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COVER FEATURE

We are pleased to feature one of our local artists, **Joscha**. Read more about Joscha on page 21.

Mission Statement

Autism News of Orange County *& the Rest of the World* **is a collaborative publication for parents and professionals dedicated to sharing research-based strategies, innovative educational approaches, best practices and experiences in the area of autism.**

Submission Policy

The Autism News of Orange County–*RW* is available free of charge. The opinions expressed in the newsletter do not necessarily represent the official view of the agencies involved.

Contributions from teachers, therapists, researchers and relatives/children of/with autism are welcome. The editors select articles and make necessary changes.

Please submit articles in Microsoft Word using font size 12, double spaced, and no more than four pages in length (2600 words). Photos are encouraged and when submitted with articles the permission to include is assumed.

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Editorial

By Vera Bernard-Opitz

Parents and professionals who work with individuals with Autism Spectrum Disorders (ASD) are faced with several crucial questions. One of the main questions is *"How do we teach?"* which aims at choosing the best-fitting acknowledged teaching method for each individual. Will my child/student benefit from behavioral or visual methods? Is she/he ready for peer-mediated programs or can she/he benefit from Cognitive Behavioral Interventions?

General discussions have mainly focused on teaching methods, while questions about *"What do we teach?"* or *"Which long- and short-term goals are targeted?"* have often been neglected. Teaching paradigms usually come with their own assessments and curricula, such as the assessment instrument "Pupil Educational Profile" (PEP-R) from the TEACCH program or the VB-MAAP from the Verbal Behavior Program, however, it is rare that these components of different programs are seen side by side. In this issue, we are pleased to present a systematic overview of different programs' assessments and curricula. While some curricula are comprehensive, such as the *Autism Curriculum Encyclopedia (ACE)* or Skills, others aim at specific domains, such as communication, reading, math or money skills.

Whatever the scope and focus of a curriculum, a third crucial question is *"Why do we teach a specific skill?"* or, "*Is this skill meaningful for a particular individual or is it just busy work, which can be nicely demonstrated and graphed?"* Parents, caregivers and/or the individual with ASD need to consider whether the targeted skill is acceptable, relevant and functional. Independent of a particular teaching method and curriculum choice, close cooperation

> *Independent of a particular teaching method and curriculum choice, close cooperation with parents and significant others, critical reflection and extensive experience in supervising therapy programs are crucial for significant developments.*

with parents and family members, critical reflection and extensive experience in supervising therapy programs are crucial for significant developments to occur.

Our first article focuses on the **Skills curriculum** as one of the two most comprehensive online curricula for individuals with ASD. *Adel Najdowski, Ali Aguilar, and Evelyn Kung* give an overview of this program, which teaches more than 3,500 skills and has evolved over more than 20 years.

Another highlight is the **ACE curriculum,** which also is a comprehensive, individualized online program. It is behaviorally based and was developed over the last 30 years by the New England Center for Children. *Rebecca MacDonald* shares the fascinating progression of steps in teaching the critical skill of "joint attention."

The current standard assessment method within the TEACCH program is the **Pupil Educational Profile – Third Edition (PEP-3).** *Lee Marcus and Elaine Coonrod* from the TEACCH program at the University of North Carolina program summarize this assessment device, which serves as the basis for the development of instructional goals, curriculum, and behavioral strategies across programs in many countries.

The **Verbal Behavior Milestone Assessment and Placement Program (VB-MAPP)** by Sundberg, 2008 comes from the tradition of Verbal Behavior. Like the PEP-R, it is widely used as an assessment device and teaching guideline. *LouAnne Boyd* from North Orange County SELPA gives an overview of the program and presents her "SYMPLE" symbols for 16 verbal behavior domains that school staff and parents can easily read and remember.

Eve Müller, Ph.D. and her interdisciplinary team from Ivymount School in Rockville, MD share their innovative and highly practical **"Lunch Buddies" Curriculum** to teach conversation skills. In order to make lessons more fun, cartoon characters link

directly to each of the curriculum objectives.

Wendy Miller is an enthusiastic and dedicated middle school teacher in a local **S.U.C.S.E.S.S. class** (Systematic Utilization of Comprehensive Strategies for Ensuring Student Success). She shares some of her successful school resources, centering on the **Edmark Reading Program, as well as TouchMath and TouchMoney.**

Pamela Payne, known for her book on Links to Language, has recently developed the interesting **JEEPP curriculum (Just Enough English for Pragmatics and Paragraphs),** which focuses on teaching language through reading, a concept which has worked well for many individuals with good visual skills.

Susanne Posselt, mother of **Linus,** shares the way her son perceives the world. Her moving account gives important insights into understanding

Asperger's Syndrome, and can serve as a tool to explain the perspective of someone affected by the syndrome to peers and the public.

Last but not least we are happy to share the superb drawings of *Dane Bottino,* a local **autistic savant with unusual drawing skills.** Thanks Dane, for the wonderful cover illustration and your great smile!

To all the authors, reviewers, colleagues and supporters involved in making ANOC 19 possible, our heartfelt thanks. We look forward to our readers' feedback and wish all of you an enjoyable, successful summer.

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Skills®: The Online Autism Solution Toolkit for Assessment, Curriculum, BIPs, and Progress-Tracking

By Adel Najdowski, Ali Aguilar, and Evelyn Kung

To treatment providers, teachers, parents and anyone else in the role of designing and managing treatment programs for children with Autism Spectrum Disorder (ASD), this list may sound familiar: Assessment, curriculum, Individual Education Plans (IEPs), behavior intervention plans (BIPs), progress tracking, and report writing. If managing effective treatment for children with ASD is a core concern for you on a daily basis, you likely dream of the day that you might have a treatment management program that streamlines the entire process. Accessibility to assessment and curriculum and increased efficiency with writing IEP goals, BIPs, and progress reports were key elements in the development of Skills®: The Online Autism Solution.

Skills® is a web-based toolkit. It provides a skill assessment directly linked to a comprehensive set of curricula for children with ASD.

Covering all areas of development from infancy through adolescence, the assessment, in combination with its curricula, facilitates the development of individualized intervention programs for individuals with ASD. It is also used, in conjunction with on-going data collection, for goal development, positive behavior support planning for challenging behavior, progress tracking, and clinical and analytic treatment evaluation.

Created by a team of senior clinicians and researchers at the Center for Autism and Related Disorders, Inc (CARD), the program has evolved over the past 23 years from a basic early intensive behavioral intervention (EIBI) curriculum, into a comprehensive assessment-linked treatment management program grounded in applied behavior analysis (ABA). ABA is the process of systematically

The Behavior Intervention Plan Builder makes it easy to create comprehensive individualized intervention plans part of formulating an effective behavioral intervention program.

applying interventions based upon the principles of learning to make meaningful improvements to socially significant behaviors. (Myers, & Plauché Johnson, 2007; National Research Council, 2001; New York State Department of Health, Early Intervention Program, 1999; U.S. Department of Health and Human Services, 1999; Vismara & Rogers, 2010).

Children with ASD have deficits in all areas of development. The ultimate goal of intervention is to get them caught up to their same-age typically developing peers. Conducting skill assessment to identify the specific curriculum needs for each individual is a critical. The assessment must determine every skill a child needs to learn. Once completed, the interventionist must select and prioritize treatment targets and develop corresponding lessons. Such a task can seem daunting when children have extensive skill deficits across multiple areas of development or when faced with practical limitations, such as minimal funding, short treatment durations, and limited availability of client and staff.

The assessment component of Skills® was created with the goal of constructing a single program that would identify every relevant skill a child needs

The Behavior Intervention Plan Builder makes it easy to create comprehensive individualized intervention plans.

across every area of human development, from infancy to adolescence. Each item on the assessment is linked to lessons within the curricula. The Skills® Assessment is the only ABA-based assessment to have undergone psychometric evaluation. Psychometrics is a branch of psychology concerned with the accuracy of instruments used to measure psychological variables. The language subscale showed excellent test-retest reliability and inter-rater reliability (Dixon, Tarbox, Najdowski, Wilke, & Granpeesheh, 2011).

The Skills® program comprises eight curricula, each focused on a specific area of functioning. Curricula are further divided into domains, and each domain contains lessons focused on a specific set of skills. Lessons are broken into lesson sections with specific teaching activities and most activities also have numerous targets. For example, the Social Curriculum contains multiple domains, including the Social Context domain. The Complex Social Cues lesson is one of the lessons in this domain. The lesson consists of ten sections, one of which is *Following Rules for Responding to Complex Social Cues.* The following is a specific teaching activity from this lesson section:

Teacher: "If (social cue), would you/are you going to (behavior)?"

Child: "Yes." / "No."

Teacher: "Why?" / "Why not?"

Child: "Because..." (the child states the rule and/or the effect of the behavior).

A target for this activity would be a social cue as well as the child's behavior in response to that cue. Here are two examples of potential targets for teaching the child to apply rules about how to respond to complex social cues:

Complex social cue rule (target 1): If someone backs up when you are speaking to them, they need more personal space.

Teacher: "If you are talking to your friend and he/she backs up are you going to keep moving closer?"

Child: "No."

Teacher: "Why not?"

Child: "Because, I might be too close and he/she might be uncomfortable and want more space."

Complex social cue rule (target 2): If someone puts their hands on their hips and stares at you, they do not like what you are doing right now.

Teacher: "If you are talking to a friend in class while Mrs. Johnson is talking and Mrs. Johnson stops, puts her hands on her hips and stares at you are you going to stop talking?"

Video demonstration is provided for the almost 4,000 unique activities in the curriculum.

Child: "Yes."

Teacher: "Why?"

Child: "Because that means she wants me to stop."

The curricula include almost 4,000 of these types of teaching activities with numerous targets. When appropriate, targets are divided into age-specific groups to ensure that the child is always working on developmentally appropriate skills. In addition to the potential targets provided, users can add and track their own targets. The comprehensive and adaptable nature of the program gives users the flexibility to customize lessons to each child.

Each lesson activity provides guidance on how a skill might best be taught, but any concept in th program may be taught using a wide range of ABA-based strategies, including Discrete Trial Teaching (DTT), Natural Environment Training (NET), and Fluency-Based Training. Choice of teaching strategy should be child specific; however, the data collection and measurement section of an activity may specify mastery criteria requiring the mastery of the skill in a naturalistic or generalized setting. This is particularly true for behaviors needed to engage in complex social and cognitive skills. Fluency-based training may also be recommended for specific skills. Motor, adaptive, and academic skills are examples of skills a child must be able to engage in automatically and without hesitation (fluently). All activities contain generalization strategies to ensure the child applies the skill in his/her real-life daily settings.

The eight curricula that make up the program include: (1) social, (2) motor, (3) language, (4) adaptive, (5) play, (6) executive functions, (7) cognition, and (8) academic. The Social curriculum includes lessons designed to develop a child's social interactions, including relationship-building, social language, self-esteem, group-related skills, and so on. As the program progresses, the social, play, language, executive functions, and cognition programs become integrally related, as the child learns to incorporate complex concepts from each curriculum into play,

"The Executive Functions curriculum is unique to Skills® and includes lessons designed to address skill areas involved in goal-directed behavior and self-management."

social and language interactions. The lessons in the motor curriculum are designed to develop the visual, oral, gross, and fine motor skills a child needs to effectively communicate, participate in play and daily living activities, and succeed academically.

