

# First If you want to change behavior (and teaching new skills is changing behavior) you need to understand how to use positive reinforcement.

Positive reinforcement (R+) is arguably our most effective, least well understood, and most poorly implemented behavioral intervention when it comes to developing and maintaining new and useful skills.

R+ is anything that when presented contingent on the display of behavior increases the probability that the behavior will be displayed again. Amazingly simple in concept yet amazingly complex in implementation.

#### Reinforcement

The reinforcing value of any stimuli varies within an individual at different times of the day (tickles right after lunch may not be an R+) and across individuals.

The reinforcing value of any stimuli may vary according to schedule of delivery, immediacy of delivery, bootleg access, choice of stimuli, and the response effort associated with task at hand.

As adaptive behavior tasks tend to be more effortful than seatwork, an effective R+ for seat work may not be effective for an adaptive behavior task.

#### Reinforcement

Effective reinforcement (R+) increases behavior. Unfortunately, in practice the reliable identification and effective application of R+ is often poorly implemented. If you have ever said:

#### "I don't know what happened, I just reinforced him and he hit me."

Chances are pretty good that while your intent was to reinforce him, in actually you presented him with his 22<sup>nd</sup> Dorito of the morning and somewhere around his 13<sup>th</sup> Dorito he started to get thirsty thereby negating the R+ properties of the Dorito. So in effect his hitting of you was an attempt to punish an annoying, fruitless, and repetitive behavior that he could stop no other way.

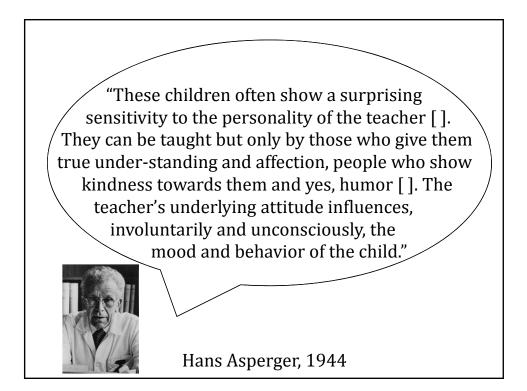
#### Reinforcement

Or if you have ever said:

#### "She knows she is not supposed to do that."

Chances are pretty good that what she "knows she is supposed to do" is far less reinforcing that what she has chosen to do. I know I am not supposed to drive above the speed limit, yet I do. Why?

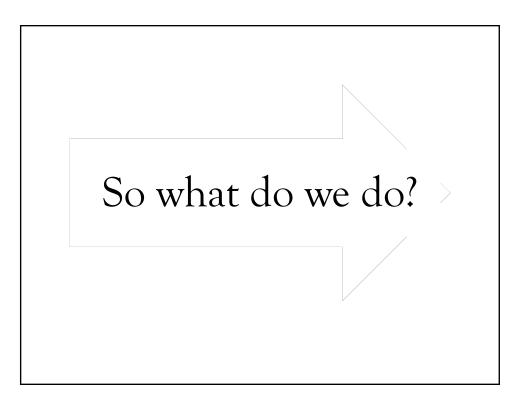
Bottom line here, reinforcers compete for supremacy and you had better be aware of that



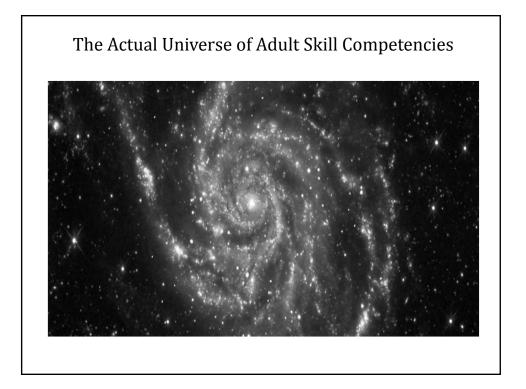
# Which simply means that you are your most effective when you are at your most reinforcing.

