

Implementing Evidence-Based Practices in Adapted Physical Education Service Delivery



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For this morning

- What is an evidence-based practice (EBP)?
- Why should I use EBPs?
- How can I use EBPs to plan for and create a more inclusive program?
 - Sharing of selected EBPs
- Addressing Specific Audience Needs/ Questions

What is an Evidence-Based Practice?



What are Evidence-Based Practices?

- Evidence-based practices (EBP) are instructional strategies, interventions or teaching programs that consistently produce positive results when experimentally tested (Marder & Fraser, 2012; Simpson, 2005).
- Educators are required by professional standards and federal regulations to implement EBP (NCLB, 2002).

Why should I use EBP in APE Service Delivery?

- Improved outcomes for learners!
- EBPs allow teachers to more effectively teach and problem solve how to address challenging behaviors
 - Important for both learners and teachers (e.g., teacher evaluations)
- Federal legislation emphasizes the use of EBP in educational practice

(Jin & Yun, 2010)

How can I implement EBP in APE Service Delivery?

- Steps of EBP Implementation:
 - Identify the problem and convert the problem into a question
 - Search for evidence related to the question and critically appraise the evidence
 - Integrate the evidence with the teacher's expertise and school circumstances to make an instructional decision
 - Implement instruction
 - Reevaluate the outcome and record the reevaluated data.

Adapted from Jin & Yun (2010)

Identifying EBPs in Education

- Research studies published in adapted physical activity, special education, education journals, etc.
- National Centers
 - Example: National Autism Center)
- National Organizations
 - Example: Council for Exceptional Children (CEC) - <https://www.cec.sped.org/Standards/Evidence-Based-Practice-Resources-Original>

Example: National Autism Center

- The National Autism Center's National Standards Report (2009), identified the 11 interventions as having "compelling scientific evidence":

Antecedent Package	Peer Training Package
Behavioral Package	Pivotal Response Treatment
Comprehensive Behavioral Treatment for Young Children	Story-based Intervention Package
Joint Attention Intervention	Self-management
Modeling	Schedules
Naturalistic Teaching Strategies	

Evidence-Based Practices in Adapted Physical Education

How to Implement EBP and Support Learners with Special Learning Needs

Antecedent Strategies

- Involve changing situational events that typically occur before the challenging behavior.
- Changes are made to increase the likelihood of success or reduce the likelihood of problems occurring.

Antecedent Strategies

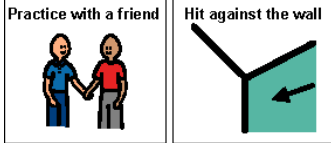
- Examples include but are not limited to:
 - Behavior shaping
 - Choice
 - Cueing and prompting/prompt fading procedures
 - Environmental modification of task demands, social comments, adult presence, seating, familiarity with stimuli;
 - Errorless learning;
 - Incorporating special interests or ritualistic/restrictive activities into tasks;

Creating Choice with a Communication System



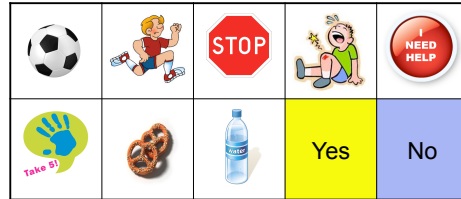
Providing Choices...

After skill practice you can...



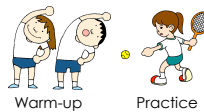
Note: Making an open ended choice may be too overwhelming for children with intellectual disabilities or Autism Spectrum Disorders.

Choices and Communication of Needs through a Picture Communication Board (Visual Supports)



Teachers, Staff and Students Must be TAUGHT to Use Visual Supports!

- If your student uses visual supports in other areas of their day, include them in physical education and other physical activity settings.
- Pair visual supports with training and class/practice routines so that students understand expectations



Using the Visual Environment to Create Opportunities

- Create patterns that make sense for the student
- Organize the environment so it leads to independence (e.g. information station, warm-up circle, "neighborhood areas")
- Increasing independence leads to fewer undesirable behaviors
- Visual organization strategies prevent the staff from making assumptions about what the students need or want



BEHAVIOR IS COMMUNICATION!



Behavior Package

- Strategies designed to reduce challenging behaviors and teach alternative behaviors or skills.
- When children can successfully make requests, challenging behaviors may decrease or be replaced



Behavior Package

- Examples include but are not limited to:
 - Chaining
 - Positive reinforcement
 - Token economy
 - Mand training



Reinforcement:

- If behavior that is not reinforced is not repeated... by default then - any behavior that is repeated must somehow be reinforced.
- By controlling/manipulating the reinforcement, we can increase or decrease behaviors.
- When possible, make yourself or the physical activity the reinforcement.



