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Assistive Technology for Behavior: Evidence-Based Strategies for Engagement, Regulation, and Belonging

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INDIANA DEPARTMENT *of* EDUCATION

Learning Objectives

By the end of this presentation, participants will be able to:

1. **Identify** at least 3 characteristics specific to emotional disability within K-12 environments.
2. **Demonstrate** how at least 3 AT tools can support students with behavioral needs by promoting regulation, communication, and/or independence.
3. **Recommend** 2 appropriate AT tools for increasing access and engagement in the classroom given an example student scenario.
4. **Describe** 3 practical strategies to integrate AT into daily routines for all learners.

In This Presentation

1. Intro to Behavior in K-12 Classrooms
2. Positive Behavior Support
3. Unpacking Behavioral Antecedents
4. Closing Thoughts and Q & A

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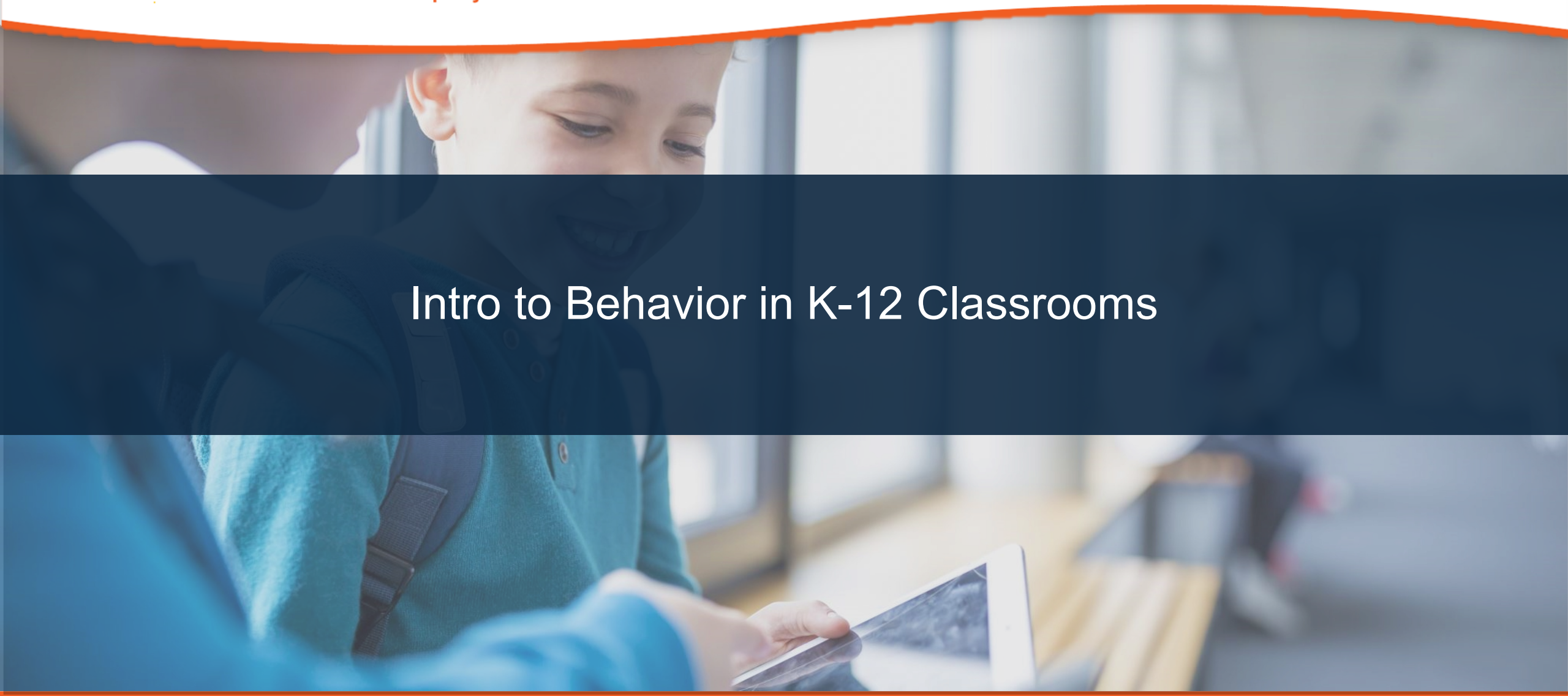