The language curriculum is designed to develop a child's ability to communicate effectively and understand the vocal and nonvocal communications of others. It covers a wide variety of language concepts (e.g., negation, plurals, actions, attributes, etc.). Inspired by B.F. Skinner's book, **Verbal Behavior** (1957), each lesson ensures that teaching goes beyond receptive (listening) and expressive (speaking) language and includes sections for teaching functional use of language. Mands (requests), tacts (comments), and intraverbals (social exchange) are incorporated into every lesson.

The adaptive curriculum is designed to teach the skills needed to independently engage in daily living activities, including personal skills (e.g., dressing, toileting), domestic skills (e.g., setting and clearing the table, making the bed), community skills (e.g., shopping, restaurants) and personal and community safety skills (e.g., stranger awareness, safety hazards in the home, using cross walks and sidewalks). The Play curriculum focuses on the development of a variety of age-appropriate play skills. Concepts include peer play, independent play, constructive play, pretend play, interactive play, computer play, and so on.

The executive functions curriculum is unique to Skills® and comprises lessons designed to address skill areas involved in goal-directed behavior and self-management, such as memory, attention, inhibition, planning, self-awareness, flexibility, and problem solving. The cognition curriculum includes lessons designed to develop a child's perspective-taking skills or "theory of mind" (i.e., the ability to understand the mental states of oneself [meta cognition] and others [social cognition], including thoughts, desires, intentions, beliefs, emotions, pref-

erences and deception.)

Like executive functions, cognition is another complex skill set often missing from many other ABA-based curricula, but critical to successful social


Any team member given access to a child's Skills® dashboard can review progress, including doctors, other service providers and funding agencies.

and emotional development. The academic curriculum includes lessons designed to develop a wide range of language arts and math skills, with the aim of promoting a child's ability to independently participate in and complete academic assignments at school. These skills are linked to Common Core State Standards for kindergarten to 2nd grade.

Beyond assessment and curriculum, other important features of the program include the: (a) Behavior Intervention Plan (BIP) Builder, which assists in development of individualized positive behavior support plans for challenging behavior, (b) online data management, including automatically generated graphs of specific skill development and overall acquisition, and (c) clinical timeline charts, which include a record of any event (e.g., vacation, medication change, alternative treatments, new therapist, etc.) which may impact progress. By gathering all relevant data, the program can also be used for analytics, including prediction of probable clinical outcomes given specific parameters, team evaluation and cost analyses.

Perhaps the most significant aspect of Skills® is its online presence. **It is recommended that the program be used under the supervision of a Board Certified Behavior Analyst (BCBA) experienced in ABA treatment for children with ASD; however, the developers are aware that access to an experienced professional is not always available.** For that reason, Skills® is offered in conjunction with research-backed e-learning to give parents, professionals, and teachers around the world the foundational training needed to begin an ABA-based treatment program for children with ASD. It is accessible 24/7 from any computer anywhere in the world. As a web-based toolkit, it allows consistency of treatment from grade to grade or even school to school. Families can also maintain their program while on vacation or during a move. Any team member given access to a child's dashboard can review progress, including doctors, other service providers and funding agencies. The program provides relatively low-cost international access to high-quality assessment and curriculum for children with ASD.
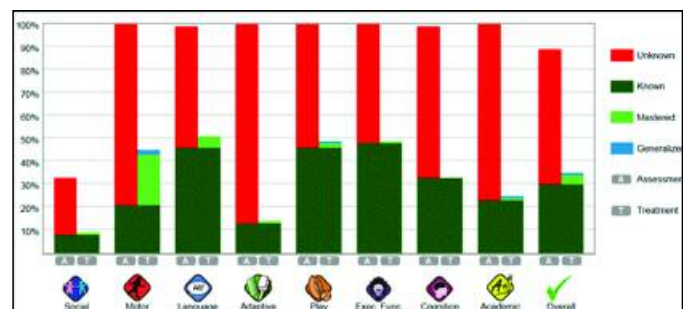
Skills® automatically graphs all recorded data. Data representation includes, but is not limited to a clinical treatment timeline, target maladaptive behaviors, and both specific and over-all skill acquisition (pictured above).

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Teaching Joint Attention
Curriculum Sequence from the ACE Curriculum

By Rebecca P. F. MacDonald

Joint attention is one of the earliest forms of communication in typically developing children. Joint attention involves using gestures and gaze shifts to coordinate attention between people and events in the environment. For example, a child sees a cat in a tree and squeals with delight. She points to the cat and then shifts her gaze to her mother to check to see if her mother has seen the cat also. Her mother looks from her daughter to the cat and says "Oh no! The cat is in the tree, what a silly cat." The child looks back to the cat and smiles. While it is widely accepted that deficits in joint attention are core to a diagnosis of autism, joint attention remains one of the most challenging skills to teach. The source of the problem is that social interactions with people are not inherently reinforcing. Typical children enjoy social interactions with adults because the interac-

tion itself serves as a reinforcer for more social behavior. For children with autism (CWA), however, social interactions serve a more instrumental function. The
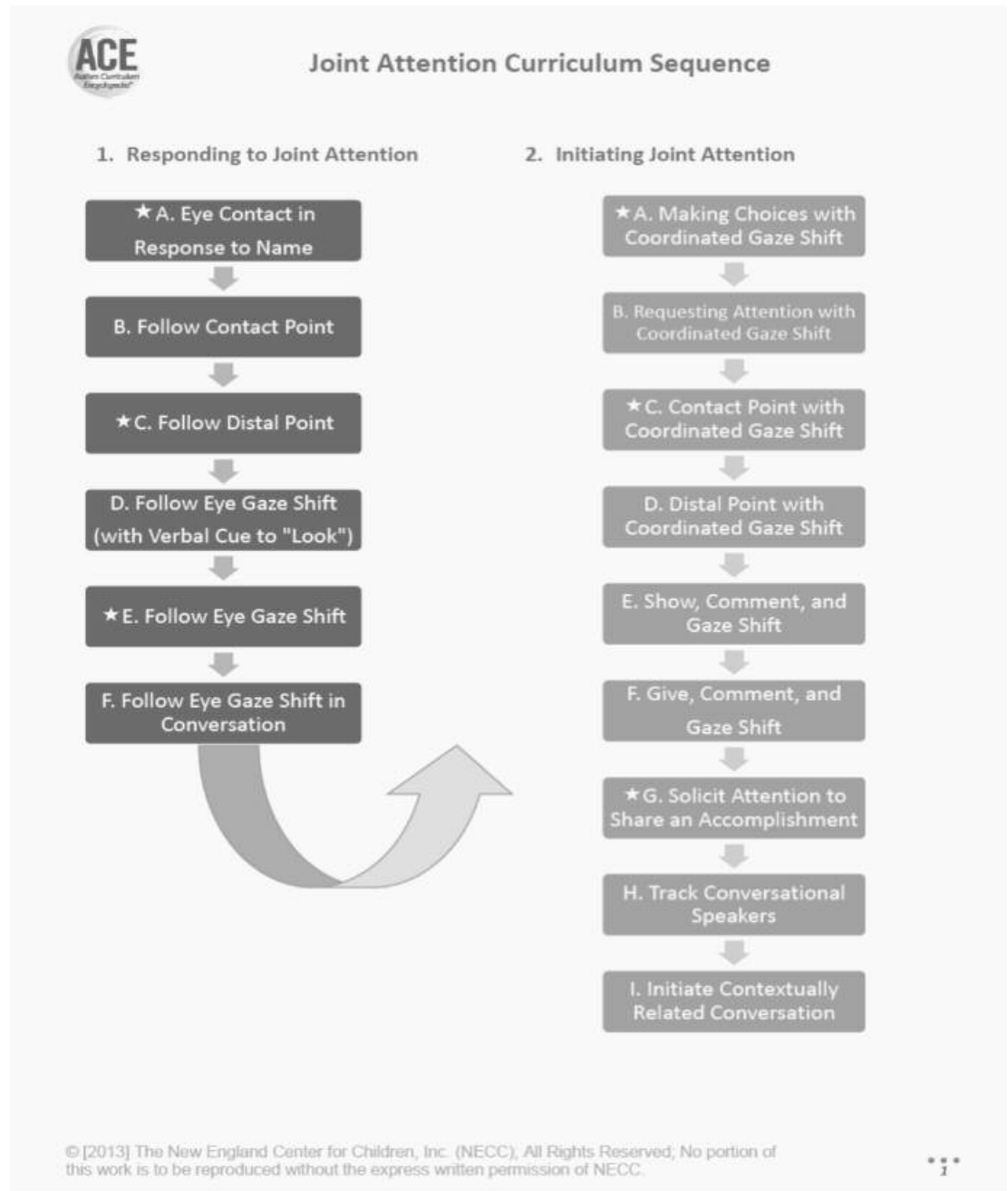

Figure 1. Joint Attention curriculum sequence from the ACE ©

child requests a toy to play with the toy, not to play with the adult and the toy.

Evidence suggests that CWA readily learn to request things, which are protoimparative interactions, but exhibit considerable difficulty learning to comment on things in their environment, which are protodeclarative interactions. The challenge for clinicians and parents is to establish the underlying motivation to engage with others socially. At the New England Center for Children, we have developed a web-based curriculum, the Autism Curriculum Encyclopedia (ACE©). One of the instructional areas on the ACE is a comprehensive curriculum sequence to teach joint attention. The purpose of this article is to outline the components of our joint attention curriculum available electronically through the ACE and to highlight some key elements necessary for effective instruction to establish this critical social skill.

Joint attention can be broken down into two major categories: Children can learn to respond to another person's bids for joint attention or to initiate joint attention. **Responding to Joint Attention (RJA)** is the ability to follow a person's point and or gaze shift to something in the environment. In this case, the adult initiates the interaction by establishing eye contact with the child. The adult then shifts in their gaze and points in the direction of something in the environment, saying "Look." The child follows by shifting their attention from the adult to the item of interest. On the other hand, **Initiating Joint Attention (IJA)** begins with the child initiating the interaction. In this case, the child observes (looks at) an interesting event in the environment (e.g., the cat in the tree) and then shifts their gaze from the event to the adult, checking to see if the adult observed the event. They may also gesture in the direction of the item and comment on it. Higher level performance involves combining eye gaze shifts with gestures.

Responding to Joint Attention

The curriculum sequence established on the ACE is shown in Figure 1. One of the earliest skills targeted is **eye contact in response to name.** The point of entry for all joint attention is eye contact with another person. Initial instruction involves face-to-face interactions on the floor or at a table. We call the child's name and gradually shape longer durations of eye contact before delivering reinforcement. The key is to shape successive approximation and to deliver a potent reinforcer paired with a social interaction like tickles and praise. When a child is reliably looking at us in response to their name, we increase the complexity of the environment by introducing toys, noise and people and then increase the distance between the therapist and the child. Once this is established we are ready to teach joint attention!

Sharing attention with another person starts with **following a contact point.** One of the quickest ways to establish this skill is to teach in the context of a book. The adult calls the child's name, obtains eye contact and then points and shifts their gaze in the direction of a picture in the book. If the child does not orient toward the picture, the adult can use a tracking gesture to prompt the response. A tracking gesture involves placing the adult hand in front of the child's eyes and moving toward the picture. Orientation to the picture is immediately followed by social praise and tickles or some type of physical social interaction that the child enjoys. Once they are demonstrating this skill across people, books and in different settings they are ready for the next step.

