

Exploring Behavior Supports



Stacie Rulison, Facilitator



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Welcome!

Your Name 

↓

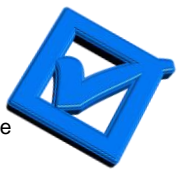
One thing you hope to get out of this session 




2

Today

- Applied Behavior Analysis (ABA) and Positive Behavioral Interventions and Support (PBIS)-Similarities and Differences
- Behavioral strategies at school and home
- Group and individual strategies
- Review of education examples



Note: Michigan Alliance for Families does not endorse any single evidence-based practice





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Objectives

Gain a better understanding of:

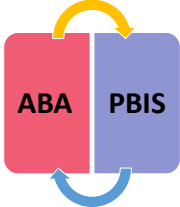

- Relationship and features of ABA and PBIS
- Group and individualized strategies at school
- Individualized strategies for home or school

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ABA and PBIS



Definitions, Practices & Relationship

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Positive Behavioral Intervention and Support (PBIS)



- Derived from principles of behavior and ABA
- System and team-based framework used in educational settings
- Multi-tiered system of *prevention* of behavior, developing pro-social skills, and data-based problem solving
- Increases capacity of schools to educate all students using research-based schoolwide, classroom, and individualized interventions
- Fidelity of implementation of the system (policies, team structures, data systems, funding, etc.) needed for effectiveness

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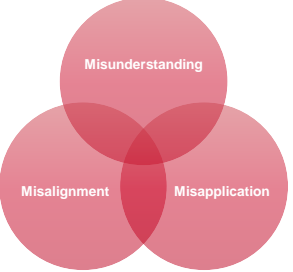
PBIS in Practice

All students receive behavioral supports at the universal, targeted, and/or individualized student levels based on the intensity of their needs (Sugai & Horner, 2006).





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PBIS Challenges
Impacts successful implementation




Tyre et al., 2021




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PBIS Challenges

- **Misunderstanding:** it's one more curriculum; not rewarding for expected behavior; they should behave
 - Lack of understanding of what it is
- **Misapplication:** feeling of futility; practices are not applied correctly, incompletely, or with low fidelity ("we can't send anyone to the office")
 - Lack of knowledge on how to implement
- **Misalignments:** of philosophy of the essence of the framework and personal beliefs; discipline is needed to correct the behavior
 - Lack shared beliefs and ongoing dialogue is needed about shared beliefs; assure assumed misalignments are not misunderstandings or misapplications



Tyre et al., 2021




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Addressing Challenges





- Staff engagement in the change process
- Assure understanding of all elements and rationale of the framework
- High quality professional development
- Effective and regular communication

Tyre et al., 2021

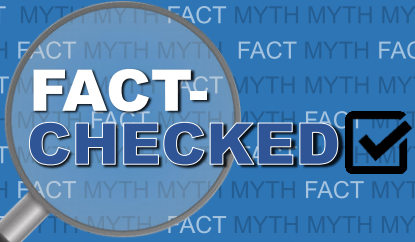


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Applied Behavior Analysis (ABA): Fact or Myth?

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Can you sort fact from myth?

LET'S PLAY >

12

HOW TO PLAY

Can you sort myth from fact from?

For each statement, decide whether the information is **FACT** or **MYTH** and respond on the poll that is presented!

LET'S PLAY >

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FACT!

ABA can be implemented anywhere

At home, school, work, in the community!

SHOW ANSWER

BACK < **NEXT >**

14

MYTH!

Discrete trial teaching should be done at a table to be done well

DTTs can be facilitated across settings, including in groups

SHOW ANSWER

BACK < **NEXT >**

15

MYTH!

ABA is only for young children

It can be used with any age to teach skills or change behavior.

BACK < NEXT >

SHOW ANSWER

16

FACT!

ABA works for people with or without autism

ABA programming can work with anyone, but because of how people with autism learn, this approach works well.

BACK < NEXT >

SHOW ANSWER

17

MYTH!

All ABA programs are the same

NO! This should not be the case. Every person should be assessed and individualized programming should be the focus.

BACK < NEXT >

SHOW ANSWER

18

FACT!

ABA strategies can be implemented in group settings

Absolutely, It can be implemented individually and in groups

BACK < NEXT >

SHOW ANSWER

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FACT!