Intro to Behavior in K-12 Classrooms

Emotional Disturbance under IDEA (34 CFR §300.8(c)(4))

A student may be eligible for services under **Emotional Disturbance** if they exhibit **one or more** of the following characteristics **over a long period of time** and **to a marked degree**, which **adversely affects educational performance**:

- Inability to learn not explained by intellectual, sensory, or health factors
- Inability to build or maintain satisfactory interpersonal relationships with peers and teachers
- Inappropriate types of behavior or feelings under normal circumstances
- A general pervasive mood of unhappiness or depression
- A tendency to develop physical symptoms or fears associated with personal or school problems

Emotional Disability under Article 7 (511 IAC 7-41-7)

In Indiana, a student may be eligible for services under **Emotional Disability (ED)** if they exhibit **one or more** of the following characteristics **over a long period of time** and **to a marked degree**, which **adversely affects educational performance**:

- Inability to learn not explained by intellectual, sensory, or health factors
- Inability to build or maintain satisfactory interpersonal relationships with peers or adults
- Inappropriate types of behavior or feelings under normal circumstances
- A general pervasive mood of unhappiness or depression
- A tendency to develop physical symptoms or fears associated with personal or school problems

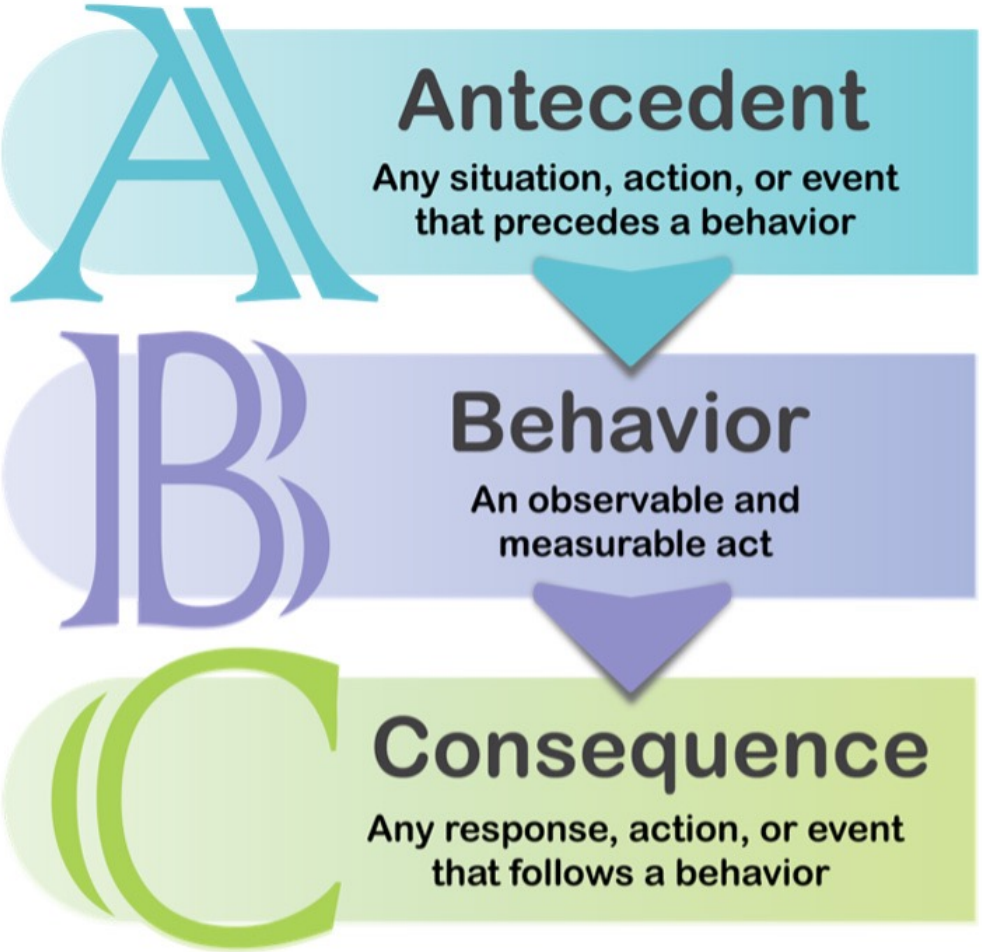
Talking About Student Behavior

- Behavior is a form of communication.
- Exhibiting negative behaviors does not automatically qualify a student for special education services.