Carr, (2005) noted that relationship quality (rapport) between people with developmental disabilities and their caregivers has long been suggested as an important variable influencing the likelihood of problem behavior. The authors evaluated a multimethod strategy for assessing rapport and then used the assessment information to develop a multicomponent intervention for problem behavior. In Study 1 the results indicated that when rapport was poor, levels of problem behavior were high; when rapport was good, levels of problem behavior were low. In Study 2, the authors noted that when professionals acquired higher rapport via training, participants showed a decrease in problem behavior and an increase in task completion in the presence of staff members who had previously been identified as having poor rapport with participants.

Carr, E., (2005). Quality of rapport as a setting event for problem behavior: Assessment and intervention. *Journal of Positive Behavior Supports*, **7**, 88-91.







So how are we supposed to determine what to teach in order to achieve our stated transition goal?

#### Priorities of Instruction in Transition Programming

- Solicit student and family input as to desired 1 year, 5 year, 10 year outcomes.
  - But you really need to try and be specific here. Not just that he should have a job but a job doing what? When does he do this job? Who does he do this job with? What might make employment worthwhile to him?
  - And then do the same for where/how he will live and his leisure skills, public social circle and private social circle.

Adapted from: Wehman, P. (1992). Life Beyond the Classroom: Strategies for young people with disabilities. Baltimore: Paul H. Brookes.

#### Priorities of Instruction in Transition Programming

- □ Solicit student and family input as to desired1 year, 5 year, 10 year outcomes.
- Survey current and potential future environments based upon these outcomes.
  - □ You need to then get out of your classrooms and homes and see what skills are really needed.
  - Are there any connections you can use to give you son or daughter a more expanded educational experience?

Adapted from: Wehman, P. (1992). Life Beyond the Classroom: Strategies for young people with disabilities. Baltimore: Paul H. Brookes.

## Priorities of Instruction in Transition Programming

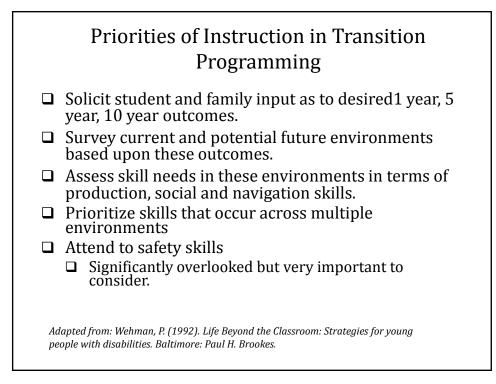
- Solicit student and family input as to desired1 year, 5 year, 10 year outcomes.
- Survey current and potential future environments based upon these outcomes.
- Assess skill needs in these environments in terms of production, social and navigation skills.
  - Remember, production skills are easy. Social and navigation skills are really difficult.

Adapted from: Wehman, P. (1992). Life Beyond the Classroom: Strategies for young people with disabilities. Baltimore: Paul H. Brookes.

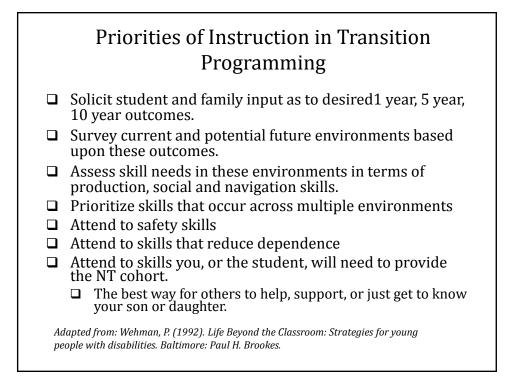
## Priorities of Instruction in Transition Programming

- Solicit student and family input as to desired1 year, 5 year, 10 year outcomes.
- □ Survey current and potential future environments based upon these outcomes.
- □ Assess skill needs in these environments in terms of production, social and navigation skills.
- Prioritize skills that occur across multiple environments
  - More often than not these will fall into the category of Social or Navigation skills but not always.

Adapted from: Wehman, P. (1992). Life Beyond the Classroom: Strategies for young people with disabilities. Baltimore: Paul H. Brookes.







