



# PSYCHOPHARMACOLOGY **EVIDENCE-BASED PRACTICES**

## Clinical Application

---

July 14, 2021



**SL Global**  
www.SLGlobalSolutions.com

### PRESENTERS

**Deborah P. Coehlo**, PhD, C-PNP, PMHS, CFLE

**Manya C. Ralkowski**, EdS, BCBA, LBA, IBA

# Housekeeping



1. Post your questions in the Questions Box. If we have time, one of our moderators will select a few to present to our panelists.
2. Downloadable tools are available in handouts. [Psychopharmacology's Resources and Tools](#)
3. If you experience technical issues during the webinar, contact GoTo Webinar directly at 1.888.537.8790
4. Please listen for 2 code words throughout the webinar. You will need to enter these in the post webinar survey in order to receive CE credits.
5. A recorded version of this webinar will be available 7 to 10 days after the live event.
6. Please complete the post- webinar survey after the webinar to receive a Certificate of Completion.
7. There will be a short quiz that is required to be completed after the webinar with a score of 80% or higher to receive CEU credit.
8. If you have any post webinar questions or comments, please send an email to [contact@special-learning.com](mailto:contact@special-learning.com).
9. This webinar is eligible for the following Continuing Education Credits: 1 Type II (BACB®), QABA® (1 General (In-Person)) or APA: 1 General (Home Study).

# Disclosures

## ❑ Relevant and Non-relevant Disclosures

- ❑ This webinar was funded in its entirety by Special Learning Global and its affiliated businesses. SL Global, Located in Menlo Park, CA is a technology company that develops content and solutions to support Behavior Analysts, Psychologists, Speech Therapists, Occupational Therapists, Educators, and other professionals who provide education and intervention to individuals with Autism and other special needs.
- ❑ This Self- study Online Webinar was created in conjunction with Deborah P. Coehlo, PhD, C-PNP, PMHS, CFLE and Manya Ralkowski, EdS, BCBA, LBA, IBA. Funding to develop and deliver this webinar was provided by Special Learning Global Solutions.
- ❑ Deborah P. Coehlo, PhD, C-PNP, PMHS, CFLE: I have the **following relevant relationships** in the products, or services described, reviewed, evaluated, or compared in this presentation.
  - Financial Relationship(s): Receive speaker fees and royalties for this webinar in recording format from SL Global.
  - Non- financial Relationship(s):
- ❑ Manya Ralkowski, EdS, BCBA, LBA, IBA: I have the **following relevant relationships** in the products, or services described, reviewed, evaluated, or compared in this presentation.
  - Financial Relationship(s): Receive honorarium fee for speaking and CEs from SL Global
  - Non-financial Relationship(s): Facilitator, panelist, and CE Coordinator for SL Global staff

# Subject Matter Expert

## Deborah P. Coehlo, PhD, C-PNP, PMHS, CFLE

Founder and Director  
Juniper Pediatrics

Dr. Debbie Coehlo is a certified Pediatric Nurse Practitioner and Pediatric Mental Health Specialist with a Doctoral Degree in Family Sciences and Human Development. She is the Founder and Director of Juniper Pediatrics, a clinic modeled after John F Kennedy's multidisciplinary system of care. Using a holistic, integrated care model, Juniper provides counseling, medication management and family therapy for children with ASD, ADHD and other childhood mental health disorders.

Dr. Coehlo completed her Master's in Nursing with a specialty in parent- child nursing. She spent 10 years working at the Child Development Center at the University of Washington in the Genetics Clinic and Multidisciplinary Clinic. In 1999, she complete her Doctorate degree in Human Development and Family Studies.

She continues to teach at the undergraduate and graduate level and had pursued research in the area of social networking, transitioning to out of home care for families, and child development.

Dr. Coehlo is a co- editor for the 4th and 5th edition of Family Health Nursing (F.A. Dais, 2010/2013) and has published several journal articles in the areas of families choosing residential care, families in transition, family health nursing, and care of children with special health care needs.



# Panelist

## Manya C. Ralkowski, EdS, BCBA, LBA, IBA

Instructional Leadership – Curriculum Specialist  
Board Certified Behavior Analyst  
Licensed Behavior Analyst  
International Behavior Analyst



Ms. Manya Ralkowski has been practicing in the field of applied behavior analysis for over 27 years. Her training began under direct education and training from consultants from the Lovaas Clinic in Los Angeles while completing her bachelor of arts in Communication Disorders with endorsements in special education and psychology at Western Washington University. Ms. Ralkowski continued her education and training with a master's degree in Education from Lesley University and a graduate certificate in Applied Behavior Analysis from the University of Washington while working as an assistant teacher on the Project DATA grant at the Haring Center-Professional Training Unit. She also possesses a doctorate degree in Instructional Leadership.

Her extensive educational and clinical background has afforded her many opportunities to build programs where there were none. Ms. Ralkowski has brought many programs and change to the PNW as a Design Team member for Seattle Public Schools creating the first STEM school for the district, a district consultant creating and replicating inclusion programs across the region, and most recently a Clinical Director, starting up a school and home-based ABA program serving 10+ districts and over 20 communities regionally.

