. Alternatively, he/she should be taught to seek adult help for all potential situations. He/she should be able to learn multi-step behavior chains.

**Avoid dangerous situations:** The student must be able to learn to recognize specific situations and to respond with a multi-step behavior chain. He should be able to walk at a quick pace/change direction. He/she should be able to learn to discriminate between safe (caregivers, relatives,

community helpers, familiar neighbors) and not safe people (strangers). He/she should be able to communicate past and current activities.

**Use the phone:** He/she must be able to recognize numbers and put them in a specified sequence. He/she should be able to wait and listen. The student must be able to use enough force to depress the buttons to enter a phone number. He/she should be able to describe the environment and both past and current events. He/she should be able to answer questions about him/herself and the current situation.

**Cross the street:** The student must be able to learn to discriminate when a car is coming versus when one isn't. He/she should be able to learn to locate a crosswalk and traffic light on any road. If using a traffic light, he/she must be able to learn to discriminate when to walk versus when to wait, as is indicated by the sign. He/she must be able to walk the width of the road at an appropriate pace.

**Avoid getting lost:** The student must be able to attend to his/her group sufficiently to learn to stay with a group/buddy. He/she should be able to learn to recognize when he/she has been separated from his/her group/buddy. He/she should be able to walk to and remain in a specified area. He/she should be able to communicate basic social information and know his/her phone number and address. He/she should be able to learn to follow a multi-step behavior chain that involves finding and relaying information to an adult.

**Avoid household hazards:** The student must refrain from ingesting non-food items. He/she must be able to respond to discrimination training to identify a variety of hazardous and safe situations. He/she should recognize and avoid touching items that are hot or sharp. He/she should have the motor skills to lock and unlock doors. He/she should be able to learn to discriminate between safe (caregivers, relatives, community helpers, familiar neighbors) and not safe people (strangers).

## Overview of Teaching Methodology

We generally use a package of components to teach these skills. The methodologies include discrimination training paired with role play and social stories/rules instruction to teach recognition of the conditions under which the response is needed and gain fluency in beginning the response, and task analyzed instruction of the responses chain.

A task analysis breaks a complex skill into component steps. Each step of the task is taught and linked with the other steps to create a behavior chain. Depending on the student, the skill may be taught as a forward chain, backward chain, or total task presentation. Research has shown the effectiveness of task analyzed teaching but no significant difference between the rate of acquisition of skills using forward chaining or backward chaining. For students with no prior knowledge of the steps necessary to complete the skill, either presentation can be used. In addition, for students who will require extensive numbers of trials to learn specific steps or sequences of steps, that step or series should be taught in isolation in mass trials before the entire chain is introduced. Students, who respond to the immediate reinforcement of escape from task, may benefit from backward chaining. For students who can already perform various steps of the task, a total task presentation may be appropriate. During total task presentation, the student will receive reinforcement for the steps performed correctly while learning the steps he/she does not demonstrate through prompting.

Prompting procedures used can be physical, model, picture/text, or verbal. Selection of prompting procedures should be based on what is most effective with the learner and most readily faded. In general, verbal prompts are avoided because research has demonstrated that these are the most difficult to fade. Note that teaching the student verbal self cues (ex: say "clean, pressure, band-aid" while dressing a cut) is not the same as a teacher delivered verbal prompt and can be effective for some of these tasks. These type of verbal self cues are often paired with picture/text instructions and modeling. The majority of NLG students learn most rapidly with either physical

prompts and/or picture/text instructions that are systematically faded. Some students benefit from an initial demonstration (model) of the task and simple description of steps and end product at the beginning of the teaching session.

Discrimination training is utilized to teach the student to recognize when to initiate a specific task analyzed chain of behaviors. During discrimination training, a response is reinforced in the presence of specific stimuli. If the response is exhibited without the stimuli present or to the incorrect stimuli, it is extinguished. For example, the student is presented with pictures of a police officer, an unfamiliar man and a little girl. He/she is asked to “touch the picture of the police officer”. If the student touches the picture of the police officer, the response is reinforced in a manner that will be specific to the student (edible, praise, token, etc.). If the student points to the picture of the unfamiliar man or the little girl, the response is ignored and the pictures are varied for the next trial. Prompting is utilized to ensure efficient learning as indicated for the student and then is systematically faded. After repeated contact with reinforcement, the student’s response will become more fluent until he/she is responding correctly and consistently. Once the student is fluent with pictures, discriminating various community helpers live in the community is trained often using the pictures as a common stimulus to assist with generalization. Similarly, we recommend that the student be taught the discrimination skill in the context of viewing a video of a live or acted out scene for practice with discrimination in a more complex environment that can occur more frequently than trips to the community. For example, a video of a crowd scene with many people present and the student is asked to identify the police officer. A picture stimulus can be paired to assist with generalization. The pictures are then systematically faded until the presence of the actual community helper controls the response.

Role play is used for many of these skills because the situations do not occur frequently enough to allow real time teaching. In the role play, the situation is repeatedly simulated or modeled by the instructor and specific responses are prompted and reinforced with prompting gradually faded until the situation evokes the response. Role play is supported by research conducted by Neef et al. (1978). This study found that role playing the skills involved in utilizing public transportation in a classroom setting was just as effective as teaching the skills in an in vivo setting and required less time and fewer resources. Similarly, video modeling may be used as a way to demonstrate the target behavior. Marcus and Wilder (2009) found that students acquired the skill of identifying novel letters more quickly when they watched a video model of themselves versus a video model of a peer. With technology becoming more accessible and user friendly, taking a video model of a student performing a target skill is a simple yet effective teaching tool.

Social stories/rules training are used as supplemental teaching procedures for some of these skills. The purpose of the story is generally to identify rules of behavior and contexts in which those rules apply as well as identify social reinforcement for following the rules. Social stories are brief passages written by the teacher/caregiver/etc. They describes the environment or context (the store), the expected behavior (stay with your group) and why the behavior is expected (so that you don’t get lost). They may provide examples and non-examples of expected behavior. In addition, videotaped scenes of specific situations and the response can be used as a supplemental teaching procedure similarly to the social story.

