2011

Teaching daily living skills to young adults with autism : the creation of a curriculum guide for special education teachers

Stephanie Iwanciow Haas
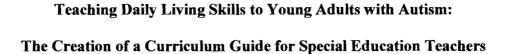*California State University, Monterey Bay*

Teaching Daily Living Skills to Young Adults with Autism:

The Creation of a Curriculum Guide for Special Education Teachers

Action Thesis Submitted in Partial Fulfillment of the Requirements

For the Degree of Master in Arts in Education

California State University Monterey Bay

Spring 2011

Action Thesis Signature Page

Daily Living Skills for Young Adults with Autism: A Curriculum Guide

By

Stephanie Iwanciow Haas

Approved by the Graduate Advisory Committee

_____   5/2/11
Dr. Josh Harrower   Date
Graduate Advisor

_____   5/6/2011
Dr. Bill Jones   Date
Thesis Committee Member

Abstract

The purpose of this thesis project was to compile a curriculum on teaching daily living skills for students transitioning from the school system to adulthood that is research-based and differentiated for students at various skill levels. A multi-level review procedure was implemented to develop the curriculum. First, a review of the literature was conducted to identify the topics and instructional methods to be included in the curriculum. Second, a panel of national experts were sent a draft of the curriculum to assess the accuracy and clarity of the information provided. Third, parents were surveyed to determine what they thought was important for their children to learn and how comfortable they felt with the proposed teaching strategies. Fourth, special education teachers were surveyed to determine their comfort level with teaching each of the topics outlined and using the proposed strategies. Results of the multi-level review procedure indicated that daily living skills were determined to be an important part of a transition curriculum. Further, the results provided supporting evidence that the topics outlined were important topics for this population to learn, the suggested teaching procedures were effective, and the format of the curriculum guide was a helpful tool for educators teaching this subject. Implications for teachers developing daily living skills curriculum for students transitioning to adulthood are discussed.

Table of Contents

Chapter 1: Statement of Purpose

Goal of the Project

As a special education teacher working with young adults with disabilities, I have been creating my own curriculum based on the individual needs of each student for several years. During the years that I have been teaching I have also been doing research and attending conferences and workshops. Through these experiences I have developed general ideas of what students need to know when they leave the school system and a general idea of how to teach it. Areas that need to be covered include, but are not limited to, education, employment, daily living skills, vocational skills and independent living skills (Collaborative Work Group on Autistic Spectrum Disorders, 1997; Hendricks & Wehman, 2009).

The lack of curriculum packages designed for students with moderate to severe disabilities transitioning from school to adulthood is one of the factors that led me to this project. In speaking with other special education teachers at the high school and post-secondary level I have found that the desire for a comprehensive curriculum is consistent, despite the fact that such a curriculum is hard to find. This is partly because the nature of autism and its variability means that very few curriculum packages can fit all students' needs (Hendricks & Wehman, 2009; Olley, 1999). Because of this variability, students with autism require highly individualized and differentiated instruction. (Rock, Gregg, Ellis & Gable, 2008). What is currently lacking for special education teachers is a comprehensive list of Individualized Education Program (IEP) and Individualized Transition Plan (ITP) goals, teaching strategies and materials for students with moderate to severe autism (Wehman, 2002).

Background

I currently teach at The Bay School, a non-public, non-profit school for students with autism. The school serves students from the age of five through the age of 22. Our school is staffed with a 1-to-1 staff to student ratio in addition to a credentialed classroom teacher. The school was founded in 1998 by families of several young children with autism, several of whom are now among the oldest at our school today (and who are the students that inspired the project). The school currently consists of 5 classrooms grouped loosely by age. We use the principles of Applied Behavior Analysis (ABA) to teach academics, social skills, language development, self-care, independent living and vocational skills as well as positive behavior support and the reduction of challenging behavior. All of the instructors at the school go through extensive hands-on, in classroom training in addition to an after school didactic training where they learn about the science and application of behavior analysis.

I have been with the school since June of 2003. In my time there I have served several roles. I started while in college as a part-time instructor working several days per week with the students during the day. When I graduated with a bachelor's degree in Community Studies from the University of California, Santa Cruz I decided to devote myself as a full time instructor and case manager and was responsible for developing and preparing daily curriculum materials for one student in addition to in classroom teaching responsibilities of multiple students. As I developed my skills further I was promoted to a senior instructor where I took on additional training and supervisory responsibilities as well as assisting the classroom teacher with IEP development and reviewing data notebooks. In 2008 I took on the significant challenge of being a classroom teacher,

developing IEP's, coordinating community employment and volunteer sites, working with families to develop positive behavior support plans and supervising all the instructors in my classroom. While I have had experience working with students of a wide age range, my classroom now consists of students with ages ranging from 17 to 21. The students currently receive 1-to-1 aide support in the classroom as well as 1-to-1 and small group instruction in the community and at job sites.

The Bay School uses the principles of ABA to teach a wide variety of skills. According to Cooper, Heron, and Heward (2007) "Applied behavior analysis is the science in which tactics derived from the principles of behavior are applied systematically to improve socially significant behavior and experimentation is used to identify the variables responsible for behavior change" (p. 20). It is important to note the inclusion of "socially significant" in this definition. When ABA is used as a method of teaching students with autism, its social significance is exemplified in the progress made and the meaningful changes in the lives of the students served. The following are among the many strategies that are utilized to teach students with autism using an applied behavior analytic approach.

Using an ABA approach, particularly with early intervention, has been proven to help students with autism learn more quickly and daily living skills to lesser restrictive environments (McEachin, Smith and Lovaas, 1993). Since we use a scientific approach in the classroom, we also take detailed data on each of the programs we run in addition to any targeted challenging or inappropriate behavior that the students engage in. We take this data and analyze it to determine when programmatic changes should be made in order to increase the success of each student. If we see through the data that a student is

not successful learning with a particular teaching strategy we make a change to improve his/her skill acquisition. Similarly, if a student is successful with a program we make changes to push them farther and teach them more.

I began my training in ABA the day I started working at The Bay School. At the time the school had about 10 students (we now have over 40). The director took me into his office, for theory, and later into the classroom, for practice, and taught me the foundations on which I have based all my training since. I learned to use student motivation, to deliver reinforcement to increase the targeted behavior and to understand what punishment meant in an applied setting (not necessarily meaning a negative action, only that the targeted behavior decreases). I learned how to teach students to attend to current instructions using motivational systems and how to implement positive behavior support plans, both proactively and in situations in which target behavior occurs. In 2006 I began taking classes through Fitchburg State College (an extension program from Massachusetts). I learned more in depth the foundations of ABA, the history behind the practice, research methodologies and practical applications. Through this education I have been able to improve my teaching and problem solving strategies for the students I serve.

Purpose of the Project

The purpose of this thesis project is to compile a curriculum for students transitioning from the school system to adulthood that is research-based and differentiated for students at various skill levels. The curriculum will focus on daily living skills and will have individual "lessons." Rather than being a typical lesson plan (e.g. 5 steps), the lessons will focus on a specific area that needs to be taught, such as

"tooth brushing" or "transportation skills." Each lesson will include sample IEP/ITP goals, several different task analyses, teaching procedures and problem solving strategies as well as sample data collection procedures. Each lesson will have several versions each focusing on students at different skill levels. The curriculum will be designed to be adapted as needed for each student's specific needs. The teaching methods suggested will be derived from the field of Applied Behavior Analysis.

Importance of the Goal and Purpose

Students with moderate to severe autism need a wealth of information and skills to be able to transition to adulthood successfully (Hendricks & Wehman, 2009), daily living skills taking a key role. For a teacher trying to impart these skills, a guide in the form of sample IEP goals, lesson ideas and teaching strategies for each area covered would be invaluable. This would help to insure that these students are getting all the information necessary to perform these daily living tasks before they leave the school system. This is not only important for their quality of life and well being, but it is also the law that they are entitled to a free and appropriate public education until the age of 22 (Individuals with Disabilities Education Improvement Act (IDEA) of 2004). I also intend to make this curriculum available to other teachers and professionals.

In order to evaluate the curriculum, I intend to send the completed package to a panel of experts in the field with an evaluation form. In addition, I intend on sending the curriculum to teachers in a variety of settings for their feedback in regards to how feasible it will be to implement the curriculum in their settings.

In order to build this curriculum I will use my several years of experience teaching this population and creating goals and instructional materials. I will conduct

research and reviews of existing curricula and utilize any relevant information. I will collaborate with other teachers and educators to establish the topics that should be covered. I will approach each lesson with research based methods which have been scientifically proven to be effective.

Research Questions

Based on these interests my research questions for this project are as follows:

1. What topics are important to cover in a curriculum of daily living skills for students with moderate to severe autism who are transitioning to adulthood?

2. How can these skills be taught using Applied Behavior Analysis?

3. Can a socially valid curriculum guide be developed covering the important topics and instructional strategies in teaching daily living skills to transitioning students with ASD?

Chapter 2: Literature Review

Introduction

Students with special needs in California are served through the public school system until the age of 22 (California State Educational Code 56041). Under the current federal law, schools are required to start programming for transition to adulthood no later than the age of 16 (Individuals with Disabilities Education Improvement Act of 2004). By this age teachers must begin teaching material in the areas of training, education, vocational and independent living skills. For each student with an IEP, the specific skills within these content areas can look very different. For students diagnosed with moderate to severe autism, there is often a focus on daily living skills (e.g., hair brushing, tooth brushing, dressing, safety skills, sexuality education, meal preparation), social skills (e.g., requesting items, engaging in conversations, reduction of stereotypical behaviors, personal relationship development) vocational skills, and behavioral support (Carothers & Taylor, 2004; Hendricks & Wehman, 2009; Wehman, 2002).

In order to prevent students from becoming dependent on any one service provider, schools and adult service agencies need to develop a plan to transition more systematically from the school to the adult service agencies (Hendricks & Wehman, 2009). Programming for generalization by teaching a variety of skills in a variety of settings by a variety of people is vital to making sure that students maintain the skills that they have learned (Carothers & Taylor, 2004).

While there is a wealth of knowledge about teaching students with developmental disabilities, particularly autism, no single curriculum has been proven to be effective for all students it reaches (Olley, 1999). This thesis serves as an introduction to a proposed curriculum to teach daily living skills to students currently in secondary and post

secondary school programs who will transition to adulthood in the next several years. What follows is a review of the literature relevant to the research focus. First, studies about the kinds of topics traditionally included in school-adulthood curricula are examined, with a specific focus on daily living skills. Second, a review of studies describing teaching methods derived from the field of Applied Behavior Analysis (ABA) and specific teaching strategies that can be used to promote independence in these areas is provided.

Topics Relevant to Facilitating Daily Living Skills

While there is limited research on teaching students with autism who are transitioning into adulthood, a few sources outline the areas of need. In 1998, Paul Wehman recommended that for people with significant disabilities teaching transition skills must begin at a young age—as early as elementary school. That transition must begin with an emphasis in vocational training. He also stated that the curricula that are available are often not appropriate for students who need to focus on functional life skills.

More recently, another study discussed more topics critical to success in adulthood. Those areas include education, employment, community living, leisure skills, functional academics, communication, and support for behavioral challenges. These skills must be taught in a variety of settings, but most importantly in the setting they will be applied. For example, vocational skills should be taught on the job, personal hygiene skills should be taught in a bathroom or bedroom, and social skills should be taught with the people the student will be interacting with such as co-workers and community members (Hendricks & Wehman, 2009).

Individuals with autism are often limited in their independence with daily living skills (Sigafoos et al., 2007). They are likely to be more independent and have a more positive life outcome if they learn independence with performing various daily living tasks (Carothers & Taylor, 2004; Hume, Loftin and Lantz, 2009). People with disabilities have been taught to engage in tasks such as washing dishes, mailing letters, setting the table, caring for pets and preparing meals (Carothers & Taylor, 2004; Delano, 2007; Sigafoos et al., 2007). These skills were taught using a variety of strategies including video modeling, activity schedules and a variety of treatment packages that combine many strategies (Carothers & Taylor, 2004; Delano, 2007; Sigafoos et al., 2007, Winterling, Gast, Wolery & Farmer, 1992).

Several sources outline the skills that are important for an individual to know how to do independently in order to transition to adulthood successfully. The Syracuse Community Referenced Curriculum Guide (Ford et al., 1989) outlines skills such as eating and food preparation, grooming and dressing, hygiene and toileting, safety and health, budgeting and scheduling, household maintenance, extra curricular activities including activities that one can do alone, physical fitness, community safety, grocery shopping, eating out and utilizing community services. Another guide provides sample ITP goals in the areas of money management, nutrition, personal grooming, health care, cooking, mobility and community participation (Blackmon, 2001). Paul Wehman in his guide "Developing Transition Plans" (1998) suggests that ITP goals include topics such as independent living, transportation/mobility, recreation/leisure, financial/income needs, and health/safety.

Teaching Methods Derived from ABA

Teaching Strategies

Many teaching strategies that have been proven effective using Applied Behavior Analytic studies can be used to teach students with disabilities. In the academic writing of ABA what is commonly referred to as "motivation" is known as "establishing operations" or "EO". An EO is "an environmental event, operation or stimulus condition that affects an organism by momentarily altering (a) the reinforcing effectiveness of other events and (be) the frequency of occurrence of that part of the organism's repertoire relevant to those events as consequences" (Michael, 1993, p. 192). In other words, an EO consists of the environmental conditions that make somebody want to do something. Strategies for arranging the environment to elicit student motivation must be taken into consideration when teaching, in order for the targeted behavior to change (the student learning new skills) (Michael, 1993; Sundberg, 1993). Given the importance of motivation to learning, research supporting the following strategies for enhancing student motivation and learning as it relates to daily living skills are reviewed.

Activity Schedules

An activity schedule is a tool used to teach skills in the absence of a person prompting the student. These schedules take the form of some sort of pictorial or textual prompt designed to walk a student through a task following sequential steps. An activity schedule may take the form of a picture book, a checklist or even a computer program designed for this purpose (Kimball et al., 2004). When teaching new skills, activity schedules are helpful because it is possible to program for generalization by reinforcing the same behaviors in a variety of settings. Typically the student is physically prompted

through the steps, and those prompts are systematically removed. Skills have been shown to be maintained just with the use of the activity schedules, promoting independence from care givers and teachers (Carothers & Taylor, 2004).

Prompting and Prompt Fading

A prompt is simply an antecedent to a desired behavior that behavior analysts use to increase the likelihood that a student will perform a task or response correctly (Cooper et al., 2007). There are several types of prompts, the most common being verbal, modeling (described in more detail below) and physical prompting (Cooper, et al., 2007). Prompts are used to teach almost all skills that are learned, and can be effective in teaching specific daily living skills such as age appropriate leisure skills and mending clothing (Cronin & Cuvo, 1979; Jerome, Frantino & Sturmey, 2007). In order to increase independence prompts must be faded. Two common strategies are called "least to most" and "gradual guidance" fading (Cooper et al., 2007). Least to most prompt fading involves using the most invasive form of prompting first (such as a physical prompt), then slowly moving to less restrictive forms (such as a model or textual prompt). Gradual guidance fading is similar, but focuses more on physical prompting, starting with the most invasive (such as prompting at the hands) and moving to a less invasive prompt (such as shadowing behind the person's shoulders) (Cooper, et. al., 2007).

Shaping

Shaping is a strategy used to teach new behaviors where successive approximations towards a final behavior response (or teaching goal) are reinforced until the goal is reached (Cooper et. al., 2007). Kennedy (1992) found that shaping strategies could also be used to reduce episodes of challenging behavior which is common among

individuals with moderate to severe autism. Shaping has been proven to be an effective teaching strategy across many skills, and students tend to learn more quickly when shaping strategies are used (Mosk & Buscher, 1984).

Modeling

Modeling is a form of prompting that can be particularly effective if the learner has already learned pieces of the behavior being taught (Cooper et. al., 2007). Students have been taught to perform tasks such as shopping at a grocery store or skills to eat appropriately at a restaurant using modeling strategies (Haring & Others, 1987; Others & Van, 1981). Modeling is not only an easy strategy to use to teach, but has been proven to increase generalization across settings without direct teaching (Cooper, et. al., 2007; Haring & Others, 1987).

Chaining and Task Analysis

Chaining is a process by which a sequence of skills are linked together to produce a larger behavior or outcome (Cooper et. al., 2007). A key component in chaining is first developing a task analysis to determine what steps are to be linked together (Cooper et. al., 2007). Task analysis is the process by which a skill is broken up into smaller components so it can be more easily learned (Cooper et. al., 2007). Age-appropriate leisure skills have been taught through task analysis and a backward chaining teaching strategy (Jerome, Frantino & Sturmey, 2007). Students have been taught to perform various tasks such as performing upkeep on an apartment, mending clothing and basic cleaning tasks. (Cronin & Cuvo, 1979; Cuvo & Others, 1992; Williams & Cuvo, 1986). Task analysis has also been proven to be an effective method for assessing daily living skills (Williams & Cuvo, 1986).

Treatment Packages

Due to the complex nature of educating people with moderate to severe disabilities a treatment package (a combination of several teaching strategies) might be more desirable to use than any individual strategy alone (Winterling et al., 1992). One package combined three teaching strategies: time delay (delaying the time between giving the direction and providing a prompt), simulation (practice using a skill outside the context that the skill will actually be used) and multiple exemplar training (incorporating several examples of the instructional materials) (Winterling et al., 1992). The researchers found that this package was effective in teaching students with moderate disabilities to identify and remove broken materials (plates, glasses, etc.) from various places around the kitchen. In their discussion, the researchers stated that due to the complex nature of educating people with moderate to severe disabilities, a treatment package might be more desirable to use than any of these individual strategies alone.

A monumental piece of research in the field of ABA was conducted by Koegel & Frea (1993). The researchers identified what they referred to as "pivotal skills" in communication—skills that once taught and mastered, begin to generalize to improve untaught behaviors. The results of this study showed that high functioning children with autism were able to change their conversational social behaviors with the training, and that other behaviors that were previously followed by a similar reinforcer improved as a result. Treatment packages can be used to focus on teaching a single pivotal skill, whose gains would then have the potential to generalize to other skills, thereby making intervention more efficient.