Since 1994, Ms. Ralkowski has been creating and designing ABA programs and educational services from San Diego up the coast and into BC, Canada. She has been trained in many ABA based methodologies including PRT, DTT, NET, Verbal Behavior, Precision Teaching, PECS, and naturalistic ABA. She brings together disciplines such as ABA, special education, speech pathology, psychology, and remedial reading instruction for a comprehensive program for each student, each family, each teacher, and each school to create stronger and more inclusive communities.

# LEARNER OBJECTIVES

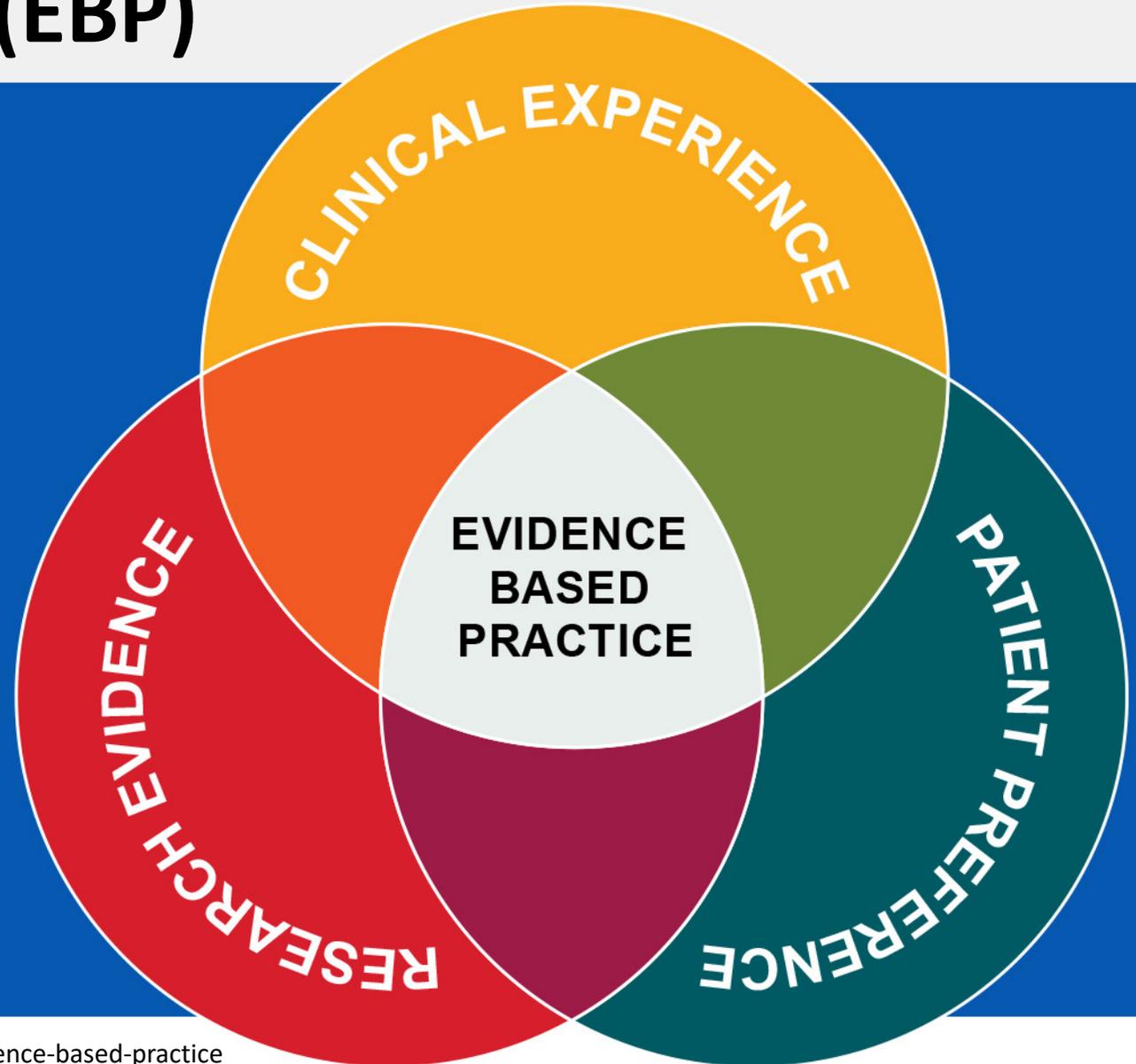
1. Explore and discuss the most effective and evidence-based strategies to treat mental health disorders in children.
2. Apply examples of evidence-based research to clinical cases.
3. Evaluate societal and cultural factors that may influence evidenced-based practices used to treat mental health disorders in children.
4. Analyze ethical issues arising when using evidenced-based practices to treat mental health disorders in children.
5. Examine approaches used to discussing evidenced-based practices with parents of children with mental health disorders.