Leaf et al. (2012) found that social stories were not as effective as providing frequent role playing opportunities with specific responses that were paired with reinforcement when correct. We have found that the use of social stories, combined with role playing and the other teaching procedures as described above can be a way to prime or “remind” the student of what responses are expected in the particular environment so that the behavior is more likely to occur and can be reinforced. The social story is effective as a component of the procedure but is not as effective in the absence

of the other components. Our component package generally includes task analyzed teaching of responses, discrimination training and then role play coupled with social stories to practice recognizing the cue for the response and exhibiting the appropriate response to the environmental cue. Chan and O-Reilly (1998) utilize a component package that consisted of reading a social story, answering comprehension questions and engaging in role playing paired with reinforcement for correct responses and appropriate behavior. The package intervention increased appropriate behavior (raising hand and appropriate social interactions), while decreasing inappropriate behaviors (inappropriate vocalizations and inappropriate social interaction), for 2 students diagnosed with autism in an inclusion setting.

For some of the steps which involving accepting medical treatment, students with autism may have aversions to participating and may exhibit inappropriate behaviors. We use systematic desensitization procedures in order to enable students to be willing participants in medical treatment. There is extensive behavioral literature involving systematic desensitization and we recommend that the reader refer to this literature to develop procedures for any steps where your student requires desensitization. We have not covered that aspect in this write-up as we generally don't begin teaching these safety skills until after the student has learned to successfully participate in basic medical care.

### **Potential Alternative Teaching Methodologies**

Typically developing individuals generally learn most of these safety skills through verbal instruction and modeling from teachers and caregivers. First aid skills are taught by the American Red Cross using a combination of textual/picture descriptions instruction, role play, guided practice with feedback in simulated conditions and proficiency testing. For many of the other skills, verbal instruction with some role play is often used with typical individuals. We find that such instructional packages work well when the individual can readily recognize the environmental cue that should control the behavior and can learn a multi-step behavior chain in a small number of trials. For our learners, specific additional training is usually needed to learn the discriminations involved in recognizing the environmental cues and the tasks often have to be broken into smaller steps and practiced much more frequently than for typical learners.

### **Rationale for selecting This Methodology**

Multi-component instruction, including task analyzed instruction, discrimination training and role plays and social stories with frequent practice of skills, prompting and prompt fading and reinforcement for demonstration of the skill, is effective for our students with autism because they often do not have the abilities needed to understand more general explanations of the skills. They require step by step teaching procedures with prompting and frequent reinforcement to acquire skills. Physical, model, textual and/or picture prompts are used because they are easily faded and less likely to result in prompt dependency than verbal prompts. This is because they allow the prior step to act as the SD for the next step in the chain and do not insert an additional teacher generated SD between steps within the task. Verbal self cues do not need to be explicitly faded as they are under the control of the learner.

Discrimination training has been found to be an effective teaching procedure for most students. This technique can be used as a first step to teaching the student to attend to cues in the environment to occasion the behavior chain (the student must first identify a police officer before he/she can request help from a police officer).

Social stories have been shown to teach some skills, albeit at a slower rate than more interactive teaching procedures that include role playing, prompting and reinforcement. Therefore we use them in conjunction with role play, prompting and reinforcement because they can serve as a



primer/reminder for when to utilize skills that have been mastered and reduce the need for the teacher to verbally describe the environment and expectations each time.

### **Type of Learner potentially served by this methodology**

Task analyzed instruction is appropriate for all learners with the specific prompting procedures customized to the learner. Discrimination training is also appropriate for all learners. However, students who have great difficulty attending to the salient features of a stimuli will have difficulty generalizing the discriminations to a variety of complex real life contexts. For these students careful programming of successive steps to generalization and extensive in vivo training will be needed. Social stories are appropriate for students who read and comprehend information presented in a text format and can be trained to apply this information to actual conditions. Role plays are effective for students who can generalize from simulated to actual conditions. The most important determining factor for whether a learner will benefit from training in these skills is how likely they are to learn to discriminate when the conditions in the environment are present that should cause them to initiate the behavior chain. This must be explicitly taught and reinforced and practiced to fluency for most of our students. This can be difficult since many of these situations do not naturally happen frequently. Taking advantage of all natural teaching opportunities (i.e. the student is actually bleeding) with high magnitude reinforcement for skill initiation and simulating conditions as closely as possible for frequent practice is essential. The degree to which the student learns to initiate the skills will help determine the degree to which they will continue to need skilled supervision as adults.

### **Resources consulted in developing this methodology and sources of data on effectiveness**

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### **Materials Needed**

Each of these safety skills will require that the student be able to access the tools/people required to demonstrate the skill (phone, police officer, a cross walk, etc.) Supplemental materials will be specific to the student, but may include social stories (I need to stay with my group while I am at the mall. If I get lost I go to the customer service desk. I should say “hello, I need help.” I should hand the person my card and answer any questions. I should wait for \_\_\_\_\_ to come get me.),

pictures (community helpers versus strangers), video exemplars, or text instructions (a list of steps to call 911 in an emergency). Below are some examples that have been used at NLG.



Sample: Common signage to teach student to respond to.



Sample: Pictures to be used during discrimination training. Student sorts each picture to the “Let’s Go!” or “Wait!” side of the board based on presence of cars.



## Car Safety Rules

I need to be safe in the car. It is dangerous to have unsafe behavior when an adult is driving the car.

**I need to:**

1. Have nice hands and feet
2. Have a quiet voice
3. Hold on to my toys

**If I follow all of my rules, I will get to play with my toys in the car.**

**If I do not follow my rules, I will not be allowed to play with toys.**

There is no yelling, screaming, kicking or throwing toys in the car.