ABA involves using viable assessment tools, a curriculum, and tracking progress

YES! It is important to do baseline with skills and set incremental goals based on individual need

BACK < NEXT >

SHOW ANSWER

20

MYTH!

ABA procedures are complicated and cannot be implemented in schools

Many procedures are already being implemented through good teaching and the use of PBIS

BACK < NEXT >

SHOW ANSWER

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FACT!

Discrete Trial Teaching (DTT) can be implemented effectively in groups and individually

Yes! It can! Schools are doing this today.

BACK < NEXT >

SHOW ANSWER

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MYTH!

ABA does not consider the independence of the person

ABA programming is about promoting the greatest independence possible by working on socially significant goals!

BACK < NEXT >

SHOW ANSWER

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FACT!

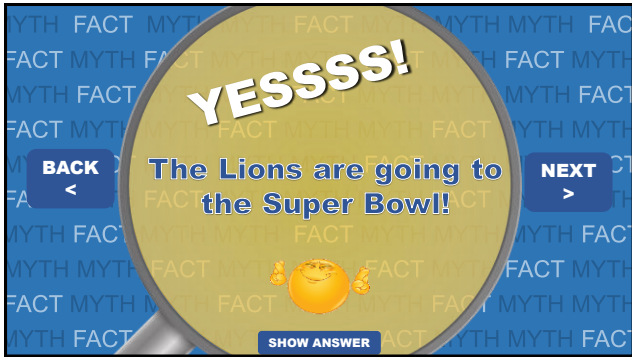
ABA goals CAN BE in the IEP

Yes, if the IEP Team feels it is needed to access general education

BACK < NEXT >

SHOW ANSWER



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Applied Behavior Analysis (ABA)

- Science of behavior change and learning
- Where psychology and education come together
- Relationships between our environment and behavior (ex. coffee!)
- Principles help to teach and increase new skills and decrease challenging or interfering behaviors
- Applies principles via interventions developed and data-based decisions
- Collaborative-not a standalone service
- Individualizes-creating chains of behavior


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ABA Quick Overview


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Pillar of ABA



To improve *socially significant* behaviors



(Baer, Wolf, Risley 1968)



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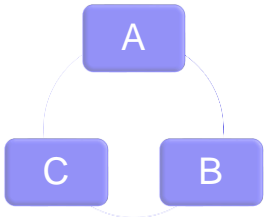
Socially Significant


- Skills or behaviors are important to the individual
- Individual and family input is very important to determining skills to work on

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3-Term Contingency

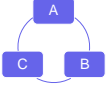





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3-Term Contingency

Interactions occur all day in classrooms, at home, in the community, everywhere...



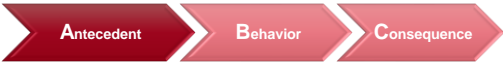


- **Antecedent:** what happens right before the behavior
- **Behavior:** what the individual does
- **Consequence:** what happens right after the behavior (e.g., a thank you, a break, a look, etc.)



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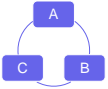
3-Term Contingency

Most basic behavior relationship






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3-Term Contingency

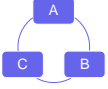


- Group examples used in school:
 - **Antecedent:** teacher says, "If you are wearing a red shirt, stand up and go get your coat"
 - **Behavior:** All kids with red shirts get up and get their coats
 - **Consequence:** teacher says, "great listening students with red shirts!"




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3-Term Contingency

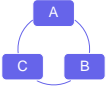


- Group examples used in school:
 - **Antecedent:** teacher says, "what is this?"
 - **Behavior:** Student raises his hand and says "it's a calendar"
 - **Consequence:** teacher says "yes, it's a calendar"! And hands him a token




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3-Term Contingency

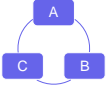


- Group or individual examples used in school:
 - **Antecedent:** teacher says, "what goes on my head?"
 - **Behavior:** Student says "hat!"
 - **Consequence:** teacher says "yes, that's right, a hat! Great answer!"




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3-Term Contingency



- Group or individual examples used in school:
 - **Antecedent:** teacher says, "who finished their algebra homework?"
 - **Behavior:** 20 hands go up
 - **Consequence:** teacher says "well done, class. If you did not get your homework done, please see me at lunch time!"