# Evidence-Based Practice (EBP)

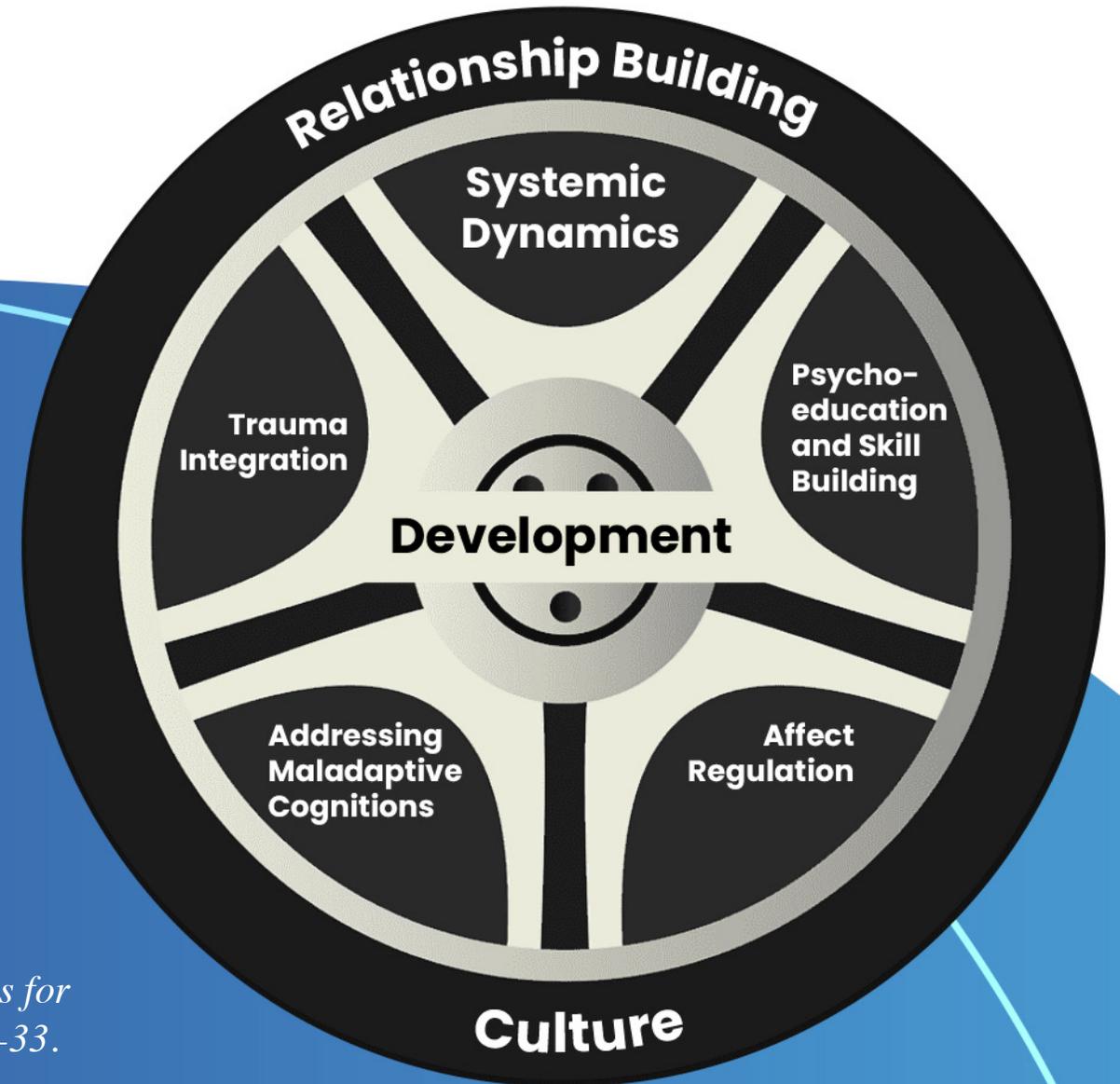
## Definition:

- Interpreting research findings and applying those findings to clinical practice using clinical decision making.
- Replacing outdated practices with new practices based on research.
- Applying EBP requires consideration of patients/ clients' unique needs and preferences



Wilson & Austria, 2021: <https://accelerate.uofuhealth.utah.edu/explore/what-is-evidence-based-practice>

# EBP Treatment Wheel



*Igelman, R. et.al. (2007). Creating more trauma-informed services for children using assessment-focused tools. Child Welfare, 86(5), 16-33.*

# CASE STUDY: Sean

## Demographics and background:

- Age: 17, low functioning ASD with property destructive tendencies, functionally non-verbal, limited leisure and adaptive skills
- High School, self-contained classroom due to behavior
- Suburban district, family has long contentious relationship with district
- Intensive home ABA program collaboration, long history of accessing ABA services
- Regular collaboration with specialty group specializing in severe challenging behaviors
- Added sub-category to Diagnosis of ASD

## FBA and BIP Process – Towards EBP

- Trigger: hearing the word "no", access restriction to preferred items, activities, people, as well being told to do something he did not want to do
- Multi-function: maintained by attention, escape, and access
- Challenging individual to work with, all team members had to be trained and retrained regularly on what words not to say to him as it would trigger severe escalations that would often result in property destruction, injured staff, and calls to 911