**If I follow all of my rules for the whole ride, I will get to play with the iphone or ipad after the ride.**

Sample: Social story about car safety rules.

My name is **Billy Smith** and I have **Autism**.

My parent's names are **Jon and Marie**.

My mom's number is: **777-777-7777**

My dad's number is: **888-888-8888**

My address is:

**24 Willow Drive**

**Mayberry, NH 22222**

I do not speak, but I can use my iPad to answer your questions. I get scared when I hear loud noises and sometimes I cover my ears. Please be patient and stay with me while I wait for my mom or dad.

Sample: Emergency information card to be kept in student's wallet.

What should I do if I am sick or hurt?

If I am bleeding...	Put a band aid on.
If my head hurts...	Tell my teacher or the nurse so she can get medicine.
If I bump my head...	Get an ice pack and put it on the bump. Tell the nurse.
If I bump my body...	Get an ice pack and put it on the bump.
If my belly hurts...	Tell my teacher or the nurse so she can get medicine.
If someone else is hurt...	Tell my teacher or other adult.

Sample: List of strategies to self-administer basic first aid.



Sample: Discrimination training to teach community helpers (police officer). Student sorts pictures of police officers and strangers.

## Teaching Steps

**A note about confidentiality:** In teaching these skills, it is important to maintain the student's confidentiality. Sometimes, in an effort to protect the student, a staff member may share too much information, for example, informing a police officer of the student's diagnosis. It is imperative that the student's parent/guardian provide consent for the information that the staff and their child may share with emergency personnel and other individuals in the community. Some families may wish to limit the information shared, for example not sharing a specific diagnosis but rather have staff members provide coaching to community personnel on how to communicate with the individual and gain information from him/her. This need for confidentiality applies to both verbal and written interaction. It is often helpful to have a child carry an information card on their person that states their emergency information. Be sure to get the information on the card approved by the student's parent/guardians before giving it to the student.

**Utilize discrimination training/Pair with response instruction:** Discrimination training is used to teach what objects/conditions in the environment should cause the student to respond. First, we teach the student to identify the relevant stimulus and then to pair this stimulus with a response. If he/she responds correctly, the response is reinforced. If he/she responds incorrectly, the response is ignored/extinguished. However, if the student does not demonstrate the response during a baseline probe, teaching begins by first prompting the student to choose the correct stimulus and then the prompting is systematically faded. For example, a picture of a walk sign, a don't walk sign and an out of order sign are placed in front of the student. The teacher asks the student "touch the walk sign" or "touch the sign that means it is okay to walk". If the student touches the walk sign, the teacher says "good job" and gives him a high five. If the student points to either of the other pictures, the response is ignored and the next trial is presented (with prompting according to student's protocol). This is an effective way to teach object/people identification, verbs, and identification of conditions of stimuli. Remember to utilize multiple exemplar training and use as many possible permutations of the stimuli as is feasible. If there are many varying permutations of possible stimuli we often have the student sort them to a sorting board so they can learn multiple members of the class at the same time. We may color code at first for errorless teaching but then systematically fade until the student can sort novel exemplars without any color coding. For example: we may want to have the student sort various types of signs to the categories of "Stop" and "Go". "Stop" might include various different types of Don't walk signs using symbols (red hand) or the words, photos showing coming traffic, curb edges, crossing guards and police officers holding their hand up in the stop gesture, Do not enter signs and the like. "Go" would show the same types of signs with symbols or words signaling walk, photos showing a street with no moving cars, a sidewalk, crossing guards and police officers signaling go, Enter signs etc..

Once the student can identify an array of photographs of the stimuli reliably and without prompting then generalize to life practice of the stimuli in its natural context (in the community if needed) pairing first with the picture as a prompt, if needed. For some students, we may teach discrimination of the stimulus at the same time as we teach the student to pair a specific response with the presence of the stimuli. For others who may take a longer time to learn the discrimination, we practice sorting and conduct mass trials of discrimination presenting the stimuli one by one in random rotation and having the student identify if it is stop or go (verbally or by touching the stop or go side of the sorting board) first and then pair the id of the stimulus with the first step of the TA (and not the entire chain each time) and with a "social story" or other brief description of what the student should do in response to the stimulus. For example, we present various exemplars of photographs of a "Don't Walk" sign (or have it posted at a place the student will traverse) while the student is walking and have the student say "I stop" and then stop.

We then present the Walk sign and the student says, “I go” and starts to walk. The student would also read a social story that might have pictures of Don’t walk Signs and in text: When I see this sign I stop and do not cross the street until it says Walk (with picture of Walk signs). When the sign says Walk, I can go across the street with my teacher. We do this so that we can practice the discrimination frequently enough to allow mastery under conditions that simulate the environment in which we will want the student to demonstrate the skill.

To supplement live training and assist in generalization to additional contexts, we recommend also using videotaped live scenes to allow for additional practice. For example, you could take a short video while practicing in the community and have the student identify the stimulus in the video when back at school. Or, get video of novel scenes and have the student identify the stimulus in the scene. For example, pick out the police officer in the crowd, find the hazardous situation etc... Photos can also be paired with these videos and then systematically faded.