- Behaviors may be disruptive primarily to the student exhibiting the behavior (e.g., student puts their head down on the desk for an extended amount of time) or disruptive to other students as well (e.g., student throws items in the classroom).
- While many behaviors may be managed sufficiently through typical classroom supports, more severe or disruptive behaviors may require additional intervention.

The ABC Model of Behavior

The ABC Model is a common framework for analyzing behavior built around antecedents, behaviors, and consequences.

- **Antecedent:** What happens before a behavior.
- **Behavior:** An observable and measurable act.
- **Consequence:** What happens after the behavior.



(IRIS Center, 2025)

Antecedent	Behavior	Consequence
A teacher assigns the class a worksheet to complete independently.	The students complete the assignment.	The teacher gives the students a token based on the classroom reward system.
A student is playing with a peer at recess.	The student refuses to share a ball with a peer.	The peer walks away and plays with someone else.
A student is working on a writing assignment when their pencil breaks.	The student sharpens their pencil.	The student continues writing.
A class of students is taking a multiple-choice exam.	One student copies the answers from a neighbor's exam.	The teacher takes the student's exam and assigns a failing grade.

(IRIS Center, 2025)

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Positive Behavior Support

Positive Behavior Support (PBS)

Positive Behavior Support (PBS) is an evidence-based practice for reducing challenging behaviors and improving student outcomes.

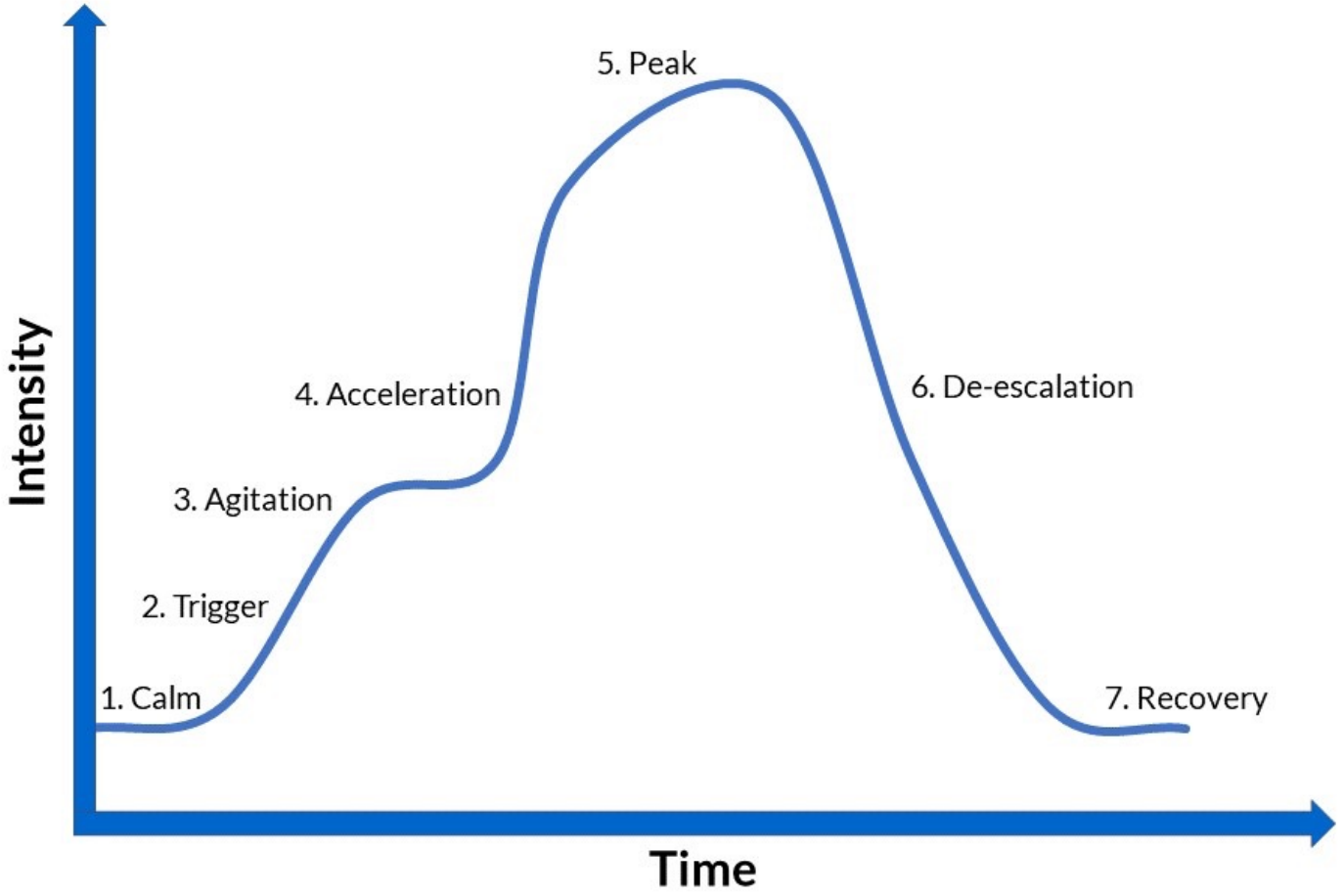
Core features include:

