



FACT SHEET NUMBER 37

projectaccess.missouristate.edu
 projectaccess@missouristate.edu
 866-481-3841



USING NATURALISTIC STRATEGIES FOR TEACHING STUDENTS WITH AUTISM

Teachers and parents have been using some variation of naturalistic teaching as long as there have been students with autism...and before. It seems like I was doing such things as taking advantage of the “teachable moment” forever. I was tempting kids to talk by waving a desirable object in front of them and insisting on some response before they got it before I ever heard the word autism. You were probably setting up situations that encourage appropriate interactions before you finished your student teaching.

To some people it seems like formal and highly structured instruction/training such as Discrete Trial Teaching has completely taken over in classrooms for students on the autism spectrum. Structure is important for students with autism and discrete trial teaching is essential for some of our kids. There continues to be a place, however, for those naturalistic interventions that most educators are comfortable with.

In the 2012 publication of the Missouri Autism Guidelines Initiative (MAGI) entitled *Autism Spectrum Disorders: Guide to Evidence-based Interventions* there are strategies referred to variously as **Naturalistic Interventions, Naturalistic Teaching Strategies, and Pivotal Response Training**. The National Professional Development Center on Autism Spectrum Disorders notes that “by definition, naturalistic intervention is used in daily routines throughout the day to develop skills in the area of communication (both verbal and non-verbal) and social development.” Naturalistic teaching strategies focus on the generalized environment and take place within such environments as the general education classroom or playground.

Among the specific strategies usually referred to as naturalistic strategies are Pivotal Response Training (PRT), Incidental Teaching (IT), and Natural Language Paradigm (NLP). The MAGI report notes that general naturalistic interventions (including those strategies note above) were considered to be evidence based in three out of three reviews. Specifically, PRT was considered evidence based in two of three reviews and to be showing emergent evidence of being evidence-based in the third.

The following paragraphs provide brief descriptions of these three strategies.

- **Natural Language Paradigm (NLP)** was one of the first of the naturalistic teaching strategies to be delineated. It was first described by Koegel, O’Dell, and Koegel (1987). NLP is a considerably more structured strategy than the strategy the Koegel’s

developed later, Pivotal Response Training, which will be discussed later. In NLP the child is presented with three items and/or activities he really likes and is encouraged to choose one. Once an item is chosen the adult models appropriate play with the item and models a spoken word. This word or phrase might be something like “Car” or “Drive car” said while pushing the car around. The adult then pauses very briefly to allow the child to imitate the word. Any attempt is reinforced by giving the item to the child. The adult then comments on the activity and offers praise for interaction. After a few seconds the adult takes back the item and models a different way of playing with it as well as a different phrase. After 3 or 4 exchanges the adult then offers three new choices and repeats the process with a new preferred item. As the intervention progresses the adult will accept closer and closer approximations of the targeted word or phrase.

- **Pivotal Response Training (PRT)** generally targets increasing the child’s repertoire of social-communication initiations and responses as well as the child’s general response to the environment. It focuses on developing the desire to interact, regulation of the child’s own behavior, development of initiation of interactions, and responding to a variety of different cues. PRT has also been used to generalize skills that have been learned in more structured situations. A manual, **HOW TO TEACH PIVOTAL BEHAVIORS TO CHILDREN WITH AUTISM: A TRAINING MANUAL** is available online at <http://www.users.qwest.net/~tbharris/prt.htm>. To see a before and after clip of Pivotal Response Training go to the following site: <https://www.youtube.com/watch?v=9w5nTegfToQ>
- **Incidental Teaching (IT)** has as its goal not only the generalization of skills learned in structured contexts but also the development and increase of spontaneous language. Incidental teaching has been defined as occurring when the environment has been arranged to attract the child to desired materials and activities. The teacher is available to provide reinforcement in the form to praise, attention, and instruction when the child initiates interaction with the materials. Several items or activities that the child enjoys are strategically placed in the environment and made accessible to the child. When the child makes a move toward one of the items or activities the adult prompts the child to use some form of language to request the item. The form of the language may be a word (or word approximation), a gesture, a sign, or even a picture. As soon as the child makes an appropriate “request” the adult delivers the item. This can be repeated in order for the child to learn the requesting behavior. You can see an example of this strategy by following this link: <http://www.youtube.com/watch?v=rUqPRCGOce>

If you think the descriptions of all three methods seem to be practically the same you won’t be alone. They are quite similar and have only subtle differences. You will need to investigate them closer to know precisely how to implement any of these strategies. However, in general,

naturalistic teaching strategies are easy to learn and can be incorporated into play and daily interactions. Adults typically enjoy doing them with children. It's not just playing with the child, however. Remember, there are specific ways to practice each strategy. There is definitely a place for both direct instruction and naturalistic teaching interventions in our work with students on the autism spectrum

References

Fenske, E.C., Krantz, P.J. & McClannahan, L.E. (2001). Incidental teaching: a not-discrete-trial teaching procedure. In Maurice, C., Green, G., & Fox, R.M. (Eds), *Making a Difference: Behavioral intervention for autism*. Austin, TX: Pro-Ed.

Koegel, R.L., Koegel, L.K., & McNerney, E.K. (2001) Pivotal areas in intervention for autism. *Journal of Clinical Child Psychology*, 1, 19-32

Koegel, R.L., O'Dell, M.C., & Koegel, L.K. (1987) A natural language paradigm for teaching non-verbal autistic children. *Journal of Autism and Developmental Disorders*, 17, 187-199.

© Project ACCESS - April 2017 *Project ACCESS is a collaboration among the Missouri Department of Elementary and Secondary Education, Missouri State University, and Missouri's public schools.