## A Short Cut

When speaking about skill development always remember that for a specific skill

If you can teach the skill, teach it

If you can't teach the skill, adapt it

If you can't adapt it, figure out some way around it

*If you can't figure out some way around it, teach the NT's to deal* 

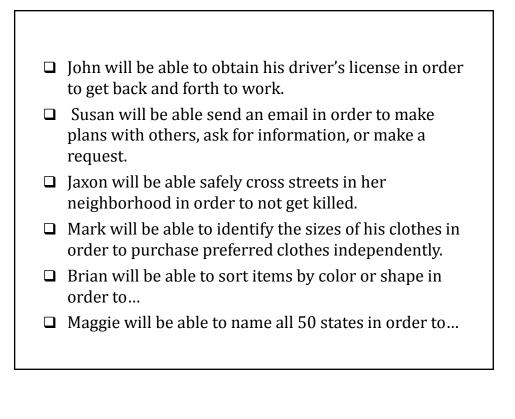
A Shorter Cut

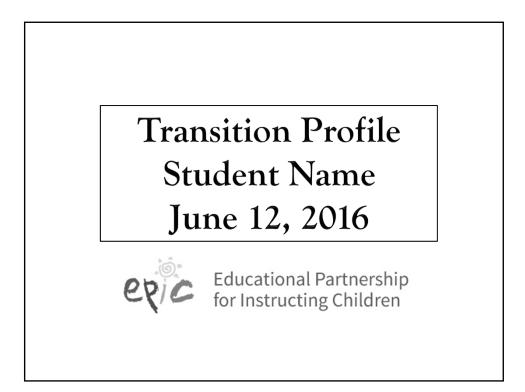
"If the student does not learn to do the task, will someone else have to do it for them?"

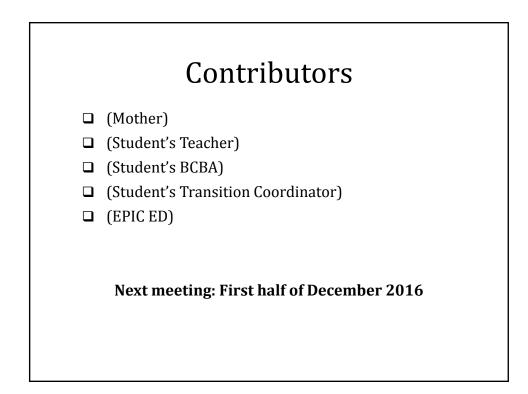
Lou Brown, 1985

#### The Shortest Cut

In order to ...