- Functional Behavioral Assessment (FBA) to identify behavior functions and triggers
- Proactive antecedent modification to prevent problem behaviors
- Teaching the student replacement skills and coping strategies (e.g., communication, self-management)
- Positive reinforcement and contingencies based on the student's behavior
- Systems-level change (i.e., team collaboration to ensure consistency and fidelity)

Escalated Behavior

In students with emotional disability, behavior often follows the escalation cycle:

1. Calm
2. Trigger
3. Agitation
4. Acceleration
5. Peak
6. De-escalation
7. Recovery



Adapted from *Appropriate Responses to the Seven Phases of the Escalation Cycle* (Colvin 2004)

How Can Assistive Technology Facilitate Positive Behavior?

Assistive technology (AT) may be utilized to reduce the likelihood that a given antecedent will result in a negative behavior. Appropriate AT may help with:

- Communication breakdowns
- Unclear expectations
- Academic frustration or skill mismatch
- Difficulty transitioning
- Sensory overload
- Social situations

AT tools should be introduced and taught while the student is calm and regulated – not while they are displaying negative behaviors.

How Can Assistive Technology Facilitate Positive Behavior?

Antecedent	Behavior	Consequence
A student with dyslexia is working on a printed assignment. Usually, the teacher reads the worksheet aloud, but today there is a substitute.	The student stops working on the assignment and puts their head down for the rest of the class period.	The student receives a zero on the assignment and a negative behavior report from the substitute.
A student with dyslexia is working on a printed assignment. Usually, the teacher reads the worksheet aloud, but today there is a substitute.	The student uses one of the classroom's scanning pens and headphones to hear the printed text read aloud, and completes the assignment.	The student receives full credit for the assignment and is ready for the next lesson.

Assistive Technology is Not a Behavior Plan

While assistive technology (AT) comprises many helpful classroom tools, ***AT is <u>not</u> a substitute for any of the following:***

- High-quality direct instruction on the student's level
- A positive behavior support plan
- An individualized education program or IEP
- Adult supervision
- Peer communication

AT should be used **<u>in conjunction with</u>** the above practices, not in replacement of them.

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Unpacking Behavior Antecedents

Antecedent: Communication Breakdown

Example:

Antecedent: The student is denied a preferred activity but has no means to express their frustration or ask for an alternative.

Behavior: The student drops to the floor and cries loudly.