## Towards EBP in Behavior Strategies

### Collaboration, Teamwork, and towards EBP

- Met with specialists regularly, however; this was a consultative model, not direct services.
- The Home Program BCBA was told to try multiple schedules... but what is this? How do we do this? Where do we start?
- The specialist recommended looking up particular research studies on the implementation of Multiple Schedules, offered particular researchers and journals to turn to look for. E.g., Hanley, JABA
- After reading numerous articles and methods of implementation of multiple schedule procedures, the BCBA was able to design a program that targeted appropriate responding to "no" in a training environment and generalized settings with increased success over time

Downloadable Tool provided – article explaining Multiple Schedules

- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4892965/pdf/nihms758272.pdf>

### Overview of Procedure:

- Two schedules of reinforcement, one was "Sean's Time" and the other was "Teacher Time"
- While it was Sean's time, he could ask for things and get access to the items. While it was Teacher time, he learned that he could not ask for things but instead got heavy levels of reinforcement for following teacher time rules/activities. During teacher time, his asking for items was put on extinction with a DRO schedule
- Step increases moved him towards longer times on the Teacher Time schedule, shorter times on Sean's Time schedule to reflect more naturally occurring routines
- This was generalized to numerous settings including grocery stores, department stores, park, etc.

## SUMMARY

### EBP Used with Sean

## EBPS used in overall ABA Home program and collaboration at school:

- Antecedent Based Interventions (ABI) - multiple schedules procedure
- Differential Reinforcement (DR) - multiple schedule procedure
- Extinction (EXT) - multiple schedules procedure
- Social Skills Training (SST)
- Discrete Trial Training (DTT)
- Pivotal Response Training (PRT)
- Task Analysis (TA)
- Functional Behavior Assessment (FBA)
- Reinforcement (R+)
- Time Delay (TD)
- Modeling (MD)
- Video Modeling (VM)
- Response Interruption/Redirection (RIR)
- Visual Supports (VS)
- Scripting (SC)
- Prompting (PP)
- Functional Communication Training (FCT)
- Parent Implemented Interventions (PII)



# CASE STUDY: Social Skills Group

---

**Social Skills group:** 8 week long session, university setting, this group had been in various social skills groups together before

**Students:** 4 students, ages ranged 8-10

**Student profile:** All High functioning ASD and Asperger's Syndrome (diagnoses at the time, this was in 2005)

**Areas of concern:** Very bright students, high cognitive/IQ, main areas of concern were social skills, social communication, social interactions, social initiation, social appropriateness at school and in groups, etc.



# Towards EBP in Social Skills Group

## TREATMENT PLAN TRAJECTORY

### Assessment:

Parent interview for priorities

Social Skills Rating System (SSRS)

Social Skills checklist – university materials

Gilliam Autism Rating Scale (GARS)