Summary

A review of the literature suggests that when building a curriculum for young adults with autism about to transition into adulthood, content should include instruction on daily living skills. Teaching these skills will help promote independence and will have a higher likelihood of increasing quality of life for these individuals

The curriculum should include teaching strategies that are derived from the field of ABA. The literature suggests that important tools to use include activity schedules, prompting and prompt fading, chaining, shaping and modeling as well as training packages that combine these strategies. As Olley (1999) noted, there is no single curriculum that has been shown to be effective across all individuals with autism.

The curriculum should include ongoing data collection and analysis to ensure that the interventions provided are and continue to be effective. Several of the articles noted that since students with autism are so different in their strengths, their needs and their learning styles, a curriculum that allows for and provides differentiated instruction for students across all levels of ability is highly needed. Therefore the purpose of this project is to create a comprehensive set of materials, focusing on daily living skills, outlining the skill areas and the research based instructional strategies necessary for ensuring a successful transition to adulthood.

Chapter 3: Methodology

Introduction

The purpose of this project is to develop a curriculum for teachers of young adults with moderate to severe autism as a resource to teach daily living skills that will ensure a successful transition to adulthood. A multi level process was utilized to develop the curriculum. The first step in this process involved conducting a review of the literature to identify crucial topics to cover and methods that have been proven most effective to teach these topics. The second step was to assemble a panel of experts in the field of teaching adolescents and adults with developmental disabilities in order to verify that the curriculum is in line with current educational practices. The third step consisted of interviewing parents in order to assess the real-world applications of the information that the students will learn. The final step consisted of a review of the curriculum by special educators who currently support students with ASD who are transitioning to adulthood. This review served to provide an assessment of the social validity of the curriculum, as the teachers had the opportunity to provide feedback on the feasibility of utilizing the curriculum for the students with whom they work.

Intended Delivery Settings and Project Participants

While the curriculum is designed for use in any community or site-based school, to maximize the effectiveness of the curriculum, the community agency or school must have the appropriate materials and facilities to teach the specified topics (e.g., there must be a bathroom with a sink to teach tooth brushing). To carry out the interventions, the students must have the appropriate support for their level of need regarding the number of instructors in the classroom. If students require visual aides these should be available to them. If students require augmentative or alternative communication systems these

systems should be available as well. Students will need many opportunities to practice these skills, often many times each day. The students for whom the curriculum is designed will usually be between 15 and 21 years of age.

Participants in the development of this project include experts in the field as well as key stakeholders such as parents and teachers who have a vested interest in the successful daily living skills of their students with ASD. The experts will be individuals who have published research and best practice guidelines in peer reviewed journals or books, and/or who direct state or federal grants in the area of daily living skills services for individuals with ASD. Key stakeholders will consist of 1) parents of adolescents or young adults with ASD and 2) local teachers who support the daily living skills of adolescents/young adults with ASD.

Procedures

Development of the curriculum required a multi-level review process, focusing on the following two primary objectives: 1) identification of the content (i.e., key topics and skills to be included) and description of evidence-based strategies for teaching the identified skills, (i.e., suggestions for teachers related to both the implementation of the strategies and the evaluation of student progress); and 2) an overall evaluation of the usefulness of the curriculum. The procedures for accomplishing each of these steps are described below.

Objective 1: Identification of Content and Description of Strategies

Literature Review

The primary means for identifying, selecting, and determining the importance of the content that should be included in the curriculum was a detailed search of the research

literature on evidence-based teaching strategies for young adults with autism on the moderate to severe end of the spectrum. Through a review of past studies, strategies and skills that have been found to be effective in addressing these students' most crucial needs were identified for adaptation and inclusion in my curriculum.

Daily living skills such as personal hygiene skills, meal preparation, dressing and appropriate eating are skills that are believed to be essential to a curriculum such as this, and therefore researched critically in the literature. Each of the skills identified for the curriculum then was structured to utilize teaching strategies that are evidence-based. To ensure that all strategies and skills are evidence-based, selected strategies were derived from a review of the literature. Descriptions of these strategies were included in every lesson plan developed within the curriculum (task analysis was only included if applicable).

Along with descriptions of teaching strategies empirically validated for teaching individuals specific daily living skills, the curriculum will include suggestions for teachers related to how to implement the strategies, and how to evaluate student progress in response to the strategies.

Objective 2: Evaluation of the Curriculum and Social Validity

Experts in the Field

An initial draft of the curriculum, along with a set of evaluation questions, was sent to a selected panel of 3 people who have worked in the field of education with young adults with special needs and who are well known in the education community for their expertise in the area of daily living skills planning for this population.

The experts were asked to evaluate the curriculum by responding to a number of questions relating to the functionality and practicality of the curriculum (see Appendix A). Responses by the experts were reviewed and incorporated into a revised version of the curriculum materials.

Parent Surveys

Another way to probe the social validity of the identified evidence-based strategies and importance of the topics is to seek the input of parents. Therefore, parents were surveyed to determine 1) their perceptions on the importance of the daily living skills identified, and 2) their comfort level with the evidence-based strategies selected, for this curriculum. Twelve parents were identified from among a group of parents who currently have a child with ASD approaching or in the high school age range.

In particular the parents were presented with a survey recruiting their feedback on the skills and strategies identified in the review of the literature. The survey for the parents (see Appendix B) evaluated whether or not acquiring the skills identified in the literature would make "life easier" for their adolescent child with ASD as they move into adulthood. The parent survey recruited information on the parents' comfort level with the evidence-based strategies being used for their child.

Panel of Current Special Education Teachers

Additionally five secondary and post secondary level special education teachers were recruited to review the revised curriculum materials regarding their practicality of use in school settings for students with ASD learning daily living skills. In particular, special education teachers who are working in both public and non-public schools teaching adolescents and young adults with autism participated. These teachers were

from a variety of districts in the Santa Cruz, California area. Each teacher who participated on the panel was asked to respond to a survey consisting of questions covering if and how they would use the curriculum and pieces of it and the feasibility of this in their setting (see Appendix C).

Data Analysis

Quantitative and qualitative data from the various surveys were examined and analyzed for the development and subsequent revision of the curriculum. Survey data from all categories of review was examined and compared for commonalities in their responses, regarding suggestions for enhancing the content, relevance, and validity of the curriculum for its target students. Ideas and suggestions that occur across consultant categories and/or that tend to be recurring were especially noted and applied to revise the curriculum.

Summary

This project created a functional curriculum for special education teachers to make use of when teaching daily living skills to young adults with moderate to severe autism. Through the use of the curriculum these students will be able to demonstrate life skills in a variety of areas. Initial content and instructional strategies for inclusion in the curriculum were identified via a review of the literature. Surveys of parents were conducted to verify the importance of the content along with the suitability of the instructional strategies. The accuracy of the content and the extent to which the strategies are clearly described and empirically supported, were evaluated by an expert in the field through an evaluation questionnaire. Further input was recruited from current special education teachers providing instruction in daily living skills, to evaluate the practicality

and value of the curriculum for use by special educators. Each of these procedures were designed to result in a curriculum that is a comprehensive compilation of suggestions, lessons, content and teaching methods for special education teachers of students with moderate to severe autism.

Chapter 4: Results and Discussion

The purpose of this project was to create a curriculum guide for teachers who are teaching daily living skills to students with moderate to severe autism. A multi-level review process was conducted. National experts were surveyed to determine the quality of information and clarity of description of each lesson and teaching strategy. Parents were surveyed to determine appropriate topics to teach. Special education teachers were also surveyed to determine feasibility of using the curriculum and comfort level with teaching each topic. This section summarizes feedback received from those surveyed as well as how the curriculum was altered to respond to the feedback.

Results from the Literature Review

A review of the literature suggests that daily living skills are an important part of a successful transition curriculum for students with autism spectrum disorder who are transitioning to adulthood. The literature identified a number of important topics in the area of teaching daily living skills including, but not limited to the following: dressing, toileting, banking, transportation skills and appropriate eating. Many resources suggested that teaching strategies derived from the field of Applied Behavior Analysis are effective in teaching these skills. Research has demonstrated empirical support for the use of many strategies derived from the field of ABA including, but not limited to the following: prompting and prompt fading, shaping, chaining, modeling and the use of activity schedules. The literature also suggested that frequent data collection and analysis is an important part of a curriculum targeting these skills.

Results from the Experts in the Field

An initial draft of the curriculum, along with a set of evaluation questions, was sent to a selected panel of three people who have worked in the field of education with

young adults with special needs and who are nationally recognized in the education community for their expertise in the area of daily living skills planning for this population. Two of these experts, Paul Wehman, and Peter Gerhardt were able to respond with their feedback on the curriculum. Both Paul Wehman and Peter Gerhardt are considered experts in the field of education with young adults with disabilities, particularly autism.

Peter Gerhardt has worked in the field of educating adolescents and young adults with autism. He has a doctorate in education and has worked with this population in various settings including education, employment and in the community. He has co-authored several articles and book chapters on the needs of young adults with autism, on the transition process and addressing target behavior for these individuals.

Paul Wehman has his Ph.D. in Behavioral Disabilities and Rehabilitation Psychology and is the Editor of the *Journal of Vocational Rehabilitation*. He has written and edited many books in the areas of transition from school to work and supported employment for young people with disabilities. He has written over 200 journal articles in the areas of transition. He is the editor of the Journal of Vocational Rehabilitation.

The first four questions that the experts responded to required a narrative answer. In regards to the first question, "Are any of the targeted skill areas addressed in the curriculum guide not of sufficient importance/relevance for students with moderate to severe autism to transition successfully? If so, please list and explain," Gerhardt said that "all the skills appear to be of sufficient importance/relevance to successful community transition." Wehman noted that the "relevance depends on the individual needs of each student. It is possible that a student would need to learn the skills listed, it is also possible

that the skills listed would not be relevant to a particular student." This reinforces the need for differentiated instruction for every student. Both Gerhardt and Wehman noted that there are too many skills to even list, as the areas of need for this population are extensive. Wehman noted that it is important to keep in mind how long it will take a student to learn a skill because "some of the skills may not be relevant if it takes the student too long to learn the skill. There are many skills to teach but instructional time is limited." Since this idea was not expressed directly in the curriculum, a "Letter to Teachers" was added at the beginning of the curriculum to explain the intended population, supports needed and ideas for selecting goals, such as how long the skill will take to teach and relevance to the individual student.

Wehman made a comment that some of the topics seemed to be geared towards younger students and that "we would not want to wait until the transition component of an IEP is in place to address some of the skills listed like dressing, toileting, showering, hand washing, etc." This points out that the intended population may not have been made clear enough to the reviewers. This curriculum was intended to meet the needs of the population of students such as those that The Bay School serves: students who have not been successful in a lesser restricted environment such as a special day class in a public school. The students that this curriculum was intended for would be those who have not been taught these skills at a younger age for a variety of reasons, but are still capable of learning how to display the skills independently. This intention was added into the "Letter to Teachers" at the beginning of the curriculum.

The second question was "are any of the instructional strategies inappropriate for teaching these skills to the targeted population? If so, please list and explain." Wehman

said "no, the strategy used will depend upon the student characteristics and the type of task that is being taught etc.," and Gerhardt expressed that none of the strategies were inappropriate.

In response to the third question "given that this curriculum guide is intended to provide just a sampling of meaningful skill areas, are there any others that are missing that warrant inclusion in the guide? If so, please provide a brief rationale for their inclusion," both Wehman and Gerhardt expressed that self determination and self advocacy was an important topic to teach. While these topics were not included in the curriculum, these would be topics to be covered in a future expansion of the curriculum. As in the first question they both expressed that the list of topics that could be included in such a curriculum is exhaustive. Wehman also suggested teaching skills in the areas of personal health, safety, social skills, money management and employment. Gerhardt suggested teaching skills in "safety, sexuality, community social competence, travel training, accessing technology, etc." These topics are all areas that could be included in an expansion of the curriculum, but were determined to be beyond the scope of the current curriculum.

Wehman commented extensively on the fourth question "given that this guide is intended to provide information on the use of empirically validated instructional strategies for the targeted population, are there any instructional strategies missing that warrant inclusion in the guide? If so, please provide a brief rationale for their inclusion." He noted that ABA is the most researched strategy for teaching individuals with autism. He also suggested that "social scripts and stories are often used to teach individuals with autism." He made mention of positive behavior support, which is another area that could

be included in an expansion of the curriculum. He expressed a need for more detail on modeling, that it could include either live or video modeling, in addition to a more detailed explanation on prompt fading strategies and prompt hierarchy. Both of these suggestions for improvement were made in the curriculum. The mention of video modeling was included in the description of the modeling strategy, as well as a description of the prompt hierarchies. Wehman also suggested some strategies for designing an instructional program (which he has personal experience with). This feedback was not taken into consideration at this time, but will be evaluated if this curriculum becomes a publishable document.

Gerhardt did not give many comments but did state that he "would prefer to see some mention of fluency/precision teaching in the instruction of community referenced skills." As a result, information on fluency and precision teaching was incorporated into several lessons where skills were expected to be demonstrated in the community i.e., transportation skills, banking and grocery shopping.

The next four questions required a response on a scale of 1-5 where 1 was "Poor", 2 was "Needs Improvement", 3 was "Adequate", 4 was "Good" and 5 was "Excellent". For question five "How would you rate the clarity of language in the curriculum materials for the following topics?" Wehman scored a "3" for each topic covered in the curriculum. Gerhardt provided the following explanation for all questions five through eight: "All are good to excellent. If an actual rating is necessary, I would offer an [sic] universal "4" but only because I an unclear to what the quantitative difference is between good (i.e. correct) and excellent (more correct)."

For question six "How would you rate the accuracy of information in the curriculum materials for the following topics? (all topics outlined in the curriculum)" Wehman gave the following explanation: "I am not sure you can rate the accuracy for each given the fact that each situation is different. Please see previous notes about relevance and expansion of areas."

For questions seven "How would you rate the clarity with which the following teaching procedures are described? (Activity Schedules, Prompting and Prompt Fading, Modeling, Chaining)" and eight "How would you rate the accuracy of the descriptions of the following teaching procedures? (Activity Schedules, Prompting and Prompt Fading, Modeling, Chaining)" Wehman recommended expanding on all topics and scored a 2 for each topic.

Results from the Parent Surveys

Of the 12 parents who were identified from among a group of parents who currently have a child with ASD, five responded to the survey. Question one asked parents what topics they felt were important for their son/daughter to learn in the area of daily living skills. The responses are displayed in Table 1. The children who the parents described in their surveys had a wide variety of skill levels and very different needs. In the analysis of the quantitative data provided in the surveys, some of the results from the scaled questions may be skewed due to this fact. For example, two parents of the same student who is still not using the bathroom independently, has very profound motor control deficits, has no verbal language and is just beginning to use adapted sign independently rated topics such as "appointment keeping" and "phone skills" as much less important than "toileting" and "dressing." Along this same line, a parent whose child

was already fluent in most of these topics rated the importance of these skills as "neutral." This variation in responses highlights the importance of individualizing the educational programs in the form of IEP's and the extent to which those skills are taught.

Question two asked parents how comfortable they felt with the outlined interventions being used to teach their children daily living skills (See Table 2). In general, parents were very comfortable with the interventions outlined ranging from 4.4 to 4.6 on a scale from 1 (not at all comfortable) to 5 (very comfortable). All of the parents surveyed have their children enrolled at The Bay School which employs all of these teaching strategies as a core part of the program and all of the students are very successful in this type of a program. This may have influenced the answers heavily. Future research could survey parents outside of a Bay School program to get results from parents whose children are in a wider variety of programs and whose teachers implement a wider variety of teaching strategies.

The next two questions allowed for a narrative answer. Some parents answered at length and some parents gave brief answers. In response to the first narrative question "describe the independent living skills you think your son/daughter will need to be successful in a setting after the age of 22," several parents mentioned that their children had "pretty strong independent living skills, but some skills still need supervision or oversight to maintain safety." This seemed to be a common theme among the parents whose children already had acquired many of the daily living skills. Some of the parents emphasized specific skills that their children needed to posses such as the "ability to communicate toileting needs" or to "be able to negotiate the streets, corridors, hallways, etc., in an appropriate and safe manner (maintaining 'situational awareness', making way

for people, etc)." One parent expressed that their child needed to be able to "eliminate target behavior in familiar and repetitive situations." All of the parents expressed the need for their children to work on their communication skills, particularly in generalizing these skills to new people. An area for expansion of the curriculum would be to include topics on communication and language skills.

In response to the next question "describe teaching strategies that you think would be effective to teach independent living skills to your son/daughter" parents were quick to describe their children's strengths. Several parents described how their children were very visual and that schedules and checklists worked well. Parents also mentioned rewards, consistency and repetition as strategies that were effective. One parent mentioned that she wanted her son to "learn to use technology such as features on his phone and computer programs such as Google Calendar to manage his daily appointments" to tie into his visual learning style.

Results from the Panel of Current Special Education Teachers

Additionally five secondary and post secondary level special education teachers were recruited to review the revised curriculum materials regarding their practicality of use in school settings for students with ASD learning daily living skills. Two teachers reviewed the curriculum and responded to the survey. One teacher was from a public school and another teacher was from a non-public school.

The first two questions had a scale from 1 to 5, 1 being "Not at all important" and 5 being "Very important." The first question read "How comfortable would you be using this curriculum to teach each of the specified areas below to your students?" The average answer on the scale for each topic is displayed in Table 1. Since only two special

education teachers responded, it is clear that both teachers felt highly comfortable with teaching each topic, with the exception of the "showering" program which was rated as neutral.

The second question read "How comfortable would you be using the following interventions to teach the topics in the curriculum?" The average answer on the scale for each topic is displayed in Table 2. Each teacher also felt highly comfortable using every teaching strategy outlined. The teacher in the non-public school is a Board Certified Associate Behavior Analyst and utilizes these teaching strategies on a regular basis. The public school teacher said that he is familiar with all of these strategies as well.