In this case the skill is to **follow a distal point** to items throughout the environment. We typically place toys in all locations around the child including; in front, behind, next to, on the ceiling, etc. The teaching procedures are the same as following a contact point. The critical element is to provide lots of exemplars, practicing this skill with many different toys, pictures and people. An added benefit of this skill is that we frequently see the emergence of the child commenting on the toy or picture, which serves to extend the social interaction.

Teaching a child with autism to **follow an eye gaze shift** is considerably more challenging. Early instruction is conducted in a discrete trial format with the child sitting across from the therapist. Items are arranged on the table or wall near the table within the child's field of vision. We establish eye contact and say "What am I looking at?" while shifting our gaze to the item. In this

case, the child must follow our eye movement alone to orient to items within their visual field. As with following a point, we use visual tracking with our hands to prompt the response if it does not occur independently. For children who are verbal, we have them tell us what they see. Once the child has mastered this, we increase the complexity of the response. We teach follow **eye gaze shift without a verbal cue "look."** For this skill, we set up a teaching environment identical to the one used in the follow a point exercise. Stimuli are placed around the room but not within reach. We establish eye contact and then shift our gaze toward the target toy or picture. If the child does not engage in following a gaze independently, we use a sweeping gesture from their eyes toward the target stimulus. It is important to provide lots of social praise and reinforcement as soon as the child follows the adult's gaze.

The goal is for the adult's gaze shift to acquire stimulus control for the child's gaze shift from the adult to the toy. The consequence that follows the child's gaze shift (the presence of an interesting stimulus) serves to reinforce the gaze shift. To increase the saliency of the target stimulus, we use toys that make noise or light up. The procedure involves activating a toy (via remote control), every time the child follows the adult gaze shift. It relies on the notion that if one follows the gaze of another, an interesting thing will happen. This procedure has resulted in generalization to toys that do not have activation features as well as increasing subsequent gaze shifts back and forth between the adult and the toys.

Initiating Joint Attention

Initiating joint attention (IJA) is the other major category of joint attention behaviors. Before beginning to teach IJA we first establish **making choices with coordinated gaze shifts.** Coordinate gaze shifting is critical to joint attention social interactions. The perfect context to establish this skill is in the context of a request for something highly preferred. We, therefore, embed this in every request. We present the child with two preferred toys and teach the child to look at and point to the one they want. We then add the requirement that they look at the toy and then shift their gaze back to the therapist in order to request the item. It is not important for the child to verbally request the toy but they must shift their gaze from the toy to the ther-

apist in order to receive the toy. We then increase the number of gaze shifts before giving access to the toy they are requesting. We have now established repeated gaze shifts in the context of making a request. Our challenge is to transfer this skill to a joint attention task.

Looking at a book and pointing to pictures in a book is one of the best tasks to begin teaching initiating joint attention. To teach the skill of using a **contact point with coordinated gaze shifts** we start with a teacher-made photo album of pictures that are relevant to the child's interests. Each page has only one picture at first. We begin a session by opening the book to the first page and guiding the child to point to the picture while the child looks at the picture. We comment on the picture and respond to any comments by the child. Once this is established then we add a gaze shift from the picture to the therapist. We prompt by using our hand to track the gaze shift, and wait to comment until the child has shifted their gaze and established eye contact with the therapist. We repeat this for each page in the book until the child is initiating joint attention by pointing, gaze shifting to the therapist and commenting on the pictures. The task should be practiced across many different books, people and settings. For example, practice using picture books at home with the child's parents. The task can then be expanded to use of a **distal point with coordinated gaze shift** to pictures and toys around the room. Place pictures of interesting things along the wall in a hallway or interesting toys in various places in the classroom. Bring the child to the area where the pictures/toys are and wait for the child to initiate pointing to the pictures. Prompt the child to use a distal point with coordinated gaze shift and comments if they do not initiate on their own. Always provide social praise for joint attention.

Once the child is able to use a point gesture to share an event, then teach the same skill using a **show gesture, comment and gaze shift.** We have found that use of a mystery box or Ned's Head© are the best toys to use to provide multiple opportunities for children to show toys to another person (see Figure 2). We fill the box/Ned's head with lots of fun toys and introduce the task as a game. Each person takes a turn pulling something from the box and showing it to the other person. It is in this

Figure 2: Teaching initiating joint attention using Ned's Head at the table.

context that we build showing, eye gaze shift from the toy to the adult and a comment about the toy. The game provides opportunities for us to model the skill and prompting can be used at first to establish the sequence of skills.

It is important that children learn to initiate joint attention regarding interesting events in their environment but it is equally important that children can **solicit attention to share an accomplishment.** Throughout the day children have opportunities to play with many manipulatives and to participate in art activities. Use these occasions to extend the already-mastered initiating joint attention behaviors. When the child has created a structure, for example, a rocket, using toys such as Legos, teach the child to hold up their creation in front of the therapist/parent, shift their gaze from the toy to the adult and to say "Look what I made." Follow this with lots of celebration about the accomplishment. While children with autism often fail to show us what they have made, when they do share they typically enjoy the attention they get from showing their work to others.

Essential elements

Teaching joint attention to children with autism requires attention to two critical factors. The first is to make sure that **social interactions are embedded** in the reinforcement. Remember the reason joint attention is so difficult for children with autism is because social interactions are not inherently reinforcing. We take time to assess what types of social interactions might function as rein-

forcers for each individual child. We evaluate their responsiveness to a variety of social stimuli like tickles, head rubs, social praise and high fives. We then embed these social interactions into each learning opportunity.

The second key component is to provide **multiple exemplars** using a variety of toys, many **people** including therapist and family members, and different settings. We have found that when we teach any joint attention skill, the more experience we can provide the better the outcome. Play makes up a substantial portion of a typical child's day. Play is the perfect context to work on joint attention. Invite all family members including siblings to participate in the instruction. Make sure to provide both contrived and natural opportunities to practice the skill in a variety of different **settings**. If the skill is practiced for example, at school and at home, on the floor and at the table, in the bathtub or on the playground, etc. the child is more likely to use the skill in these settings as well as novel situations. Additionally, we have found that practicing the skill with as many different toys as possible will facilitate maintenance and generalization. Use toys that make noise and toys the light up or produce some sort of visual stimulation to create a more interesting and interactive learning situation. We have used race car sets and bubbles, which are both action and turn-taking activities to promote joint attention. The bottom line is instruction and learning opportunities must be infused into the child's day to produce the best outcomes. Finally, it is important to have fun and enjoy your child in every social interaction.

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Psychoeducational Profile - Third Edition (PEP-3)

By Lee M. Marcus & Elaine Coonrod

"Results from the child's performance on the different developmental domains of the PEP-3 can be used to develop instructional goals, curriculum, and behavioral strategies for implementation at school and home. Integrating the information from the developmental and behavioral scales leads to a well-rounded approach to intervention and program planning. Other resources are available that show examples of how skills can be taught in a visual, structured way (Boswell, Reynolds, Faulkner, & Benson, 2005; Eckenrode, Fennell, & Hearsey, 2003; Eckenrode, Fennell, Hearsey, & Reynolds, 2009)."

Background

The Psychoeducational Profile: (TEACCH Individualized Psychoeducational Assessment for Children with Autism Spectrum Disorders) - Third Edition, and its two earlier versions, (Schopler, Lansing, Reichler, & Marcus, *2005*) is an autism-specific assessment tool. It addressed the long-standing problems inherent in testing based on the misunderstanding of the children. By using an instrument based on developmental principles and administrative flexibility, examiners not only were able to obtain accurate information, but the understanding of the nature of autism and how it affected children was better appreciated.

Drs. Schopler and Reichler highlighted the distinction between diagnosis and individualized assessment, particularly relevant to autism. Diagnosis involves the grouping of cases based on a set of common characteristics, while individualized assessment pertains to the specific profile of skills, deficits, interests, and behaviors. In their research, Schopler and Reichler developed both the Childhood Autism Rating Scale (originally the Childhood Psychosis Rating Scale) and the PEP as companion scales, with the former addressing diagnosis and the latter individualized assessment, with both emphasizing direct observation. The PEP was also unique in its integration of behavioral and developmental data in one instrument, emphasizing the importance of linking the atypical features with the developmental delays and irregularities. Autism was meant to be understood as a disorder of development, not an emotional or primarily behavioral disturbance, and the PEP was a means of documenting this.

Description

The PEP-3 (Schopler et al., 2005), is the most current version of an assessment developed by professionals at TEACCH to evaluate the skills and behaviors of 2- to 7- year-old children with suspected Autism Spectrum Disorders. Similar to its predecessors, the PEP-3 was designed to (a) measure developmental strengths, weaknesses, and learning style to inform educational programming; (b) assist in the autism diagnostic process by obtaining information from caregivers and by providing opportunities to observe social, communication, and play behaviors; and (c) provide developmental ages and other scores for diagnostic decision-making, educational planning, and/or assessing change in behavior and development over time. As such, the PEP-3 has utility in clinical, educational, and research contexts.

Developmental subtests on the PEP-3 assess early cognitive abilities, language/communication, and motor skills. Subtests included are cognitive verbal/preverbal, expressive language, and receptive language, which together comprise the communication composite, and fine motor, gross motor, and visual-motor imitation,

which together comprise the motor composite. Each developmental subtest item is scored as passing (the child can execute the task successfully without needing a demonstration), emerging (the child demonstrates some knowledge of how to complete the task but needs demonstration or practice), or failing (the child does not attempt or is unable to complete any aspect of the task). Raw scores are converted to developmental ages, percentiles, and developmental levels.

Maladaptive behavior subtests on the PEP-3 assess behavior areas related to an autism spectrum diagnosis. Subtests included are affective expression, social reciprocity, characteristic motor behaviors, and characteristic verbal behaviors, which together comprise the maladaptive behavior composite. Ratings for the maladaptive behavior subtests are based on observations throughout the assessment, and each item is scored as appropriate (the behavior is appropriate for the child's chronological and overall mental age), mild (the behavior is slightly or mildly unusual for the child's chronological and overall mental age), and severe (the behavior is unequivocally unusual or dysfunctional). Raw scores are converted to percentiles and adaptive levels. New PEP-3 software can be used to assist with scoring, statistical analyses, graphing, charting, and report generation.

The caregiver report component is a questionnaire completed by a caregiver, such as a parent, guardian, or teacher, based on his or her daily observations of the child. Two sections ask caregivers to provide estimates of the child's developmental level in several areas and rate the applicability and severity of several diagnostic labels. This information provides the examiner with a broader perspective of the child's overall strengths and weaknesses and helps the examiner understand the caregiver's perceptions of the child. The caregiver report also has subtests asking caregivers to rate behavioral problems associated with autism, skills in personal self-care, and adaptability and responses to the environment. Caregiver ratings are scored as appropriate, mild, or severe, and raw scores are converted to percentiles and developmental/adaptive levels. A developmental age equivalent can also be computed for personal self-care skills.

