Precision Teaching: Making Learning Effortless

By Vera Bernard-Opitz

Seven year old Erin shuffles the stack of sight words, takes a deep breath, sets the timer to 20 seconds and reads card after card as fast as she can: "EXIT, STOP, WOMEN, ENTER, PULL, STOP, WOMEN, ... PUSH ...." When she hesitates on a card, she tosses it aside. After the sound of the beeper she counts the labeled cards and adds the number to a celeration chart. She compares it to the session goal, sighs, reads the missed cards and starts all over again. When the timer beeps the next time, she beams, since she has reached her frequency goal. Her therapist beams along with her and gives her a "high five".

A timer, standard celeration charts and self-monitoring are some of the crucial components of ***Precision Teaching***, a method, which stresses the need for the learner to become automatic, fluent and effortless in what he does. It can help teachers, therapists and parents enhance the outcome for students with autism, and other disabilites, as well as help the children have fun going fast, beating their own performance standards and experiencing mastery and efficacy instead of effort or failure (Kubina, et al, 2002). As I write this I can concentrate on my thoughts and don't have to worry about my finger position and the right letters finding the way to the computer screen. Such automatic production is necessary to do most things in life, be it talking, social greetings, calculating, brushing teeth or riding a bike. If we stumble over words in a foreign language, chances are, that we rather refrain from talking or reading in that language and spend more time on more familiar ways to communicate. Lack of spontaneous speech, problems with generalization and noted effort in a wide range of behaviors are obvious challenges for children with Autism Spectrum Disorder (ASD).

Precision Teaching can be a helpful adjunct to current instruction since it breaks teaching goals down into manageable components, making learning easy, enhancing speed of production, endurance and generalizing behavior across learning channels and settings. It is characterized by basic small teaching steps, which must be attained within short periods of time - 10, 20, 30 or 60 seconds. Teaching sessions should be carried out several times a day so that the learned response becomes automatic and endures over time (Pennypacker, Koenig and Lindsley, 1972; White and Haring, 1980).

Precision Teaching is a method developed in the 1960s, at Harvard University, by Ogden Lindsey (Lindsley, 1990). It grew out of the tradition of behaviorism and direct instructions and was first tested in a Montessori class for children with learning difficulties. It is also called '*Fluency Learning*' and has been used successfully with university graduates, as well as students with diverse problems such as autism, attention deficit or severe intellectual disabilities (White, 1986). Individuals with ASD have benefited by enhanced communication, reading, writing, play and many other skills (Leach, 1999, Leach et al, 2003; Fabrizio & Moors, 2003). From the original training center at Morningside Academy in Seattle, Washington, programs have been imported into research centers, schools, private practices and the homes of children (Johnson & Street, 2004). While involved teachers and parents rave about improved learning, less effort in spontaneous responding and better generalization, research documentation for children with ASD is only now beginning and has not reached the mainstream journals.

Examples of teaching targets (Bernard-Opitz, 2005)

- To develop legible **handwriting**, the student practices drawing slashes, semicircles or circles in various directions for periods of 20 or 30 seconds (Vargas & Vargas, 1991). This ensures that the child has automated the principles of writing before he/she attempts to master the much more complex task of forming letters. Based on the frequency of correct responses during the first 10 trials the child sets his own

performance standards. For each improvement, he/she receives or – at a later stage – gives him/herself a "token", such as a sticker, a star or a smiley face.

- **Imitation** is a core skill, which is delayed or even deficient in many children with ASD (Sigman & Ungerer, 1983; Williams, Whiten & Singh, 2004). Getting children to be proficient in imitation has clear advantages, one being an increase in observing others, which is a basic component of social skills and peer play (Leach, 1999). Again fluency is a main component.
- In a more advanced stage of **concept acquisition**, the children are taught to achieve preset goals such as answering 20 questions about the calendar in one minute. They enter the number of correct/incorrect responses on a logarithmic learning curve and try to improve their answering rate every day until they reach the predetermined standard.
- Even various aspects of **social behavior** can be enhanced greatly by using Precision Teaching, such as eye contact, joint attention, social scripts or peer play.

Teaching targets requiring fluency training cover all curriculum areas, from matching objects into categories, talking to peers or playing a variety of sports. Presently task sequences, materials and fluency standards for persons with ASD are developed (Bernard-Opitz, 2005, Fabrizio & Moors, 2003). While case studies are promising regarding the effect of fluency training on spontaneity and generalization, more research is urgently required.

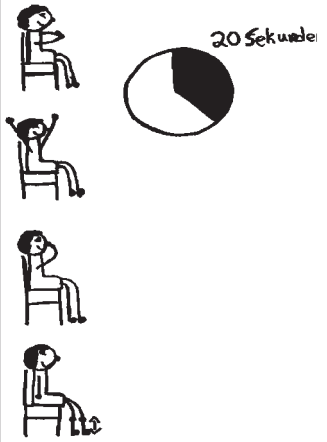

Figure 1: ***Fast imitation of various movements can enhance social awareness *)***

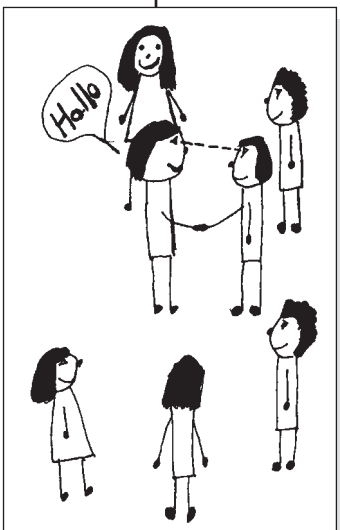

Figure 2: ***Greeting people with eye contact can be practiced as a fluency program *)***

Children with Autism Spectrum Disorders present with a spectrum of challenges, which require a variety of teaching methods. Precision teaching is one of the methods, which can help facilitate curricular decisions, make teaching steps smaller and more precise learning less of an effort and learners more successful. The following case exemplifies this.

**) Reprinted with permission from Bernard-Opitz, V. (2005) Autism Spectrum Disorders: A training manual for parents, teachers and therapists, (German: Kohlhammer publication "Kinder mit Autismus-Spektrum-Störungen"; English in print in Pro Ed).*

Selected References:

The complete list of references can be requested from the Editor at vbernard@ocde.us.

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