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3-Term Contingency

- Individual example at home:
 - **Antecedent:** parent says, "what will happen if you miss your ride to your work experience?"
 - **Behavior:** teen says "I will wait for the next bus that comes 10 minutes later"
 - **Consequence:** parent says "yes, perfect, and text your boss to let him know you will be there late".

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3-Term Contingency

- Group or individual examples used at home:
 - **Antecedent:** mom asks, "did you finish folding laundry?"
 - **Behavior:** Daughter says, "I did mine and yours!"
 - **Consequence:** mom says "awesome, you get 15 extra minutes tonight of computer time"! And gives her a thumbs up.

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Reinforcement Matters-*A LOT*

- Critical to behavior change
- Shape behavior through reinforcement
- Harder the skill being taught, the more important it is
- Humans and all living things respond to reinforcement

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Reinforcement



Essential for behavior change...



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Reinforcement Effectiveness



- **No/limited access:** the longer without it the greater the value
- **Immediate:** sooner=more effective
- **Valuable:** important to the person; harder skill=provide stronger reinforcer
- **Conditional:** ONLY given when the behavior occurs

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Use Interests!

- Increases motivation
- Less contrived
- Natural approach






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ABA is Evolving...

ABA continues to evolve with procedures and as a treatment

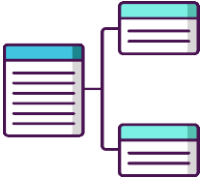
- Play- and interest-based, natural settings, family-focused
- Individualized and learning adaptable to group settings


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ABA & PBIS Relationship

- PBIS evolution in ABA, advanced in the late 80s from leaders in the behavior analytic community (e.g., Rob Horner, Ted Carr)
- Dr. Rob Horner, former co-director of Center on PBIS, former associate editor of Journal of Applied Behavior Analysis (JABA) and Journal of Positive Behavior Interventions (JPBI) and contributor to specific PBIS language in IDEA in 1997)



Matthews & Dyer, ABA in Schools, 2021



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ABA & PBIS School Strategies

ABA


- Focus is on individual behavior change
- Implementation 1-1 or in groups

PBIS

- System: implement with all students (Tier 1-universal)
- Small Groups (Tier 2)
- Individualized intensive intervention (Tier 3)



Matthews & Dyer, ABA in Schools, 2021



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Behavior Strategies in Schools

Continuum of Practices




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Maximize Teaching Time

- More active engagement
- Teaching techniques should increase active responding
- Observable responses- we can see what students are thinking by responses
- High impact techniques are important for behavior change



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ABA School Based Assessments

- FBA: functions of behavior and interventions
- Ecological Assessment: functioning in different school environments (physical factors, seating, subjects, what peers are doing in those settings; new behavior targets can be set)
- Skill-based assessments (common)
 - Measure skillsets in certain areas (e.g., cognitive, social, adaptive, etc.)
 - Can facilitate IEP goals
 - Types:
 - Verbal Milestones Assessment and Placement Program (VB-MAPP)
 - Assessment of Basic Language and Learning Skills, Revised (ABLLS-R)
 - Assessment of Functional Learning Skills (AFLS)

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ABA Assessment Tools

The collage features several key documents: a large 'Assessment of Basic Language and Learning Skills - Revised' table with columns for 'Skill', 'Skill Name', 'Skill Objectives', 'Directions', 'Examples', and 'Criteria'; a 'VB-MAPP' manual cover; a 'VB-MAPP-CE' manual cover; and various spreadsheets and smaller charts related to these assessments.

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Range of ABA Supports & Services in Schools

- PBIS-Schoolwide models of support
- Classroom supports and strategies
 - Common ABA strategies used in teaching and to enhance teaching
 - Group strategies to benefit the whole and individuals
- Individual Support
 - Pullout for intensive 1-1 teaching then transition back to the classroom
 - Push-in teaching in group settings (preferred)

The pyramid diagram consists of three horizontal sections. The top section is red, the middle section is yellow, and the bottom section is green. The pyramid is positioned to the right of the text.

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Best Practice: Classroom Supports

- Utilize strategies that work for all students (universal)
 - Rules and expectations: 3-5 clear and simple rules
 - Visual supports and schedules
 - Group reinforcement system
- ABA can be **more deeply** included in routines and teaching
 - Direct instruction
 - Additional 1-1 support (tier 3)
 - Group and individual teaching strategies
 - Group and individual reinforcement systems: tied to success of individual or group

The image shows a male teacher in a white shirt and tie pointing at a chalkboard. The chalkboard contains several mathematical equations, including $(ax+by)^2 = (ax+by)(ax+by)$, $(x+y)^2 = x^2 + 2xy + y^2$, $(x-y)^2 = x^2 - 2xy + y^2$, and $(x+y)(x-y) = x^2 - y^2$.