### LESSON PLAN GOAL EXAMPLES:

Encouragement

Compliments

Appropriate Interrupting

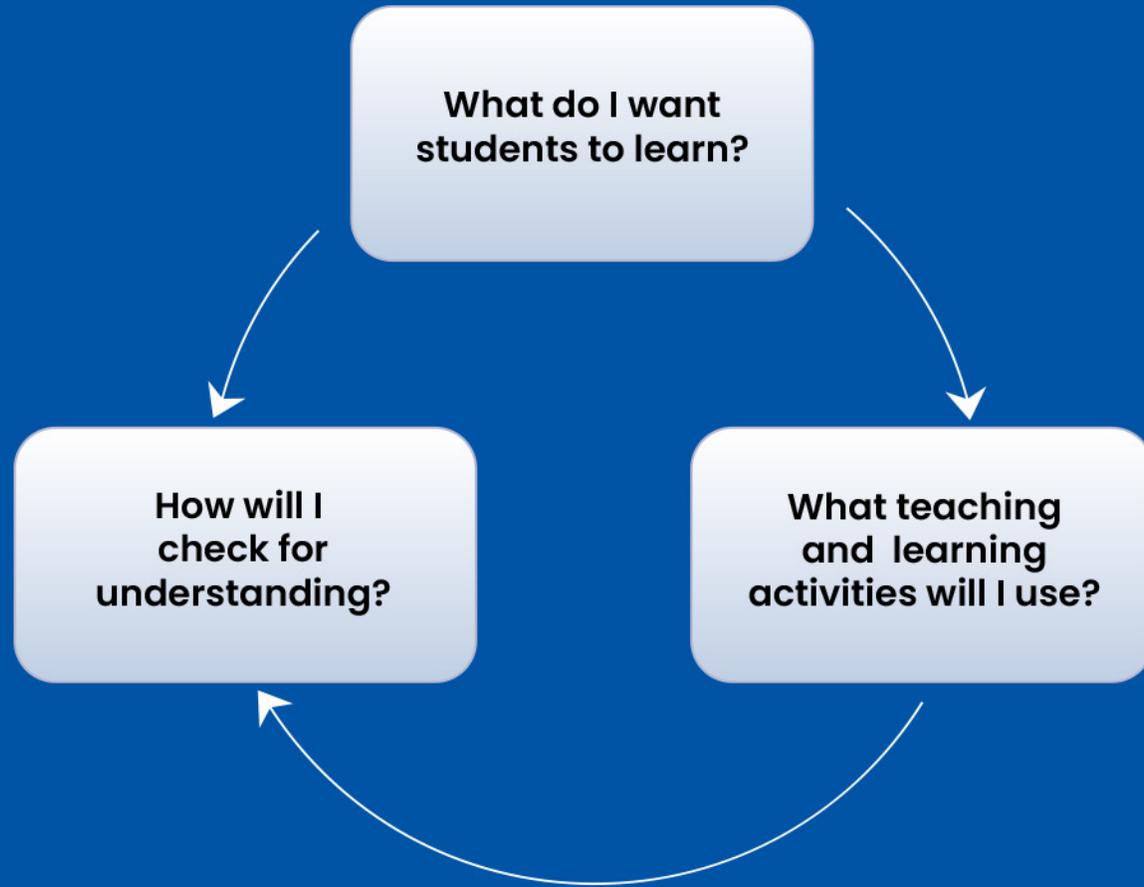
Including others

Good Listening

Asking Questions

Turn Taking in Conversations

Understanding another person's perspective



## Treatment Planning Towards EBP in Social Skills Group

**Session Structure – Literature Circles Framework to provide consistent structure and social interaction expectations:**

Each student had a role

– Art Master, Connection Master, Word Master, Theme/Plot Master

Materials used

– poems, songs, kid friendly news articles, movies, and tv shows (all students voted and agreed on genre each week)

Homework, parent sheets, parent coaching/involvement

# Toward EBP in Social Skills Group

---

## Data Collection Procedures – Evidence Based Practice:

Permanent Product

Self Evaluations - Students

Daily Behavioral Data - Teacher

## Outcomes:

---

All students increased in social interactions (more questions, initiations, statements and comments)  
All students attendance and participation improved, requested group continuation

Name:

Date: APR 26 / 2005

Buddy Topic: SD

Topic Area: ~~move~~ noise.

What did I do well during buddy circles? (asked good questions, listened actively, responded to others, supported my ideas by bringing materials to share with buddies, took a risk, compared the topic to my life, other books, or community events) Give specific examples.

listened actively  
; used news

What could I do better next time?

took a risk

# Examples of Tools Used for Social Skills Group

## Self Evaluation

# Examples of Tools Used:

---

## Self Evaluation

Name:

Date:

Buddy Topic: **move**

Topic Area:

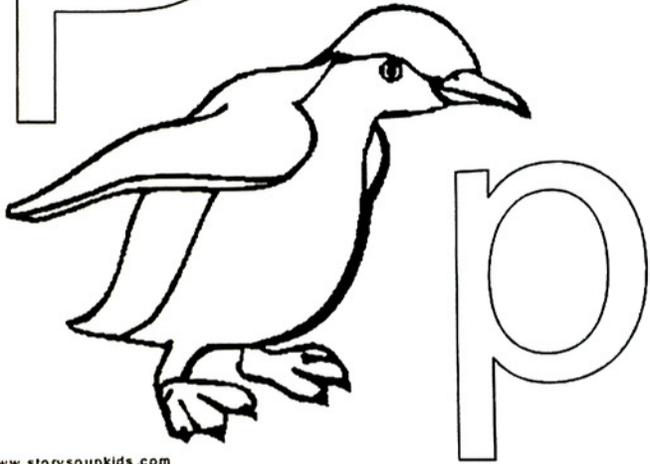
What did I do well during buddy circles? (asked good questions, listened actively, responded to others, supported my ideas by bringing materials to share with buddies, took a risk, compared the topic to my life, other books, or community events) Give specific examples.

**I asked good questions**

What could I do better next time?

**ask more questions**

P Penguin



www.storysoupkids.com

.	Q	I	Q	.	.	I	.	Q	Q
I	I	I	I	Q	I	Q	I	Q	Q
Q	.	I	Q	.	.	.	.	.	I
I	.	I	.	.	.	.	.	Q	.
.	.	I	Q	Q	Q				



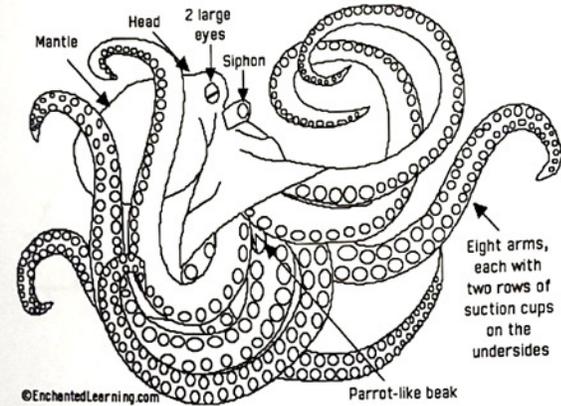
Examples of  
Tools Used:

Self  
Reinforcement

# Examples of Tools Used:

# Self Reinforcement

The Octopus



i	.	Q	.	.	.	Q	i	.	.
.	Q	.	.	Q	.	.	.	.	.