Questions three, four and five required narrative responses. Question three read "Please describe the strengths of the curriculum." The public school teacher made a similar comment to Paul Wehman about the topics appearing to be geared towards students of an earlier age. He mentioned that "some [of the skills] may be appropriate in the school setting depending on the type of facilities, staff availability, skill level and age of the student." He said that in the class he teaches, there is a wide range of students with disabilities, but that they all had most of the personal hygiene skills outlined in the curriculum, because that was part of the curriculum that was taught to most of his students at an earlier age (since they have been in the district from a young age). He said that even though his "students can range from mild to severe, most of them have their hygiene skills completed by the time they reach the 18-22 year age group." He mentioned that he has taught the hygiene skills, but to much younger children, as well as in a home setting.

The non-public school teacher liked the task analyses that were written, but would have liked some more detail, specifically with the hair brushing task analysis in regards to how far the student had to hold the detangler spray away from their head when spraying. She also said that "it would be helpful if some of the analyses were more detailed or if there were examples of the task analyses for students with more motor difficulties for tasks such as flossing or dressing." Clarifications were made to the hair brushing task analysis and some more detail was outlined in the "differentiating instruction" section for several other topics.

Question four read "Please discuss what you think should be eliminated from the curriculum." Neither the public school teacher nor the non-public school teacher had any topics that they thought should be eliminated.

Question five read "Would you be likely to use any of the elements from this curriculum in your classroom? If so, which elements?" The non-public school teacher said that she uses all the elements regularly. The public school teacher did not provide any written response, but we spoke over the phone about the answers to this question.

He informed me that in many public school post-secondary programs there isn't a mild-moderate class, they are clumped into the moderate-severe class. So in his class, he has an even wider range of students than typical. As he mentioned in the response to question three, he doesn't typically teach a lot of the personal hygiene and self-care skills because most of his students already have those skills, but he did say that if he was going to teach these skills, he would feel comfortable using the resources provided in the curriculum. They do teach a lot of the budgeting, transportation, appointment keeping,

leisure skills and making purchases. He thought that the task analyses were helpful and that he liked the description of the teaching strategies.

Assessment of Social Validity

In order to assess the social validity of the curriculum the parent and teacher ratings on the surveys were compared in the following tables. Table 4 compares the relevance of instructional objectives to both stakeholders. The parents were asked how important they thought the skill was for their child to learn and the teachers were asked how comfortable they were with teaching the skill. As discussed above, the parent ratings may appear skewed due to the small sample size and the large variety in the level of needs of their children. The sample size of the teachers was small as well, so the data may be equally skewed. In general teachers felt comfortable teaching most topics, however the two topics they felt neutral about teaching were "pill swallowing" and "showering." These two topics were rated to be of relatively high importance by the parents. This demonstrates a need for some investigation as to why the teachers felt less comfortable teaching these topics and their responses could provide more information about what resources should be added to the curriculum to address this lower level of comfort.

Table 1: Relevance of Instructional Objectives to Stakeholders

Daily Living Skill	Parent Importance Rating	Teacher Comfort for Instruction Rating
Appointment Keeping	2.4	5
Appropriate Eating	4.4	5
Dressing	4	4
Face Washing	4	4.5
Feminine Hygiene	3 (N=2)	4.5
Flossing	3	5
Grocery Shopping	3.8	5
Hair Brushing	3.6	4.5

Hand Washing	4.4	5
Laundry	3	5
Leisure Skills	4.2	5
Making Purchases	3.4	5
Nail Grooming	3.2	4.5
Phone Skills	2.8	5
Pill Swallowing	4.2	3
Shaving	2.8**	4
Showering	4	3
Toileting	4.6	4.5
Tooth Brushing	4	5
Transportation Skills	3.4	5

** Two of the five parents reported on a female child, and the lesson on shaving was geared more toward shaving of the face, however the parents still answered the question.

Table 2 compares the stakeholder comfort levels with intervention strategies used in school settings. The parents were asked to rate how comfortable they were with the instructional strategies being used to teach their children and the teachers were asked to rate how comfortable they were with teaching these strategies. It is clear that both parents and teachers agree that these teaching strategies are appropriate strategies and that teachers feel comfortable teaching them and parents feel comfortable with their children being taught with these strategies.

Table 2: Stakeholder Comfort Levels with Intervention Strategies used in School Settings

Teaching Strategy	Rating of Parent Comfort Level	Rating of Teacher Comfort Level
Activity Schedules	4.4	5
Prompting and Prompt Fading	4.4	5
Modeling	4.6	5
Chaining	4.6	4.5

Summary

Following a review of the literature, and analyzing parent, teacher and expert panel surveys, it is clear that the curriculum uses socially valid teaching strategies and focuses on topics that are appropriate for the targeted population. All parents expressed desire for their children to learn daily living skills in some form and both teachers expressed that they felt comfortable teaching most of the topics. The teachers expert panel provided crucial information for the revision of the curriculum and changes were made based on their feedback.

Chapter 5: Discussion

The purpose of this project was to create a curriculum guide for special education teachers teaching daily living skills to students with moderate to severe autism. The curriculum focused on 20 daily living skills and recommended instruction using methods derived from the field of ABA. The intention was to provide teachers with a guide to teaching daily living skills that included ideas for assessment, sample task analyses, IEP/ITP goals, data collection strategies, strategies for differentiated instruction and helpful hints for teachers.

Implications

As the literature suggests, daily living skills are an important piece of a transition curriculum for students with moderate to severe autism (Hendricks & Wehman, 2009). The literature also suggests that an effective method of teaching people with autism is through using the principles of Applied Behavior Analysis (Cooper et. al., 2007). The importance of teaching these skills to students was evident from the feedback received from the parents of these students. In the process of creating this curriculum, the most challenging, yet important task was how to be as specific as possible in each task analysis. For teachers who are developing this type of curriculum for their students this is a good practice in order for teaching to be consistent. Thinking carefully about how to adapt each skill to fit the individual needs of each student is also a key part of differentiating the instruction. Even if students are only working on a piece of the ultimate goal, they can still participate in the activity at the level that they are at. The skill that they are working on may not necessarily be directly related (e.g., a student practicing waiting in line at the grocery store isn't learning how to shop, but is gaining skills to engage in appropriate behavior in a difficult situation) but may serve a purpose that will

help them effectively participate in their community. This will require a lot of "thinking outside the box" for teachers to be able to identify and select the skills that are socially significant for each student.

Limitations

One limitation is that the number of topics that need to be covered to effectively teach students with moderate to severe autism all the daily living skills they need to know is endless. Therefore, while the current version of the curriculum guide includes important topics in the daily living skills domain, it is by no means exhaustive. Another limitation was that the sample of parents surveyed came solely from parents whose children were enrolled at The Bay School. A larger sample of parents may have provided additional information as to what teaching strategies a broader group of parents feel comfortable with and which topics they feel are important for their children to know. A larger sample of parents would also create ratings that are more representative of an average student since there is such a wide range of student needs; a small sample of parent input may have created ratings that were skewed. A larger sample of special education teachers would have also been more helpful for input on changes to make to the curriculum. Since only two special education teachers were able to respond to the surveys, the revisions to the curriculum was based solely on 2 opinions. If a larger sample of teachers were surveyed, there may have been different results about the comfort level with teaching each topic and the comfort level with using the teaching procedures outlined. Additional narrative feedback would have given more suggestions for revising the curriculum.

Reflections

In reviewing the feedback from the special education teachers and the expert panel I realized that the target population for this curriculum is more specific than I had originally thought. This curriculum is designed to provide education in these topics to students who did not receive this information at a young age, quite possibly because they were in a school setting that was not appropriate for their level of need. This curriculum may be geared towards the specific population of students that are served at The Bay School and other schools like it. In my experience at a school like The Bay School, this is very important, as there aren't as many direct resources such as general education students to reference, or even many resources in the district; these schools tend to create a lot of their own curriculum. For teachers who are writing IEP's and problem solving with students, this type of guide is helpful so that all resources are in one compiled place, rather than scattered in various files, folders, drawers and other locations.

Next Steps

In the future I would like to expand on the curriculum and create more topics to address more daily living skills in addition to topics in the areas of vocational skills, communication, language development, social skills and positive behavior support. I would like to take this information and provide it free of charge to other special educators and professionals in the field, as well as to parents. Based on the feedback received from all parties, it is a resource that would be helpful to teach young adults with moderate to severe autism skills that they need to transition to adulthood successfully. I would primarily like to provide this curriculum to the teachers and instructors at The Bay School

in order to give them more resources for teaching and for them to have a set of materials that are compiled into an easy to use handbook.

Conclusion

The process of creating this curriculum guide highlighted the need for such a guide to exist for special education teachers to use as a reference. Just like in the IEP process, a collaboration of special education teachers, parents and other professionals in the field contributed to the project as a whole. Through the use of this guide and the use of ABA based teaching methods, the intention is that teachers will be able to more effectively teach daily living skills to the young adults with autism with whom they work.

References

Blackmon, D. (2007). *Transition to Adult Living an Information and Resource Guide.*

California Department of Education

Carothers, D. & Taylor, R. (2004). How teachers and parents can work together to teach

daily living skills to children with autism. *Focus on Autism and Other*

Developmental Disabilities. 19(2), 102-104.

Cooper, J. O., Heron, T. E., & Heward, W. L. (2007). *Applied Behavior Analysis.* Upper

Saddle River, New Jersey: Pearson Education, Inc.

Collaborative Work Group on Autistic Spectrum Disorders. (1997). *Best practices for*

designing and delivering effective programs for individuals with autistic spectrum

disorders. Sacramento: California Department of Education.

Cronin, K. A., & Cuvo, A. J. (1979). Teaching mending skills to mentally retarded

adolescents. *Journal of Applied Behavior Analysis, 12*(3), 401-406.

Cuvo, A. J., & Others, A. (1992). Promoting stimulus control with textual prompts and

performance feedback for persons with mild disabilities. *Journal of Applied*

Behavior Analysis, 25(2), 477-489.

Delano, M. E. (2007). Video modeling interventions for children with autism. *Remedial*

and Special Education. 21(1), 33-42.

Ford, A., Schnorr, R., Meyer, L., Davern, L., Black, J. & Dempsey, P. (1989). *The*

Syracuse Community-Referenced Curriculum Guide for Students with Moderate

to Severe Disabilities. Baltimore: Paul H. Brookes Publishing Co.

Haring, T. G., & Others, A. (1987). Teaching generalization of purchasing skills across

 community settings to autistic youth using videotape modeling. *Journal of*

 Applied Behavior Analysis, 20(1), 89-96.

Hendricks, D., Wehman P. (2009). Transition from school to adulthood for youth with

 autism spectrum disorders: Review and recommendations. *Focus on Autism and*

 *Other Developmental Disabilities. (24)*2, 77-88.

Hume, K., Loftin, R., & Lantz, J. (2009). Increasing independence in autism spectrum

 disorders: a review of three focused interventions. *Journal of Autism &*

 Developmental Disorders, 39(9), 1329-1338.

Individuals with Disabilities Education Improvement Act (IDEA) of 2004 (20 U.S.C. §§

 1400 et seq). (2004).

Jerome, J., Frantino, E. P., & Sturmey, P. (2007). The effects of errorless learning and

 backward chaining on the acquisition of internet skills in adults with

 developmental disabilities. *Journal of Applied Behavior Analysis, 40*(1), 185.

Kimball, J., Kinney, E., Taylor, B. & Stromer, R. (2004). Video enhanced activity

 schedules for children with autism: A promising package for teaching social

 skills. *Education and Treatment of Children. 27*(3), 280-298.

Koegel, R. & Frea, W. (1993). Treatment of social behavior in autism through the

 modification of pivotal social skills. *Journal of Applied Behavior Analysis. 26*(3),

 369-377.

Lattimore, L., Parsons, M., & Reid, D. (2006). Enhancing job-site training of supported

 workers with autism: A reemphasis on simulation. *Journal of Applied Behavior*

 Analysis. 39(1), 91-102.

McEachin, J. J., Smith, T., and Lovaas, O. I. (1993). Long-term outcome for children with autism who received early intensive behavioral treatment. *American Journal on Mental Retardation.* *(97)*4, 359-372.

Michael, J. (1993). Establishing Operations. *The Behavior Analyst.* *(16)*(2), 191-206.

Mosk, M. D., & Bucher, B. (1984). Prompting and stimulus shaping procedures for teaching visual-motor skills to retarded children. *Journal of Applied Behavior Analysis, 17*(1), 23-34.

Olley, J. (1999). Curriculum for students with autism. *School Psychology Review. 28*(4), 595-607.

Others, A., & van, d. P. (1981). Teaching the handicapped to eat in public places: Acquisition, generalization and maintenance of restaurant skills. *Journal of Applied Behavior Analysis, 14*(1), 61-69.

Sigfoos, J., O'Reilly, M., Cannella, H., Edrisinha, C., de la Cruz, B., Upadhyaya, M., Lancioni, G., Hundley, A., Andrews, A., Garver, C. & Young, D. (2007). Evaluation of a video prompting and fading procedure for teaching dish washing skills to adults with developmental disabilities. *Journal of Behavioral Education. 16*(2), 93-109.

Sundberg, M. L. (1993). The Application of Establishing Operations. *The Behavior Analyst. 16*(2), 211-214.

Wehman, P. (1998) *Developing Transition Plans.* Austin: Pro-Ed Inc.

Wehman, P. (2002). A new era: revitalizing special education for children and their families. *Focus on Autism and Other Developmental Disabilities. (17)*4, 194-197.

Williams, G. E., & Cuvo, A. J. (1986). Training apartment upkeep skills to rehabilitation

clients: A comparison of task analytic strategies. *Journal of Applied Behavior*

Analysis, 19(1), 39-51.

Winterling, V., Gast, D., Wolery, M. & Farmer, J. (1992). Teaching safety skills to high

school students with moderate to severe disabilities. *Journal of Applied Behavior*

Analysis. 25(1), 217-227.

Appendix A: Expert Panel Survey

Please answer the following questions with as much information as possible. The answers to these questions will be used to revise the curriculum as needed to improve the quality of education. Feel free to use additional space if needed.

1. Are any of the targeted skill areas addressed in the curriculum guide not of sufficient importance/relevance for students with moderate to severe autism to transition successfully? If so, please list and explain.

2. Are any of the instructional strategies inappropriate for teaching these skills to the targeted population? If so, please list and explain.

3. Given that this curriculum guide is intended to provide just a sampling of meaningful skill areas, are there any others that are missing that warrant inclusion in the guide? If so, please provide a brief rationale for their inclusion.

4. Given that this guide is intended to provide information on the use of empirically validated instructional strategies for the targeted population, are there any instructional strategies missing that warrant inclusion in the guide? If so, please provide a brief rationale for their inclusion.

For questions 5 and 6 please use the following scale:

1 = Poor   2 = Needs Improvement   3 = Adequate   4 = Good   5 = Excellent

5. How would you rate the clarity of language in the curriculum materials for the following topics?

   a. Appointment Keeping   1   2   3   4   5

   b. Appropriate Eating   1   2   3   4   5

   c. Dressing   1   2   3   4   5

d. Face Washing	1	2	3	4	5
e. Feminine Hygiene	1	2	3	4	5
f. Flossing	1	2	3	4	5
g. Grocery Shopping	1	2	3	4	5
h. Hair Brushing	1	2	3	4	5
i. Hand Washing	1	2	3	4	5
j. Laundry	1	2	3	4	5
k. Leisure Skills	1	2	3	4	5
l. Making Purchases	1	2	3	4	5
m. Nail Grooming	1	2	3	4	5
n. Phone Skills	1	2	3	4	5
o. Pill Swallowing	1	2	3	4	5
p. Shaving	1	2	3	4	5
q. Showering	1	2	3	4	5
r. Toileting	1	2	3	4	5
s. Tooth Brushing	1	2	3	4	5
t. Transportation Skills	1	2	3	4	5

6. How would you rate the accuracy of information in the curriculum materials for the following topics?

a. Appointment Keeping	1	2	3	4	5
b. Appropriate Eating	1	2	3	4	5
c. Dressing	1	2	3	4	5
d. Face Washing	1	2	3	4	5

e. Feminine Hygiene	1	2	3	4	5
f. Flossing	1	2	3	4	5
g. Grocery Shopping	1	2	3	4	5
h. Hair Brushing	1	2	3	4	5
i. Hand Washing	1	2	3	4	5
j. Laundry	1	2	3	4	5
k. Leisure Skills	1	2	3	4	5
l. Making Purchases	1	2	3	4	5
m. Nail Grooming	1	2	3	4	5
n. Phone Skills	1	2	3	4	5
o. Pill Swallowing	1	2	3	4	5
p. Shaving	1	2	3	4	5
q. Showering	1	2	3	4	5
r. Toileting	1	2	3	4	5
s. Tooth Brushing	1	2	3	4	5
t. Transportation Skills	1	2	3	4	5

7. How would you rate the clarity with which the following teaching procedures are described?

a. Activity Schedules	1	2	3	4	5
b. Prompting and Prompt Fading					
	1	2	3	4	5
c. Modeling	1	2	3	4	5
d. Chaining	1	2	3	4	5

8. How would you rate the accuracy of the descriptions of the following teaching

   procedures?

    a. Activity Schedules   1   2   3   4   5

    b. Prompting and Prompt Fading

                                  1   2   3   4   5

    c. Modeling   1   2   3   4   5

    d. Chaining   1   2   3   4   5

Please provide any additional comments:

Appendix B: Parent Survey

For each of the following items, please provide a rating based on the key below:

1 = Not at all important

2 = Somewhat important

3 = Neutral

4 = Important

5 = Very Important

1. For your son/daughter with autism spectrum disorder, please rate the importance of possessing the following independent living skills.

a.	Appointment Keeping	1	2	3	4	5
b.	Appropriate Eating	1	2	3	4	5
c.	Dressing	1	2	3	4	5
d.	Face Washing	1	2	3	4	5
e.	Feminine Hygiene	1	2	3	4	5
f.	Flossing	1	2	3	4	5
g.	Grocery Shopping	1	2	3	4	5
h.	Hair Brushing	1	2	3	4	5
i.	Hand Washing	1	2	3	4	5
j.	Laundry	1	2	3	4	5
k.	Leisure Skills	1	2	3	4	5
l.	Making Purchases	1	2	3	4	5
m.	Nail Grooming	1	2	3	4	5
n.	Phone Skills	1	2	3	4	5

o.	Pill Swallowing	1	2	3	4	5
p.	Shaving	1	2	3	4	5
q.	Showering	1	2	3	4	5
r.	Toileting	1	2	3	4	5
s.	Tooth Brushing	1	2	3	4	5
t.	Transportation Skills	1	2	3	4	5

For each of the following items, please provide a rating based on the key below:

1 = Not at all comfortable

2 = Somewhat comfortable

3 = Neutral

4 = Comfortable

5 = Very comfortable

2. To what extent would you be comfortable with the following interventions being used with your son/daughter?

   a. Activity Schedules - using a visual (either text or picture) schedule to show the student how to do something. It may take place in the form of a checklist or in the form of a variety of pictures that follow a certain order.