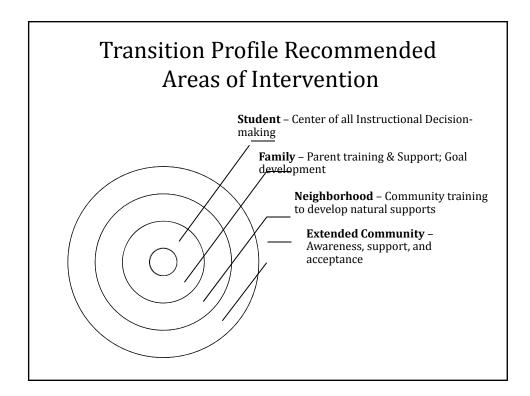


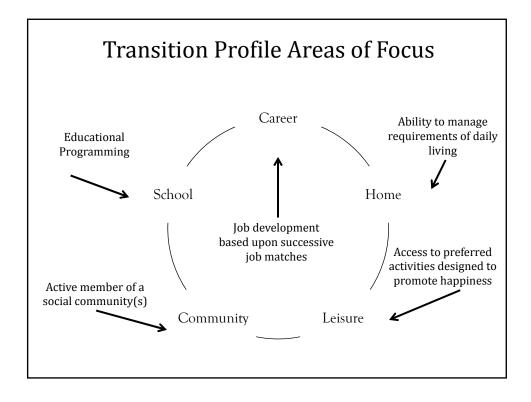




#### Student's Transition Statement

In 5-years Student will be 21-years old and preparing for graduation. Ideally, Student will be working at job where there is music in the background and he will be able to move from activity to activity. When there are clear expectations Student can be very proficient at work tasks. Currently Student works in a 1:1 staff to student ratio so that needs to expand to a 3:1 prior to graduation and his engagement needs to increase to 45 minutes of independent work. In terms of his home life, Student will have a greater repertoire of independent skills including dressing, showering, toileting, laundry, etc. Student needs to increase his repertoire of preferred activities, beyond I-Pad Apps, and increase his engagement in these at home. In terms of the community he enjoys going out to restaurants and working out at the gym with his father. Student's ability to communicate is significantly limited and this needs to be a focus of intervention moving forward. Student appears to be his happiest when he is eating, with his family, or leafing through books with preferred photos. He will engage in Wii Sports and riding a bike when the opportunity is made available. The issue of "motivation" plays a major role is almost every aspect of Student's program.





Skill	Challenge	Recommendation
I-Phone/I-Pad Schedules	Attention to appropriate stimuli may be a challenge.	<ol> <li>Consider a simple keeping appointments program using I-Pad</li> <li>Transition current lo-tech schedule to more self management</li> <li>Introduce hi-tech scheduling program using I-Pad</li> </ol>
Increase Student's endurance beyond 3 minutes (preferred task).	Finding activities that Student finds engaging. Stereotypy can interfere although can be redirected. Student has a tendency to be prompt dependent with longer, high response effort chains.	<ol> <li>Baseline actual engaged time on variety of tasks</li> <li>Implement endurance program based upon systematically increasing length of engaged time.</li> </ol>
Ability to work in larger teacher/student ratios	Student's aggression presents a challenge to more group instruction	<ol> <li>Environmental modifications continue to be assessed.</li> <li>Hypothesis-testing data be collected by CB and AF</li> </ol>
Independent toileting	Safety & hygiene concerns Socially reinforced and mediated behavior and so limited naturally occurring reinforcement. Encouraging privacy and safety	<ol> <li>Assess JK's current bathroom TA and modify if necessary.</li> <li>Determine preference for forward of backward chaining.</li> <li>ID a high power Sr+ to use for this program only &amp; implement</li> </ol>
Address challenging behavior (aggression, stereotypy, hand in pants)	Impacts most all aspects of programming. Although aggression is currently at low rates the PBS program is fairy restrictive and needs to fade and be replaced.	<ol> <li>Environmental modifications continue to be assessed.</li> <li>Hypothesis-testing data be collected by CB and AF</li> </ol>

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supports), accomplish the		
Skill	Challenge	Recommendation
Making his own lunch @ home and school	Identification of highly preferred, simple lunches.	<ol> <li>Identify 1-3 such lunches</li> <li>Develop TA and provide instruction using backwards chaining</li> <li>Target one meal at a time. As a meal is mastered, generalize t home.</li> </ol>
Independent toileting, dressing etc.	Safety & hygiene concerns Socially reinforced and mediated behavior and so limited naturally occurring reinforcement. Encouraging privacy and safety	<ol> <li>Program for independent toileting implemented at EPIC and can be transitioned to home prior to mastery at school.</li> </ol>
Increase leisure engagement (consider electric scooter or bike).	Student currently has a very limited leisure skill repertoire consisting primarily of I-Pad and stereotypy.	<ol> <li>A FULL staff meeting will be held to brainstorm variety of possible leisure activities wha will then be included in a leisure sampling protocol. See next page.</li> </ol>

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Student should be able to independently (or with minimal supports), access and utilize the following leisure skills.