4/12/05 Surprisebox master

Sam

•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•
•	•	•	•	•					

# Examples of Tools Used:

# Self Reinforcement

# Examples of Tools Used:

# Sample Lesson Plan and Goal

## Being a Good Listener

### *Social Skills Training*

General Procedure: Discussion, role play, application

---

**Student:**

**Date Introduced:**

**Prerequisites:**

**Next Phase of Training:**

---

**Program Goal:**

Provide social skills rules and situations for the child to learn, think about, practice, and apply to real life situations.

**Materials/Set-Up:**

Social stories, peers, familiar people, social skills journal

**Procedure:**

1. Introduce the topic of discussion and encourage child to include thoughts, ideas, and definitions, examples of topic.
2. Follow the discussion with some rules, or perspective taking lines that can be “words of wisdom” for him to use when appropriate.
3. End the discussion with a pride statement that summarizes the discussion, the rules, and encouragement.

Try role playing with the student, instructor and child can change roles and then discuss feelings about it.

If possible, try it with a peer mentor for role play scenarios.

**Data Collection:**

Permanent product, parent report, child report, homework (if applicable)

**Generalization:**

The child should be able to use social skills strategies to apply to his real life situations.

Child's name:

Date:

Topic:

### Plot/Theme Master Descriptions for Parents to help in Homework for the week

*If your child is the Plot/Theme Master this week, some things you can do to help with the homework are included below. Please return this description sheet with a quick note to share with us the degree of support your child needed to complete the homework. Thank you so much for your support and feedback! ☺*

The job of the plot/theme master is to retell or summarize the buddy circles topic for the week and share his/her thoughts with the others in the group. Some things to encourage your child to include in their summaries are:

- to remember as many things as he/she can about the topic
- to remember to summarize the topic for the week
- pretend to be a detective and look for hidden messages in the topic

Things that your child can bring to emphasize what the summaries might include shows, movies, books that have similar messages or plots, remember social skills that are related to the plot, and include child's feelings as well as other people's feelings that were addressed in the topic of the week.

Encourage your child to bring these materials to the group and try to prime him/her to have at least one thing to say about the materials and maybe one question for the group.

Encourage your child to think of things that they already know about the topic, things that would like to learn about the topic, and things that they think someone in the group might know about the topic.