   1   2   3   4   5

   b. Prompting and Prompt Fading – using various types of prompts: physical, gestural, textual (either pictures or words) or verbal to teach new skills

   1   2   3   4   5

c. Modeling – the instructor completing the task within the visual field of the student in order to show the student how to complete the task

<div align="center">1   2   3   4   5</div>

d. Chaining – teaching the student to put individual behaviors together to complete a longer task

<div align="center">1   2   3   4   5</div>

Please answer the following questions with as much information as possible.

3. Please describe the independent living skills you think your son/daughter will need to be successful in a setting after the age of 22.

4. Please describe teaching strategies that you think would be effective to teach independent living skills to your son/daughter.

Appendix C: Special Education Teacher Survey

For questions 1 and 2, the scale reads as follows:

1 = Not at all comfortable

2 = Somewhat comfortable

3 = Neutral

4 = Comfortable

5 = Very comfortable

1. How comfortable would you be using this curriculum to teach each of the specified areas below to your students?

a.	Appointment Keeping	1	2	3	4	5
b.	Appropriate Eating	1	2	3	4	5
c.	Dressing	1	2	3	4	5
d.	Face Washing	1	2	3	4	5
e.	Feminine Hygiene	1	2	3	4	5
f.	Flossing	1	2	3	4	5
g.	Grocery Shopping	1	2	3	4	5
h.	Hair Brushing	1	2	3	4	5
i.	Hand Washing	1	2	3	4	5
j.	Laundry	1	2	3	4	5
k.	Leisure Skills	1	2	3	4	5
l.	Making Purchases	1	2	3	4	5
m.	Nail Grooming	1	2	3	4	5
n.	Phone Skills	1	2	3	4	5

o. Pill Swallowing   1   2   3   4   5

p. Shaving   1   2   3   4   5

q. Showering   1   2   3   4   5

r. Toileting   1   2   3   4   5

s. Tooth Brushing   1   2   3   4   5

t. Transportation Skills   1   2   3   4   5

2. How comfortable would you be using the following interventions to teach the topics in the curriculum?

a. Activity Schedules   1   2   3   4   5

b. Prompting and Prompt Fading

         1   2   3   4   5

c. Modeling   1   2   3   4   5

d. Chaining   1   2   3   4   5

Please answer the following questions with as much information as possible. The answers to these questions will be used to revise the curriculum as needed to improve the quality of education. Feel free to use additional space if needed.

3. Please describe the strengths of the curriculum.

4. Please discuss what you think should be eliminated from the curriculum.

5. Would you be likely to use any of the elements from this curriculum in your classroom? If so, which elements?

Appendix D: The Curriculum Guide

**Daily Living Skills for Young Adults with Autism:
A Curriculum Guide**

Stephanie Iwanciow Haas

Table Of Contents

Letter to Teachers

Dear Teacher,

This is a guide to teach students with moderate to severe autism daily living skills that they will need to transition to adulthood successfully. The teaching strategies are derived from the field of Applied Behavior Analysis, as the strategies suggested are evidence based and, when implemented correctly, are proven to be effective in teaching these types of skills.

This "Curriculum Guide" is meant as that, a guide. It is designed to be flexible to accommodate the needs of a wide range of students. Every young adult with autism has individualized needs and this guide is designed to accommodate for many of them.

This guide is geared towards a population of adolescents and young adults with moderate to severe autism. While many of these skills are often taught at an earlier age, many young people with autism are unable to acquire these skills at a young age due to behavior challenges and learning delays. As students get older and are able to manage their behavior challenges, they can become more open to and capable of learning new daily living skills.

It is important to make decisions with the IEP team about whether or not it will be appropriate to teach a skill to a student. When the team is deciding on skills to teach, be mindful of factors such as how long it will take the student to learn the skill, whether or not there is an easier way to teach the student to adapt to the challenge (e.g., wearing slip-on shoes rather than learning to tie shoes), whether or not the skill is functionally appropriate.

This guide is meant to be adapted to fit the needs of any student that it is found to be appropriate for. Feel free to adjust the task analyses, change the IEP/ITP goals, alter the data collection systems and assessment strategies, or whatever is necessary to facilitate teaching most effectively.

Teaching Strategies

Activity Schedules

Activity schedules are a visual guide for students to complete a task. They can take many forms including a checklist with words, a checklist with pictures, a flip book style format where each page contains a component of the task to complete, or any other form that serves this purpose.

Activity schedules are used to teach students tasks that they should be doing independently such as meal preparation, personal hygiene routines, job skills, etc. The goal is for the student to rely on the activity schedule for prompts to complete the task rather than a care giver or instructor.

In order to teach a student to use an activity schedule, physical or gestural prompts should be provided from behind the student. Verbal prompts are very difficult to fade, so they should be limited. Prompts should be systematically faded out until the student is completing the task independently.

There are some pre-requisite skills for a student to be able to use an activity schedule. They must be able to match a 2 dimensional image to a 3 dimensional object. They usually must also be able to accept physical prompts (since it is easiest to fade the physical prompts for activity schedules).

Prompting and Prompt Fading

There are many types of prompts (and we use them naturally throughout our day). Prompts are a cue for a student to engage in a behavior. Prompts can be as simple as giving a direction or pointing at something. Many prompts are also delivered inadvertently – the instructor looking at the answer to a question, using a head nod, eye gaze or body movement to cue a student to complete a direction. It is important to be conscious of any prompts that the student may be inadvertently receiving.

Physical prompts involve physically assisting a student to complete a task. Physical prompts are easy to fade by moving to continually less invasive prompts (e.g., move from a hand over hand prompt to a hand over elbow prompt) until the prompts are no longer needed.

Verbal prompting involves somebody giving a verbal cue for a student to engage in a task. We use verbal prompts frequently throughout our day. Verbal prompts can be very difficult to fade so be cautious of using them to teach tasks that will eventually require total independence (such as personal hygiene and independent activities).

Textual prompts involve using a word or a picture as a cue for a student to engage in a task. Activity schedules are a form of textual prompting. Textual prompts are easy to fade as well by systematically reducing the number of words or pictures or cutting down the size of the text or picture until no visual remains. Students must be able to read words or match 2-dimensional pictures to 3-dimensional objects in order to benefit from textual prompts.

Prompts must be systematically faded in order for students to perform tasks independently. In order to fade, slowly reduce the amount of prompting given (as in the examples) or increase time between when the prompt is given and when the student is expected to complete the task independently.

Prompts are typically faded from a most restrictive prompt to a lesser restrictive prompt. One example may begin with a hand-over-hand prompt, faded to prompting at the shoulder, faded to shadowing the student, faded to model prompting and finally faded to a natural support in the environment. Prompt hierarchies may take many forms including "most to least" restrictive and "gradual guidance" fading, where physical prompts start most invasive then are gradually faded to a lesser restrictive physical prompt.

Chaining

Chaining is putting together small chunks of behavior into a larger string of behaviors (e.g., putting a tooth brush in one's mouth, starting a timer, rinsing one's mouth will eventually be put together to form a tooth brushing routine). When the behaviors are put together they are often called a "behavior chain."

Total task chaining is when these behaviors are all presented at once and they are taught together.

Forward chaining is where the task is written out and only the first few steps are taught until the student is consistently completing these steps correctly. Each further step is systematically added in until the student is completing the entire behavior chain successfully.

Backward chaining is where the task is written out and everything is completed for the student with the exception of the last step. When the student is consistently completing the final step correctly, another step is added in until they are completing the task from the beginning. Backward chaining is good to use if the completed activity is a reinforcer itself, such as a meal preparation program.

Shaping

Shaping is a process used to achieve an ultimate goal by reinforcing successive approximations towards that goal. This strategy is used often when a task is behaviorally challenging. Instructors start slowly with a behavior that is already in the student's repertoire and continue to teach tiny steps toward the ultimate goal. Shaping strategies that can be used are outlined in the curriculum.

Modeling

Modeling is a process by which the instructor prompts the student to engage in an activity by showing them what to do. Modeling can be done via video where a student watches somebody else or even themselves completing the task, instructor modeling, or peer modeling.

Lesson Outline

Introduction

In the introduction the rationale and reasons are explained for why the skill should be taught to young adults with moderate to severe autism.

IEP Goals

This section provides some sample goals for IEP's including wording in observable and measurable terms in addition to the mastery criteria. Sometimes the IEP goals are written into a percentage of a certain number of steps of a task analysis. This is so that the goal is not only attainable but it allows for a little room for adjusting the task analysis if necessary. In general students seem to pick up on one piece of the routine quicker than others and are able to demonstrate independence in those steps first.

Assessment

This section provides a brief description of one way to assess the student for current knowledge and skill.

Task Analysis

Sample task analyses are provided for each type of task. Each task analysis will need to vary depending on the student, their needs, their starting skill level and how they learn. The task analyses are detailed and specific so as to provide a clear understanding of what skill is to be taught. These task analyses are designed to be altered, sampled and changed in any way that is suitable to the specific teaching situation.

Teaching Strategies

In this section helpful teaching strategies are outlined. These strategies are described in the previous "Teaching Strategies" section. Some of the lessons have sections that go into more detail about specific teaching strategies, and some are left with a more broad description.

Differentiating Instruction

The "moderate/severe" categorization of autism is very broad. Students often have drastically different skill levels within each of the outlined topics. This section provides suggestions for how to teach that same topic to students who are at different skill levels.

Data Collection

This section provides a brief description of one way to collect data on the skills that the students are acquiring.

Helpful Hints

Described here are several ideas or suggestions to make teaching easier. These are compiled from a wealth of resources from experienced teachers and educators. Many of these "helpful hints" were discovered through trial and error, so this list can (and should) be added to!

Appointment Keeping

Introduction

Teaching students to keep appointments has many practical applications. It can be a good job skill and it can teach them independence in managing their own day. It can also benefit the student as a behavior management strategy to give the student a way of knowing what is coming up next and when they will be able to do something. A pre-requisite skill for keeping appointments is telling time.

IEP Goals

Given 9 appointments that span 5 days (e.g., 10:00 Monday go shopping with Jane, 1:30 Monday go to the Fitness Center, 9:15 Tuesday make photocopies for Pam) George will record the activities on his weekly calendar and complete the activity (or notify the appropriate person) within 3 minutes of the assigned time with 100% accuracy for 2 consecutive weeks.

At the beginning of the week, George will program his weekly appointments into his electronic calendar (e.g., a Google calendar synched to his phone) with 100% accuracy for 10 consecutive weeks. George will reference his calendar (e.g., on the computer or on his phone) to follow his daily appointments with 100% accuracy for 20 consecutive days.

Assessment

Pre-Test: Present the student with all the materials they need (e.g., watch, clock, appointment book, etc.). Give them an appointment with a time to engage in an activity. When that time arises record whether or not the student engages in the activity or initiates the activity. If the student does not engage in the activity, determine what part of the task they did not do correctly (e.g., were they looking at the clock, do they know how to tell time?) and teach to that aspect.

Continuing Assessment: Continue to record and analyze data as the student progresses. Fade out prompts as students demonstrate predetermined criteria for mastery.

Teaching Strategies

If the student does have the prerequisite skill of telling time and matching numbers (i.e., matching numbers on a digital clock to numbers on a written schedule), a prompting and prompt fading strategy can be used to teach the student to engage in a specified behavior at a specified time. To start small, place a card with a time written on it (e.g., 12:15) and a snack a student enjoys (e.g., a chip, a piece of a cookie) or an activity (e.g., a movie) on the table. Give the student a digital watch or clock set to 1 minute before the card specifies. When the time arises prompt the student to look at the clock then look at the written time and read both aloud, then prompt them to eat the snack or engage in the activity.

When the student is able to successfully match the two times with a 1 minute delay, increase the written time to 2 minutes past the time on their watch. Once the student is able to match that time successfully, continue to increase the amount of time delay until the student is able to match the time with several hour delays.

- Prompting and Prompt Fading

Differentiating Instruction

- Some students will need to start with basic time telling on a digital or analog clock.
- When students are able to tell time correctly for any time within a day, give them a list of appointments for the week on the first day of the week and teach them to check their appointments daily without reminders. This can lead in to keeping a monthly calendar with bills to pay, doctor's appointments, etc.

Data Collection

Record a correct or error for each appointment kept correctly. Track the progress daily until the student is responding correctly at criteria.

Helpful Hints

- Using preferred activities as initial appointments will help make keeping the appointments more motivating – if they don't remember the appointment, don't allow access to the activity.
- Deliver reinforcement whenever the student looks at their watch or clock so that they are more likely to keep checking in on the time.
- If students are having difficulty remembering their appointments, have them set an alarm on their watch or their cell phones to go off when they have an appointment.

Appropriate Eating

Introduction

Being able to eat appropriately is important for many reasons. One of these reasons is for health. Students must be able to eat slowly in order to allow for good digestion and to help avoid stomach aches. In addition to this, eating is a very social event. In order to open up more social opportunities, students must be able to eat neatly and in a socially acceptable manner.

IEP Goals

When presented with 4 food items that require cutting into at least 5 pieces, Julia will independently cut the food item into bite size pieces with 100% accuracy in 3 out of 3 trials for 2 consecutive days.

When George is eating a meal he will stop to chew and swallow his food between each bite and put his fork or spoon down between each bite (if applicable) with 100% accuracy in 40 out of 40 opportunities.

Isaac will use a spoon to eat soup, holding the spoon correctly and eating neatly (e.g., without spilling soup on his clothing, on the table or on his face) with 100% accuracy in 5 out of 5 opportunities.

Isaac will independently engage in 4 appropriate eating skills (e.g., cutting with a knife and fork, holding a spoon correctly, using a napkin, sitting appropriately at the table) with 100% accuracy in 3 out of 3 opportunities.

Assessment

Pre-Test: Present the student with all the materials they need (e.g., food, napkins, fork and knife, etc.). Prepare a data sheet with the specified task analysis. If appropriate, give the student the direction to complete the task (e.g., "eat your lunch"). As they go through the task record whether or not they complete the step correctly. Prompt each step as needed, as the cue for the student to move on to the next step is completing the previous step.

Continuing Assessment: Continue to record and analyze data as the student progresses. Fade out prompts as students demonstrate predetermined criteria for mastery.

Task Analyses

Task Analysis 1

1. Lay napkin flat out on lap
2. Sit up straight
3. Use knife and fork to cut food
4. Put fork down to chew between each bite
5. Use napkin to wipe mouth when necessary
6. Sip from a cup without swallowing the whole amount

Task Analysis 2

1. Get binder
2. Wash hands
3. Get a plate
4. Put food on plate
5. Get appropriate silverware
6. Get napkin
7. Make sure all materials are on the kitchen table
8. Sit up straight at kitchen table
9. Sit with both feet on floor or crossed at ankles
10. Chew with mouth closed
11. Use napkin to wipe mouth after every bite
12. Throw out trash when finished
13. Push in chair
14. Put binder away

Teaching Strategies

Because physical prompting is easy to fade, it is a good strategy to use when teaching students to eat food appropriately. To teach students to use a fork and knife to cut their food, it will probably require the instructor showing them how firmly to cut and hold the food down by physically prompting their hands. When dealing with following eating rules (such as in Task Analysis 2), a visual activity schedule in the form of a checklist can be helpful.

- Prompting and prompt fading
- Activity Schedules

Differentiating Instruction

- For earlier learners, just learning to use a pincer grasp to hold food is a big skill. This not only targets appropriate eating skills but fine and gross motor skills as well.
- When students are able to follow rules for eating on their own, the process of teaching table manners, polite conversation skills at a dining table and appropriate cleaning of the food area (e.g., wiping crumbs into their hand to throw away, etc.) can begin.

Data Collection

Using a task analysis data sheet, recording a plus or a minus for each step, at the end, calculate percentage of steps. Establish criteria to move on (e.g., each step at trials with no error in order to fade back prompting).

Helpful Hints

- To teach holding a utensil such as a spoon or fork correctly, using a pencil grip can help the student learn where to put their fingers.
- For students who know how to read, using visual checklists or reminders is a helpful strategy. Students can even use picture schedules to remember their eating rules.

Dressing

Introduction

Teaching students to dress themselves is a big step towards independent living. It also will work on fine and gross motor skills in a functional way (e.g., buttoning, shoe tying).

IEP Goals

Sarah will independently put on 2 items of clothing (e.g., shirt, pants) with 100% accuracy in 3 out of 3 trials for 2 consecutive days.

Given 4 clothing items (i.e., pants, underwear, shirt, socks) Isaac will put the item on appropriately with 100% accuracy in 3 out of 3 opportunities.

Julia will complete all the steps to put on a bra (e.g., placing the clasp in the front, clasping the bra, rotating the bra so the clasps are in the back, pulling the bra up under the bust line, putting arms through straps) with 100% accuracy in 5 out of 5 opportunities.