**Teach the steps of the Response.** For responses that require a multi-step behavior chain, we utilize a TA (samples are attached) paired with the presence of the stimuli that will occasion the behavior chain. To teach the TA we might use the following steps:

1. **Model the steps of the task.** If the student has the ability to attend to a demonstration (model) of the task and it is feasible/socially appropriate for the teacher to do so, demonstrate the skill exactly as the student should complete it one or several times at the beginning of the teaching session. For some of these skills, it may require an additional teacher; one to model the task and the other to ensure attending and manage behavior/safety. After the model, the student may be able to respond more readily to physical or text/picture prompts because he/she has a context for the entire task. For example, once a student can discriminate that the edge of the sidewalk should cause them to stop, we can model the rest of the response chain: look left, right, left, determine if it is safe to cross (no cars in view) if yes, cross, if not wait and begin response chain again once the car has passed. We can then have the student imitate the model. Live and/or video models can be used. Video models can be helpful to allow repeated demonstrations of the skill in a variety of conditions.
2. **Select appropriate boundaries for each step in the TA and adjust teaching/prompting procedures if needed.** Modifications to steps in the TA should be made based on the student’s learning history and need for consistent prompting. For a student who can respond to a model or text cues and does not need physical prompts, broader steps are appropriate.
3. **Select appropriate extra-stimulus prompts:** Many of our students benefit from using supplemental materials while completing the task. Often this consists of a list of text and/or picture instructions of the steps of the task. These instructions can be very specific (example: pick up the phone, listen for the dial tone, dial xxx-xxx-xxxx, wait for someone to answer, say “Hello, my name is (name). I am at (place). I am (verb).” Answer the person’s question, follow any directions, say “Thank you. Goodbye” or more general (example: call XXX’s office and let her know what you are doing”). The degree of specificity needed depends on the student’s understanding of the task and ability to follow more general text and/or picture instruction. For some students, pictures/diagrams for each step are helpful even if the student can read. These supplemental stimuli can remain in use once the student can perform each step independently without adult assistance and the skill can be considered mastered (with supplemental instructions) as long as the stimuli are in place in all locations the student may perform the skill (or the student is responsible for retrieving and bringing the stimuli as part of the task). The team can decide whether and when to fade these supplemental stimuli through periodic probes.
4. **Utilize appropriate response prompts.** We generally make use of physical prompts when teaching a chain of behaviors, often paired with extra stimulus prompts as described above.

Physical prompts are usually the easiest to fade and are less likely to insert the teacher into the behavior chain than are verbal or gestural prompts. However, for students who find physical prompts highly aversive and for steps where physical prompts may not be appropriate to maintaining student privacy as discussed above, alternatives may need to be used.

Photos/diagrams of each step are effective without physical prompts for some learners. For those students with sufficient reading or picture comprehension skills, simple step by step textual or picture instructions may be used as noted above. In some cases where physical prompts are not appropriate, pairing verbal prompts with the text/picture prompts can be used to gain the response and then the verbal prompts are faded as quickly as possible. As is demonstrated in the behavioral literature, it is generally most effective to ensure that responses are robust before fading prompting and to return to prompts after an error to prevent error patterns from developing.

5. **Probe for progress towards independence.** When teaching a chain of behaviors, it is important to prompt sufficiently to ensure correct responding but then to conduct periodic probes for independence so that prompts can be systematically faded. During probes, allow the student 1 second to perform each step of the task analysis independently. If the student makes an error or does not respond, use least to most prompting to complete the step. The least intrusive prompt necessary to complete the step correctly will become the student's new prompt level for that step. In many cases, prompt levels can be faded across trials, with the first several trials prompted and then the remaining trials completed without the prompt. This should also be probed periodically to ensure that these early trial prompts are systematically faded.
6. **Teach problem solving.** After the student can complete the skill independently, it is important to teach him/her to troubleshoot through impediments that might arise (examples: during an evacuation the elevator may not work, an exit may be blocked, etc). These situations can be set up ahead of time and the solutions directly taught, using specific task analyses, the teaching procedures described above, and reinforcement for initiating the solution, until the student can solve common problems independently. Then, reinforcement is gradually faded to natural rates. In some cases, the student is taught to fix the issue himself/herself. In other cases, the student is taught to report the issue to a teacher/caregiver. For students who will have difficulty discriminating what solution may apply to a problem, teach them to communicate with a teacher/parent when they encounter an impediment. Because many of our students are not skilled at initiating communication and might simply cease responding or become frustrated, it is important to explicitly and thoroughly teach and reinforce this skill if supervision is to be faded.
7. **Reduce reinforcement.** At first, reinforcers are selected based on their value to the student. Reinforcement should be systematically shifted and reduced until the type, rate and the quantity resemble that in the natural environment (example: going to a preferred store after crossing the street appropriately). We typically pair our primary or generalized reinforcement with the natural reinforcers that will be available so that over time these natural reinforcers become valuable to the student. Then, we systematically reduce the frequency of our reinforcement until the student only receives reinforcement at the end of the task and finally, we fade the quantity of reinforcement as appropriate. In all cases, the teacher should be alert to signs of ratio strain and reinforcer ineffectiveness and adjust accordingly so that completing work tasks remains reinforcing to the student.
8. **Reduce supervision.** Once reinforcement is reduced in frequency enough to allow the supervisor to fade his or her presence (but do not wait until it is at natural rates as this may take a very long time for some students), additional reinforcement fading can be paired with reducing supervision. Intensity of supervision should be systematically reduced by having the



teacher take one step back (and increasing the distance another step as soon as criteria are met for that step), stepping back in for reinforcement on a variable schedule and for error correction as needed until eventually the student can complete the task without supervision or additional reinforcement. The ability to fade supervision will vary by student. In the fading process it is important that the instructor is returning for reinforcement more often than they return for error correction. If this is not the case then either the proximity of supervision or the frequency of reinforcement has been faded too quickly and should be adjusted. Our goal is to have the student succeed at the lowest level of supervision that is consistent with maintaining appropriate behavior, and completing the tasks correctly. Objectives for each student should be based on performance data under various levels of supervision.

9. **Generalization Training: Add distractions.** The final step in teaching these skills is to add distractions that will be similar to those that the student may encounter on his/her own. This may include the number of other people walking around, varying traffic conditions, someone talking on a cell phone, etc. The student must be able to tolerate these distractions (and engage in appropriate social behavior, such as saying “excuse me” when squeezing past the person on the cell phone), while continuing to complete his/her behavior chain if he/she is to be independent. Objectives for each student will vary and should be based on the student’s ability to perform successfully under various conditions. For many students, the tradeoff between intensity of supervision required and the ability to work with the distractions of a natural environment will need to be monitored as increased distractions may increase the intensity of supervision required for successful performance. Decisions should be made on which variable to emphasize based on student needs and the opportunities available for that student in adulthood.