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Individualized Behavioral Teaching Strategies

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Individualized ABA Supports

- Can be used at home or in school
- Being proactive to deter a behavior (antecedent strategies)
 - Visuals (checklists, schedules, calendars, etc.)
 - Token systems
 - Contingency maps
 - Behavioral momentum
 - Others



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Visuals


- Visual Schedule-modified for individual


MONDAY - THURSDAY

- 8:00 - 8:20 Arrival/Warmup
- 8:25 - 8:40 Vocabulary
- 8:45 - 9:30 Specials
- 9:30 - 9:40 Restroom
- 9:45 - 10:55 Math
- 10:00 - 10:05 Grammar
- 10:15 - 1:25 Spelling
- 1:40 - 1:25 Lunch/Recess
- 1:30 - 1:30 Reading
- 1:35 - 2:00 Writing Workshop
- 2:05 - 2:50 Read Aloud/Handwriting
- 2:50 - 3:00 Pack Up/Dismissal

- Recess
- P.E.
- Free Choice
- Brain Break
- Morning Work
- Surprise Activity
- Health
- Pack Up
- Art
- Dismissal
- Silent Reading
- Calendar





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Visuals

- Visual Schedule-modified for the individual

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Visual

- Video:** visuals used by a speech pathologist

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Token Systems


- Reinforcement system-student earns token for correct responses or behavior they can exchange for reinforcers
- Highly individualized
- Visual incentive
- Only earn the token for the desired behavior

I am working for


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Token Systems


Apps



Select from Token image library or add your own



Money is a token. Money itself does not have worth; it has value because it can be EXCHANGED for things we want and need (food, shelter, entertainment, etc.) which are called back-up reinforcers. Amount we are willing to spend on items depends on how much we value the item




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Token Systems

- Tokens must have value enough to work for them, and motivated to work toward exchanging them for something of personal value.
 - 5 tokens and get iPad time
 - 5 tokens and jump on the trampoline for 15 minutes
 - 10 tokens and get to go to McDonalds
 - 10 tokens and 1/2 hour break
 - Earn \$500 to buy a new phone

Video

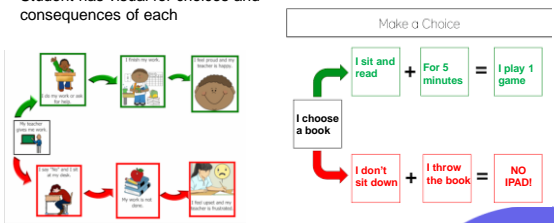


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Contingency Maps

- Student has visual for choices and consequences of each



Make a Choice

I sit and read

+

For 5 minutes

=

I play 1 game

I don't sit down

+

I throw the book

=



NO IPAD!

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Behavioral Momentum



- Use easy requests followed by a more difficult request (called high or low probability requests)
- Give 3 to 5 requests: High 5, touch your nose, turn around clap your hands, wiggle your fingers, stomp your foot, shake your head, etc.
 - Follow with a more difficult task, behavior, request: say my name
- Give verbal or gestural praise for each correct answer (high 5, thumbs up, "awesome" (provides opportunity to give positive feedback!)
- Reduce (fade) requests which will likely be answered correctly

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Behavioral Momentum

- Video example and non-example of - Behavioral Momentum (Iris Center)

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Behavioral Teaching Strategies for Groups and Individuals

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Behavioral Strategies for Groups and Individuals


- Students can learn and disruptive behaviors can be reduced using effective classroom strategies
- Behavioral principles can be applied in group or individual settings
- Alternate to "pull out"
- Group and Individual ABA Strategies
 - Choral Responding
 - Response Cards
 - Guided Notes

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Capitalizing on Available Time

- Available time-school days: 180-185; hours: 1080 hours of instruction
 - Not all time is for instructions (lunch, recess, transitions, wellness checks, etc.)
 - Engaged time: need many opportunities to respond in class of 25-30 (1 out of 30)
 - Group based interventions provide more targeted support