The item content and administration procedures of the PEP-3 were designed to maximize its value assessing children with Autism Spectrum Disorders. Test materials are manipulative and interesting to young children, and with the exception of the language subtests, items require minimal language ability. Items are not timed, and tasks can be administered in an alternative order, if doing so will make the assessment more engaging or appealing for the child. Further, given the scattered skills often shown by children with Autism Spectrum Disorders, basals and ceilings are not used, though examiners may credit lower level skills when higher level skills are demonstrated. **Finally, performance on test items readily translates into educational planning goals, and observation of the child during the assessment provides information about his or her learning style and the best way to begin teaching those goals.**

Psychometric Data

The PEP-3 was developed using a normative sample comprised of 407 children and adolescents with ASDs and 148 children with typical development from around the United States. Development data were collected by professionals who had experience with the PEP-R and/or work as psychologists within the TEACCH program. Overall, analysis of reliability and validity indicates that the PEP-3 demonstrates sound psychometric properties (Schopler et al., *2005*).

Criterion-prediction validity was assessed in a series of studies correlating scores from the PEP-3 with scores from other developmental and behavioral assessments used to measure similar constructs. Overall, the vast majority of correlations were large (.50 and above) and in the expected direction, thus supporting the validity of the PEP-3 as a measure of development and autism characteristics (Schopler et al., 2005).

The PEP-R and the PEP-3 have been translated into several languages including Chinese, Japanese, French, Portuguese, Dutch, Italian, and Estonian. Although some versions may benefit from further study, evidence available in English indicates that translated versions continue to show strong reliability and validity, and the PEP is a valuable instrument internationally for assessing children with autism (e.g., Fu, Chen, Tseng, Chiang, & Hsieh, *2011*; Villa et al., *2010*).

Clinical Uses

The PEP-3 has multiple clinical and educational purposes including gathering developmental data for program planning and informing diagnostic decision-making, although it should not be used as a stand-alone measure for making a diagnosis. However, the PEP-3 collects information on the behavioral characteristics associated with ASD. It has normative data based on a large sample of children with autism, particularly useful in clarifying

the extent to which the child being tested shows features shared by the sample of children with ASD. The PEP-3 can be used as the primary test in the evaluation process, but it should be supported by other information such as parent report, observations in a natural setting (e.g., home or school), previous history, and collateral reports. When diagnostic clarification is a primary goal of the evaluation, it is preferable if the PEP-3 is used in conjunction with the Childhood Autism Rating Scale, the Autism Diagnostic Observation Schedule, or another scale specifically designed for diagnostic classification.

Perhaps the most valuable use of the PEP-3 is in generating developmental information across multiple function areas. **A strength of the test is that it was designed specifically for children with autism; it can be flexibly administered, contains materials of interest to children, and does not depend on language for instructions.** The nonverbal domains and items do not require language processing for the child to complete them. The test covers a wide range of important developmental functions. Examples of test flexibility include the options of alternating easy and challenging activities, conducting the assessment using work systems or routines familiar to the student, and teaching and scaffolding to get complete information.

Developmental age scores can be derived and can be converted into a developmental quotient (Delmolino, *2006*). However, more important to program planning is the breakdown of skills into patterns as well as item analysis. In reviewing the data, the clinician is able to consider multiple levels of analysis including examining the child's overall pattern of strengths and weaknesses, analyzing the individual items that were passed or where an "emerging" score was obtained, reviewing the pattern of maladaptive behaviors, and considering the caregiver information. A careful analysis provides insight about appropriate developmental expectations useful in plan-

ning goals and curriculum.

Each of the developmental functions or domains is made up of many items that tap a variety of skills. For example, the Cognitive Verbal/Preverbal Scale measures the skills of problem-solving (nonverbal), matching, sorting and categorizing, and visual-motor integration. In addition, the examiner can observe characteristics of social communication (e.g., directing attention or commenting, seeking help or praise, sharing enjoyment), cognitive style (e.g., organization, flexibility, ability to transition between materials, persistence, cognitive areas of strength and weakness), and use of and response to materials (e.g., appropriate or inappropriate, unusual sensory responses, rigid or flexible). **Results from performance on the different developmental domains can be used to develop instructional goals, curriculum, and behavioral strategies for implementation at school and home.** Integrating the information from the developmental and behavioral scales leads to a well-rounded approach to intervention and program planning. Other resources are available that show examples of how skills can be taught in a visual, structured way (Boswell, Reynolds, Faulkner, & Benson, *2005*; Eckenrode, Fennell, & Hearsey, *2003*; Eckenrode, Fennell, Hearsey, & Reynolds, *2009*).

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Educational Supports for the Verbal Behavior Milestones Assessment and Placement Program: VB-MAPP made "Symple"

By LouAnne Boyd

INTRODUCTION

This article is intended to familiarize those who work with students with autism with the components that make up the Verbal Behavior Milestone Assessment and Placement Program (VB-MAPP).

SYNOPSIS OF VB-MAPP

The VB-MAPP, by Mark Sundberg (2008), is a manual designed to provide markers or Milestones for 900 verbal skills that typically develop by age four. The Verbal Behavior Milestones, Assessment and Placement Program (VB-MAPP) is made up of five tools. The tools are separate measures but overlap in that the data collected for one tool informs the data entered for another tool. The five tools are:

1) Verbal behavior milestones assessment which details 170 developmental makers based on 50 standardized developmental screeners

2) Barriers assessment, which provides descriptions of 24 domains of behaviors that interfere with learning

3) Transition to least restrictive placement scoring form, that combines the information on which verbal behavior level the student is functioning at and adds the barriers to learning and academic independence

4) VB-MAPP Task Analysis and skill tracking, which provides even greater detail on each milestone bringing the total number of skills in this curriculum up to 900

5) VB-MAPP placement and IEP goals program chapter, which provides guidance on how to use the assessment information to design a program or determine a placement for the student. The

term "symple": is a reference to the strategies employed in this article to convey the complex information packed into the VB-MAPP manual in a simple way, through symbols. "Symple" is the authors' term for a teaching technique used to create this development. By using symbols to convey concepts efficiently, the clinical information in the VB-MAPP program can be brought to the classroom. Although the verbal milestones are only addressed to age four, Sundberg (2008) states the in the introduction of the manual that the VB-MAPP is appropriate for any student struggling with significant language delays. VB-MAPP is a rich assessment program that generously describes verbal behavior components that are often missing from the current educational tools for assessment, IEP goal development and program placement.

Too often, the language used in Verbal Behavior Analysis is unfamiliar and regarded as separate from cognitive, social and language development. In fact, the verbal behavior milestones in VB-MAPP describe the very same developmental processes of receptive and expressive in language development. Skills developed during this 0-48 months range encapsulate the target of the majority of educational programming for elementary and secondary students with Autism Spectrum Disorders. The terminology of Verbal Behavior Analysis is a barrier to educators and families accessing this curriculum. Therefore transactional supports are provided here to contribute to the contemporary movement in the field of ABA (Strain 1992) where the structure, intensity and accountability of Applied Behavior Analysis are blended with developmental approaches (Prizant & Wetherby 1998) AND made user-friendly for families and schools.

The simple symbols paired with verbal behavior terminology are an educational support to bring the technical language from VB-MAPP to the teacher and IEP team so that clear communication about a student's level of performance, IEP goals and placement are illustrated in a visual format that can communicate a vast amount of information quickly.

This article describes a system that adds visual supports to make the verbal behavior concepts clear and enhances the illustration of a student's verbal strengths and needs. These visual supports create a system to put VB-MAPP into practice in a school and home setting.

VERBAL BEHAVIOR DOMAINS MADE "Symple"

To understand and quickly learn verbal behavior development, the unfamiliar behavioral terms were paired with familiar concepts and symbols to represent those concepts.

The following analogs and visual supports were designed to put the 16 verbal behavior domains into a format that school staff and parents can easily read and remember.

Figure 1 Pairing Verbal Behavior Terms with Educational support of symbols and analogies. The colors of the symbols correspond to the each level this skill appears in on the VB-MAPP Milestones. Red, level 1 represents skills for 0-18 months, green level 2 represent skills for 18-30 months, and blue level 3 represent skills 30-48 months of age.

VB Domain name and Definition	Symbol, colored by level and Analogy
MAND Behavior used to Requesting, demanding a want or need	● ● ● **Doorbell** DING-DONG! The door bell rings and a request or demand is made of you.
TACT To name or label aspects of the immediate observable environment. Such as calling something by name (noun), labeling someone's action (jumping) or emotional state (sad).	■ ■ ■ **Sticky note or flash-card** A paper in your physical presence. Label it, write it down, stick it, post it, learn its name.
INTRAVERBAL A response to a verbal behavior An interaction of verbal exchanges that are controlled by the last statement in the exchange	▲ ▲ **Warning! Sign** CONVERSATION AHEAD. Triangle LIKE TRAFFIC SIGN FOR construction or hazard...need to pay attention in the moment, we can't always be prepared ahead of time for what might come next in conversations.
ECHOIC Repeating what is heard exactly, word for word. Imitation. The beginning of practicing speech sounds and pronunciation.	◆ ◆ **Mirror Image** Repeating what is heard exactly, word for word. Imitation. The top triangle is an image of the bottom triangle.

LISTENER RESPONDING	Port/Portal
Attending to spoken word(Receptive language) demonstrated by following instruction.	Opening, entrance, tube to receive, threshold\n\nTunnel for information to enter
VISUAL PERCEPT	Moon MATCHING
Visual discrimination tasks such as matching pictures or objects to sample	Basic shape , could be puzzle piece, matching identical objects.
LRFFC	POLYGON
Listener Responding by function, feature, class\n\nUnderstanding complex and abstract words	(5 points = 5 words in title of this in this domain title, also a shape that is complex compared to than basic square, circle or triangle. Congruent to this idea, this domain requires understanding of some verbal behavior skills represent by the more basic shapes/ verbal skills.
SPONTANEOUS VOCAL	Talk Bubble
Initial spontaneous utterances such as sounds, words, phrases	Sounds, talking, speech
LINGUISTIC STRUCTURE	2 way arrow sign
More sophisticated language that includes articulation, vocabulary, mean length of utterance.	Complex parts for communication\n\nTraditionally speech goals for adverbs, prepositions, plurals and tense.
CLASSROOM ROUTINES	Table and chairs
Skills required to function in the group learning format of a classroom.	Aerial view of table with chairs around it. Sitting with a group, learning in a group.
SOCIAL BEHAVIOR	Special Seal
Interaction with others including eye contact and playing together.	Social skills can add a flare to life. Sticker, Badge of honor.
INDEPENDENT PLAY	Star Reward
Playing with toys as intended.	You earned it! Time to play.
MOTOR IMITATION	Heart
Imitating body movements.	Physical conditioning. Physical movement
MATH	Plus Sign
Early math skills such as 1:1 correspondence to 5.	Math symbol for addition.
READING	Horizontal banner
Early reading skills such a s attending to a book and matching words to pictures.	As in a page to read from left to right.

WRITING	Vertical banner
Imitates early writing actions to copying letter.	Top to bottom for listing.
SELF HELP	Baby carriage
Self-care needs such as eating and toileting.	We learn to self-soothe starting at birth, as these skills progress, we become independence with taking care of our needs.

After these symbols are made more understandable, a team can start looking at a student's needs and goals in light of these concepts to see the complete picture of their verbal behavior. The skill profile forms show the milestones achieved, and the colored symbols show the operant level in a condensed format for "big picture" communication. Of course several other aspects of a child's devolvement are considered in placement, namely the 24 behaviors described in VB-MAPP as barriers to learning. But that detail would be part of an IEP; this classroom matrix gives an overall picture of a teacher's current targeted goals for the classroom as a whole. The targeted skills will change as goals are met and/or students enter or exit the program.