### **A Note on Writing Task Analyses (TA’s)**

There are many options in writing a TA for how specific to make the description of the step and how many steps to break the task into. There are many ways to complete the tasks included in this document that get the job done. Selecting the “right way” to teach the task to a student should rely on several considerations. First, what is practical for the student and what most closely resembles what they may have previously learned about the task when they had a parent perform it with them or for them. Second, what will feel natural to the person most frequently prompting the student through the task. In the case of these safety skills, it is very important to consult with the family and find out their preferences for the task and how they will prompt at home as most of these skills should be generalized to home and when the student is in the community with his or her family.

In deciding how detailed and specific the TA steps should be, there are several factors to consider. The first is how much physical prompting the student will need to learn the task. If extensive prompting will be needed then the TA should be more specific. That is so the teacher can make sure to prompt the task the same way each time, allowing the student to learn the motor plan for the task more quickly. For example, specifying which hand holds the telephone receiver and which finger to use to push the buttons will allow the prompters to be consistent. If the student is at the level where text or picture instructions can be given of broader outcome oriented steps (examples: Picture of cut, picture of Bactine being sprayed on the cut, picture of hand with gauze applying pressure, picture of Band-aid being opened, picture of band-aid securely on the cut), then the steps can also be more outcome oriented and not include specific motor actions. That is because the student will develop a consistent motor plan on his/her own as they complete the steps without physical prompting. The teacher can monitor the quality of the outcome of the step vs. tracking which hand was used or what the order was.

The TA's below assuming that the student is able to perform the tasks without a high degree of physical prompting of specific steps. That is because these skills require a high level of prerequisite skill in order for a student to learn the necessary discriminations and responses so that the student who is learning these tasks will already have a solid base of skills to work with. In addition, because of the highly variable nature of the situations in which the skills will be required, the student must be able to be flexible in his or her responses and so an overly specific TA can be a liability to the student. For example, a Community Helper may ask an array of situation specific questions that require that the student attend to the specifics of the situation. First aid requires assessing the situation and responding accordingly, etc... As always, feel free to modify the level of detail and specificity of these TA's based on the needs of your student.

The following are examples of task analyses that we use to teach our students safety related behavior chains. Note that prompt levels should be indicated next to each step (I = independent, LP = faded physical prompt or graduated guidance, FP = full physical prompt) so that the teacher can easily see where and how he/she should prompt.

Respond to fire/carbon dioxide alarm													
Date/Staff	Current Step				probe				probe				probe
1. Attends to alarm (stops current activity)													
2. Stands up if not already													
3. Calls out- "let's go" or similar phrase to alert others and signal that he/she is exiting													
4. Walks to nearest exit in a quick but controlled manner													
5. <b>Problem Solves if needed</b>	NA	-	-	-	-	-	-	-	-	-	-	-	-
exit is blocked/locked – walks to next exit (note: teach students to use stairs, never elevator as an elevator is a very dangerous place to be in a fire)													
6. Pushes door open and exits													
7. Crosses parking lot/street safely (see street crossing TA)													
8. Walks to designated meeting place													
9. Waits in meeting area for group/buddy													
10. Waits until trusted adult says that it is okay to enter													
11. Re-enters building													
<b>Independence</b> # independent steps / 11 steps													

Notes: For responding to alarm, we use a recording of an alarm to allow frequent practice wherever the student will be. Often we begin with mass trials of the first few steps to gain fluency in the student dropping whatever they are doing and jumping up to exit when they hear the alarm. Also, this skill must be taught in a variety of conditions: the student is alone, the student is with a group, the student is engaged in a reinforcing activity, the student is at work, the student is in the bathroom, the student is lying in bed, the student is in the kitchen, etc., in order to generalize the skill to the times when the student must act alone because supervision is lower or the caregiver is affected by the emergency and not able to respond. Many students will "follow the group" but we want each student to be able to initiate the exit. Work with families to conduct skill practice at night when the student is sleeping and must get up from bed. Perhaps early in the morning or later at night when the parent is awake but the student is asleep. Although it is difficult to do this, and the likelihood of an overnight fire is low, it is these fires that are the most deadly. We also use social stories and other supplemental instructional materials paired with simulated practice to reinforce that the student must respond to the alarm no matter when or where he/she hears it or what he/she is doing and we review situations where the student is sleeping and hears the alarm.

Respond to emergency personnel													
Date/Staff	Current Step				probe				probe				probe
Presents self/ signals needs help/does not flee/hide when emergency personnel appear													
Attends to emergency personnel (makes eye contact)													
Tells/signals situation (says, I'm hurt, points to injury, points to injured person)													
<b>States emergency information when asked(using a variety of sd's for each such as: Who are you? What's your name? etc.)</b>	NA	-	-	-	-	-	-	-	-	-	-	-	-
Full name													
Age													
Birthdate													
Phone number													
Address													
Parents'/guardians' names													
Diagnoses (if consent given by parents/guardians)													
<b>Answers Questions (many variations)</b>	NA	-	-	-	-	-	-	-	-	-	-	-	-
What were you doing?													
What happened?													
How did you hurt yourself?													
Where is your parent/teacher?													
Can you move your (bodypart)?													
Who got hurt?													
How did he/she get hurt?													
Did someone hurt him/her/you?													
<b>Follows Directions</b>	NA	-	-	-	-	-	-	-	-	-	-	-	-
Lie down													
Sit down													
Stay still													
Show me where it hurts													
Close your eyes													
How many fingers do you see													
Hold this here													
Open your mouth													
Look up													
Let me do _____ to your (body part)													
<b>Allows Self to be Treated with appropriate behavior</b>	NA	-	-	-	-	-	-	-	-	-	-	-	-
Allows Emergency personnel to measure vitals													
Allows personnel to dress wounds													
Allows personnel to assess injury													
Allows self to be transported to vehicle if needed													
Asks for information if needed (what are you going to do)													
Provides information if needed (yes, this hurts, no this doesn't hurt).													