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Strategies for Behavior at School


Examples:

- Language and communication
- Memory and focus
- Self-regulation skills
- Self-management and self-monitoring skills
- Engagement skills
- Independence skills
- Adaptive skills




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Choral Responding




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Choral Responding

- **Addresses challenges:** maintaining class attention; giving enough opportunities to respond; provide individualized feedback for student's responses; monitor each students learning; prevent and deal with disruptive behavior
- **ABA strategy:** Students respond out loud together to questions, problems, or item presented by the teacher; whole group and individual component; intersperse individualized questions to specific students


(Messenger et al., 2017; Twyman & Howard, 2018)




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Choral Responding

- Research supports less off-task and disruptive behavior compared to individual responding
- Increased likelihood of correct responses (from practice)
- Positive relationship between choral responding, on-task behaviors, correct responding for all students, with and without disabilities
- Greater maintenance of skills



Cihak et al., 2006; Twyman & Howard, 2018



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Example

Video-choral responding in a classroom



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Response Cards



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Response Cards

- Used in the classroom for whole class responding
- Cards, signs, etc. students hold up at the same time
- Can alternatively use small white board
- More effective than traditional hand-raising, with one student responding (one student understands)
- Promotes entire class engagement and demonstration of knowledge
- Used with any age and can be modified to fit context




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Using Response Cards


- Cards should face teacher
- Can learn from peers and following lead
- Some students may need prompting
- Recognize by responses if a student is struggling
- Reinforce immediately for correct responses/attempts and provide correct response and come back to the question
- Effort to create and may be a cost
- Math, calendars, receptive skills, vocabulary, etc.
- Energetic pace

wh



ph






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Research and Response Cards

- Research supports increased levels of engagement and correct responding by all students
- Allow more active participation by all students, including those with more complex disabilities
- Infused ABA techniques in implementing response cards (prompting, visuals, reinforcement)
- Opportunity for decreased challenging behaviors due to being more actively engaged

Bondy & Tincani (2018)



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Types of Cards

• Cards for variety of questions (multiple choice, true/false, yes/no, sequencing,)

STUDENT CHECK FOR UNDERSTANDING CARDS

DIFFERENT TREATS!

I AM GOING TO GET IT!

I GOT IT!

NO!

YES


NO



T F

Y

PUT THE FOOD INTO THE ORDER THAT THE CATERPILLAR ATE IT ON SATURDAY

FIRST	SECOND	THIRD	FOURTH	FIFTH
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>



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Example

Video using Response Cards in Secondary Education

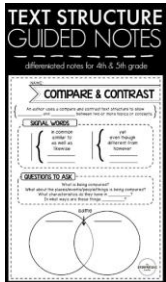


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Guided Notes



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Guided Notes

- Handouts guiding students through lessons with background information
- Provide visual cues where to note important facts, points, relationships
- Way to organize thoughts
- Important information is left blank to encourage listening, thinking, following along, responding



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Guided Notes

• Examples

Types of Verbs notes

1. What are verbs?

2. Give an example of each type of verb.

3. Write the name of each verb.

4. Write the type of each verb.

5. Write the meaning of each verb.

6. Write the part of speech of each verb.

7. Write the tense of each verb.

8. Write the voice of each verb.

9. Write the mood of each verb.

10. Write the number of each verb.

11. Write the person of each verb.

12. Write the gender of each verb.

13. Write the case of each verb.

14. Write the degree of each verb.

15. Write the force of each verb.

16. Write the quality of each verb.

17. Write the quantity of each verb.

18. Write the value of each verb.

19. Write the use of each verb.

20. Write the sign of each verb.

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16. Write the quality of each verb.

17. Write the quantity of each verb.

18. Write the value of each verb.

19. Write the use of each verb.

20. Write the sign of each verb.


Kyle

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Example

Video using guided notes in education



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Behavior Skills Training (BST)

1. Teach

2. Model

BST

3. Rehearse

4. Feedback and coach



- Used to teach new skills
- Promotes acquiring skill
- Research supported

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Challenges with ABA in School



- Similar to PBIS
- Insurance will not cover
- Behavior consultants from outside
- Assuring enough individualized programs-time
- Required training in behavior

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Case Study

Katie

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Case Study 1: Helping Katie Communicate

Background: Katie is an 8-year-old in a third grader in Ms. Miller's class.