This "symple" illustration of individualized needs can ultimately assist in placing a student in a program that addresses his or her unique needs.

Figure 2: Portion of a sample IEP goal planning sheet made "symple" for a preschool student.

SYMBOL	VB-MAPP DOMAIN	IEP GOAL CONTENT
	MAND Milestone 5	Emits 10 different mands without prompts
	TACT Milestone 3	Labels 6 nonreinforcing items
	LISTENER Milestone 8	Performs 10 motor demands on command
	CLASSROOM Milestone 7	Puts away personal items, lines up, and comes to table with only 1 prompt
	SOCIAL Milestone 5	Spontaneously imitates peers movements 2 times

Time	Activity	Teacher	M	M
8:40-9:20	Group time	🔴	✴️	🔺
9:20-9:30	Fine motor	🌙	🌙	🌙
9:35-10:00	Language Arts Centers	⭕	🔴	🟢
10:00-10:15	Recess	Break	🔺	❤️
10:15-10:45	Math centers	◼️	Break	⭕
10:45-11:30	Language arts	◼️	◼️	🔷
11:35-12:15	Lunch time and Recess	Supervise	⭐	🔴
12:15-12:30	Bathroom, Sensory break	⭐	⭕	Break
12:35-12:55	Social skills	🔴	🟢	🔴
12:55-1:30	Group time	✴️	Break	🔺

Figure 3: VB-MAPP "Symple" classroom matrix to support VB-MAPP program placement .

Example of Mild-Moderate SDC Preschool class wide matrix, list of level and type of target skill taught in small groups lead teacher or IA (instructional assistant) by time and activity (specific to the 8 students enrolled in the given year)

The next step in this process is to consider a best fit for placement options. One way to illustrate current programs may be to design the class schedule to reflect the collective milestones addressed by each activity and measured by the staff. This illustration is an example of how a class made up of six to eight preschool students with autism may look using the VB-MAPP symbols. Activities may be delivered in whole group, small group, or one-to-one settings, or may be collected during observation of independent play. Comparing programs through visual analysis can lead to a deeper understanding of what a program has to offer. The VB-MAPP sym-ple matrix allows for a quick, visual analysis of a special education program, or of the entire range of programs, to determine what a least restrictive, free and appropriate educational placement (i.e., "best fit") might be for each student.

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Using the "Lunch Buddies" Curriculum to Teach Conversation Skills to Students with Autism and Other Social Cognition Challenges

By Eve Müller, Lynn Cannon, Courtney Goldstein, Katherine Driggs, Jonna Clark & Michal Powers

Although conversation is an important way we build and maintain friendships with peers, most children with Autism Spectrum Disorders (ASD) experience a range of significant language and social cognition challenges that make it particularly difficult for them to understand and master the art of conversation. For example, children with ASD experience difficulties establishing joint attention, initiating conversation, selecting topics, making relevant contributions, taking turns, and using eye gaze and other nonverbal means to indicate engagement (e.g., Hurtig et al., 1982; Loveland, 1990; Mundy & Crowson, 1997; Prizant & Rydell, 1993; Tager-Flusberg & Anderson, 1991). Many also display "unexpected" conversational behaviors, such as immediate or delayed echolalia, that pose a challenge to conversational continuity and/or relevance (Winner, 2007; Prizant, 1983).

Over the past few decades, a number of studies have attempted to measure the efficacy of a variety of conversation skills interventions (e.g., Charlop & Milstein, 1989; Chin & Bernard-Opitz, 2000; Chung, Reavis, Mosconi, Drewry, Matthews, & Tasse, 2007; Dotson, Leaf, Sheldon, & Sherman, 2010; Leaf, Taubman, Bloomfield, Palos-Rafuse, Leaf, McEachin, & Oppenheim, 2009; Sarokoff, Taylor, & Poulson, 2001). Although all of these studies have demonstrated some success in boosting children's skill levels, most are limited in that they either set the bar very low (e.g., teaching students to engage in conversational exchanges of no more than a few turns), or teach discrete conversational skills, such as initiating a conversation or responding appropriately to a peer's question/comment, without teaching the "why" of conversation (i.e., contextualizing skills within a social learning-based framework).

One particularly promising approach to teaching social skills is based on the **Teaching Interaction Procedure (TIP)** framework. TIP offers a pedagogical model for instruction that includes provision of a rationale for why learning the skill is important, breakdown of the skill into its component parts, teacher demonstration/modeling of the skill, oppor-

Cover Artist: Dane Bottino

Dane Bottino is an autistic savant and a natural artist. He has drawn since the age of two and has drawn in perspective from the very start. His dad first saw him draw a horse on the foggy livingroom window and was amazed at its beauty. Though he has difficulty with language, Dane communciates and expresses himself through his art. He can draw anything and has been studied by many doctors and film crews. He has exhibited in Laguna Beach and has been on the *Discovery Channel* and filmed by the *BBC*. Films about him such as *Fire in The Brain* and *Thinking in Pictures* have been broadcast in the U.S., Europe and Australia. He is a self-taught artist who loves what he does. Dane sells his work and creates hundreds of drawings and paintings each week.

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tunities for students to practice the skill with scaffolded support and feedback, and – in some cases – reinforcement (Dotson et al., 2010; Leaf et al., 2009, 2010; Maloney et al., 1976; Minken et al., 1976; Phillips et al., 1971). Several recent studies suggest that this comprehensive pedagogical approach has been particularly effective in teaching social skills to students with ASD (Dotson, Leaf, Sheldon, & Sherman, 2010; Leaf, Dotson, Oppenheim, Sheldon, & Sherman, 2010; Leaf, Taubman, Bloomfield, Palos-Rafuse, Leaf, McEachin, & Oppenheim, 2009).

Social skills curricula by Madrigal and Winner (2008a, 2008b, 2009) also stress the importance of teaching "social thinking," or providing a rationale for the underlying social significance of specific skills, and tie key social thinking concepts to highly motivating super heroes/cartoon characters.

This article describes the "Lunch Buddies" curriculum, an evidence-based method for teaching conversation skills to students with social cognition challenges. The curriculum uses an adapted version of the TIP framework described by Leaf and others, as well as a team of cartoon characters inspired by the work of Madrigal and Winner that is specially designed to facilitate thinking about the social significance underlying each conversation skill. The article also provides a brief summary of student outcomes resulting from participation in the Lunch Buddies curriculum (Müller & Cannon, unpublished manuscript).

Overview of Lunch Buddies Curriculum

> **Key Objectives of the Lunch Buddies Curriculum**
>
> Too often, students with ASD and other social cognition challenges spend their lunch periods in silence, making undirected comments, reciting scripts, or talking at length about restricted interests. The Lunch Buddies curriculum, developed by Ivymount School staff, teaches students that lunchtime is an opportunity for fun and meaningful conversation with peers.

The curriculum provides direct instruction in both the "how" and "why" of conversation.

Conversation skills are gradually introduced over the course of the program year, and students are given supported opportunities to practice new skills with reinforcement on a daily basis. Goals of the curriculum include teaching students to do the following:

- Articulate why it is important to select topics your partner is interested in and remember what your partner said.

- Select a topic and/or subtopics for conversation.

- Use information known about a peer to select a mutually agreeable conversation topic.

- Use information from on-topic questions or comments to formulate follow-up questions and comments using "key" words and "wh" questioning strategies.

- Demonstrate active listening (e.g., orienting body and gaze toward peers, recalling what peers shared during a conversation).

- Use attention gaining strategies to ensure that your partner is listening, and repair simple conversation breakdowns.

Selecting Students to Participate

The Lunch Buddies curriculum is designed for use with elementary school students with ASD and other social cognition challenges. Because meaningful conversation is the goal, it is critical that participants have adequate receptive and expressive language to engage in conversational exchanges with peers. Ideally, students are paired with one peer per lesson, although it is occasionally necessary for instructors to work with larger groups of students (maximum of 3 to 4).

Structuring and Pacing of Lessons

As mentioned earlier, Lunch Buddies lessons are based on the TIP framework. At the beginning of each lesson the instructor uses one of the Lunch Buddies cartoon characters to introduce the specific conversation skill that will be discussed that day. In an effort to increase intrinsic motivation, instructors also provide a rationale to students for how learning the skill will benefit them. Instructors then describe and model the target skill and provide structured

opportunities for practice.

To further support students' skill acquisition, the TIP framework was adapted to include a structured review session at the beginning of each lesson to orient students to the lesson and activate prior knowledge, and visuals to support student learning, including Lunch Buddies character "icons," reinforcement charts, and graphic organizers to facilitate conversational flow.

Pacing of lessons is based on the needs of students. Many times this means that a specific lesson will be repeated for multiple weeks. The Lunch Buddies curriculum is intended as a year-long program, and lessons take place 3-4 times per week, with weekly opportunities for generalization. Each lesson lasts approximately 20-30 minutes.

Making Lessons Fun

In order to secure buy-in from students and make lessons more fun, four Lunch Buddies cartoon characters were developed who link directly to each of the curriculum objectives (see Figure 1 for example of character). Lunch Buddies "club" characters include:

- **Friendly Freddy,** who helps us select a conversation both partners will enjoy, and wants us to use his favorite words (who, what, where, and when) to keep the conversation going;

- **Listening Larry,** who helps us identify key words from what our partner said and use those words to keep the conversation going;

- **Good Memory Marge,** who helps us visualize what our partner is saying, and remember what was said; and

- **Polly Parrot,** Freddy's best friend who helps us share information using all of Freddy's favorite words.

Figure 1 –
Friendly Freddy

Throughout the program, these characters serve as reminders of the skills and how to use them in conversation. They give students something to "hook" concepts onto, and instructors can prompt students with questions like, "What would Friendly Freddy want us to say?" As with Madrigal and Winner's super heroes, the Lunch Buddies characters are intended to be highly motivating for students, making activities seem more like games than lessons, and making the program more culturally relatable.

Reinforcing Student Effort and Engagement

Students are provided specific feedback, both positive and corrective, during the course of each lesson, and specific reinforcement systems are put in place to reinforce demonstration of target skills (see Figure 2 for example of point sheet). Throughout the year, instructors gradually fade prompting and reinforcement, determining how frequently target skills should be reinforced, and the levels of independence necessary to trigger reinforcement in the form of "points," based on student need.

Figure 2 – Point Sheet

Teaching Conversation Skills

Social motivation. Teaching the "why" of conversation is at the heart of the Lunch Buddies curriculum. Opportunities to discuss why conversation is important (e.g., conversations are fun, we get to share information, we get to ask questions and learn things about our friends,

good conversations cause people to want to spend time with us) are woven throughout each lesson. One of the key concepts infused throughout the curriculum is that thinking about our partners, selecting topics based on their interests, and asking questions that show we're paying attention when they talk gives people "good/nice thoughts." Likewise, it gives us good/nice thoughts when people pay attention to what we are saying.

Selecting topics. Several progressively more complex lessons are devoted to topic selection. For each of these lessons, Friendly Freddy – introduced as a cartoon character who helps us select a topic and stay on topic – serves as a learning hook. Throughout lessons, students are encouraged to "be like Friendly Freddy" and earn points for doing so.