A comment on punishment



- Punishment typically doesn't work because the child doesn't have the skills needed...
- We MUST teach the new *alternative* behaviors we want them to demonstrate.



Reinforcement in PE

Task 5

- Depersonalize the behavior.
- Look at the behavior as an outsider. What does the student "get" by engaging in the behavior?
- Find an appropriate way to help the student get what they want/need.
- Teach the student an alternative behavior that achieves the desired function.
- Reinforce with the student engages in the appropriate behavior. When the student engages in the target behavior, withhold reinforcement or reinforce a peer who is engaging in the desired behavior.

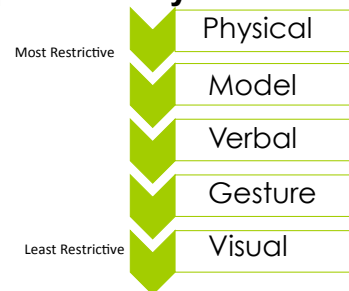


Reinforcement in PE

- Shaping behaviors
 - Teach skill using visual supports
 - Provide the lowest level of prompting required for success (approximation)
 - Systematically reinforce the students successive approximation; shaping the performance to proficiency.
 - Do not reinforce incorrect form – reinforce correct components.



Prompt Hierarchy



Prompt at the least restrictive level that facilitates success.



Remember BEHAVIOR is COMMUNICATION!



Schedules

- These interventions involve the presentation of a task list that communicates a series of activities or steps required to complete a specific activity.
- Schedules are often supplemented by other interventions such as reinforcement.
- Schedules can take several forms including written words, pictures or photographs, or work stations.



An Example of a Community-Based Sports Visual Schedule

Today is Tuesday

At Basketball, Today, I Will

1



2



3



Visual Schedules & Task Schedules

- Visually organize the information for the students
- Visually answers the following questions:
 - **What** is to be done?
 - **How much** is to be done?
 - **When** will it be finished?
 - What's **next**?
- Visual schedules should only be used with previously learned skills.

Visual Schedules vs Task Schedule

- Global visual schedule provides representations of activities presented in order



- Task schedule provides representation of individual tasks - can also be referred to as within-task schedule because it breaks down the activity into tasks



Story-based Intervention

- These treatments involve a written description of the situations under which specific behaviors are expected to occur.
- Stories may provide more information, as needed (e.g., prompting, reinforcement, discussion, etc.).
- Social Stories™ are the most well-known story-based interventions and they seek to answer the “who,” “what,” “when,” “where,” and “why” in order to improve perspective-taking.
- Social stories are delivered in preparation for the social event (e.g., class, game play, locker room time, etc.)

sports 	I like to play sports.
friends 	Sometimes I play sports with my friends.
winner 	I might win.
winner 	It is OK if I do not win.
shake 	At the end of the game I will shake my friend's hand and say "Good Game"
fun 	Playing sports is fun!

Sport Example

Modeling

- These interventions rely on an adult or peer demonstrating a target behavior (motor or social behavior) with the expectation that the student with a disability would imitate the target behavior.
- Modeling can include simple and complex behaviors.



Modeling

- This intervention is often combined with other strategies such as prompting and reinforcement.
- Model the overhand throw, then prompt with a gesture.
- Modeling can be done through live modeling, video modeling, animations, etc.



Peer Modeling

- One of the most powerful interventions!
- Children with ASD learn social skills BEST from their neurotypically developing peers.



Embedded Intervention for Children with Special Needs

- Embedding Intervention into Routine Activities
 - Teaching and providing opportunities for students with disabilities to learn and practice skills and/or behaviors across the curriculum and across daily activities
 - Maximizing the functionality of developmentally appropriate routines and activities



Embedded Instruction via a Routine-Based Model

- Focus on the daily routines or activities like circle time, PE/APE warm-up, recess, transitions between classes, etc. as a context for learning and an opportunity for embedding
- Teachers give students opportunities to work on IEP or IFSP goals during these daily routines or activities instead of special instructional time.



Parker Will Walk Unassisted for 10 Feet

- Set up the classroom and gym in 10 foot segments – like 10 ft. between stations.
- During daily activities, the teacher can easily monitor progress (e.g., Parker walked unassisted between 4 of the 6 stations).
- Embedding the intervention requires teachers to make sure opportunities for practice are provided and that there is PURPOSE in the practice (i.e., walking unassisted for 10 ft.) – motivation is key.



With all of the EBPs...

- Collaboration with others is key!
- Distributed practice, supported by EBPs, of skills and behaviors is more effective
- Progress must be monitored and changes made if the EBP is not effective for the specific situation

Any Questions?



Thank You!

For your time and efforts on behalf of our kids!!!

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