# Examples of Tools Used:

# Parent Description Sheets

# Examples of Tools Used:

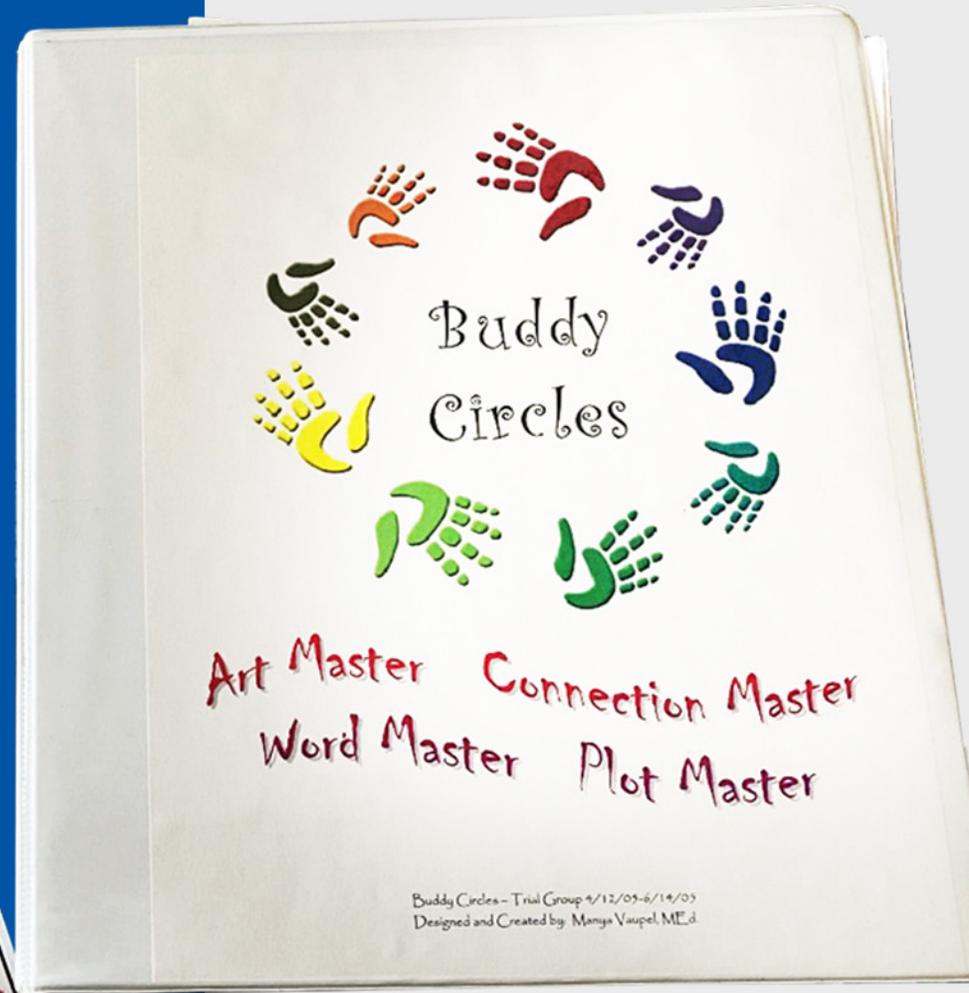
# Documentation

**Plot/Theme Master:**  
The job of the plot/theme master is to retell or summarize the buddy circles topic for the week and share my thoughts with my buddies. I have to remember as many things as I can about my topic, but I also have to summarize our topic for the week. I can also be a detective and look for hidden messages in the topic. My buddies will probably be interested in what I find.  
Things that I can bring to emphasize what I summarize and find in the topic are other similar messages, I can remind my buddies of social skills that are related, and I can think about people's emotions that were in the topic of the week. Anything I think of myself is really important to my teacher, so I have to be creative!

**Word Master:**  
The job of the word master is to keep track of words that I think sound cool, words that I don't know, and words that remind me of my buddies.  
Things that I can bring to share about my wonder words are, other books/magazines/comics that have my wonder words, make my own acronyms that define my wonder words, make my own poem that uses my wonder words, etc.  
Think of wonder words and quick questions for my buddies about my new wonder words this week.

**Connection Master:**  
The job of the connection master is to try to connect the topic of the week to my family and friend life, other things that I have read or seen or done, or even community or world events. I have to remember to think of things that the topic reminds me of and share with my buddies. My buddies will think it is pretty cool when I can connect the topic to our real lives.  
Things that I can bring to share about my connections are things from my scrap book, other books or things that are similar, or things from the newspaper or internet (as long as my parents say it is okay).

**Art Master:**  
The job of the art master is to bring other things that are related to the buddy topic to the group to share with my buddies that are considered art (pictures, paintings, sculpture (play dough and clay included), someone else's art (related toys, history, etc.), and other things that I think are related to art.  
Things that I can bring are self drawn pictures of my favorite part of the topic, other examples of the topic (comic books, figurines, sculptures [my own clay], art history of topic, etc.)  
and quick questions for my buddies about my materials.



# Towards Evidence Based Practices – Considerations

## What are Evidence Based Practices?

*"An evidence-based practice is an instructional/intervention procedure or set of procedures for which researchers have provided an acceptable level of research that shows the practice produces positive outcomes for children, youth, and/or adults with ASD." – NPDC*

- Gathering evidence
- Applying evidence considering the patient/client/family, culture, and setting
- Communicating evidence with others
- [National Clearinghouse of Autism Evidence and Practice \(NCAEP\) - 1990-2017](#)
- [National Standards Professional Development Center-Autism Spectrum Disorder \(NPDC\) - 2007-2014](#)
- [National Standards Project \(NSP\) - 2009-2015](#)
- [Autism Focused Intervention Resources and Modules \(AFIRM\)](#)

# NCAEP (2020) and NSP (2015)

## Behavioral Strategies: Evidence Based Practices for Children, Youth, and Young Adults with Autism

Evidence-Based Practices Identified (NCAEP)	Established Interventions Identified by NSP												Comprehensive Behavioral Treatment for Young Children		
	Behavioral Interventions	Cognitive Behavioral Intervention Package	Modeling	Naturalistic Teaching Strategies	Parent Training	Peer Training Package	Pivotal Response Treatment®	Schedules	Scripting	Self-management	Social Skills Package	Story-based Intervention		Language Training (Production)	
Antecedent-Based Intervention (ABI)	✓													Language training did not emerge as a focused intervention by the NCAEP. Components of Language Training (Production) overlap with NCAEP identified practices that may support language production, such as modeling, prompting, reinforcement, visual supports, and music-mediated interventions.	The NCAEP did not review comprehensive treatment models. Components of the Comprehensive Behavioral Treatment of Young Children may overlap with many NCAEP identified practices, such as discrete trial training, modeling, prompting, time delay, and behavior momentum intervention.
Cognitive Behavioral Instructional Strategies (CBIS)		✓													
Differential Reinforcement (DR)	✓														
Discrete Trial Training (DTT)	✓														
Extinction (EXT)	✓														
Modeling (MD)	✓		✓												
Naturalistic Interventions (NI)				✓		✓									
Parent-Implemented Interventions (PII)					✓										
Peer-Based Instruction & Intervention (PBII)						✓									
Prompting (PP)	✓							✓							
Reinforcement (R)	✓														
Response Interruption & Redirection (RIR)	✓														
Self-Management (SM)									✓						
Social Narratives (SN)												✓			
Social Skills Training (SST)										✓					
Task Analysis (TA)	✓														
Time Delay (TD)	✓														
Video Modeling (VM)	✓		✓												
Visual Supports (VS)	✓							✓	✓						
Augmentative & Alternative Communication (AAC)	Identified as an emerging intervention by the NSP.														
Exercise & Movement (EXM)	Identified as an emerging intervention by the NSP.														
Functional Communication Training (FCT)	Identified as an emerging intervention by the NSP.														
Music-Mediated Interventions (MMI)	Identified as an emerging intervention by the NSP.														
Technology-aided Instruction & Intervention (TAII)	Identified as an emerging intervention by the NSP.														
Behavior Momentum Intervention (BMI)	The NSP did not consider this as a category for intervention.														
Direct Instruction (DI)	The NSP did not consider this as a category for intervention.														
Functional Behavior Assessment (FBA)	The NSP did not consider this as a category for intervention.														
Sensory Integration® (SI)	The NSP did not consider this as a category for intervention.														