It is first necessary to teach students what a topic is. One way of doing this is to ask students, "What are some of the things you like to talk or think about?" and explain that these are called topics. Another strategy is to say something like "I'm thinking about Patrick and the Krusty Krab," and ask students to guess what topic you're talking about (i.e., Sponge Bob Squarepants). At the beginning of the program, students practice introducing topics using prepared topic cards. Providing students with topics gives students an opportunity to expand the repertoire of topics they have at their disposal.

As their repertoire of topics grows, students begin to independently select topics of interest and engage in structured "brainstorms" of all the possible sub-topics related to those topics. These brainstorms also provide students an opportunity to build their lexicon or schema around a given topic, allowing them to talk at greater length and in greater detail about a topic. Instructors explain that Friendly Freddy wants us to identify all the things about a given topic we can talk about. For example, if the topic is Halloween, we can talk about costumes, favorite candies, and where we like to go trick-or-treating. Once students' conversation skills have improved, the focus shifts to improving social cognition and motivating students to think about their conversation partners when selecting topics. For

example, students create friendship files that include information about their partners interests, and use information from these files to help select conversation topics that are mutually enjoyable.

Maintaining conversation. The majority of lessons are devoted to maintaining conversation. As with topic selection, lessons are layered, requiring progressively greater levels of conversational skill and understanding. At the beginning, instructors introduce Listening Larry who helps us listen to what our friends say. Listening Larry teaches us to use his **"key word" trick,** which means using a word our friend used in our follow-up comment or question (e.g., Student A: "I went to the **movies**." Student B: "What **movie** did you see?"). Identification of key words helps students become active listeners and internalize what their partner said. Listening Larry explains that when we are good listeners, people will want to spend time and have more conversations with us. He tells us that his key word trick makes our

friends feel good and gives us lots of information about them.

Friendly Freddy also plays an important role in maintaining conversation. He helps us stay on topic by asking on topic questions using Freddy's favorite words – the "wh" words. Again, it helps to review with students the meaning of each "wh" word (i.e., who, what, where, when). A simple illustrated key (e.g., who = picture of a person, when = picture of a clock) can serve as a helpful visual reminder of which is which. After brainstorming topics, students brainstorm all the "wh" questions that can be asked about each topic. Another activity, the "Barrier Game,"
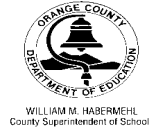
improves student fluency when asking "wh" questions. This game requires that students formulate "wh" questions about an image that only their partner can see. Students use information from their partner's answer to visualize the image and describe what they are seeing in their "mind's eye." Another activity that helps students master "wh" questions involves having them generate sentences that include information answering all four "wh" questions. Freddie's pet parrot Polly is introduced in the form of a graphic organizer that includes space on her wings for each of the "wh" questions. As students provide informative details, the instructor checks off each word on Polly's wings using a dry erase marker. An alternate version of this exercise requires students to generate sentences that are missing information answering at least one of the four "wh" questions. The conversation partner listens carefully in order to request the missing information using the appropriate "wh" word (e.g., Student A: "I ate dinner [what] at Applebees [where] on Friday [when]." Student B: Who did you eat dinner with?").

Active listening. Good Memory Marge is introduced towards the middle of the program. Marge helps us think about who we are talking to, remember what they said, know what our friends like and dislike, and avoid talking about the same things over and over. Good Memory Marge checks in on students at the end of conversations to see if they remember what their partner said during conversation. When students demonstrate careful listening, by recalling what their partner said, they earn extra points for being a good friend and thinking about what their partner said.

Gaining attention and conversation repair. As students become more active and engaged conversationalists, they are taught specific strategies for gaining attention and responding to conversation breakdown. Strategies include repeating a question, using our partner's name if he/she does not respond, requesting clarification, and excusing ourselves if we need to leave a conversation.

Putting it all together. Once students have

mastered both topic introduction and conversation maintenance skills with minimal prompting, they are ready to put all the pieces together. Using a visual representation of conversational flow based on the image of a tree (topic), branches (subtopics) and leaves (comments and questions) helps students track progress of the conversation.

Student Outcomes

An evaluation of the Lunch Buddies program was conducted during the 2011-12 academic year using a combination of quantitative and qualitative methodologies (Müller & Cannon, unpublished manuscript). Participants were four males, 9-11 years old, two with autism and two with other social cognition challenges, and all with mild to moderate expressive language deficits. The authors found remarkable growth over the course of the program year in students' topic maintenance skills as measured by **the total number of on-topic comments/questions (which grew from an average of 1.0 per student at baseline to an average of 31.5 during generalization** without reinforcement) (see Table 1). Students also demonstrated growth in peer-directed comments/questions, average of length of time on a single topic, and ability to select and introduce topics based on prior knowledge of peers' interests or using conventional conversation starters (e.g., "What are you doing after school today?"), ask "wh" questions, use gaining attention strategies and listening behaviors, and reduce/eliminate unexpected comments and questions.

Table 1 - Growth in Four Students' Topic Maintenance Skills
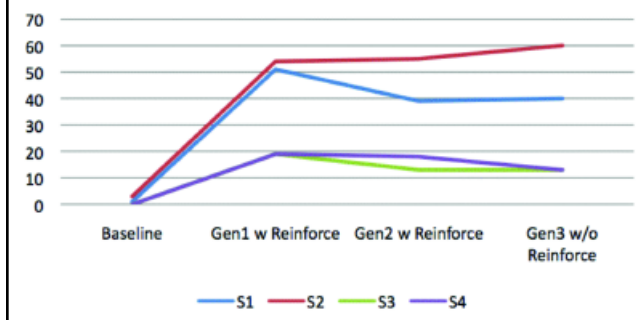
By the end of the year, students were able to demonstrate all of these skills independent of adult prompting and the structured support provided by the Lunch Buddies lessons themselves. Even without reinforcement, students' abilities to demonstrate conversation skill gains remained high. Future research goals include assessing outcomes for a larger pool of students and gathering longitudinal data on the generalization of conversation skills.

Conclusions

Based on these outcomes, it appears that the Lunch Buddies curriculum offers a highly promising means of teaching both the "how" and "why" of conversation to students with ASD and other social cognition challenges. Even with the Lunch Buddies curriculum, however, mastery of the nuances of conversation can be challenging for students. Some of the obstacles we encountered at Ivymount included students' lack of information or adequate breadth of knowledge necessary for discussing many topics, difficulty distinguishing between "wh" words (or grasping the meaning of more challenging "wh" words like "why" and "how"), lack of motivation to become friends with some conversation partners, frustration when conversation partners were non-responsive, and lack of ability to use skills flexibly (i.e., navigating more free-flowing conversations that deviated from the structures taught in class). Some of the ways instructors were able to address these challenges included reading stories or watching videos about a given topic to build knowledge, rotating partners and identifying students' common interests to address motivation, and providing additional opportunities for interaction outside of Lunch Buddies lessons to promote increased flexibility and support generalization. Instructor responses to the Lunch Buddies curriculum have been extremely positive, with teachers and related service providers describing the curriculum as responsive to student needs, highly engaging for students, and helpful in providing clear goals and expectations for improving students' conversation skills.

For further information

All of the authors: **Eve Müller, Ph.D., Lynn Cannon, M.Ed., Courtney Goldstein, M.A., CCC-SLP, Katherine Driggs, M.Ed., Jonna Clark, OTR/L, and Michal Powers, LCSW-C, are employees of Ivymount School in Rockville, MD.** Illustrations are by Achille Radelet. For a complete list of references and/or more information about Lunch Buddies, contact Eve Müller, Coordinator of Program Evaluation and Outcomes Research, at emuller@ivymount.org or Lynn Cannon, Social Learning Coordinator, at lcannon@ivymount.org. ♥

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# One Size Does Not Fit All: Looking for Curriculum Options

By Wendy Miller

After teaching for 15 years, I have discovered my most valuable tool is having knowledge of available resources and how, when and with whom to use them.

The need for a variety of alternative curriculum is commensurate with the variance of needs presented by students in my S.U.C.S.E.S.S. (Systematic Utilization of Comprehensive Strategies for Ensuring Student Success) class, a class designed for students with Autism Spectrum Disorders or those meeting the educational eligibility of autistic like characteristics. The importance of maintaining a structured environment, use of student schedules, utilizing tools to maintain appropriate levels of sensory input, direct teaching of everyday social skills using general education peers as models, and curricular accommodations and modifications are well known and are the foundation of programs like ours. An understanding of how to effectively utilize alternative curriculum is another key element to meeting each students' needs.

The majority of my students with ASD have been visual learners. While there are many useful tools available, I will be reviewing two programs, which have yielded positive results for students who had made little or no progress in the areas of reading decoding and basic math skills.

A **comprehensive reading program** includes core curriculum and direct instruction in phonics (for younger students), fluency, and comprehension, but for some students this is not sufficient. I have found the *Edmark Reading Program,* from Pro Ed, http://www.proedinc.com to be useful for select students who were demonstrating difficulty with phonics based decoding strategies. My favorite part of this program is that the students are immediately successful and motivated to continue learning. The challenge to this program is its intensive nature, but the directed part of each lesson is relatively short 10 minutes or less and goes very quickly. This program is designed as a one-to-one-type program. The program begins with several visual-discrimination type lessons. I find that the level of success on the beginning lessons is a good indicator as to the appropriateness of the program for that particular student. Those students who do well on the beginning lessons tend to be successful with the program. As described by Pro Ed it is a "basic sight word program built especially for students: with developmental disabilities, with autism, with learning disabilities, in Title 1 programs, in ESL programs, who lack vocabulary development, who struggle with phonics, who are non-readers." (www.proedinc.com). On a couple of occasions, I have tried this with students who were unable to successfully complete the beginning lessons. That is when I looked for different solutions or worked on
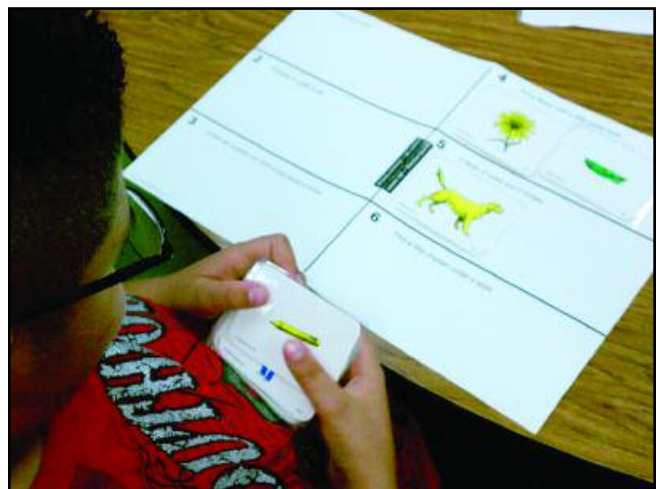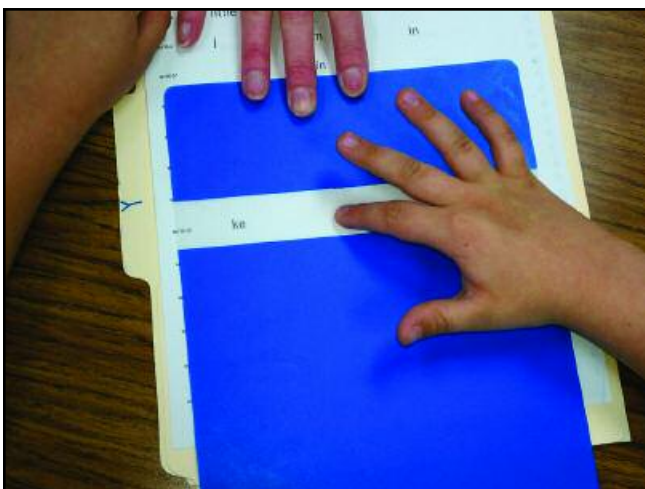
prerequisite skills. I have also seen many faces light up when students realize that they just read for the first time while using this intervention.