Notes: When we teach these skills we find that teaching multiple exemplars for how each of these questions may be asked is very important and fluent responding to these questions and their

variations generally needs to be taught separately from the rest of the chain in order to gain sufficient practice.

For the steps involved in being treated, which we certainly hope are only needed infrequently, taking every opportunity for simulated practice is essential. Certainly it is easy to practice responding to questions and following directions outside of actual emergencies. It is also important to give the student frequent practice interacting with medical personnel and responding to basic assessment and treatment even if they are not injured. We use our nurses as the emergency personnel and also take any opportunity to have an outside first responder visit and interact with our students. The closer the simulation and the more frequent the practice under varying conditions, the more likely that the student will respond appropriately in an actual emergency.

Please note that if a student exhibits aversive behavior to basic medical assessment we recommend systematic desensitization procedures to teach the student to tolerate medical assessments before returning to teaching the chain.



Respond to law enforcement													
Date/Staff	Current Step				probe				probe				probe
<b><i>Responds rapidly to officers initial command</i></b>	NA	-	-	-	-	-	-	-	-	-	-	-	-
Hey you!													
Stop!													
Hold it!													
What's going on?													
Provides a verbal script or hands over a card stating that they have a language disability or Autism (with parent/guardian consent)													
<b><i>States emergency information when asked with a variety of SD's.</i></b>	NA	-	-	-	-	-	-	-	-	-	-	-	-
Full name													
Age													
Birthdate													
Phone number													
Address													
Parents'/guardians' names													
Diagnosis (if consent given by parents/guardians)													
<b><i>Follows Directions</i></b>	NA	-	-	-	-	-	-	-	-	-	-	-	-
Stop													
Hands up													
Show me your id													
Stand against the wall/car													
Get down!													
Put your hands behind your back													
Step over here													
Go that way (with point).													
<b><i>Answers Questions</i></b>	NA	-	-	-	-	-	-	-	-	-	-	-	-
What are/were you doing?													
Where are/were you going?													
Where is your parent/teacher?													
What happened?													
Who did this?													
What did he/she look like?													
Where did it happen?													
When did it happen?													

Implement basic first aid procedures														
Date/Staff		Current Step				probe				probe				probe
Splinter	1. Identifies that he/she has a splinter													
	2. Identifies that he/she requires first aid													
	3. Retrieves first aid kit													
	4. Retrieves tweezers, rubbing alcohol and cotton ball from first aid kit													
	5. Opens alcohol													
	6. Places cotton ball on opening of bottle													
	7. Tips bottle upside down, holding the cotton ball tight to the opening													
	8. Places bottle upright on a surface													
	9. Closes bottle of alcohol													
	10. Rubs cotton ball over site of splinter													
	11. Rubs cotton ball over surface of tweezers													
	12. Places cotton ball on surface													
	13. Picks up tweezers													
	14. Positions tweezers on either side of the splinter involving as little skin as possible													
	15. Squeezes the tweezers together to grasp the splinter													
	16. Pulls splinter out the same direction it entered the skin													
	17. Picks up cotton ball													
	18. Wipes splinter onto cotton ball													
	19. Rubs cotton ball over surface of tweezers													
	20. Discards cotton ball in trash													
	21. Returns tweezers and alcohol to first aid kit													
	22. Washes hands thoroughly with soap – if bleeding, follows steps below													
	23. If not bleeding or after completes sequence below closes and returns first aid kit to original location													
	<b>Independence</b> # independent steps/23 total steps													
Cut	1. Identifies that he/she is bleeding and requires first aid													
	2. Retrieves first aid kit, brings to sink and places on surface													
	3. Retrieves tissue, gauze or paper towels													
	4. Uses to apply pressure to wound													
	5. Retrieves disinfectant and band aid from kit													
	6. At sink, turns on water and prepares to clean wound either by													

[illegible]



Note: For the response to unfamiliar person below, this skill should be taught prior to training the TA. This skill should only be targeted for individuals who can learn the double discrimination to not respond only if a person is both not an “official” and not familiar . If this is an area of difficulty then this program creates the risk that the person will not be cooperative with reasonable requests from a community helpers, first responders and store staff and could even put themselves in danger by failing to respond to directions from a helpful community member. If this is a concern then teach the individual to respond to all community members.

Avoid Dangerous Situation														
Date/Staff		Current Step				probe					probe			probe
Unfamiliar person approaching	1. Recognizes person approaching as unfamiliar and not a community helper or badge wearing staff member													
	2. Responds to hello and social pleasantries													
	3. Refrains from responding to personal questions /giving over belongings or going with the person													
	4. Immediately says, “ I will go ask my teacher/parent/friend													
	5. Walks immediately away from approaching stranger, toward accompanying adult or if alone towards a community helper or crowded place													
	6. Informs accompanying adult of request from unfamiliar person or calls a trusted adult to alert him/her to situation													
	7. <u><b>If stranger makes physical contact (beyond handshake) or grabs belongings</b></u> - Yells out “I need help! I don’t know this person!” repeatedly and pulls away until person lets go or help arrives or reaches trusted adult													
	8. Follows instruction from trusted adult													
	<b>Independence</b> # independent steps/8 total steps													
Emergency situation	1. Recognizes a dangerous situation in the environment (people fighting, a person engaged in a behavioral episode, a person experiencing a medical emergency, a car accident, an open manhole, etc.)													
	2. Walks away from/steers clear of dangerous situation													
	3. Continues with what he/she is doing after steering clear of the obstacle if appropriate or													
	4. If obstacle prevents progress, or after arriving at destination finds a trusted adult or if alone calls an													