Julia will tie the shoes on her feet in 1 opportunity per day with 100% accuracy for 80 school days.

Assessment

Pre-Test: Present the student with all the materials they need (e.g., clothing, untied shoes etc.). Prepare a data sheet with the specified task analysis. If appropriate, give the student the direction to complete the task if applicable (e.g., "get dressed," "put on your shoes"). As they go through the task record whether or not they complete the step correctly. Prompt each step as needed, as the cue for the student to move on to the next step is completing the previous step.

Continuing Assessment: Continue to record and analyze data as the student progresses. Fade out prompts as students demonstrate predetermined criteria for mastery.

Task Analyses

Putting on a Vest

1. Stand next to the chair (with the vest draped over it) with her back to the back of the chair
2. Place left and right hands simultaneously into their respective arm holes
3. Put left and right arms all the way through their respective arm holes
4. Move vest onto shoulders by lifting both arms up

Buttoning Pants

1. Pick up pants and hold button side with left hand and hole side with right hand
2. Put hole on top of button
3. Pinch above button side and slide button into hole
4. Push button through hole (left thumb still pinching button side and right thumb pulling hole over button)

Shoe Tying

1. Pick up ends of laces with both hands

2. Cross laces to form X

3. With left hand, pinch laces where they meet at X

4. Pick up end of lace on right side with right hand

5. Loop right-hand lace around and through hole under left hand

6. Pull ends of laces apart

7. Release both laces

8. Pick up base of right-hand lace

9. Double right-hand lace over to form loop and pinch base of loop

10. With left hand, wrap left lace around loop

11. Push left hand lace through hole

12. Pull left hand lace out of hole to complete tie

Putting on a Bra

1. Grab the hooks with her right hand
2. Release the bra to a vertical position
3. Clasp the bra

4. Insert right arm through the bottom band of the bra and under the right shoulder strap
5. Insert left arm through the bottom band of the bra and under the left shoulder strap
6. Raise both arms above her head and insert her head through the bra
7. Pull the bra down (and adjust if necessary)

Putting on Socks

1. Pick up inside out sock
2. Turn sock right side out
3. Put sock on correctly
4. Pick up right side out sock
5. Put sock on correctly

Putting on a Shirt (Tag/No Tag Method)

1. Get shirt from drawer
2. Place over template
3. Fold over the back collar
4. Label "tag" or "no tag"
5. If tag: continue to step 5
6. If no tag: pick up shirt with both hands at collar, turn in other direction, repeat steps 2-4
7. Put shirt on (i.e., head through shirt, arms through shirt)
8. Fold over the front collar
9. Look at front collar
10. Label tag/no tag
11. If tag: task completed
12. If no tag: turn shirt around (i.e., take out arms from sleeves, spin around neck), repeat steps 7-8

Teaching Strategies

Physical prompting is often necessary for many of these steps. These prompts will be systematically faded out to increase independence. Skills like "shoe tying" can be forward or backward chained or taught using a total task chaining strategy. Activity schedules can be used to teach the order in which to put on clothing.

- Prompting and prompt fading
- Chaining
- Activity Schedules

Differentiating Instruction

- Students learning dressing will be at many different levels. Some students will be working on pulling up their pants after using the bathroom, and some may be working on just buttoning a button or zipping a zipper.
- For students who become proficient at dressing themselves, they can begin to work on picking out their own clothing.

Data Collection

Using a task analysis data sheet, recording a plus or a minus for each step, at the end, calculate percentage of steps. Establish criteria to move on (e.g., each step at trials with no error in order to fade back prompting).

Helpful Hints

- Positioning clothing in ways that the student is able to access them easily can help them become more successful. For example: placing a vest hanging over the back of a chair so it is easy to put it on without picking it up.
- For "shoe tying" put small pieces of tape or draw in with permanent marker where the student needs to hold the lace in order to make the bow.
- For "putting on a bra" have the student clasp it before they put it on rather than clasping it around their waist then twisting it around their body.

Face Washing

Introduction

Part of a comprehensive personal hygiene routine is face washing, particularly for adolescents. Faces need to be washed with different products and with a different pressure than basic hand washing, so the skill is often not generalized without being specifically taught.

IEP Goals

Isaac will independently complete 80% of the face washing task analysis with 100% accuracy in 3 out of 3 opportunities.

Kim will independently complete 26 out of 48 steps of her face washing task analysis with 100% accuracy in 3 out of 3 opportunities.

Assessment

Pre-Test: Present the student with all the materials they need (e.g., face wash, wash cloths, cleansing pads, etc). Prepare a data sheet with the specified task analysis. If appropriate, give the student the direction to complete the task (e.g., "wash your face" or "start your schedule"). As they go through the task, record whether or not they complete the step correctly. Prompt each step as needed, as the cue for the student to move on to the next step is completing the previous step.

Continuing Assessment: Continue to record and analyze data as the student progresses. Fade out prompts as students demonstrate predetermined criteria for mastery.

Task Analyses

Isaac's Task Analysis

1. Get face wash and wash cloth
2. Turn on the water and wet hands
3. Put a small amount of face wash on hands
4. Lather face wash in hands
5. With both hands wipe both sides of face 5 times
6. With right hand wipe chin 5 times

7. With left hand wipe forehead 5 times
8. With left hand wipe nose 5 times
9. Rinse hands
10. Wet wash cloth
11. Squeeze out extra water
12. Take wet wash cloth in right hand and wipe right side of face 5 times
13. Take wet wash cloth in right hand and wipe left side of face 5 times
14. Wet wash cloth
15. Squeeze out extra water
16. With wash cloth in right hand wipe chin 5 times
17. With wash cloth in right hand wipe forehead 5 times
18. With wash cloth in right hand wipe nose 5 times
19. Rinse wash cloth
20. Squeeze out extra water
21. Put face wash away
22. Dry face with paper towel
23. Put away wash cloth in laundry bin in voc. room

Kim's Task Analysis

1. Opens schedule
2. Gets supply tote from drawer
3. Turns page
4. Gets out headband
5. Puts on headband
6. Turns page
7. Turns on water
8. Rinses face
9. Turns off water
10. Turns page
11. Squeezes soap into hands
12. Lathers hands together
13. Applies soap to cheeks
14. Applies soap to forehead
15. Applies soap to nose
16. Applies soap to chin
17. Turns page
18. Gets hand towel
19. Turns on water
20. Wets towel
21. Rings towel out
22. Turns page
23. Wipes face with towel
24. Turns on water
25. Wets towel
26. Rings towel out
27. Turns page
28. Hangs towel on rack
29. Turns page
30. Gets hand towel

31. Turns page
32. Wipes face with towel
33. Turns page
34. Hangs towel on rack
35. Turns page
36. Opens tea tree oil pad container
37. Takes one tea tree oil pad
38. Applies to cheeks
39. Applies to forehead
40. Applies to nose
41. Applies to chin
42. Throws pad away
43. Turns page
44. Takes off headband
45. Turns page
46. Puts supplies back in tote
47. Puts supply tote in drawer
48. Closes schedule

Teaching Strategies

Kim and Isaac are using two different teaching strategies to teach the same skill. Kim is using a pictorial activity schedule (note that some of the steps say "turn page" – this is a flip-book style pictorial schedule) and Isaac is using a physical prompting and prompt fading strategy to learn a behavior chain. This behavior chain is presented as a total task chain (we are teaching it all at once rather than systematically adding in each step).

Physical prompting and prompt fading can also be used in combination with an activity schedule.

- Prompting and prompt fading
- Total task chaining
- Activity Schedules

Differentiating Instruction

- Some students will just be working on accepting somebody washing their face with a wash cloth – a stimulus demand fading strategy can be used to teach this. Begin by just showing the student the wash cloth, delivering reinforcement and putting the wash cloth away. Once they are successful with this step, touch the wash cloth to their face, deliver reinforcement then put the wash cloth away. Then hold the cloth to their face for 5 seconds, remove the wash cloth and deliver reinforcement. Slowly fade in the amount of time they are allowing the instructor to put wash cloth on their face or accept their face being washed until they reach the final criteria.

- Some students will be able to memorize the pattern in which they must wash their face without an activity schedule of any sort. For students who are able to understand verbal directions and do not have a history of prompt dependency, explaining to the student how to do the task may be an effective strategy. Be careful with this however, as verbal prompting can be difficult to fade.

Data Collection

Using a task analysis data sheet, recording a plus or a minus for each step, at the end, calculate percentage of steps. Establish criteria to move on (e.g., each step at trials with no error in order to fade back prompting).

Helpful Hints

- If the student is using a pictorial activity schedule, make sure it is laminated or placed in plastic sheet protectors so they don't get wet
- If the student is using a flip book style pictorial activity schedule, place some Velcro strips or another page separator between each page – when students have their hands wet while washing their face, the pages get stuck together.
- Wipe down the laminated activity schedules after each use so that they don't get sticky and moldy

Feminine Hygiene

Introduction

For young women who have begun their menstrual cycles (and for young women who have not begun yet), teaching independent feminine hygiene will not only prevent behavior challenges for students who find sanitary pads uncomfortable, but it will give them more access to independence in the bathroom. Even if the student is typically independent using the bathroom, if they are unable to change their pads independently, they will always need that support during that time of the month.

IEP Goals

Julia will independently respond to a timer on her watch to change her feminine napkin and complete all the steps to change her feminine napkin for 3 out of 3 opportunities per day while on her monthly cycle with 90% accuracy for 4 monthly cycles.

Kim will independently respond to an alarm on her iTouch or a wristwatch by going to the restroom and changing her pad in the absence of any verbal, physical, or gestural prompts from an adult in 8 out of 10 opportunities.

Assessment

Pre-Test: Present the student with all the materials they need (e.g., feminine napkin (pad), wrist watch, etc). Prepare a data sheet with the specified task analysis. If appropriate, give the student the direction to complete the task if applicable (e.g., "change your pad"). As they go through the task record whether they complete the step correctly. Prompt each step as needed, as the cue for the student to move on to the next step is completing the previous step.

Continuing Assessment: Continue to record and analyze data as the student progresses. Fade out prompts as students demonstrate predetermined criteria for mastery.

Task Analyses

Julia's Task Analysis

1. Get up
2. Go to backpack
3. Get pad
4. Walk to bathroom
5. Go in (wait if necessary)
6. Turn on light
7. Close bathroom door
8. Sit on toilet
9. Place new pad on top of toilet paper dispenser
10. Remove pad
11. Wrap pad in toilet paper
12. Throw pad away
13. Get new pad and unwrap it
14. Replace pad
15. Wash hands

Kim's Task Analysis

1. Pick up iTouch
2. Read "change pad"
3. Slide arrow or press "OK" to turn of the alarm
4. Press the power button on top left of screen to turn off the iTouch
5. Go to locker and get a pad
6. Walk to the bathroom (wait if necessary)
7. Sit on toilet
8. Pull off a piece of toilet paper, place it on lap and place the pad on top
9. Roll pad up in toilet paper, starting from one side and neatly rolling the whole pad
10. Throw away in trash can
11. Wash hands

Teaching Strategies

Both students are using a timer to alert them that it is time to change their pad. Physical prompting is usually necessary for students with fine motor difficulties when rolling the pad into the toilet paper. Since this task is one that must be completed in its entirety, it should be presented as a total task behavior chain.

- Prompting and prompt fading
- Total task chaining

Differentiating Instruction

- For students who are just working on accepting the pad being on, use a stimulus demand fading strategy. This will need to be started before the student begins their first menstruation. Begin by taking the student to the bathroom and putting the pad in their underwear. When the student accepts the pad being in their underwear, remove the pad

and deliver reinforcement. Once the student is successful with this step, require that the pad be on when they pull their underwear on. When the student accepts this, remove the pad and deliver reinforcement. Slowly increase the amount of time they are wearing the pad until they are able to do so for the entire day without any challenges.

- This lesson mostly covers how to change a pad and being able to recognize when to do so. For women who have already mastered this skill, moving on to other reproductive health skills is encouraged.

Data Collection

Using a task analysis data sheet, recording a plus or a minus for each step, at the end, calculate percentage of steps. Establish criteria to move on (e.g., each step at trials with no error in order to fade back prompting).

Helpful Hints

- Setting a timer that the student knows how to use (such as on a cell phone or a repeating watch timer) will make a big difference in fading out assistance and prompting.
- Start this goal several months if not at least a year before the student starts her menstrual cycle. It is often very difficult for students to accept having the pad on and by the time they actually start their menstrual cycle, they will need to keep it on for the duration of their period.

Flossing

Introduction

In addition to tooth brushing, flossing will prevent many painful dental procedures that students with autism are often unable to tolerate. Building flossing into a student's daily routine will make it not only less painful but will help with good oral hygiene.

IEP Goals

Isaac will independently complete 40% of the flossing task analysis in 3 out of 3 opportunities.

Assessment

Pre-Test: Present the student with all the materials they need (e.g., floss stick, cup, etc). Prepare a data sheet with the specified task analysis. If appropriate, give the student the direction to complete the task (e.g., "floss your teeth"). As they go through the task, record whether or not they complete the step correctly. Prompt each step as needed, as the cue for the student to move on to the next step is completing the previous step.

Continuing Assessment: Continue to record and analyze data as the student progresses. Fade out prompts as students demonstrate predetermined criteria for mastery.

Task Analysis

1. Take out the floss stick
2. Place the floss between the farthest molars of the bottom right teeth
3. Floss the bottom teeth from right to left, placing the floss in each gap (13 total)
4. Place the floss between the farthest molars of the top right teeth
5. Floss the top teeth from right to left, placing the floss in each gap (13 total)
6. Set the floss stick on the counter
7. Rinse mouth
8. Dry mouth with a towel

Teaching Strategies

Physical prompting is probably going to be the easiest strategy to use due to the fact that it can be hard for the student to see where they are putting the floss. Systematically fade the prompts so

that the student is maintaining the thoroughness but gaining independence. Shaping may need to be used if the student has difficulty accepting the floss in their mouth.

- Prompting and prompt fading
- Total task chaining
- Shaping

Differentiating Instruction

- Some students will just be working on accepting the floss in their mouth – a stimulus demand fading strategy can be used to teach this. Begin by just showing the student the floss, delivering reinforcement and putting the floss away. Once they are successful with this step, touch the floss to their mouth, deliver reinforcement then put the floss away. Then floss 1 gap, remove the floss and deliver reinforcement. Slowly fade in the amount of time they are allowing the instructor to put the floss in their mouth, or the number of gaps they are allowing the instructor to floss until they reach the final criteria.

Data Collection

Using a task analysis data sheet, recording a plus or a minus for each step, at the end, calculate percentage of steps. Establish criteria to move on (e.g., each step at trials with no error in order to fade back prompting).

Helpful Hints

- This program is very difficult to teach with an activity schedule due to the fact that it is hard for the student to visually see what gap they are flossing – they must learn to feel for the correct gap.
- For students who have good 1:1 correspondence and verbal counting skills, teaching them to count the gaps will help them learn how many they need to floss.
- For students without counting skills, a token system can be used to tell them when they are finished. They will have a token board with 13 tokens (1 for each tooth gap) on it and another board with 13 spaces to put tokens. Each time they floss a tooth, they move a token to the other board. As they go along the row of teeth, they continue to put tokens onto the second board until all their teeth are finished. The process can be repeated for the other row of teeth.

Grocery Shopping

Introduction

One piece of living independently or semi independently is being able to feed oneself. Acquiring that food from the grocery store independently will increase autonomy and the ability to make choices about what food the student is able to eat.

IEP Goals

Given a list of 8 grocery items in 1 store setting, Brad will reference the items, locate them in the store, place them in his basket, stand in line, give the cashier the money and take the receipt and the items with 100% accuracy in 3 out of 3 opportunities.

Isaac will reference a grocery list (either textual or pictorial) to complete 100% of the steps of the grocery shopping task analysis with 100% accuracy in 3 out of 3 opportunities.

When given a 2-item grocery list, Kim will independently complete 18 out of 22 steps (see attached task analysis) to make a purchase in a grocery store with 100% accuracy in 3 out of 3 opportunities.

Assessment

Pre-Test: Present the student with all the materials they need (e.g., wallet, grocery list, money). Prepare a data sheet with the specified task analysis. If appropriate, give the student the direction to complete the task (e.g., "go shopping"). As they go through the task, record whether or not they complete the step correctly. Prompt each step as needed, as the cue for the student to move on to the next step is completing the previous step.

Continuing Assessment: Continue to record and analyze data as the student progresses. Fade out prompts as students demonstrate predetermined criteria for mastery.

Task Analyses

Task Analysis 1

1. Read the grocery list aloud
2. Get a basket
3. Locate the item(s) in the store and put it/them in the basket
4. Walk to an open check stand and stand in line
5. Take the item(s) out of the basket and put the basket next to the check stand
6. Wait in line
7. Read the cost of the item and hand over the correct amount of money
8. Wait for the receipt and change, and put them in the wallet
9. Take the bag of groceries

Task Analysis 2

1. Take the grocery list from the instructor
2. Get a cart
3. Point to the items (beginning with first item on list) on the list and push cart to where food items are located
4. Push cart to check out area and stand in line behind her cart
5. Move to the small counter and stand facing the cashier while being checked out
6. Pay for the items using the Trader Joe's gift card or appropriate payment method
7. Take receipt and bag, saying "Thank you" before walking away

Task Analysis 3

1. Get a cart
2. Mango-Point to the word and read the word out loud
3. Find the item in the store and place the item in the cart
4. Turkey-Point to the word and read the word out loud
5. Find the item in the store and place the item in the cart
6. Cheese-Point to the word and read the word out loud
7. Find the item in the store and place the item in the cart
8. Mustard-Point to the word and read the word out loud
9. Find the item in the store and place the item in the cart
10. Bread-Point to the word and read the word out loud
11. Find the item in the store and place the item in the cart
12. Stand in line at the checkout stand
13. Hand over the money
14. Take the bag and receipt and put the wallet, change, and receipt in his pocket
15. Leave the checkout area

Teaching Strategies

Activity schedules or checklists are the most natural teaching strategies because nearly everyone uses some form of list while they are shopping. Teach students to rely on this list, rather than another person, using a prompting and prompt fading strategy. Use the same strategies that would be used if the skill were taking place at school (i.e., stand behind the student, do not provide verbal prompts). When teaching this skill in the community it is important to make sure that the

student is completing the skill with fluency (i.e., quickly and accurately) in order for the skill to be most functional.