Basic math skills are the basis of everyday living. Just think about your morning routine: what time do I need to wake up? How long do I have to get ready? How many cups of water and oatmeal do I need to make breakfast (what if I can only find the _ cup measuring cup)? How much money do I need to take for lunch? How much longer before I need to leave? The lack of the fundamental math skills required to begin your day would have a negative impact on your ability to live independently. When students struggle to learn these concepts in the traditional fashion, we must look for alternative methods.

When used along with the core curriculum, Touch Math (Innovative Learning Concepts Inc.) http://www.touchmath.com provides useful strategies which allow students who have difficulty with number sense to access the core curriculum and functional living skills. According to the publisher, "The secret to TouchMath is simple. In fact, it can be summed up in one word: TouchPoints. Each numeral from 1 through 9 has TouchPoints corresponding to the digit's value. As students count the TouchPoints, they associate numerals with real values. They learn that a numeral (3, for instance) is not just a squiggle on a page. It represents a quantity such as three apples, three ladybugs, three buttons or three TouchPoints." (www.touchmath.com).

If you are going to use TouchMath it is important to carefully teach each lesson in order to ensure that the students comprehend the concept. It is important that the students learn to see, say, hear, and touch correctly as they use the TouchPoints in the beginning. This will help avoid later confusion when they begin to apply the strategies. Using TouchMath begins by teaching concepts of one-to-one correspondence and sequencing using the TouchPoints that the students will continue to use while learning concepts such as addition, subtraction, multiplication, division, telling time, money, fractions, skip counting, and word problems. In my experience, *TouchMoney* (a product of TouchMath) has been a beneficial strategy for teaching students how to count coins. My students who are successful with using TouchPoints easily generalize the strategies and use them throughout their daily activities. From time to time I even find myself using them.

These are just a couple of examples of alternative curriculum that can possibly be a good match for some of our students. There are countless great products on the market. However, the key is being able to identify the needs of each child, pair those needs with his/her preferred learning style, and then find a curriculum that most closely matches those specifications. There is no single curriculum that works for every student. Therefore, it is important to reiterate that every student with ASD is an individual and has very specific needs. These needs must be carefully identified in order to find the most appropriate curriculum, which will best meet his/her learning styles and academic needs.

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Teaching Language through Reading

JEEPP™
Just Enough English for Pragmatics and Paragraphs

By Pamela C. Payne

JEEPP is a curriculum designed to lead students from single words/single phrases to multi-paragraph stories and chapter books.

The JEEPP Template was created to teach sentence patterns (syntax) to prepare children for multiple, connected sentences (narration). The curriculum can be adapted for individual, small-group and/or classroom settings for children with chronological ages of 2 1/2 to 10+ years and mental ages of at least 24 months. It also teaches the **pragmatic functions** of request/protest, comment, follow/give directions and answer/ask questions.

Louis Carroll, author of "Alice in Wonderland," has been quoted as saying **"If you don't know where you are going, any road will get you there."**

The JEEPP Program is structured to work backwards from its ultimate objective.

Franke and Durbin (ASHA Convention, 2006) cited B. Hardy ***"...we dream in narrative, daydream in narrative, remember, anticipate, hope, despair, believe, doubt, plan, revise, criticize, construct, gossip, learn, hate and love by narrative."***

The JEEPP Program is designed to teach that functional, everyday narrative genre.

If necessary, intervention should begin with the establishment of a syntax system.

It is important to:
- Teach a syntax system that will enable students to *compartmentalize words* into predictable categories
- Teach the syntax through *relevant and meaningful texts*
- Make the *implicit----explicit* rather than assume unspoken/unwritten segues are obvious
- Enact single photos and photo sequences, if nec-

essary, to provide *visceral experiences* to enhance concept knowledge

Once a core syntax system has been established, the teacher can strive to teach the children to:
- Comprehend language across *multiple, connected* sentences
- *Sequentially recount* and *summarize* information about *VERBAL* and *PRINTED* paragraphs
- Achieve these goals by targeting speech intelligibility, phonological awareness, syntax, semantics, pragmatics and literacy, *simultaneously and interactively,* within meaningful texts

Think of language as a system (see Anisfeld [1984] "Language Development From Birth to Three Years"):
- Language is acquired as a system
- At the beginning of syntax--some memorized sentences serve as prototypes on the basis of which new sentences are generated
- Construction of longer sentences is facilitated by the presence of practiced word sequences which function as prefabricated components
- Material assimilated by a structure is retained much better than material that has to be memorized by rote
- Skilled readers do not read a word at a time--nor do their eyes move word to word until they reach the end--rather, they scan the text for patterns that will make the task of reading easier
- Considerations in teaching children with special needs (see Sousa [2002] "How the Special Needs Brain Learns"):
- Provide high structure and clear expectations
- Use short sentences and simple vocabulary
- *Meaning* (or relevancy) becomes the key to focus,

learning and retention

- **Rehearsal** (continuous re-processing) is a critical component in the transference of information from working to long-term storage

- The most effective form of teaching combines direct instruction with teaching students strategies of learning

- The component with the greatest effect on student achievement is control of the task difficulty

Children who do not make progress simply repeating fleeting phrases may benefit from a methodology in which the printed information can remain in view as long as desired. Further, when considering Theory of Mind, a deficit for many children on the autism spectrum, the JEEPP Template can serve as a neutral "referee." For example, a child looking for linguistic patterns may be distressed when the adult unexpectedly requests the child to repeat car/cars or sit/sitting. Pointing out the printed morphemes on the JEEPP Template often serves as a "tiebreaker."

Parent report: Case 1

When Jamie, was diagnosed with autism at the age of three he had no speech at all. He didn't even babble. He went through early intervention and his parents tried to help promote speech. It was very slow progress. At the school age of five, Jamie was saying one-word phrases and still receiving a lot of extra private therapy. Getting to a two-word phrase was extremely challenging…. Jamie was a visual learner. Telling him to repeat wasn't working anymore. Auditory wasn't enough. He needed to see it and for it to be very concrete. At one point, the parents were advised not to waste their money for if a child had little to no speech, most likely this is how it will remain. They opted to not take that advice….

When Jamie started the JEEPP Program, progress finally became evident. Jamie was reading sentences in a very short time. Mrs. Payne showed Jamie a picture of washing a car then followed through by going outside and washing Jamie's car (taking a picture of Jamie washing his car). With a picture of Jamie washing his own car available, he washed a matchbox car as he was reading a story about washing a car. By the end of the session, Jamie completely understood "washing the car." The parents went from having a non-verbal child to suddenly having Jamie referred to as a verbal boy. Teachers began remarking how they never realized Jamie's high level of reading. Jamie now can read stories. He can express all of his needs and wants. Jamie can speak in an extensive variety of full sentences (when asked to do so).

Jay, Lisa and Jamie Cheek

Parent report: Case 2

…"In the 7 years Vincent has been going to Ms. Payne, Vincent has developed a superior reading ability and has been moved out of the lower functioning class and into a higher functioning one. Utilizing the **JEEPP Template,** his reading and communication skills have markedly developed over that time."

Angelo J Puma

Parent report: Case 3

"When Cameron was age 3, a neurologist classified him as being in the autism spectrum. He was non-verbal. Following that diagnosis, the parents pursued many treatments and therapies in efforts to improve Cameron's verbal function. While working with Ms. Payne, the parents learned that Cameron was a reading learner. That is, he learns best when he reads, rather than hears, information. This was very important to learn as it provided guidance as to how to teach and communicate with Cameron at home and elsewhere…."

As Cameron transitioned from the controlled sentence forms on the **JEEPP Template** to unrestricted English, the parents discontinued therapy sessions with Ms. Payne. She had taught them how to create books that assisted in their son's language development…

Robert Dillon

Children with ASD often learn best through visual modes, be it pictures, sign language or reading. "Reading" can be interpreted differently. The author has integrated the lessons learned from Anisfeld and

Sousa as well as created an English syntax system displayed on a template the size of a placemat—present tense on one side and non-present tenses on the reverse side. The template facilitates a sense that English syntax can be mastered. That confidence encourages a persistence to tolerate linguistic challenges.

This can be a potential breakthrough for many children with ASD struggling with language acquisition.

Example of Single Words, Phrases and Short Sentence Instruction:
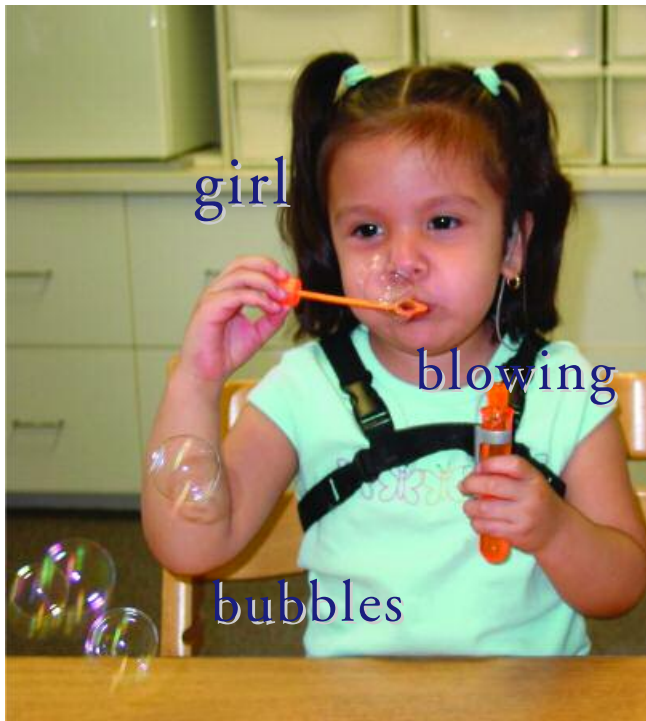
The girl   is* blowing   the bubbles.

*One can make a case for coding this photo in the **present tense** (**is**) as well as make a case for coding this photo in the **past tense** (**was**)

- **Single words** and **phrases** are always presented within the context of sentences
- Justice and Kadervek wrote (2004, LSHSS), **"embedded print** encourages children to engage with written language even when their attention is drawn to the illustrations." (embedded print is text superimposed on pictures) Copyright © 2013 Pamela C. Payne

Example of Beginning Narrative Skills (4-5 paragraphs):

Clinical observations and considerations:

Efforts to simplify the text by presenting a single sentence per photo may actually contribute to the child's confusion about the message.

The boy was making dessert pizzas. He wanted to bake the pizzas.

The boy was opening the drawer. He wanted to get the foil out of the drawer.

The boy was wrapping a pizza in the foil. The boy will take the pizza to his house.