Skill	Challenge	Recommendation
Photos and "Photoshop"	Technological skill on some level. Is there sufficient interest? No experience at baseline. May take significant practice before Student reaches a level of competence where this may become a leisure activity.	<ol> <li>Probe use digital camera with Student.</li> <li>Probe interest in printing, editing, or manipulating photos.</li> <li>Make own photo-book to read</li> </ol>
Books - Student enjoys leafing though books with pictures and photos	Reading has always been presented as a series of instructional sessions and not leisure. ID of both age appropriate and interesting material.	<ol> <li>Identify a series of age appropriate and interesting materials.</li> <li>Work on choice making using these materials.</li> <li>Consider using "Student- Made" photo-books.</li> </ol>
Swimming	Cannot be done at school – Home only	None for school
Cyber-Chase, Charlie Brown, Dora, SpongeBob, Vimeo.	Student has a very limited video and video game repertoire.	Explore other options. Pair new options with highly preferred conditions and Sr+

Skill	Challenge	Recommendation
Shopping for ingredients for lunch	Student's challenging behavior makes this goal difficult to consistently implement	<ol> <li>Pair this goal with making lunch at school 1 day/week</li> <li>ID a store, and time of day, where there are (generally) a limited number of patrons.</li> <li>ID location of items in store prior to trip to reduce search time.</li> </ol>
Noise	Student tends to be very sound sensitive under yet to be fully understood conditions. Crying babies are highly non-preferred.	<ol> <li>CB and AF are continuing to assess EOs that may or may no be associated with increased sound sensitivity.</li> </ol>
Involvement in Church	Requires Student to be quietly and appropriately engaged for X minutes. Challenging behavior may present a risk.	<ol> <li>Work with parents to identify parameters of Mass and skills necessary to attend.</li> <li>Coordinate with OLV to systematically increase Student's presence in church.</li> </ol>
Independent Toileting	See other sections	Once mastered at Home/School will be generalized to public restroom.
Display appropriate behavior through longer family/community activities such as bowling, church, movie, etc.		See above & sections on behavior support and engagement.
Behavior support		See previous sections on challenging behavior.

#### Sphere of Intervention: School

Not directly applicable in this case as the necessary skills are subsumed under the four other areas of intervention

Skill	Challenge	Recommendation
Make own lunch		See previous sections
Ability to work in larger ratios.		See previous sections
Engagement/Endurance		See previous sections
Challenging behavior		See previous sections

Family Responsibility in Support of	
Transition Programing	

AREA	RESPONSIBLITY
Career	<ul> <li>Coordinate with EPIC on reasonable "independent" toileting protocol.</li> <li>Coordinate with EPIC of "in vivo" preference assessment to ID new Sr+</li> </ul>
Home	<ul> <li>Identify simple lunches – provide systematic instruction via backwards chaining.</li> <li>Continue working on health and wellness via exercise and bike riding.</li> <li>Collect data on conditions impacting challenging behavior re: CB</li> </ul>
Leisure	<ul> <li>Continue swimming &amp; related health wellness</li> <li>Coordinate with EPIC on new ideas/samples</li> <li>Investigate I-Pad games or apps that may be more age appropriate and engaging.</li> </ul>
Community	<ul> <li>Coordinate with EPIC on requirements and protocol re: participation in Mass.</li> <li>Transition home mastered independent meals.</li> </ul>
School	Continued communication and feedback with EPIC.

AREA	RESPONSIBLITY
Career	<ul> <li>Begin appointment/scheduling programming</li> <li>Begin engagement/endurance programming</li> <li>Assess toileting TA &amp; suggest modifications if necessary</li> <li>Continued assessment and intervention in the area of challenging behavior.</li> <li>Update 5-year plan in 6 months.</li> <li>Continue assessing challenging behavior and current behavior program.</li> <li>EPIC Transition Coordinator included in all future clinics and "Futures" meetings .</li> <li>SLE Coordinator to investigate community placement/interships.</li> </ul>
Home	<ul> <li>Coordinate with home on all relevant programs</li> <li>Schedule bi-monthly home visits staggered between clinics.</li> <li>Keep channels of communication open and accessible.</li> </ul>
Leisure	<ul> <li>Leisure "crowd sourcing" sampling meeting</li> <li>Consider accessing Facebook for similar information.</li> <li>Investigate the photography aspect and photo books.</li> <li>Investigate alternative I-Pad games or apps.</li> <li>Keep channels of communication open and accessible.</li> </ul>
Community	<ul> <li>Implement "lunch making" program</li> <li>ID community supermarket that meets necessary criteria.</li> <li>Assess noise EOs</li> </ul>
School	All of the above