- Prompting and prompt fading
- Chaining
- Activity Schedules

Differentiating Instruction

- Some students may just be practicing waiting in the store while their care givers shop or pay for their groceries without engaging in challenging behavior. Systematically increasing the amount of time that the student needs to wait in line will help them eventually build up the tolerance and motivation to wait for the duration of the time in the store. Begin with a small amount of time, such as 30 seconds or even less, and practice waiting in line (or in the store) for that amount of time. If the student is able to wait for the small amount of time, allow them to leave the area and deliver any secondary reinforcement. Slowly and systematically increase the amount of time that they must wait until they are able to stay the entire time without engaging in challenging behavior.

Data Collection

Using a task analysis data sheet, recording a plus or a minus for each step, at the end, calculate percentage of steps. Establish criteria to move on (e.g., each step at trials with no error in order to fade back prompting).

Helpful Hints

- It's a good idea to program for generalization by going to several different stores and teaching the students to shop at all stores, so they don't become reliant on one store layout or setup.
- Occasionally cashiers immediately show the student how much money to give, or don't talk to the student but to the instructor - go talk with the cashier before the student gets in line to pay. Let them know that the student is working on paying for the groceries independently and that you would like them not to help the student.

Hair Brushing

Introduction

Teaching a student to brush their hair is an important skill to teach so that they are able to keep their hair healthy. It is also important for social situations. Looking clean and well put together (by having neatly brushed hair) will help students be more accepted by their peers as well as being more likely to get a job.

IEP Goals

The IEP goals are written into a percentage or a certain number of steps of a task analysis. This is so that the goal is not only attainable but it allows for a little room for adjusting the task analysis if necessary. In general students seem to pick up on one piece of the routine quicker than others and are able to demonstrate independence in those steps first.

Kim will independently complete all 12 steps of the hair brushing task analysis with 100% accuracy in 2 out of 2 opportunities for 5 consecutive days with teacher proximity faded to 6 feet away.

Assessment

Pre-Test: Present the student with all the materials they need (e.g., hair brush, detangle spray, etc.). Prepare a data sheet with the specified task analysis. If appropriate, give the student the direction to complete the task (e.g., "brush your hair"). As they go through the task, record whether or not they complete the step correctly. Prompt each step as needed, as the cue for the student to move on to the next step is completing the previous step.

Continuing Assessment: Continue to record and analyze data as the student progresses. Fade out prompts as students demonstrate predetermined criteria for mastery.

Task Analysis

1. Get her detangler spray from drawer
2. Spray right side of hair 2 times with spray
3. Spray left side of hair 2 times with spray
4. Put detangler spray in drawer
5. Get her brush from the drawer

6. Stand in front of the mirror
7. Pull hair over left shoulder
8. Brush from the top of head to the bottom of hair 10 times (counting for each brush stroke) on the left side
9. Pull hair over right shoulder
10. Brush from the top of head to the bottom of hair 10 times (counting for each brush stroke) on the right side
11. Brush bangs from part to bottom of hair 10 times (counting for each brush stroke)
12. Put brush away

Teaching Strategies

Physical prompting along with a prompt fading strategy will ensure that the student is brushing thoroughly. Requiring the student to count aloud how many strokes they are using will help them with consistency. Usually teaching all the steps together (total task chaining) is a good strategy, but for a student who may benefit from shorter work sessions, the skill can be forward or backward chained. Shaping may be required for students who have difficulty accepting the hair brush on their hair.

- Prompting and prompt fading
- Chaining
- Shaping

Differentiating Instruction

Some students will just be working on accepting their hair being brushed – a stimulus demand fading strategy can be used to teach this. Begin by just showing the student the hair brush, delivering reinforcement and putting the hair brush away. Once they are successful with this step, touch the hair brush to their head, deliver reinforcement then put the hair brush away. Then brush one stroke, remove the hair brush and deliver reinforcement. Slowly fade in the amount of time they are allowing the instructor to put the brush to their hair until they reach the final criteria.

Data Collection

Using a task analysis data sheet, recording a plus or a minus for each step, at the end, calculate percentage of steps. Establish criteria to move on (e.g., each step at trials with no error in order to fade back prompting).

Helpful Hints

- The sample goal specifies that the instructor must be at least 6 feet away. This is to insure that there are no unintentional prompts and that the student is able to complete this task without someone being in the bathroom with them
- An activity schedule can be used as well. Steps can be broken down as small as they need to in order for the student to be successful.
- As the student in this task analysis example does, using a detangler spray can be helpful for students who have tangly or knotty hair.

Hand Washing

Introduction

Hand washing will help keep students healthy and clean. It is one of the most important preventative strategies to avoid illness. Following any activity that involves bodily fluids it is vital that students wash their hands for safety purposes. It is also important for students to have clean hands after touching anything that could dirty their hands.

IEP Goals

Sarah will independently complete 100% of the steps of the hand washing task analysis with 100% accuracy in 3 out of 3 trials for 2 consecutive days.

Kim will independently complete all 11 steps of hand washing task analysis with 100% accuracy in 3 out of 3 opportunities for 2 consecutive days with faded teacher proximity to 6 feet away.

Assessment

Pre-Test: Present the student with all the materials they need (e.g., soap, sink etc.). Prepare a data sheet with the specified task analysis. If appropriate, give the student the direction to complete the task (e.g., "wash your hands"). As they go through the task, record whether or not they complete the step correctly. Prompt each step as needed, as the cue for the student to move on to the next step is completing the previous step.

Continuing Assessment: Continue to record and analyze data as the student progresses. Fade out prompts as students demonstrate predetermined criteria for mastery.

Task Analysis

1. Walk to sink
2. Get soap
3. Rub palms together
4. Rub right palm against back of left hand
5. Rub left palm against back of right hand
6. Repeat steps 3-5
7. Turn water on

8. Rinse, rubbing palms together
9. Rub right palm against back of left hand
10. Rub left palm against back of right hand
11. Repeat steps 8-10
12. Turn water off
13. Walk to cloth towel
14. Dry inside of left hand
15. Dry outside of left hand
16. Dry inside of right hand
17. Dry outside of right hand

Teaching Strategies

Hand washing is best taught as a total task behavior chain so that students get practice going through all the steps. Physical prompting can be used to teach students to wash and dry thoroughly.

- Prompting and prompt fading
- Total task chaining

Differentiating Instruction

- Hand washing is a skill that must be taught at all levels of ability.
- Once students are consistently washing their hands independently, teach them to independently wash their hands at all the appropriate times (e.g., before and after eating, after using the bathroom, after coughing or sneezing into their hands, etc.).

Data Collection

Using a task analysis data sheet, recording a plus or a minus for each step, at the end, calculate percentage of steps. Establish criteria to move on (e.g., each step at trials with no error in order to fade back prompting).

Helpful Hints

- If a student uses the bathroom independently with the door closed, it's a good idea to check every now and then to make sure they are washing their hands completely after using the bathroom.
- Using a foaming pump soap can help students with motor control challenges get the soap all over their hands.

Laundry

Introduction

This lesson includes washing and drying clothes in addition to folding and hanging clothes. All of these skills are important to teach, especially chaining them together (i.e., first wash, then dry, then put away).

IEP Goals

When given a pile of laundry with at least 4 types of clothing items (e.g., jackets, pants, shirts, underwear) Dennis will correctly put the item away by folding it and putting it in a drawer or by hanging it on a hanger and putting it in the closet with 100% accuracy in 3 out of 3 trials for 3 consecutive days.

Isaac will independently complete the steps to wash and dry a load of laundry following his showering routine with 100% accuracy for 5 consecutive weeks. When the clothes are dry Isaac will independently fold the entire load of laundry and put the items away in their appropriate locations (e.g., a dresser drawer) with 100% accuracy in 3 out of 3 opportunities.

Assessment

Pre-Test: Present the student with all the materials they need (e.g., laundry basket with clothing, washer, dryer, etc.). Prepare a data sheet with the specified task analysis. If appropriate, give the student the direction to complete the task (e.g., "wash the clothes, fold your pants"). As they go through the task, record whether they complete the step correctly. Prompt each step as needed, as the cue for the student to move on to the next step is completing the previous step.

Continuing Assessment: Continue to record and analyze data as the student progresses. Fade out prompts as students demonstrate predetermined criteria for mastery.

Task Analyses

Washing Clothes

1. Open the washing machine, if there are clothes in the washing machine, put them in the dryer
2. Take my fitness center clothes out of my fitness center bag
3. Put my fitness center clothes in the washing machine
4. Take my work clothes out of my locker
5. Put my work clothes in the washing machine
6. Make sure I have no other clothes that need to be washed
7. Turn the "Load Size" knob to "Medium"
8. Turn the "Temperature" knob to "Cold/Cold"
9. Make sure the "Options" knob is turned to "Off"
10. Turn the other knob to the Cotton section, and make sure it is set to "Heavy" in the dark blue section
11. Press "Start" button and make sure the water starts running
12. Add 1 scoop of laundry detergent and close the lid

Drying Clothes

1. Open the dryer door and make sure there are no clothes inside
2. Clean out the lint trap
3. Move my clothes from the washing machine to the dryer
4. Get a dryer sheet from the laundry locker
5. Put the dryer sheet in the dryer and close the door
6. Turn the "Signal" knob to "Off"
7. Turn the "Fabric Care" knob to "Cottons/Reg Heat"
8. Turn the "Options" knob to "Off"
9. Turn the other knob to "More Dry" in the dark blue section
10. Press and hold the "Start" button until the dryer starts

Hanging a Shirt

1. Pick up the shirt from laundry basket
2. Lay item flat on bed
3. Open closet
4. Get hanger from closet
5. Put left arm of hanger in shirt (at neck)
6. Put right arm of hanger in shirt (at neck)
7. Button one of the top buttons of the shirt
8. Pick up hanger by the hook
9. Clear a space in the closet by using one or both hands to separate clothes
10. Hang shirt in closet
11. Close closet

Hanging Pants

1. Pick up item from laundry basket
2. Lay item flat on bed
3. Fold one pant leg over the other pant leg
4. Open closet

5. Put hands together (palm to palm) with fingertips pointed at closet
6. Push hands in between clothing items in closet
7. Move hands apart to separate clothing items on rack
8. Get hanger from closet
9. Hold hanger at hook and slide the pants through so that they are folded in half over the hanger
10. Pick up hanger by the hook
11. Hang pants in closet
12. Close closet

Folding a Towel

1. Hold towel lengthwise in a vertical position against body
2. Place towel on a flat surface
3. Bring bottom of towel up to the top of the towel meeting the corners (folding towel in half)
4. Bring bottom of towel up to the top of the towel meeting the corners (folding towel in half) a second time
5. Pick up left side of towel bringing it to the right meeting corners (folding towel in half)

Folding Pants

1. Lay the pants on the bed so that the waist part of the pants is pointing away from him
2. Fold the pants in half vertically from left to right (so the length of the pants matches)
3. Fold the pants in half horizontally from top to bottom (so the waist and bottom of the pants meet)

Folding a Shirt

1. Lay the shirt on the bed so that the neck part of the shirt is pointing away from him
2. Fold the shirt in half vertically from left to right (so the sleeves of the shirt meet)
3. Fold the shirt in half horizontally from top to bottom (so the neck and bottom of the shirt meet)

Teaching Strategies

Activity schedules work well to teach the washing and drying component, using either a checklist or picture format. Activity schedules can also be used to teach the folding components or just simply teaching it as a behavior chain. If students have challenges with physical prompting, modeling is a good strategy to use as well.

- Activity schedules
- Chaining
- Prompting and prompt fading
- Modeling

Differentiating Instruction

- Students who are working on imitation skills can work on this skill by working with somebody to put clothes into the washer, or take them out of the dryer – this helps with more advanced imitation repertoire as well as allows them to participate in an independent living program.
- For students with strong matching and sorting skills, they can sort the laundry into darks and lights before washing the clothes.

Data Collection

Using a task analysis data sheet, recording a plus or a minus for each step, at the end, calculate percentage of steps. Establish criteria to move on (e.g., each step at trials with no error in order to fade back prompting).

Helpful Hints

- Since washing machines and dryers can be so different, using an activity schedule to teach the skill is good for generalization. If the student can use the activity schedule at school, a nearly identical one with variations to the knobs and buttons can be created for the home environment.
- Work with the families to identify what clothes they usually hang and what clothes they usually fold and teach to this – every family is different.
- Putting in a specific sized measuring cup (e.g., ¼ cup) into the soap area (whether liquid or powder) can be helpful if the student has difficulty determining how much soap to put into the measuring devices that come with the soap (e.g., the lid on the liquid soap or the large size scoop in the powder soap).
- Using powder soap may be easier for students with motor control challenges, so they don't need to use two hands (e.g., one to stabilize the liquid jug and one to hold the lid).

Leisure Skills

Introduction

Along with work, teaching leisure skills is an important part to a happy, high quality of life. Students often need explicit teaching to learn new skills, and that includes leisure skills as well.

IEP Goals

Kim will engage in 3 new age-appropriate leisure activities for at least 5 continuous minutes each in 3 out of 3 opportunities.

Julia will engage in 2 new recreational activities with a preferred peer, completing 100% of her portion of the components with 100% accuracy in 3 out of 3 opportunities.

Isaac will independently engage in 2 age appropriate independent leisure activities for 5 minutes with the teacher faded to 6 feet away with 100% accuracy in 3 out of 3 opportunities.

Assessment

Pre-Test: Present the student with all the materials they need (e.g., games, art materials, etc). Prepare a data sheet with the specified task analysis. If appropriate, give the student the direction to complete the task (e.g., "let's play the game"). As they go through the task, record whether or not they complete the step correctly. Prompt each step as needed, as the cue for the student to move on to the next step is completing the previous step.

Continuing Assessment: Continue to record and analyze data as the student progresses. Fade out prompts as students demonstrate predetermined criteria for mastery.

Task Analyses

Included here are sample task analyses for common games and activities. This list is nowhere near all inclusive; each activity must have its own task analysis created. These are just samples to see how a game or activity can be broken down into their smallest components.

Go Fish (Card Game)

1. Pick up card holder, place cards one at a time so that they are facing her; when picking up a new card, place in holder so that it is facing her
2. Ask instructor "Do you have any [card in her hand]?" If instructor says "yes", move to step 3. If instructor says "Go fish", move to step 4.
3. Put pair of cards face up on table, then move to step 2
4. Draw one card from the draw pile
5. When instructor asks "do you have any [card in their hand]?" If yes, Kim will say "Yes" and hand instructor that card/cards. If no, move to step 6.
6. If Kim does not have that card in her hand, she will say "Go fish", then move to step 2

Blink (Card Game)

1. Place all cards in her hand into card holder so that they are fanned out and facing her
2. If a card in their hand matches the color, number, or shape of the play card, player will place that card face up on top of the play card, then move to step 4
3. If no card in their hand matches the play card, player will draw cards one at a time from the draw pile until a matching card is found, then move to step 4
4. Wait while other player takes turn

Kite Flying

1. Instructor will take Isaac to the beach
2. Instructor will start a timer for 5 minutes and say, "Let's fly a Kite!"
3. Instructor will hand Isaac the spool to be held in the left hand
4. Instructor will hold kite and walk backwards 10 ft
5. Isaac will hold onto the spool with his left hand until the timer beeps without releasing the spool or engaging in target behavior

Disc Golf

1. Throw disc from tee, without going off
2. Wait for instructor to throw
3. Go to spot where disc landed
4. Throw disc towards basket without walking away from the spot where the disc landed
5. Repeat steps 3 & 4 until close to basket
6. Throw disc into basket

Driving Golf Balls

1. Walk to the left hand corner of the upper level where the dispensing machine is, carrying his club

2. Place a bucket underneath to catch the balls and put $5 in the machine
3. Press OK
4. Take the bucket and clubs and walk to an empty mat on the upper level
5. Hit golf balls, one at a time, in a safe manner (staying behind the safety line at all times)
6. Say "I'm done" when he has no balls left

Teaching Strategies

Each skill will require different teaching strategies. Any of the following can be effective.

- Activity Schedules
- Modeling
- Prompting and Prompt Fading
- Chaining

Differentiating Instruction

Every student will be working on different aspects of "Leisure Skills." Some students may just be working on sitting still for periods of time, whereas other students may be learning to play complicated games. Meet students where they are at and start small.

Data Collection

Using a task analysis data sheet, recording a plus or a minus for each step, at the end, calculate percentage of steps. Establish criteria to move on (e.g., each step at trials with no error in order to fade back prompting). If the goal is measuring amount of time on task, use an interval data sheet and record a plus or minus for every interval on task (define off task per activity).

Helpful Hints

- Often students with autism have interests that aren't age appropriate. Capitalize on the aspect that the students enjoy (music, images of vehicles) but make them age appropriate. Enjoying age-appropriate games will take time, but can be taught.
- Pair new activities with strong reinforcement to associate the new activities with reinforcers.
- Incorporate already preferred items into the activities (e.g., teaching students to do a "paint by number" activity, help them choose pictures of images they enjoy).
- Incorporate peers as often as possible to associate the student's classmates, siblings or other peers with enjoyable activities.

Making Purchases

Introduction

The ability to make a purchase independently will allow students to participate in the community and community activities.

IEP Goals

When presented with 2 planned shopping opportunities in which George knows what he is going to purchase he will: independently get his wallet, count his money, request to go to the bank if he doesn't have enough, withdraw an appropriate amount of money with 100% accuracy in 5 out of 5 opportunities (at least 3 must require withdrawing money).