AT for Communication Breakdown

- Communication devices (low-tech, mid-tech, high-tech)

Antecedent: Unclear Expectations

Example:

Antecedent: The teacher gives a multi-step verbal direction.

Behavior: The student puts their head down and refuses to start the task.

AT for Unclear Expectations

- Recording devices
- Note-taking apps
- AI summary tools

Evernote

NotebookLM

Left to right: C-Pen Reader 3, Evernote app, Google NotebookLM (free, not in ATLAS library)

Antecedent: Academic Frustration or Skill Mismatch

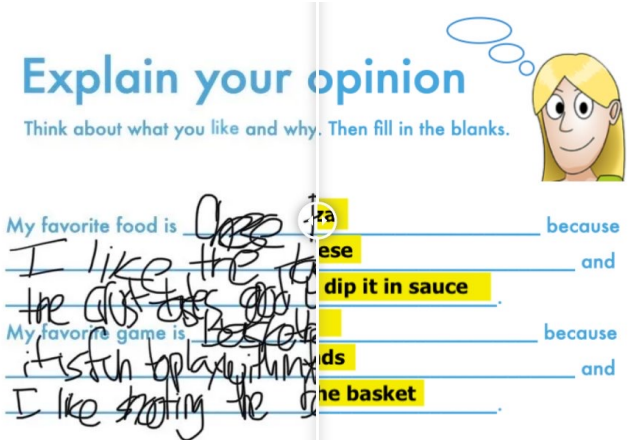
Example:

Antecedent: The class begins a writing assignment requiring full sentences and correct spelling.

Behavior: The student tears up the paper and yells, “This is stupid!”

AT for Academic Frustration or Skill Mismatch

- Word-processing and spell-check software
- Speech-to-text software
- Digital assignment apps
- Break cards



Left to right: iOS Dictation, Dragon Anywhere, SnapType on iOS, example of a break card

Antecedent: Difficulty Transitioning

Example:

Antecedent: The teacher announces it's time to clean up and move to math.

Behavior: The student screams and throws a toy across the room.

AT for Difficulty Transitioning

- Visual schedule (Velcro)
- Vibrating wristband
- Visual timer
- Step by step communicators

Top row: Visual schedule, WatchMinder 3
Bottom row: Time Timer with Visual Scheduler, Step-by-Step Communicator

Antecedent: Sensory Overload

Example:

Antecedent: The class enters the noisy cafeteria with bright lights and echoing sounds.

Behavior: The student covers their ears and bolts out of the room.

AT for Sensory Overload

- Noise reducing earmuffs or headphones
- Supports for self-soothing (e.g., fidget, weighted stuffy, or weighted lap pad)

Top row: Foot Fidget
Bottom row (left to right): QuietEars Hearing Protecting Earmuffs, Desk Buddy, Stan the Weighted Starfish, Wipe Clean Weighted Lap Pad

AT for Social Situations

Example:

Antecedent: A student with deficits in motor coordination attempts to roll the dice in a game with their peers, but drops the dice on the floor.

Behavior: The student storms out of the room yelling, “I can’t do anything right!”

AT for Social Situations

- Adaptive recreation equipment:
  - All-Turn-It spinner
  - Adaptive X-Box controller
  - Switch adapted toys
  - Beeping sports equipment

Top row: All-Turn-It Spinner, Adaptive X-Box controller
Bottom row: Alphabet Jodie, Beeping Foam Disk