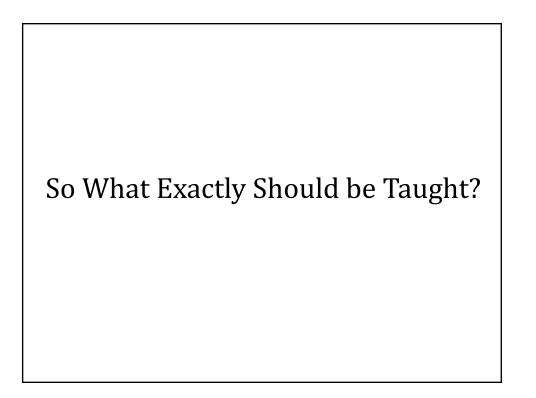
Desired community Responsibility
in Support of Transition Programing

AREA	RESPONSIBLITY
Career	• Available internship with minimal noise, work within Student's current skill set, and where he would work a safe distance from co-workers.
Leisure	<ul> <li>Support continued access to swimming facilities</li> <li>Support continued access to "eating lunch out" instructional program.</li> </ul>
Community	<ul> <li>Support access to an actual Sanctuary for Student to acquire skills necessary to attend Mass.</li> <li>Support "shopping for lunch" program by allowing assessment of store and minimal training of an available cashier.</li> </ul>

AREA	POSSIBLE SOURCES
Leisure	YMCAs, Movie theaters, JCCs, Township Sponsored Adaptive Sports, Music classes or concerts, SNACK etc.
Financial Support	Social organizations such as Lions or Elks Clubs, Community Foundations, Communities of faith, etc.
Career	Retired Senior Volunteer Programs, Chambers of Commerce, Rotary Clubs, Local Businesses (particularly those with which you do business), Volunteer opportunities such as Meals on Wheels, Good Will, Salvation Army, Food Pantries, etc.
Social	Neighbors, friends, high school seniors (community service graduation requirement), Communities of faith, College fraternities or sororities, Community College, Local Arts organizations, SNACK, etc.

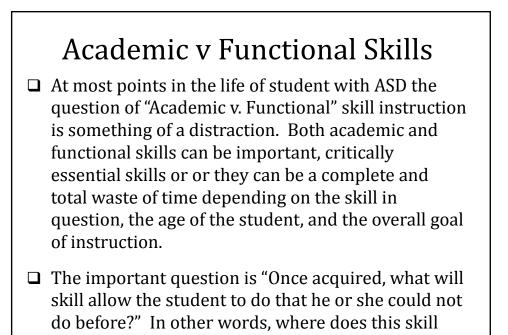
## Like any other tool

- □ The 5-year plan process can be very useful or it can be a complete and total exercise in futility. The difference is what you, as the E/BS, Teacher, or Instructor do with the information in the plan.
- □ If you know where you student is expected to end up in 5 years, it is much easier to identify the instructional path he or she needs to take to get there than it would to identify a path to an unknown outcome. For example, if you want to be a BCBA, there is a very specific process with very specific courses that you would need to be complete to achieve your goal. If, however, you just want to go to graduate school there is no such clear cut process to follow to achieve an broadly defined and mostly unknown goal.

