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Independence Starts with Teaching: Implementing Evidence-Based Strategies to Build Self-Advocacy and Independence in Students with Autism

Kelsey Tobey

INDEPENDENCE STARTS WITH TEACHING: IMPLEMENTING EVIDENCE-BASED STRATEGIES TO BUILD SELF-ADVOCACY AND INDEPENDENCE IN STUDENTS WITH AUTISM

Student Article by Kelsey Tobey

Abstract

Although children with autism are dependent on educators to provide guidance; never the less, students also need opportunities to exhibit independence and advocate for themselves. If they are always dependent on adults, students with autism are not able to increase their independence in functional and adaptive skills. Through ongoing studies and observations, educators found students who are taught through research-based structures, such as the least-to-most prompt hierarchy and Treatment and Education of Autistic and Communication related handicapped Children (TEACCH) tasks, are better prepared to exhibit independent living skills during further education and independent living.

Introduction

A survey given to over 700 teachers of students with disabilities noted students with autism have a paraprofessional less than three feet away for 86% of the school day (Giangreco & Broer, 2005, pp. 14-15). Students with autism need interventions and supports that guide them to be independent and learn skills they can apply to their adult life. These independent skills may include play, academic tasks, completing daily living routines, and self-managing behavior. When working with students with autism, educators should implement fade-plans with strong data collection to monitor student independence. Students easily become reliant on adults when educators do not put distinct plans in place.

Promoting Independence

Educators continue to look for evidenced-based strategies to support students with autism who require more time within the special education setting, which can naturally lead them to become dependent on adults. For students who work in a small group or one-on-one setting, it is vital that educators implement a structure that controls the level and amount of prompting. Once a student has become prompt-dependent, they have limited ability to show the extent of what they know. In addition, the student becomes less likely to participate spontaneously and increases the likelihood of learned helplessness (Goodson, Sigafoos, O'Reilly, Cannella, & Lancioni, 2007).

Research has shown students with autism not only struggle with independence during school-age, but also in further education, employment, independent living, and adult interactions (Howlin, Goode, Hutton, & Rutter, 2004). A study involving seven men who were students of structured teaching was conducted to compare growth in independent living skills over a period of two years. The students found their vocational and independent living skills improved, and their quality of life was greater due to a decrease in adult dependency (Persson, 2000).

Evidence-Based Strategies: Constant Time Delay

When introducing a new task, one might argue a student may need frequent support and encouragement to persevere and master the skill. In this instance, a prompt time delay or fade plan can be put into place. Constant time delay (CTD) is a method to gradually fade the teacher-given prompt, while allowing the student time to achieve the correct answer (Kurt & Parsons, 2009). A more recent study monitored the outcome for students who were taught using the constant time delay. The study found that starting with a zero-second time delay and then gradually increasing the time between the direction and the teacher-prompt allowed the student to build independence, while still being supported (Kurt & Parsons, 2009).

Intervention to Increase Independence: TEACCH

Even better, if teachers replace prompting with visual supports and other evidence-based teaching structures, students would have an even greater chance for building independent skills and the ability to generalize these skills across settings (Ayres, Maguire, & McClimon, 2009). The TEACCH approach has shown to play a key role in helping students build independence with completing tasks (Hume, Playnick, & Odom, 2012). However, it is recommended students be taught in a one-on-one setting until they achieve at least 50% accuracy with the targeted skill before utilizing the TEACCH approach (Mesibov, Shea, & Schopler, 2005). A study involving three first grade students with autism spectrum disorder (ASD) was conducted to evaluate the overall effects of using the TEACCH approach (Hume et al., 2012). Results indicated not only did the TEACCH structure decrease the student's dependency on adult prompts, but also increased the accuracy and generalization of the skill.

Intervention to Increase Independence: Prompt Hierarchy

A study by McDonell and Ferguson showed most-to-least prompt hierarchy has been an effective teaching intervention, specifically when teaching life skills (as cited in Aycut, 2012). Prompts used in the prompt hierarchy include full physical, partial physical, direct verbal, indirect verbal, give a model, and gestural. Teachers must determine the type of prompt to implement prior to starting a trial or lesson (Aycut, 2012). When implementing the most-to-least model, the teacher will utilize the most intrusive prompt first, full physical, to provide the student with an accurate response. From there, the prompt would slowly fade to less intrusive prompts, such as a gestural or indirect verbal.

Aycut (2012) conducted a study that found the most-to-least prompt hierarchy to be the most efficient when teaching students life skills. Participants in the study were able to achieve objective criterion in less trials and less time. An older study showed when the prompt hierarchy was used in conjunction with a progressive time delay procedure, students showed a decrease in errors and interfering behaviors (Heckaman, Alber, & Hooper, 1998).

In addition to the most-to-least prompt hierarchy, a teacher could implement the least-to-most hierarchy model. Some studies found the model falls short in comparison to the most-to-least model and other procedures used to gradually fade adult prompts (Ault, Wolery, Doyle, & Gast, 1989). The least-to-most prompt hierarchy model provides the student with a natural response time. If the student answers incorrectly, the implementer would utilize one of the prompt methods. Most commonly, a direct verbal is utilized after a child gives an incorrect response (West & Billingsley, 2005). This could make it very difficult for students to master skills at an adequate rate and may cause a higher frequency of errors (West & Billingsley, 2005).