Table 4.3 Overlap between evidence-based practices identified by NCAEP and NSP

# Downloadable Tools

To access the downloadable tools, go to: [Psychopharmacology's Resources and Tools](#)

1. [What is Evidence-Based Practice?](#)
2. [Article Literature Circles to Teach Language Development](#)
3. [Article in Academic Performance And Methylphenidate](#)
4. [Article in Autism and Medications](#)
5. [Article in Clinical Practice Guideline \(AAP\)](#)
6. [Article in Evidenced-Based Practice In Mental Health](#)
7. [EBP Report 2020 Table 4.3](#)
8. [EBP Self Assessment Tool 10-2017](#)
9. [Evidence-Based Practice \(EBP\)](#)
10. [Multiple Schedules of Reinforcement](#)
11. [NCAEP Report Table3.1 - EBP List](#)
12. [The EBP of ABA](#)

# SUMMARY



# References



Goel, R., Hong, J. S., Findling, R. L., & Ji, N. Y. (2018). An update on pharmacotherapy of autism spectrum disorder in children and adolescents. *International Review of Psychiatry*, 30(1), 78–95. <https://doi-org.ezproxy.proxy.library.oregonstate.edu/10.1080/09540261.2018.1458706>

Hoagwood, Burns, Kiser, Ringeisen, & Schoenwald. (2001). Evidence-based practice in child and adolescent mental health services. *Psychiatric Services*, 52 (9), 1179-1189.

Igelman, R. et.al. (2007). Creating more trauma-informed services for children using assessment-focused tools. *Child Welfare*, 86(5), 16-33.

Kortekaas-Rijlaarsdam, A. F., Luman, M., Sonuga-Barke, E., & Oosterlaan, J. (2019). Does methylphenidate improve academic performance? A systematic review and meta-analysis. *European Child & Adolescent Psychiatry*, 28(2), 155–164. <https://doi-org.ezproxy.proxy.library.oregonstate.edu/10.1007/s00787-018-1106-3>

Skale, G., Perez, H., & Williams, M. E. (2020). Factors Influencing Implementation of Evidence-Based Mental Health Interventions for Infants and Young Children. *Journal of Behavioral Health Services & Research*, 47(4), 493–508. <https://doi-org.ezproxy.proxy.library.oregonstate.edu/10.1007/s11414-020-09694-5>

Wolraich ML, Hagan JF, Allan C, et al. (2019). AAP SUBCOMMITTEE ON CHILDREN AND ADOLESCENTS WITH ATTENTION-DEFICIT/HYPERACTIVE DISORDER. *Clinical Practice Guideline for the Diagnosis, Evaluation, and Treatment of Attention-Deficit/Hyperactivity Disorder in Children and Adolescents. Pediatrics*. 144(4):e20192528

# Acknowledgements

Thank you for attending Special Learning's  
**Psychopharmacology and Evidence-Based Practices**

*Thank you to our exceptional group of subject matter experts and panelist for providing us with an exceptional learning experience!*

**Ronald T. Brown, PhD, ABPP**

**Deborah P. Coehlo, PhD, C-PNP, PMHS, CFLE**

**Manya C. Ralkowski, EdS, BCBA, LBA, IBA**

*Thank you to the wonderful Special Learning team members without whom our experience would be greatly diminished (or just plain disorganized!)*

**Manya C. Ralkowski, EdS, BCBA, LBA, IBA (SL Clinician)**

**Michelle L. Zube, MAT, BCBA, LBA (SL Clinician)**

**Michelle Capulong (Director of Operations and Client Support Manager)**

**Manilyn Suva (Operations Support)**

**Sofia Natividad (Marketing Support)**

**Sasho Gachev (Creative Director)**

# OTHER WEBINARS IN THIS SERIES

- [Overview of Psychopharmacology and Childhood Disorders \(Recorded\)](#)
- [Psychopharmacology and ADHD: April 14, 2021 \(Recorded\)](#)
- [Psychopharmacology and Autism: May 12, 2021 \(Recorded\)](#)
- [Psychopharmacology and Mood Disorders: June 9, 2021 \(Recorded\)](#)
- [Psychopharmacology and Evidence-Based Practices: July 14, 2021](#)
- [Ethics of Medication: August 11, 2021](#)
- [Psychopharmacology: Diagnosis and Assessment: September 8, 2021](#)