In "Directing School Discourse"(1994) Blank, et.al. discuss the concept of an **"invisible language system"** in which the reader or listener is expected to connect the separate sentences to form a single, coherent message. "Hidden, implicit messages are

the invisible system…" "With the introduction of the 'invisible connections,' the text is easily understood. Without it, there is confusion."

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The boy   was making

three dessert pizzas

and

he   was making   one regular pizza

during his speech class.

Next

he   wanted to bake   the pizzas.

Then

the pizzas   were   finished   baking.

The boy   wanted to eat

one dessert pizza.

But

there   was   a problem.

His lesson   was   finished

and

it   was   time   to go   home.

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The boy   had   a good idea.

He   wanted to take   the pizza   home.

He   can eat   the pizza   at his house.

The boy   did not want   the pizza   to get

dirty

so

he   was getting   some foil.

Then

he   can wrap   the pizza   in the foil

and

the pizza   will not get   dirty.

The boy   was wrapping
the pizza   in the foil

and

he   was   putting   <u>the</u>
pizza   in a bag.

The boy   can take   the pizza   home.

He   will eat   the pizza   at his house.
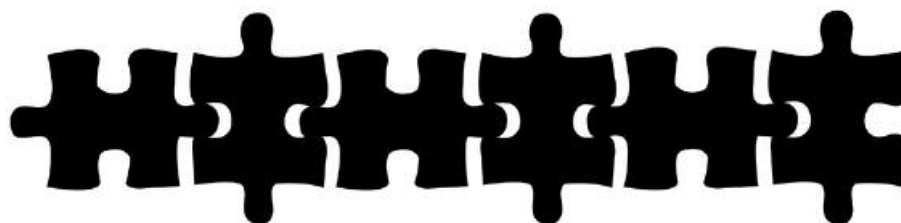
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Board Recognized Specialist in Child Language
Email: pampayne@jeepp1.com ♥

Clinical Research Study of Autism Spectrum Disorders

Dr. Sharon Wigal at the University of California, Irvine is examining the safety and effectiveness of an investigational drug on the treatment of autism spectrum disorders. This investigational drug is being studied to determine if it has an effect on communication in children with autism, Asperger's Disorder, or PDD-NOS.

Seeking Participants who:
- are between the ages of 6 and 12
- have a diagnosis of autism, Asperger's Disorder, or Pervasive Developmental Disorder, Not Otherwise Specified (PDD-NOS)
- can complete up to 13 visits over 50 weeks

Participants may receive:
- evaluation at no cost
- investigational drug at no cost
- compensation for time and travel

For Further Information Please Contact:
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949-824-1819

akapelin@uci.edu

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Toufic Jeiroudi

Your support is urgently needed to help ANOC continue. Please visit our website at **www.autismnewsoc.org** for more information.

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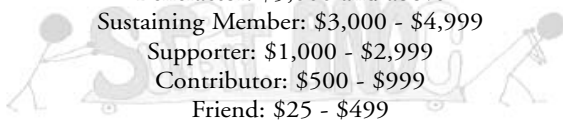
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$14.8 MILLION PARTNERSHIP TO FOR AUTISM

FOUNDATION CENTER
Knowledge to build on.

PUBLIC-PRIVATE CREATE CENTER

The Children and Families Commission of Orange County has entered into a $14.8 million public-private partnership with the William & Nancy Thompson Family Foundation to create the Center for Autism and Neurodevelopmental Disorders of Southern California.

Building on the work of the For OC Kids Neurodevelopmental Center, which has provided assessment, diagnosis, care coordination, family support, and education for children with Autism Spectrum Disorder (ASD) and other developmental disorders since 2001, the Center for Autism will pursue a multidisciplinary approach to clinical care, education, and research related to autism, with the ultimate goal of offering a complete range of diagnostic and treatment services for children, adolescents, and young adults. The center will be a part of the University of California, Irvine and will be led by UC Irvine and Children's Hospital of Orange County pediatric neurologist Joseph Donnelly, who is also the director of For OC Kids. In addition to providing rehabilitation services, CHOC Children's has made a five-year commitment to fund several positions based at the center, including a pediatric neurologist and a psychologist.

The UC Irvine School of Medicine will receive $14 million in initial funding through the partnership — a $7 million grant for evaluation, diagnosis, and treatment services from the commission and $7 million from the

foundation in support of clinical services and research. The foundation's investment will support a drug discovery platform that unites UC Irvine scientists working in diverse specialties, from gene function to cell biology to brain function and behavior, in a common purpose: to develop an effective ASD drug therapy.

In addition, with $800,000 in funding from the Thompson Family Foundation, Chapman University's College of Educational Studies will spearhead two initiatives for children and families affected by ASD. The Family-Schools Intervention Team will serve as an advocate for children and as an ombudsman between the family and the school system, while a second initiative will offer education and outreach to help parents and educators access the most up-to-date information and ideas for children with autism.

"We intend to create a nationally recognized treatment and research center that provides help and hope for children and families living with autism spectrum and neurodevelopmental disorders," said William Thompson, chair of the Thompson Family Foundation, which created the Thompson Center for Autism and Neurodevelopmental Disorders at the University of Missouri in 2005. "Nothing like this currently exists in Southern California, and we are absolutely committed to transforming the diagnosis and treatment of autism."

The Center for Autism & Neurodevelopmental Disorders is proud to be a founding partner and longtime supporter of ANOC.

Originally founded in 2001 (as For OC Kids), The Center for Autism & Neurodevelopmental Disorders launched in December 2012 as a home to a team of experts in the field of autism and neurodevelopmental disorders.

Our goal is to bring help and hope, and improve the lives of individuals and families.

With the commitment from our partners, we will evolve to provide:

✓ Comprehensive evaluation, diagnosis and treatment from birth to age 22 years
✓ Multidisciplinary team approach with specialists in pediatrics, psychiatry, psychology, special education, social work, behavior intervention, speech and language, occupational therapy, physical therapy and more
✓ Family support and care coordination
✓ Community educational opportunities and training
✓ Awareness and advocacy
✓ Innovative research

We look forward to the ongoing philanthropic support of our community in achieving this vision!

For more information on our programs, please visit us at www.thecenter4autism.org

Children & Families Commission of Orange County

CHAPMAN UNIVERSITY COLLEGE OF EDUCATIONAL STUDIES

CHOC Children's

William & Nancy Thompson Family Foundation

SCHOOL OF MEDICINE UNIVERSITY of CALIFORNIA · IRVINE

Hello!

My name is Linus.

I am different...

because I have Asperger's Syndrome

What is different about me:

My perceptions don't work the way they work for other people.

I can hear **better, since I hear everything**.

But I also hear worse, since I hear everything.

This means: in general I can hear very well. But in a noisy environment or when many people talk, I have a much harder time. Sometimes I can't understand anything or everything gets on my nerves.

I can see very well.

But it is extremely difficult for me to concentrate on several things at one time and to combine them in a meaningful way. Therefore, I often miss the overall view.

I can smell very well.

Unfortunately this means things smell much more strongly to me than to other people. Some smells are intolerable for me and make me extremely nervous.

Sometimes things look different for me

My skin is very sensitive.

I don't like when people touch me. It scares me a lot. I get very frightened.

Sometimes my sensations are so strong, that I can't feel anything anymore. This may sound illogical, but can you imagine what happens to a computer when its working memory is overloaded? Nothing functions anymore.

My sense of taste is also quite unusual. There are some things I can't eat because my system can't take it and others I just strongly dislike. I prefer to eat things that are familiar. I especially like hot and sour things, such as water with a lot of lemon juice. I also like potatoes and spinach as well as ice cream.

I often have problems controlling my movements and my strength.

When I run, I sometimes look odd, and other kids often make fun of me.

I think this is mean, since I can't move the same way others can.

Sometimes I am a bit clumsy.

I bump against objects and people without wanting to do so. Sometimes people think that I do it to annoy them.

Sometimes people assume that I want to annoy them.

When kids roughhouse or tickle each other, I don't always understand when it stops being fun. Since I can't judge my strength, I may hurt others without meaning to do so.

It is also really hard for me to empathize with the feelings and thoughts of others. Currently I am very interested in the Lego Star Wars figures. I can talk about them for hours. I know a lot about the figures and the spacecrafts and spend most of my time on this. It is difficult for me to understand that others are not as fascinated with Star Wars as I am.

When people communicate, there are many

unspoken rules. I have a hard time understanding these rules, and if I don't understand why they are there, I often don't follow them on purpose. One rule is that kids have to talk in a different way to adults than they do with their peers. I don't have a clue how to do this.

I also don't understand when my peers indicate that they don't want me to join their game. I cannot read their faces and their gestures.

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When clear rules have been set, it is very important to me that these rules are followed by everyone. Why would you have rules if they are not followed by everyone?

I sometimes have problems controlling my feelings.

When different sensations overwhelm me, I may lose control.

Sometimes I run away, or – worst case – feel like I have to physically defend myself. In these moments it's best to leave me alone. During a "melt down" it doesn't help to talk to me or to appeal to my common sense. Usually a melt down will subside eventually all by itself.

I need predictable, reliable settings and clear rules.

Since I am born different, it is difficult for me to understand the world. I find it especially demanding to be with groups of people. Therefore I need to know what is expected in unfamiliar or confusing settings.

You can help me by letting me clearly know what you expect from me. It is helpful when you keep promises and agreements and when you explain things I don't understand. Sometimes it's best to just leave me alone.

For further information, please contact:

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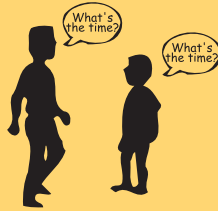
SOME EXAMPLES OF AUTISTIC BEHAVIOR
ALGUNOS EJEMPLOS DEL COMPORTAMIENTO DE PERSONAS CON AUTISMO

Avoids eye contact
Evita el contacto visual

Copies words like a parrot ("echolalic")
Repíte las palabras como un loro
("en forma de echo")

Shows preoccupation with only one topic
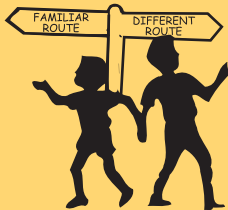Demuestra preocupación/interés en solo un tema/asunto

Lacks creative "pretend" play
Carece el juego creativo

Shows indifference
Demuestra indiferéncia

Displays special abilities in music, art, memory, or manual dexterity
Demuestra capacidades especiales en musica, arte, memoria or destreza manual

Does not like variety: it's not the spice of life
No demuestra interés en variedad

Shows fascination with spinning objects
Demuestra fascinación con objetos que gíran

Shows fear of, or fascination with certain sounds
Demuestra miedo de/ó fascinación con ciertos sonidos

Laughs or giggles inappropriately
Risa/reír inadecuadamente

Shows one-sided interaction
Demuestra interacción que es unilateral

Some Examples of Autistic Behavior
Algunos ejemplos del comportamiento de personas con autismo

- Difficulty with social interactions.
  Tienen dificultad para socializar con otras personas.
- Problems with speech.
  Tienen problemas con su lenguaje.
- Disturbed perception.
  Tienen una percepción anormal de los sucesos que acontecen a su alrededor.
- Abnormal play.
  Su forma de jugar es anormal.
- Resistance to change in routine or environment.
  Se resisten a cambios en sus actividad rutinarias ó a su medio ambiente.

Does not play with other children
No juega con otros niños