When George presented with the bill at 4 sit-down restaurants, George will calculate the tip and pay using either his ATM card or the appropriate amount of cash with 100% accuracy for 2 consecutive purchases.

Brad will make 5 purchases where the total price is between $5 and $20 with 100% accuracy in 3 out of 3 opportunities.

In 1 store setting, Dennis will complete 4 of the 4 steps of the making a purchase task analysis (i.e., after shopping with an instructor he will stand next to the instructor he is with in line, hand over a bill after the instructor's verbal prompt, collect the change when the cashier hands it to him, and take the item/bag before leaving the check stand) with 100% accuracy in 3 out of 3 trials.

Assessment

Pre-Test: Present the student with all the materials they need (e.g., wallet, cash, credit or debit card, etc.). Prepare a data sheet with the specified task analysis. If appropriate, give the student the direction to complete the task (e.g., "buy this item"). As they go through the task, record whether or not they complete the step correctly. Prompt each step as needed, as the cue for the student to move on to the next step is completing the previous step.

Continuing Assessment: Continue to record and analyze data as the student progresses. Fade out prompts as students demonstrate predetermined criteria for mastery.

Task Analyses

Using a Gift Card

1. Waits in line
2. Walks to counter
3. Responds to questions from cashier
4. Takes wallet out of purse
5. Takes card out of wallet
6. Swipes card through machine correctly
7. Presses 'Gift Card' from menu
8. Puts card in wallet
9. Takes receipt
10. Puts receipt in wallet
11. Puts wallet in purse
12. Says "Thank You" to cashier
13. Takes grocery bag
14. Walks away from cashier

Using ATM or Cash

1. Takes out his wallet
2. Identifies whether or not he has enough money in his wallet
3. Pays with cash if he has enough in his wallet. If he does not have enough, continue to step 4
4. References his account balance
5. Indentifies whether or not he has enough money in his account to buy the item
6. Pays with the debit card

Teaching Strategies

This skill is good to teach as a behavior chain. The steps are relatively the same at every location. One of the few things that will vary is the machine used to swipe the card. Prompting and prompt fading will be used. Physical or gestural prompts are best, but if the student is able to learn new skills with verbal prompts, those can be used as well. When teaching this skill in the community it is important to make sure that the student is completing the skill with fluency (i.e., quickly and accurately) in order for the skill to be most functional.

- Prompting and Prompt Fading
- Chaining

Differentiating Instruction

This lesson assumes that if the student is using cash, they have money math skills (at least basic "dollar up" strategies). Using a card is good for students who don't have those skills.

Data Collection

Using a task analysis data sheet, recording a plus or a minus for each step, at the end, calculate percentage of steps. Establish criteria to move on (e.g., each step at trials with no error in order to fade back prompting).

Helpful Hints

- Teach students to take the card out of their wallet and put it back the same way every time, so that it is easier for them to swipe the card correctly.
- Make sure the students are referencing the price screen to identify how much money they must hand over.
- For students who aren't able to count money, but still are using cash, make sure they always have a large enough bill in their wallet (e.g., a $10 or $20) to cover the price of the purchase.
- Give students a rule about when to use an ATM card and when not to – one sample rule (it will vary depending on the student) is if it costs less than $5, use cash (if they have it), otherwise use a card.

Nail Grooming

Introduction

Having clean nails will help students have better hygiene including preventing infections if they scratch their skin. It also helps students look more presentable for social situations and for being on the job.

IEP Goals

Richard will use a nail clipper to cut the nail on one finger and will properly dispose of the nail clippings with 100% accuracy for 3 consecutive opportunities.

Richard will independently clip and file the nails on both his hands and feet with 100% accuracy in 3 out of 3 opportunities.

Assessment

Pre-Test: Present the student with all the materials they need (e.g., nail clipper, nail file, etc). Prepare a data sheet with the specified task analysis. If appropriate, give the student the direction to complete the task (e.g., "clip your nails"). As they go through the task, record whether or not they complete the step correctly. Prompt each step as needed, as the cue for the student to move on to the next step is completing the previous step.

Continuing Assessment: Continue to record and analyze data as the student progresses. Fade out prompts as students demonstrate predetermined criteria for mastery.

Task Analysis

1. Pick up nail clippers
2. With right hand, use the clippers to cut the nails of each finger starting with the thumb and moving towards the pinky one finger at a time, moving from right to left on each nail
3. Then, with the left hand, use the clippers to cut the nails of each finger on the right hand, starting with the thumb and moving towards to pinky one finger at a time, moving from left to right on each nail
4. Clean up nail clippings and throw them in the garbage

Teaching Strategies

Using a physical prompting and prompt fading strategy is an effective way to teach the student to cut the appropriate amount of nail (not too much, not too little). Some students may be able to cut their nails from seeing somebody model the process, but learning to cut the appropriate amount may take a more intense prompt.

- Prompting and prompt fading
- Modeling

Differentiating Instruction

Some students will just be working on accepting their nails being cut – a stimulus demand fading strategy can be used to teach this. Begin by just showing the student the nail clippers, delivering reinforcement and putting the nail clippers away. Once they are successful with this step, touch the nail clippers to their finger, deliver reinforcement then put the nail clippers away. Then clip one small piece of nail, remove the nail clippers and deliver reinforcement. Slowly fade in the amount of time they are allowing the instructor to clip their nails until they reach the final criteria.

Data Collection

Using a task analysis data sheet, recording a plus or a minus for each step, at the end, calculate percentage of steps. Establish criteria to move on (e.g., each step at trials with no error in order to fade back prompting).

Helpful Hints

- In order to teach the appropriate amount to cut, starting with paper hands with a more clear distinction on the nails, such as a bright color, as to where to cut might be helpful to learn to cut the appropriate amount off.
- To help with jagged ends of nails, teach the student to file their nails following the cutting.

Phone Skills

<u>Introduction</u>

Using the phone is not only a safety skill but a skill that will open students up to social and vocational opportunities. There are many skills to teach, especially with today's growing cell phone technology. Here is a sample of a few skills, though each student's capability, needs and interests should go into what types of programs are developed.

<u>IEP Goals</u>

George will answer at least 3 "wh" questions on a cell phone (e.g., "Where are you?" "Who are you with?" "What are you doing?") with 100% accuracy in 3 out of 3 opportunities in 4 situations.

When George is sent a text message, he will reply to the person using a text message, answering any questions the sender asked with 100% accuracy in 40 out of 40 opportunities.

When George leaves a location he will text message a family member to notify them where he is going with 100% accuracy in 40 out of 40 opportunities.

Julia will place a call to 2 people using a cell phone with pre-programmed numbers with 100% accuracy in 4 out of 4 trials.

Brad will demonstrate 4 phone skills (e.g., answering the phone, making a call to a specified person, having a conversation on the phone) with 100% accuracy in 3 out of 3 opportunities for 2 consecutive days.

<u>Assessment</u>

Pre-Test: Present the student with all the materials they need (e.g., cell phone, phone numbers programmed into their phone, etc). Prepare a data sheet with the specified task analysis. If appropriate, give the student the direction to complete the task (e.g., "use the bathroom"). As they

go through the task, record whether or not they complete the step correctly. Prompt each step as needed, as the cue for the student to move on to the next step is completing the previous step.

Continuing Assessment: Continue to record and analyze data as the student progresses. Fade out prompts as students demonstrate predetermined criteria for mastery.

Task Analyses

Using a Cell Phone to Answer Safety Questions

1. Pick up phone
2. Flip open phone so that keyboard is accessible and oriented for typing
3. If no message is there, close phone
4. If text message is there, follow steps for receiving a text message before moving on to step #5
5. If missed call message is there, press red button and close phone
6. Press green button w/ white line through it under "Contacts"
7. Scroll down using arrow until appropriate name is highlighted in blue
8. Press the green button
9. Hold phone up to ear (Instructor on phone will say "Hello")
10. George will say "Hi this is George" (Instructor on phone will ask "Hey George, how are you?")
11. George will say "I'm fine, how are you?" (Instructor on phone will say "I'm fine. Where are you right now?")
12. George will say "I'm at school." (Instructor on phone will say "Okay. Who are you with right now?")
13. George will say "I'm with _____." (Instructor on phone will say "Sounds good, see you later!")
14. George will say "Goodbye" while holding phone up to his ear
15. George will press the red button

Adding Phone Numbers to Address Book

1. Instructor will hand George an index card (found under the independent living skills binder tab) with Marina, Alana, or Lindsay's phone number on it
2. George will enter the phone number from the main menu screen
3. Once the number is entered, George will push the dot button on the left indicating "store"
4. He will hit the left dot button again, indicating "change" (referring to the name)
5. He will then hit the appropriate alpha numeric buttons to put in the instructor's name. When he is done he will hit the dot button on the left indicating "OK."
6. He will hit the dot button on the right indicating "done"

Calling a Phone Number in the Address Book

1. Open the phone

2. Press "Contacts"
3. Scroll down to the person's name until highlighted
4. Point to the display, say the name of the person aloud
5. Press "Send"
6. Wait for the person to answer
7. Greet the person
8. Have at least a 2- exchange conversation
9. Say "Bye"
10. Hang up the phone by pressing the "End" button

Teaching Strategies

For initial teaching, an activity schedule may be a good option. There must be a plan, however, to fade the activity schedule as it is impractical to carry an activity schedule into the community every time the student needs to make or receive a call. Prompting and prompt fading may also be used to teach the appropriate steps.

- Activity Schedules
- Prompting and Prompt Fading
- Chaining

Differentiating Instruction

- For students with writing skills, text messaging may be a good option. This can be helpful, particularly for safety, if students communicate more effectively through writing than through speaking.
- Some phone companies sell phones that have a few buttons that can be pre-programmed so the student just needs to press one button. These phones are helpful for students who have more discrimination challenges.
- Cell phones have many functions, especially the new "smart phones." These phones can be used for their other applications that can help students in numerous ways. Some companies are even creating applications meant just for the education and use of students with autism.

Data Collection

Using a task analysis data sheet, recording a plus or a minus for each step, at the end, calculate percentage of steps. Establish criteria to move on (e.g., each step at trials with no error in order to fade back prompting).

Helpful Hints

- Creating motivation to use the phone will help the student be more successful – build in opportunities for them to talk to preferred people, or follow reinforcing directions over the phone.
- For pre-programmed phones, put tiny pictures on top of the buttons to correspond to who that person calls.

Pill Swallowing

Introduction

Many people have to take medication for a variety of reasons, even just a periodic pain killer, fever reducer or a daily vitamin. Learning to swallow a pill (rather than chew it) is important in order to treat disorders or illnesses.

IEP Goals

Given a pill or placebo (e.g., piece of candy), ½ inch in size, Julia will swallow the pill, with out spitting it out or chewing it with 100% accuracy in 3 out of 3 opportunities.

Assessment

Pre-Test: Present the student with all the materials they need (e.g., placebo pill, cup of water, etc). If appropriate, give the student the direction to complete the task (e.g., "Take your meds"). Identify areas of strength and areas that require prompting (e.g., the student can pick up the pill and put it in their mouth, but cannot swallow it without chewing).

Continuing Assessment: Continue to record and analyze data as the student progresses. Fade out prompts as students demonstrate predetermined criteria for mastery.

Task Analysis

For a Pill Swallowing goal, the challenge usually lies in the student's ability to actually swallow the pill without chewing it, rather than completing the behavior chain. A task analysis is not included in this lesson, though one could be written if it is necessary for that student.

Teaching Strategies

Physical prompting is a good method to use to show the student what they are supposed to do. The student may be required to engage in a number of responses that are physically challenging. The instructor may also model for the student, for example the instructor will open their mouth wide to show the student that they should open their mouth wide to put the pill in their mouth. A shaping strategy will be used to systematically increase the size of the pill. Begin with very small

pills such as small round candy sprinkles, moving to larger candy sprinkles, then eventually to ½ "Tic Tac" size pill, then 1 "Tic Tac" size pill, and so on until the student is able to swallow the appropriate size pill.

- Prompting and prompt fading
- Modeling
- Shaping

Differentiating Instruction

Some students may be able to swallow pills effectively but may be having a challenge remembering to take their pills independently, or taking the correct number of pills. For these students using a watch or cell phone alarm can help them to take their pills on their own. Using a weekly pill divider case can help students know how many pills to take in one day.

Data Collection

Practice several times per day, using a +/- recording strategy for each trial. When the student is consistently swallowing one size pill, move on to a larger size.

Helpful Hints

- Make sure the student is able to swallow regular size gulps of water (rather than just sips). This will allow them to take the pill smoothly with less chance of chewing it.
- It may be necessary to go back and re-teach steps if the pill swallowing begins to become aversive to the student.

Shaving

Introduction

This goal addresses face shaving for men, although similar strategies can be used to teach women to shave their legs or armpits. This is an important goal to teach because it will help with hygiene. Beards can get food particles or other dirt stuck in them, and can contribute to skin problems. Having a clean shaven face can also help students look more professional for jobs. Some students (or their families) may choose not to shave – depending on the situation, this is a personal decision of the students in which beard upkeep and hygiene must be practiced. These topics are not covered in the curriculum.

IEP Goals

The IEP goals are written into a percentage of a certain number of steps of a task analysis. This is so that the goal is not only attainable but it allows for a little room for adjusting the task analysis if necessary. In general students seem to pick up on one piece of the routine quicker than others and are able to demonstrate independence in those steps first.

Brad will apply shaving cream to his face, covering all the areas that he will shave, and shave four facial areas (e.g., upper lip, check, chin) with 100% accuracy in 3 out of 3 trials for 2 consecutive days.

Brad will use an electric razor to shave all the areas of his face (i.e., cheeks, chin, upper lip, neckline and jaw) and will use the appropriate tools to clean out the razor after shaving with 100% accuracy for 9 consecutive opportunities.

Brad will independently complete 100% of the shaving task analysis in 3 out of 3 opportunities.

Assessment

Pre-Test: Present the student with all the materials they need (e.g., shaving cream, razor, etc). Prepare a data sheet with the specified task analysis. Give the student the direction to complete the task (e.g., "shave your face" or "start your schedule"). As they go through the task, record whether or not they complete the step correctly. Prompt each step as needed, as the cue for the student to move on to the next step is completing the previous step.

Continuing Assessment: Continue to record and analyze data as the student progresses. Fade out prompts as students demonstrate predetermined criteria for mastery.

<div align="center">Task Analysis</div>

Shaving with a Razor Blade

1. Put shaving cream on his cheeks
2. Put shaving cream on his chin
3. Put shaving cream on space between upper lip and nose
4. Pick up the razor
5. Start at the very left part of his face from the top of his left cheek, pull down using razor until meeting the bottom of his left cheek and all shaving cream is gone
6. Turn on the water in the sink and rinse the razor
7. Go to the next most left part of his left cheek with remaining shaving cream, repeat steps 5 and 6 until the left cheek is complete
8. Place razor on the space between the upper lip and the nose, starting on the left, pull down until the razor meets the top of upper lip, removing shaving cream
9. Turn on the water in the sink and rinse the razor
10. Repeat steps 8 and 9 until all of the space between the upper lip and nose is complete
11. Place the razor on the chin starting at left side, pull down until the razor meets the bottom of the chin
12. Turn on the water in the sink and rinse the razor
13. Repeat steps 11 and 12 until the chin is complete
14. Go to the right cheek, pull down with razor until the razor meets the bottom of the right cheek
15. Turn on the water in the sink and rinse the razor
16. Repeat steps 14 and 15 until the right cheek is complete
17. Rinse the razor and put it on counter
18. Pick up the towel and wipe his face
19. Bring the razor and shaving cream back to the desk

Shaving with an Electric Razor

1. Go to locker and remove toiletry bag
2. Take toiletry bag to an available bathroom
3. Remove the electric razor from the bag
4. Turn on the razor
5. Start timer for 1 min
6. Shave right cheek and right neck until timer beeps
7. Stop timer and re-start it again for 1 min
8. Shave left cheek and left neck until timer beeps
9. Stop timer and re-start it again for 1 min
10. Shave chin and neck until timer beeps
11. Stop timer and re-start it again for 1 min
12. Shave upper lip
13. Put razor back in his toiletry bag
14. Put the toiletry bag back in his locker

Razor Cleaning

1. Make sure the razor is off before cleaning
2. Remove the protective cover
3. Use the brush to remove any hair from the top of the razor
4. Push the release button and carefully pull the shaver head off
5. Clean inside the shaver head with the brush
6. Put the shaver head back onto the razor
7. Put razor back into the box

Teaching Strategies

Prompting can take many different forms. Some students will be most successful with physical prompting (e.g., hand over hand prompting them to shave correctly). Other students may benefit from gestural prompting (e.g., pointing to the correct part of the face to shave) or modeling. This skill can be chained together by using forward chaining. Physical prompting and prompt fading can also be used in combination with an activity schedule.

- Prompting and prompt fading
- Chaining
- Activity Schedules
- Modeling

Differentiating Instruction

- Some students will just be working on accepting somebody shaving their face – a stimulus demand fading strategy can be used to teach this. Begin by just showing the student the razor, delivering reinforcement and putting the razor away. Once they are successful with this step, touch the razor to their face, deliver reinforcement then put the tooth brush away. Then hold the razor on their face for 5 seconds, remove the razor and deliver reinforcement. Slowly fade in the amount of time they are allowing the instructor to put the razor on their face or accept their face being shaved until they reach the final criteria.
- Some students will be able to memorize the pattern in which they must shave their face without an activity schedule of any sort. For students who are able to understand verbal directions and do not have a history of prompt dependency, explaining to the student how to do the task may be an effective strategy. Be careful with this however, as verbal prompting can be difficult to fade.

Data Collection

Using a task analysis data sheet, recording a plus or a minus for each step, at the end, calculate percentage of steps. Establish criteria to move on (e.g., each step at trials with no error in order to fade back prompting).