An article by MacDuff, Krantz, and McClanahan (2001) outlined the specific levels of prompts from most-to-least. Verbal prompts can be direct in form of a clear directive, such as ‘get your pencil’ or indirect in the form of a questions, such as ‘What do you need to be able to write your name on the paper’? While verbal prompts provide the child with a clear expectation, they are also the most difficult prompts to fade. Modeling prompts are less restrictive than verbal prompts and can even be a great way to implement peer interactions (MacDuff, Krantz, & McClanahan, 2001). After a verbal prompt, the teacher could have a peer model what the student needed to do. When using gestural prompts, the teacher could implement a visual cue system. As the gestural prompts fade, the student could refer to the visual without needing a reminder to do so. Visuals are a reasonable accommodation, even when it comes time for students to get a job. With physical prompts, the teacher can provide hand over hand assistance and slowly fade to a slight nudge behind the arm. Whether the teacher is using a more restrictive or less restrictive prompt, there should be a plan to fade the prompt as appropriate for the individual student.

Some might argue there are students who may be more successful with a constant time delay or error-correction procedure. Teachers should evaluate which teaching method allows the student to generalize the skill to their greatest potential (Aycut, 2012). In

addition, the goal is that teachers will be able to determine which procedure allows for the student to accomplish the most sessions, ultimately achieving more skills in a faster period of time (Hughes & Frederick, 2006; Snell, 1982; Zhang, Cote, Chen, & Liu, 2004).

When used in conjunction with a time-delay, there are two different ways to implement the strategies: using a zero-second time delay where the student is prompted immediately to achieve the correct answer (errorless learning) or a multiple-second time delay where the determined prompt is implemented 3-5 seconds after a natural response window (Aycut, 2012).

Intervention to Increase Independence: Self-Monitoring

Self-monitoring is defined as a student's ability to identify and record their performance, either academically or behaviorally (Kamps & Tankersley, 1996). When a student is learning to self-monitor, he or she is required to attend to their own performance and skills, versus needing an adult in close proximity to consistently point these things out for him or her. Two studies were able to show positive impacts that self-monitoring had on students with ASDs and functioning (Pierce & Schreibman, 1994; Stahmer & Schreibman, 1992).

For students with ASDs, self-monitoring can be specifically used to increase expected behaviors or decrease unexpected behaviors. Stereotypical behaviors positively impacted by self-monitoring are: appropriate play (Stahmer & Schreibman, 1992), independence of daily living skills (Pierce & Schreibman, 1994), attending to the task (Callahan & Rademacher 1999), social responsiveness (Koegel et al., 1992), social interactions with siblings and peers (Strain & Kohler 1994), stemming behaviors (Stahmer & Schreibman, 1992), and dependency on adult prompts (Kern, Merder, Boyajjan, Ellior, & McElhatten, 1997).

Self-Advocacy

Teachers can continue to research strategies such as TEACCH tasks and prompt hierarchies to help students be more successful and independent. However, it should not stop there. Students with autism must learn to complete tasks independently and advocate for themselves.

Many of the secondary grades, and even college programs, feel that self-advocacy is a skill students with disabilities do not have. A team of teachers from the Johnson County Community College expressed, "We believe that the development of self-efficacy to self-advocacy is a continuum — the more our students take ownership of their own education, the more they have this feeling of success: I DID IT!" (Kozacek & Specht, 2014, p. 6). This should bring teachers and staff to ask themselves whether they are implementing strategies that help their students become advocates for their own learning.

McCarthy (2007) brought up a great point that it is not only an educator's job to modify curriculum, provide special education services, or give them an alternative learning space, it is an educator's job to help the student understand and learn about their disability. Teachers can provide every possible accommodation to students, but this will not help them build an understanding for what is needed as they progress in work or education. Individuals with autism will continue to face challenges and intimidating expectations. However, if educators can teach students to identify individual needs, the students will pursue those challenges with confidence and independence.

Long Term Impact on Independent Work and Living Skills

Executive function, as defined by Welsh and Pennington (1988), is an individual's ability to gain and apply problem-solving skills that will help guide future performance and behavior. Hume, Loftin, and Lantz (2009) reminded teachers, while pairing a child with a paraprofessional may provide the student with more support and accommodations, the overall impact is detrimental to the generalization of the skills necessary for job acquisition and independent living. Furthermore, the continual use of a paraprofessional provides students with an unrealistic expectation to get them through daily life (Hume et al., 2009). There may not be additional adult support in employment or residential settings for our students with ASDs, this is another reason educators need to implement practices that gradually increase their independence and executive functioning.

Eaves and Ho (2008) conducted a study that assessed the independent functioning skills of 48 young adults diagnosed with ASD. In this study, almost 50 of the young adults were determined to have poor independent living outcomes, unable to live independently, volunteer, or have a paid job. One might argue this is only the case for students with both cognitive deficits and ASD, but a student becoming over-reliant on school support staff and caregivers is a significant contributing factor, despite cognitive functioning (Hume et al., 2009).

Conclusion

If educators and families do not educate themselves on how to help children become more independent, then teachers and parents are limiting children with autism to obtain a job, live on their own, attend further education, and be independent contributors to society. In future years, hopefully more research will develop to support the positive and long-term outcomes of TEACCH tasks, prompt hierarchies, and time delay have on students with autism. More specifically, future research will hopefully address additional ways to increase self-determination and self-advocacy in students with autism and significant cognitive deficits.

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