Closing Thoughts

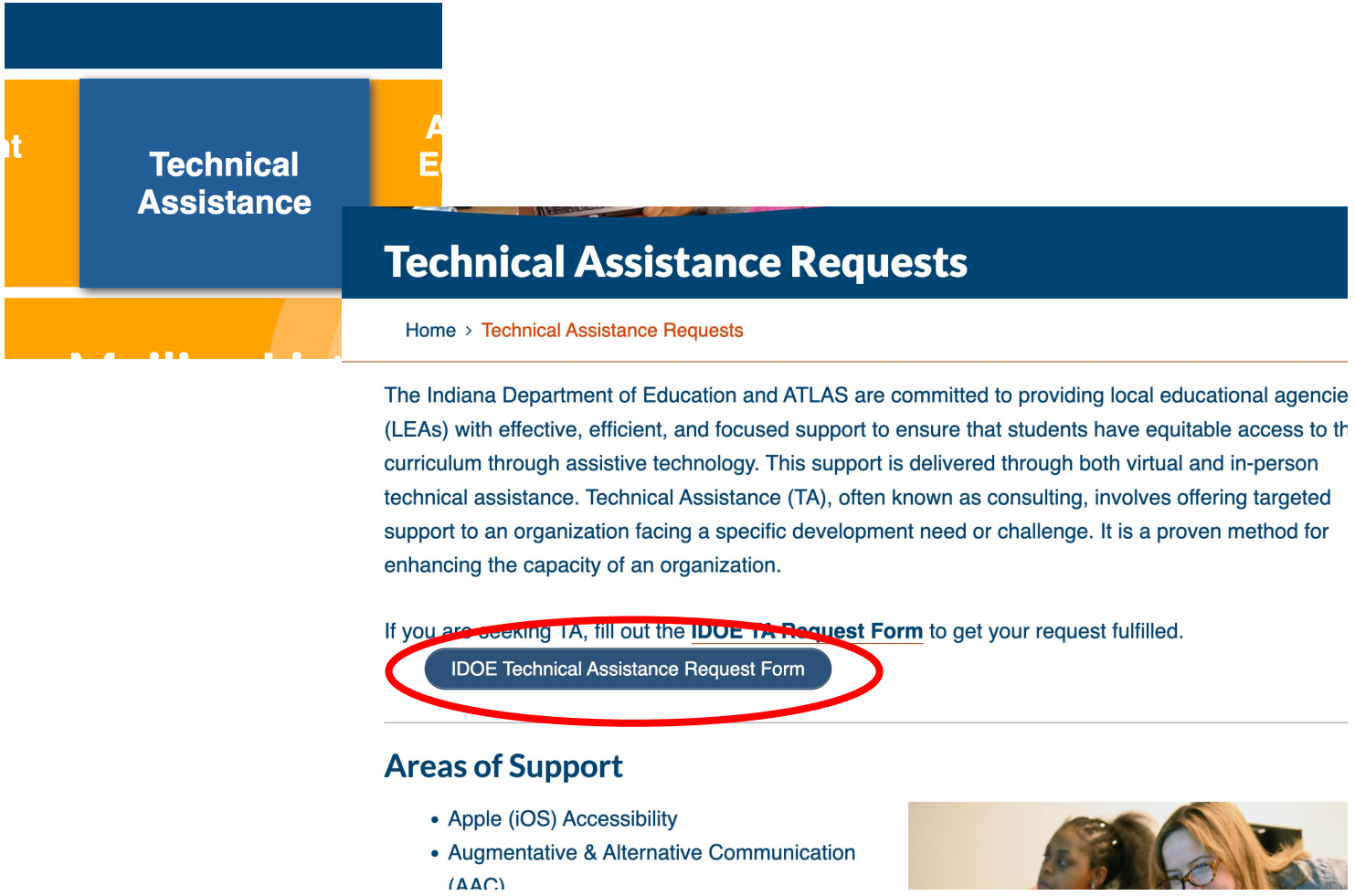
Planning Strategically, Not Reactively

Remember: AT doesn't "fix" behavior—it supports students in meeting expectations more independently.

Align any AT that you choose with the greater behavior support programs in place.

AT is a broad classification of tools and strategies, and there are so many more than what we covered today.

To learn how AT can enhance your classroom and assist your students, contact us using the **TA Request Form** on our website: k12atlas.eastersealstech.com



tinyurl.com/atlas-eval

Today's date: June 26, 2025

Title: AT for Behavior

Facilitator: Raine Sims

Thank you!

ATLAS Project
Training/Workshop Evaluation

References

Indiana Department of Education. Title 511 Indiana Administrative Code Article 7: Special Education Rules. 511 IAC 7-41-1: Emotional disability. Accessed via the Indiana General Assembly or IDOE website: https://www.in.gov/doe/files/Article-7-July-2022.pdf

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