Use the phone									
Date/Staff	Current Step				probe				probe
1. Recognizes need to make a call (needs to reach person, emergency situation)									
2. Retrieves or goes to telephone									
3. Picks up receiver or turns on/opens telephone									
4. Puts phone to ear									
5. Listens for dial tone									
6. Dials specified phone number (dials 9 if in school) and "Call" button if needed									
7. Waits for person/answering machine to pick up									
Answering Machine	8. Waits for machine to finish message								
	9. Listens for beep								
	10. States greeting								
	11. States name								
	12. States current/future activity /asks permission if needed (ex: I am out to lunch with ____)								
	13. Asks question (ex: Can we go for a walk after school?/ are you open on Sunday)								
	14. Gives call back instructions, stating number clearly: Call me back at {number}.								
	15. Makes departing statement								
	16. Hangs up phone								
Person	1. Listens for person to answer								
	2. States greeting								
	3. States name								
	4. Asks for person. "Is ____ there?" or "Is this ____"								
	5. Waits for positive response or person. If negative response, asks to leave message								
	6. States current/future activity/asks permission if needed (ex: I am out to lunch with ____)								
	7. Asks question (ex: can we go for a walk after school?/ are you open on Sunday?)								
	8. Writes down answer if needed								
	9. Answers questions (ex: where did you go for lunch today?)								
	10. Follows directions (ex: tell ____ I said hi)								
	11. Makes departing statement								
	12. Hangs up phone								
911	8. For 911, after step 1 has attempted to locate an adult								
	9. Listens for dispatcher to answer								
	10. States name and disability (if parent/guardian consent)								

11. States problem (ex: ____ fell down, ____ is unconscious, etc.)									
12. States address									
13. Holds phone away from mouth and calls out for assistance									
14. Answers questions using I don't know if they can't assess (ex: is she breathing? Was she eating?)									
15. Follows directions (ex: apply pressure, etc.)									
16. Waits for dispatcher to tell them it is okay to hang up the phone <u>or</u> when the ambulance arrives									
17. Hangs up phone									
<b>Independence</b> # independent steps / steps									

Cross the Street												
Date/Staff	Current Step				probe				probe			
In a Parking Lot												
1. Recognizes end of parked car line and start of active lane and stops												
2. Stands in line with parked cars												
3. Looks left												
4. Looks right												
5. Looks left again												
<u>If car is coming:</u>												
6. Stops and waits for break in traffic												
<u>If no car is approaching:</u>												
7. Walks across width of road/lane at an appropriate pace without stopping												
<u>If car stops:</u>												
8. Recognizes that it is safe to cross												
9. Walks across width of road/lane at an appropriate pace without stopping												
10. Waves/nods to driver to thank him/her for stopping												
Continues to follow steps 1-10 for each active traffic lane until he/she reaches his destination	NA	-	-	-	-	-	-	-	-	-	-	-
<b>Independence</b> # independent steps/7-10 steps												
On a Road												
1. Recognizes need to cross a street.												
2. Stops at boundary between walking path and street												
3. Scans road for nearby crosswalk												
4. If crosswalk is nearby, walks on sidewalk/edge of road to cross walk												
5. Stands at curb/edge of road												
6. Looks left												
7. Looks right												
8. Looks left again												
<u>If car is coming:</u>												
9. Stops and waits for break in traffic												
<u>If no car is approaching:</u>												
10. Walks across width of road/lane at an appropriate pace without stopping												
<u>If car stops:</u>												
11. Recognizes that it is safe to cross												
12. Walks across width of road/lane at an appropriate pace without stopping												
13. Waves/nods to driver to thank him/her for stopping												
<b>Independence</b> # independent steps/13 steps												
At a Walk Signal/Traffic light												
1. Recognizes need to cross a street												
2. Scans road for nearby traffic light												
3. If traffic light/walk light is nearby, walks on sidewalk/edge of road to it												

4. Pushes button on walk signal/light												
5. Stands at curb/edge of road, attending to traffic light/walk signal												
6. Recognizes Walk signal												
7. When walk light signals go, student looks left to ensure that no cars are approaching												
8. Looks right												
9. Looks left again												
10. If car is coming: stops and waits for car to stop												
Repeats steps 7-10 until cars are stopped at light or no moving cars are approaching	NA	-	-	-	-	-	-	-	-	-	-	-
11. Walks across width of road at an appropriate pace without stopping												
<b>Independence</b> # independent steps/11 steps												



The skills included in this next TA will require a significant amount of pre-teaching under contrived conditions. It is important to ensure that the student is fluent with all of the targeted skills before introducing the chain in the community. It is particularly important to teach the student how to navigate a variety of locations (how to use a mall map, move from one location to another by attending to the map or environmental cues (vs. following a leader). We have found that many students require significant training in multiple environments to become sufficiently detailed describers of their location. For example, they may default to saying “the mall” vs. saying they are near the Apple Store on the second floor of the mall. In addition, many students need training to recognize that they have lost their group. While setting up contrived scenarios in the community, it is imperative that the student is supervised during the entire trial. Though he/she will feel as though he/she is “lost”, a staff member should always be monitoring and able to step in if the student exhibits any challenging behaviors or meets criteria for prompting.