Helpful Hints

- If the student is using a pictorial activity schedule, make sure it is laminated or placed in plastic sheet protectors so they don't get wet (if shaving cream is being used)
- If the student is using a flip book style pictorial activity schedule, place some Velcro strips or another page separator between each page – when students have their hands wet while shaving their face, the pages get stuck together
- Wipe down the laminated activity schedules after each use so that they don't get sticky and moldy
- Using a razor blade and shaving cream is helpful to teach students where their face has already been shaved (because the shaving cream will be removed). Start with shaving with the plastic cover on in order to learn how to cover their whole face, then once they are doing that consistently remove the razor cap.
- Using an electric razor is definitely safer than using a razor blade. Two drawbacks to this are that sometimes students are sensitive to the noise or vibration, and it's difficult to clearly see where they have shaved their face. A helpful strategy is starting with using shaving cream and a capped razor then moving to an electric razor once they are able to cover all the areas of their face successfully.
- If the student is using an electric razor, it is also important to teach the student to clean the razor in order to maintain its life and insure a clean shave.

Showering

Introduction

Being able to shower or bathe independently is one of the biggest steps towards independent living. It is important for students to be able to clean their own bodies to make sure that they are staying healthy. Social issues may also come up if a student is not consistently clean. People will be less likely to include the student in social situations if they have body odor or have dirty hair or skin.

IEP Goals

One of the IEP goals is written into a percentage of a certain number of steps of a task analysis. This is so that the goal is not only attainable but it allows for a little room for adjusting the task analysis if necessary. The other goal is written to specify "components" of showering (e.g., using the appropriate amount of shampoo). This style of a goal is useful if the student is able to learn behavior chains quickly but has more challenges with specific pieces.

Isaac will independently complete 90% of the task analysis for showering with 100% accuracy in 2 out of 2 opportunities.

Isaac will independently complete 4 components of showering (e.g., using the appropriate amount of shampoo, stepping out of the water to soap his body, etc.) with 100% accuracy in 3 out of 3 opportunities.

Assessment

Pre-Test: Bring the student to a bathroom with a shower and present them with all of the materials they will need (e.g., shampoo, soap, towels). Give the student the direction to complete the task (e.g., "wash your face" or "start your schedule"). As they go through the task, record if they complete the step correctly or not. Prompt each step as needed, as the cue for the student to move on to the next step is completing the previous step.

Continuing Assessment: Continue to record and analyze data as the student progresses. Fade out prompts as students demonstrate predetermined criteria for mastery.

Task Analysis

Note: This task analysis specifies that the student undresses in one bathroom, puts his robe on then moves to another bathroom (which has a shower). This is to simulate undressing in his bedroom at home then walking to the bathroom.

Verbal Direction: "Get ready for the shower"

INSTRUCTOR TO LEAVE THE BATHROOM AFTER DIRECTION IS GIVEN

1. Take off clothes, put clothes in hamper

2. Put robe on, tie string and tighten

3. Put shower flip flops on (from bottom drawer)

4. Pick up shower caddy (from bottom drawer)

5. Walk to large bathroom

6. Put shower caddy in shower

7. Take off robe

8. Turn on water

9. Adjust the temperature and get in (within 10 seconds)

10. Start watch (Press "Start/Split" button).

11. Raise left arm and rinse it

12. Raise right arm and rinse it.

13. Rinse genitals

14. Rinse bottom

15. Lean forward and get head wet

16. Lean left and get head wet

17. Lean right and get head wet

18. Turn around, lean back, and get back of head wet

19. Get shampoo bottle from caddy and pour shampoo into hands

20. Put shampoo bottle in caddy

21. Lather hands together

22. Using both hands, put shampoo in hair

23. Lean forward and, using both hands, rinse shampoo out of hair

24. Lean to the left and, using both hands, rinse shampoo out of hair

25. Lean to the right and, using both hands, rinse shampoo out of hair

26. Turn around and, using both hands, rinse shampoo out of hair

27. Get soap

28. Wash left underarm with soap

29. Wash right underarm with soap

30. Wash genitals with soap

31. Wash bottom with soap

32. Place soap back in caddy

33. Rinse left underarm

34. Rinse right underarm

35. Rinse genitals

36. Rinse bottom

37. Turn off shower and get a towel

38. Dry face

39. Dry hair

40. Dry left underarm

41. Dry left arm

42. Dry right underarm

43. Dry right arm

44. Dry chest

45. Dry back (raising right hand over shoulders while holding the towel, reaching and grabbing the towel with the left hand, and shimmy with towel against upper back)

46. Dry left leg

47. Dry right leg

48. Dry genitals

49. Dry bottom

50. Hang up towel

51. Stop watch (Press "Stop" button on lower right corner)

52. Put robe on, tie string and tighten

53. Pick up caddy and walk to the small bathroom

INSTRUCTOR TO WAIT OUTSIDE OF THE SMALL BATHROOM

54. Put shower caddy away (in bottom drawer)

55. Hang up robe

56. Get deodorant from toiletry kit and put on (counting to 3)

57. Take off shower flip flops and put back in bottom drawer

58. Put on new clothes (underwear, pants, shirt)

59. Put socks and shoes on

60. Take clothes in hamper to laundry in the laundry room

Teaching Strategies

Physical prompting is necessary to teach thoroughness with scrubbing shampoo and soap as well as rinsing and drying. Systematically fading the prompts is important in order to make this task more independent. An activity schedule may also be used to teach the order in which the body parts must be washed.

- Prompting and prompt fading
- Total task chaining
- Activity Schedules

Differentiating Instruction

- Some students may only be working on being more independent with certain steps of the showering or bathing process while somebody helps them. These steps can include independently holding their arms up to be washed, or independently scrubbing their hair. This will depend on the fine and gross motor control of the student.
- Some students will not need a timer to monitor how long they are washing or rinsing for. They may only need to count to themselves or they may be able to recognize when they have washed enough to be clean.

Data Collection

Using a task analysis data sheet, recording a plus or a minus for each step, at the end, calculate percentage of steps. Establish criteria to move on (e.g., each step at trials with no error in order to fade back prompting).

Helpful Hints

- If the student is using a pictorial activity schedule, make sure it is laminated or placed in plastic sheet protectors so they do not get wet.
- If the student is using a flip book style pictorial activity schedule, place some Velcro strips or another page separator between each page – when students have their hands wet while showering, the pages get stuck together.
- Wipe down the laminated activity schedules after each use so that they do not get sticky and moldy.
- Place the schedule out of the direct spray of the water.
- Using a repeating watch timer is helpful for students who either count too fast or are not able to independently monitor the amount of time they are scrubbing for.

Toileting

Introduction

In order to be truly independent a student must be able to use the bathroom independently. The importance of this becomes particularly clear when students get too old to go into the opposite sex bathroom with their caregiver. Not being able to use the bathroom independently greatly limits the type of community activities that the student is able to participate in, particularly jobs.

IEP Goals

Sarah will independently complete 100% of the steps of the toileting task analysis with 100% accuracy in 3 out of 3 trials for 2 consecutive days.

Isaac will expressively identify "clean" vs. "Dirty" when using toilet paper after a bowel movement and engage in the appropriate response (he will discard dirty toilet paper and continue wiping until the toilet paper is clean, when the toilet paper is clean he will discard the toilet paper and continue to the next step in the toileting routine) with 100% accuracy in the first 12 trials of each bowel movement for 2 consecutive days.

Assessment

Pre-Test: Present the student with all the materials they need (e.g., bathroom, toilet paper, etc.). Prepare a data sheet with the specified task analysis. If appropriate, give the student the direction to complete the task (e.g., "use the bathroom"). As they go through the task, record whether or not they complete the step correctly. Prompt each step as needed, as the cue for the student to move on to the next step is completing the previous step.

Continuing Assessment: Continue to record and analyze data as the student progresses. Fade out prompts as students demonstrate predetermined criteria for mastery.

Task Analyses

Task Analysis 1

1. Pull pants down

2. Sit on toilet until timer beeps
3. Get toilet paper or flushable wet wipes
4. Wipes backside
5. Brings and holds toilet paper in front of him
6. Says "Dirty, keep wiping" and repeats steps 3-5
7. Every 3 wipes he will flush the toilet
8. Says "Clean, I'm finished"
9. Places toilet paper in toilet
10. Stands up
11. Pulls up pants
12. flushes toilet

Task Analysis 2

1. Instructor pulls down pants & underwear
2. Sit down
3. Sit on toilet for 2 minutes or until eliminates
4. Eliminate
5. Using left hand, grab toilet paper and pulls until across body
6. Put right hand on top of toilet paper roll
7. Move left hand over to pull and rip toilet paper
8. Using left hand, wrap toilet paper around right hand to cover it
9. Stands up
10. Wipe
11. Throw toilet paper in toilet
12. Flush
13. Instructor pulls up pants & underwear

Teaching Strategies

Because physical prompting is easy to fade, it is a good strategy to use when teaching toileting. It is also best taught as a behavior chain with a total task presentation (rather than forward or backward chaining).

- Prompting and prompt fading
- Total task chaining

Differentiating Instruction

For men who are able to use the bathroom independently, it is good to teach urinal use. Using a urinal has many nuances to it – where to stand, how to hold his pants, appropriate social behavior (i.e., not talking to or looking at other men using the urinal). These specific skills are not covered

in these lessons, but information on teaching strategies can be found in the "resources" section below.

Data Collection

Using a task analysis data sheet, recording a plus or a minus for each step, at the end, calculate percentage of steps. Establish criteria to move on (e.g., each step at trials with no error in order to fade back prompting).

Helpful Hints

- Use as little verbal praise or verbal prompting as possible – if too much is used it will be much harder to fade out the presence of the instructor.
- Prompt the student to complete as much of the task as possible themselves, even if they cannot do it fully due to motor control challenges.

Tooth Brushing

Introduction

Tooth brushing is a very important skill to teach. Many students with autism have a very difficult time going to the dentist and some families often find that they need to give their children sedatives in order to have dental work done. A preventative tooth cleaning is a good way to avoid any painful dental procedures. In addition to this, it is important for inclusion in social situations to have clean smelling breath – if a student has bad breath people are less likely to want to interact with the student.

IEP Goals

The IEP goals are written into a percentage or a certain number of steps of a task analysis. This is so that the goal is not only attainable but it allows for a little room for adjusting the task analysis if necessary. In general students seem to pick up on one piece of the routine quicker than others and are able to demonstrate independence in those steps first.

Dennis will independently complete 50% of the tooth brushing steps with 100% accuracy in 2 out of 2 trials for 3 consecutive days.

Isaac will independently brush his teeth completing 100% of the steps of the tooth brushing task analysis in 3 out of 3 opportunities.

Kim will independently complete 25 out of 25 steps of her tooth brushing task analysis with 100% accuracy in 3 out of 3 opportunities.

Assessment

Pre-Test: Present the student with all the materials they need (e.g., tooth brush, tooth paste, etc.). Prepare a data sheet with the specified task analysis. If appropriate give the student the direction to complete the task (e.g., "brush your teeth" or "start your schedule"). As they go through the task, record whether or not they complete the step correctly. Prompt each step as needed, as the cue for the student to move on to the next step is completing the previous step.

Continuing Assessment: Continue to record and analyze data as the student progresses. Fade out prompts as students demonstrate predetermined criteria for mastery.

Task Analyses

Dennis's Task Analysis

1. Takes toothbrush out of cup
2. unscrews cap to toothpaste, placing cap on counter
3. Applies toothpaste
4. Holds toothbrush with left hand
5. Starts timer (preset at 10 seconds)
6. Places brush in lower right quadrant
7. Brushes back and forth until timer sounds
8. Spits
9. Stops and starts timer
10. Places brush in upper right quadrant
11. Brushes back and forth until timer sounds
12. Spits
13. Stops and starts timer
14. Holds toothbrush with right hand
15. Places brush in lower left quadrant
16. Brushes back and forth until timer sounds
17. Spits
18. Stops and starts timer
19. Places brush in upper left quadrant
20. Brushes back and forth until timer sounds
21. Spits
22. Stops and starts timer
23. Places brush in front middle of teeth
24. Brushes back and forth until timer sounds
25. Spits
26. Stops timer
27. Rinses toothbrush
28. Rinses mouth with cup 3 times
29. Wipes mouth with a paper towel
30. Puts toothbrush and toothpaste back in mug

Isaac's Task Analysis

1. Open Schedule
2. Put toothpaste on brush and flip page
3. Press "Start/Split" button on watch (timer set for 30 seconds) and flip the page
4. Brush bottom left teeth until the timer beeps and flip the page
5. Brush bottom right teeth until the timer beeps and flip the page
6. Brush top right teeth until the timer beeps and flip the page
7. Brush top left teeth until the timer beeps and flip the page
8. Brush front teeth until the timer beeps and flip the page

9. Press the "Stop" button on the watch and flip the page
10. Rinse the tooth brush and flip the page
11. Rinse the mouth and flip the page
12. Dry mouth with a paper towel and flip the page
13. Put the supplies away and flip the page
14. Close the activity schedule

Kim's Task Analysis

1. Get schedule out of drawer, set on counter and open
2. Put toothpaste on toothbrush
3. Wet toothbrush, turn page
4. Start timer
5. Brush bottom left teeth until timer beeps
6. Stop timer, spit into sink, turn page
7. Start timer
8. Brush bottom right teeth until timer beeps
9. Stop timer, spit into sink, turn page
10. Put toothpaste on toothbrush
11. Wet toothbrush, turn page
12. Start timer
13. Brush top left teeth until timer beeps
14. Stop timer, spit into sink, turn page
15. Start timer
16. Brush top right teeth until timer beeps
17. Stop timer, spit into sink, turn page
18. Start timer
19. Brush front teeth until timer beeps
20. Stop timer, spit into sink, turn page
21. Rinse toothbrush in sink, turn page
22. Put toothbrush, toothpaste and timer in toiletry bag
23. Put toiletry bag away in top drawer, turn page
24. Follow schedule and pick up Dixie cup to rinse mouth
25. Use paper towel to wipe off mouth, throw away towel, close schedule and put away.

Teaching Strategies

Kim is using a pictorial activity schedule (note that some of the steps say "turn page" – this is a flip-book style pictorial schedule). Dennis and Isaac are using a physical prompting and prompt fading strategy to learn a behavior chain. This behavior chain is presented as a total task chain (we are teaching it all at once rather than systematically adding in each step).

- Prompting and prompt fading
- Total task chaining
- Activity Schedules

Differentiating Instruction

- Some students will just be working on accepting the tooth brush in their mouth – a stimulus demand fading strategy can be used to teach this. Begin by just showing the student the tooth brush, delivering reinforcement and putting the tooth brush away. Once they are successful with this step, touch the tooth brush to their mouth, deliver reinforcement then put the tooth brush away. Then hold the brush in their mouth for 5 seconds, remove the tooth brush and deliver reinforcement. Slowly fade in the amount of time they are allowing the instructor to put the tooth brush in their mouth or accept their teeth being brushed until they reach the final criteria.
- Some students will be able to memorize the pattern in which they must brush their teeth without an activity schedule of any sort. For students who are able to understand verbal directions and do not have a history of prompt dependency, explaining to the student how to do the task may be an effective strategy. Be careful with this however, as verbal prompting can be difficult to fade.

Data Collection

Using a task analysis data sheet, recording a plus or a minus for each step, at the end, calculate percentage of steps. Establish criteria to move on (e.g., each step at trials with no error in order to fade back prompting).

Helpful Hints

- If the student is using a pictorial activity schedule, make sure it is laminated or placed in plastic sheet protectors so they don't get wet
- Using a wristwatch with a repeating timer is helpful – the watch and timer can be used for many daily living skills and the timer strategy can be easily generalized.

Transportation Skills

Introduction

Along with working and living independently comes traveling independently. Teaching transportation skills will allow students to get from work, to home to any location they would like without relying on outside assistance.

IEP Goals

George will demonstrate use of 4 bus skills (e.g., showing his bus pass to the driver, waiting in line to get on the bus, sitting in an appropriate seat, notifying the bus driver when his stop arrives) with 100% accuracy for 3 consecutive days.

Assessment

Pre-Test: Present the student with all the materials they need (e.g., bus pass, bus schedule, etc). Prepare a data sheet with the specified task analysis. If appropriate, give the student the direction to complete the task (e.g., "use the bathroom"). As they go through the task, record whether or not they complete the step correctly. Prompt each step as needed, as the cue for the student to move on to the next step is completing the previous step.

Continuing Assessment: Continue to record and analyze data as the student progresses. Fade out prompts as students demonstrate predetermined criteria for mastery.

Task Analysis

1. Get out his disability card and bus pass
2. Wait for appropriate bus #
3. Wait in line and for passengers to get off bus
4. Board the bus when it arrives
5. Show his ID and swipe his bus pass
6. Find appropriate seat
7. Ring the bell for right stop
8. Get off the bus when it arrives

Teaching Strategies

Teaching the steps as a behavior chain is an effective strategy in teaching transportation skills. Since the student must follow a variety of steps in order to ride the bus, each step may be taught in isolation as well. Either way, the steps eventually need to be chained together. Prompting and prompt fading strategies should also be used in order to attend to the correct bus stop to get off at. When teaching this skill in the community it is important to make sure that the student is completing the skill with fluency (i.e., quickly and accurately) in order for the skill to be most functional.

- Chaining
- Prompting and Prompt Fading

Differentiating Instruction

- For students not independently riding the bus, they still need to know appropriate bus behaviors. Teach them to sit in the appropriate seat, to stay seated, to hold onto the bars appropriately if they must stand and to speak with appropriate voice volume.
- Once students are independently following the movements to ride the bus, teaching stranger safety (e.g., not to talk to people they don't know, don't follow directions from strangers, etc.) will be an important step to fading the instructor's presence entirely.

Data Collection

Using a task analysis data sheet, recording a plus or a minus for each step, at the end, calculate percentage of steps. Establish criteria to move on (e.g., each step at trials with no error in order to fade back prompting).

Helpful Hints

- If possible, teach the student to use bus routes close to their place of residence, or wherever they will be using the bus most effectively.
- When on the bus, fade the distance between the student and the instructor as quickly as possible in order to avoid prompt dependency.