Description of Target Behavior: Tantrumming


Operational definition: Katie screams "no, no, no" in a loud voice; falls to the ground and hits the ground with her feet and hands, she moves her body by lurching back and forth.

ABC Data Collection: averaging 8-10 tantrums per day

Interview with parents: behavior sometimes occurred at home when things were hard for her

Action: Ms. Miller collected ABC data and work with a behavior specialist on the data she collected

Current intervention: removal of tangible or activity




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Case Study 1: Helping Katie Communicate

Katie enjoys activities that involve numbers and letters; reading picture books; and playing with animals and blocks. Katie's **communication skills have been slow to develop**. There have been many attempts to encourage her to speak more in class. (Can't do or won't do?)

An additional concern has been an **increase** in episodes of disruptive behavior. When Katie doesn't get a toy that she wants or when she is asked to share a toy or activity with others, she tends to **tantrum and scream** at other children. When these behaviors happen, Katie's **peers get upset and run away from her**, and Ms. Miller **takes her toy away**. This outcome often makes Katie's tantrums **worse**.

Ms. Miller has noticed when Katie gets the toy she wants or is allowed to play alone, she does not exhibit these kinds of behaviors. Ms. Miller has also noticed that Katie's tantrums occur at times when she is **asked to do something that is hard for her**.



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Case Study 1: Helping Katie Communicate

After several observations through a functional behavior assessment (FBA), Ms. Miller found when Katie was required to share a preferred toy or activity, she was unable to communicate her frustration. Instead, Katie communicated her frustration through tantrums and screaming.

Ms. Miller also found that Katie's tantrums were more **severe** when she was **not given a prompt** or advance warning that she would need to share a toy or play with something different.

Ms. Miller and Katie's parents met to discuss her strengths and communication skills. They agreed that Katie's verbal communication was slow in developing so, at first, an efficient form of communication should involve something visual, such as a cue card, to support her speech. Although everybody wanted to encourage Katie's speech, they decided to take advantage of her **interests** in the alphabet and early reading.

The **initial replacement** skill would be cue cards that Katie could hold up to indicate her requests for assistance in obtaining a toy or completing a difficult activity. At the same time, Katie would be encouraged to use her speech for the same purpose.




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Case Study 1: Helping Katie Communicate

Based on the FBA, Ms. Miller and Katie's parents decided to use **Functional Communication Training (FCT) as an intervention** to help Katie.

- Began the intervention during playtime, when Katie was having the most difficulty.
- Because Katie tended to exhibit challenging behavior most frequently when she was unable to play with a favorite toy or when asked to share toys with peers, Ms. Miller **modeled** and **rehearsed** with Katie how to use the cue cards during playtime.
- Ms. Miller paid close attention to Katie during the first few sessions. Katie was given cue cards that said, "I need help," and "I want a new toy."
- Katie's peers and all the adults in the classroom were informed about what the cards meant. When Katie held up a card, she was asked what she wanted, and the request was honored. If Katie started to fuss, Ms. Miller stepped in and **prompted** Katie to use her card. At the same time, she urged Katie to use speech to make the same request (although she did not insist on the request being spoken).
- The goal was to teach Katie that using the cards to communicate (**replacement**) was easier and worked more efficiently than exhibiting a challenging (tantruming) behavior.




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Case Study 1: Helping Katie Communicate

Teaching FCT: used for aggression, tantrums, destructive behavior, self-injurious behavior, elopement, etc.

1. Conduct an FBA (tangible)
2. Select form of communication: Non-verbal (visuals)
3. Choose the replacement behavior: FCT (to get access to tangibles through FCT)
4. Entire team should be familiar and support
5. Use most to least prompting hierarchy
6. Reinforce replacement behavior (FCT) and fade reinforcement
7. Remove reinforcement for tantrumming behavior
8. Set up practice opportunities
9. Shape as needed (start with single word, and increase communication chain)
10. Monitor and take data
11. Determine new goals and next steps


Maich et al. (2016); Dutton, 2011



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- ABA is where the fields of teaching and psychology come together
- ABA strategies are currently used every day in education
- ABA strategies can be implemented individually and in groups
- ABA field has an expanded focus on teaching in groups
- Interventions used in school are considered evidence based and work effectively *when implemented well*

Parting Thoughts



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Research & Citations

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