Avoid getting lost										
Date/Staff		Current Step				probe				probe
***When walking/standing with group, member stays within 10 feet of group (count redirects per interval)***										
Meeting Place	1. Scans immediate area for group									
	2. If has lost sight of group, Walks to predetermined meeting place									
	3. Waits in meeting place for group leader to arrive									
	4. Notes time group leader is due to arrive									
	5. Recognizes when 10 minutes overdue									
	6. If leader has not arrived 10 minutes past meeting time, calls group leader (see making call TA)									
<b>Independence</b> # independent steps /6 steps										
Use Phone	1. Scans immediate area for group									
	2. Recognizes that group is not nearby									
	3. If there is a designated area, goes there. If not, locates phone									
	4. Uses cell phone <u>or</u> Requests to use store's phone									
	5. Dials number									
	6. Waits for person to respond or voicemail									
	7. States name, and that she/he can't find group									
	8. Describes where he/she is including, what store and where in store (dept, nearby landmarks)									
	9. Follows directions (ex: wait where you are, walk to the food court, etc.)									
<b>Independence</b> # independent steps /9 steps										
	1. Scans immediate area for group/partner									
	2. Recognizes that group/partner is									

	not nearby									
Community Helper or Store Employee	3. Scans immediate area for community helper or store employee									
	4. Approaches community helper or store employee									
	5. Informs the community helper that he/she is lost and needs help									
	6. Responds to questions <b>or</b> hands information card									
	7. Follows directions of community helper or store employee (ex: wait right here while I call)									
<b>Independence</b> # independent steps /7 steps										

What follows is not a TA, it is a list of teaching targets for common hazards. For each, the student should be trained to discriminate between examples and non-examples of the hazard, to immediately recognize a hazard in the environment and to follow a rule whenever encountering the hazard. For fire safety, we teach the listed skills but still provide supervision at all times while student is in the kitchen.

Avoid household hazards										
Date/Staff		Current Step				Probe				probe
Cleaning Supplies	Refrains from ingesting cleaning chemicals or touching without gloves									
	Refrains from spraying cleaning chemicals on self or others									
	Stores cleaning chemicals safely (tightly closed in designated place and away from extreme heat or cold)									
	Avoids mixing cleaning chemicals									
	Demonstrates knowledge of which cleaning chemicals to use for which jobs									
	Carefully measures appropriate quantity of cleaning chemical and dilutes as indicated									
Appliances	Plugs appliance in safely (does not touch metal prongs)									
	Avoids touching blade or heating element of appliance									
	Ensures appliance is on sturdy surface									
	Ensures cord of appliance is not in jeopardy of being pulled on or tripped over									
Fire Hazards	Can discriminate when fire is not where it is supposed to be									
	Calls for help while taking steps to extinguish, if appropriate									
	Responds to smoke/fire alarm by exiting house immediately and going to meeting place									
	Exits house while calling for help if extinguishing efforts fail or if fire spreads at all, even if no alarm									
	Avoids overloading outlets and/or extension cords									
	Monitors cooking food/ knows how to turn burner/oven off									
	If pan flames, turns off burner and puts lid on pan									
	If potholder flames, throws in sink and turns on water									
	If clothing catches, stops, drops and rolls while calling for help									
	Turns off appliances/stove after use									
	Refrains from leaving candles/incense unattended, extinguishes before leaving									
	Refrains from using appliances with frayed cords									

	Demonstrates ability to use fire extinguisher									
Home Security	Keeps doors locked									
	Looks out window/peephole if someone knocks versus immediately opening door									
	Only opens door for trusted people or community helpers									

## Generalization Steps

**Fade reinforcement.** The frequency and intensity of the reinforcement should be faded using the guidelines outlined in the teaching steps to resemble a more natural environment.

**Fade supervision.** The teacher should systematically fade his/her supervision of the student to resemble what will be available in an adult services or home environment using the guidelines outlined in the teaching steps. Note that we recommend that supervision always be provided in the kitchen due to the potential dangers there and the need for rapid judgments.

**Vary the people with which the student works.** The student's therapists should be rotated through his/her skillbuilding programs to ensure that the student generalizes the skill across people. **Vary the materials.** Change the materials the student uses to complete the task to ensure that he/she generalizes the skill across varying sets of materials. For example, multiple types of cell phones, different types of kitchen appliances etc...

**Vary the environment in which the student completes the task.** Use multiple exemplar training and continue to generalize to novel settings.

## Potential issues that may occur and variations to teaching steps to overcome them

**Students who are resistant to physical prompts:** Some students do not respond or become resistant to a physical prompts. As discussed above, there are other prompting strategies that may be helpful for these students, including: using a laser pointer to indicate a location, using a live or video model to demonstrate the target behavior, or using a set of instructions with text and/or pictures. If these are not successful for the student, begin a tolerance program, reinforcing for gradually increased duration of physical prompting. Note that for most kitchen skills, due to the difficulty of safely prompting while working with sharp objects and around fire, we generally do not teach these unless the student can respond to model prompts.

**Students who are prone to prompt dependency:** When teaching a behavior chain, care should be taken to address the issue of prompt dependency. Prompt dependency occurs when the student will not perform the skill without the prompt. The prompt, prompt level and process to fade the prompt should be clearly spelled out on the step sheet. Ways to fade the prompt may include inserting a time delay between the SD and the prompt, fading the text prompt from black to gray to white, and fading the picture from a superimposed text from 100% to 50% to 25% to 0% density. Verbal prompts can be difficult to fade so picture/text, physical prompts and environmental cues are preferable. Note that the therapist's presence or inadvertent cues from the therapist are frequently prompts for many students and must be faded. Providing reinforcement for initiating the next step instead of or in addition to completing a step can be used to teach the student to initiate steps. This reinforcement should be faded on a variable schedule.

For this set of skills it is crucial that the student learn to respond when there is not a teacher present and outside of what the student would recognize as training situations. This means there is a need for a great deal of contrived training in the community to provide sufficient practice for the skills, particularly the first step of recognizing the issue.

**Students who are prone to depend on reinforcement:** It is important to note that students do not only become dependent on the prompt to complete the skill, but often become dependent on the reinforcement that is delivered by the therapist and the therapist's presence as a signal that reinforcement is available. As with prompting, the step sheet should clearly describe how the reinforcement and the therapist's presence should be faded to resemble a more natural environment. This can be accomplished by systematically fading the amount of reinforcement, the frequency of reinforcement, or inserting a time delay between completion of the task and reinforcement and gradually increasing that delay.

### **Next Steps**

These safety skills are essential to living more independently. The mastery of these skills allows more opportunities for students with regards to potential living situations, community activities and employment opportunities. These skills serve as prerequisites to living in an apartment, and working and/or engaging in preferred activities with reduced supervision.

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