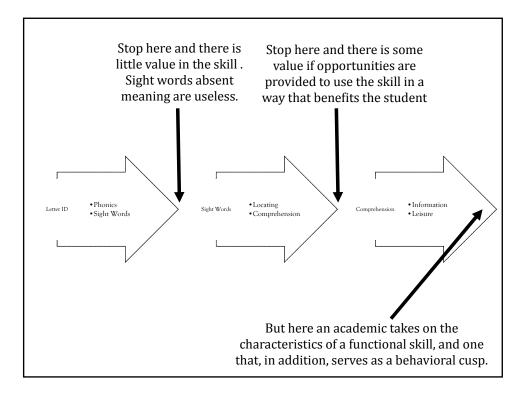


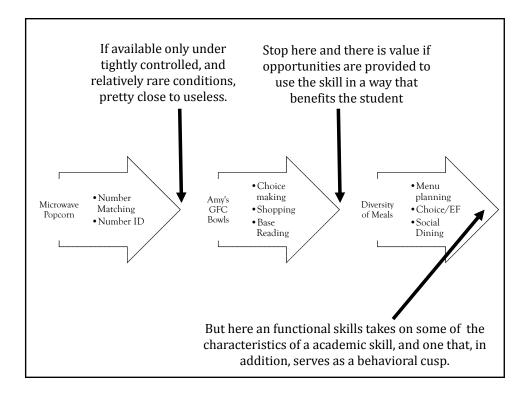
## How many skills?

- □ A quick search on-line indicates that the typical autism curriculum generally has somewhere between 2,000-4,000 instructional programs.
- If the average student's IEP has 40 goals, and assuming one year to mastery for each goal, it will take somewhere between 50 to100 years to master all these goals.
- Given that, how do we determine what is, and what is not, important to teach for a particular student at a particular point in time?



lead?

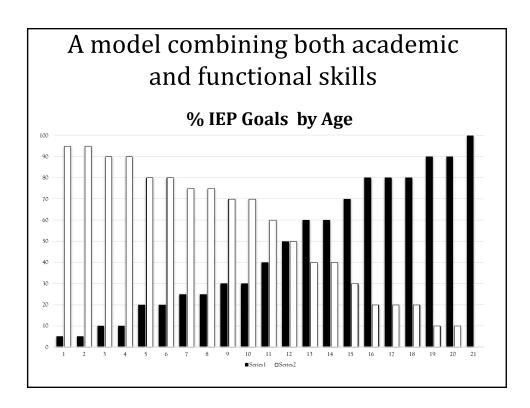




#### Remember, context is critical to the discussion

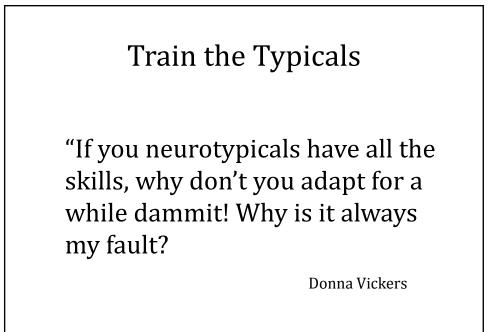
"Behavior analysts often emphasize the need to study the effects of ABA procedures in the context of typical practice settings (e.g., Johnston, 1996). However, reviews indicate that the large majority of our research focuses on interventions delivered by study personnel, usually in tightly controlled environments such as laboratories, specialized ABA classrooms, or distraction-free areas set up to provide one-to-one instruction []. This discrepancy may reflect a dilemma that behavior analysts have had trouble resolving: We recognize that conducting studies in practice settings may require sacrificing some scientific rigor because the primary mission of such settings is to deliver services rather than conduct research (Johnston, 1996), yet we regard the quality of many studies in these settings as unacceptable (Johnston et al., 2006)." (Smith, 2013)

Johnston J. M. Distinguishing between applied research & practice. *The Behavior Analyst*.19, 35–47. Johnston J. M., Foxx R. M., Jacobson J. W., Green G., Mulick J. A. (2006) Positive behavior support and applied behavior analysis. *The Behavior Analyst*. 29, 51–74. Smith, T., (2013). What is evidence-based behavior analysis. *The Behavior Analyst*. 36, 7-33.



## Simple Strategies

- Desitive Reinforcement
- □ Environmental Assessment & Restructuring
- □ Shaping
- □ Chaining
- □ Naturalistic/Incidental Strategies
- □ Self management/monitoring
- □ Generalization
- □ Maintenance
- □ Train the Rest of the World



## Knowledge can be Powerful!

"... under appropriate conditions interpersonal contact is one of the most effective ways to reduce prejudice between majority and minority group members." (Alpert, 1954)

