





BrainSTEPS
Strategies Teaching Educators, Parents, & Students
A BRAIN INJURY SCHOOL RE-ENTRY CONSULTING PROGRAM

**Helping Kids Thrive
After Brain Injury:
Strategies for Parents/Caregivers**

Dr. Brenda Eagan-Johnson, CBIST-AP
BrainSTEPS Director
brenda@brainsteps.net
www.brainsteps.net






1



BrainSTEPS
Strategies Teaching Educators, Parents, & Students
A BRAIN INJURY SCHOOL RE-ENTRY CONSULTING PROGRAM

BrainSTEPS:
Assists students, schools, and families in
Pennsylvania following acquired
brain injury



2

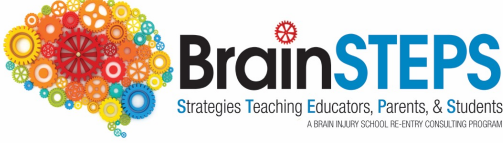
The BrainSTEPS Program

Created by:
PA Department of Health in 2007

Unique partnership for funding:
PA Department of Health
PA Department of Education, Bureau of
Special Education via the PaTTAN network

Implemented by:
Brain Injury Association of Pennsylvania

3



BrainSTEPS
Strategies Teaching Educators, Parents, & Students
A BRAIN INJURY SCHOOL RE-ENTRY CONSULTING PROGRAM

- **29 BrainSTEPS Brain Injury Consulting Teams cover the state of Pennsylvania**
- **200+ Brain Injury school consultants**
 - Educational professionals
 - Medical & Rehab professionals
 - Family members

4



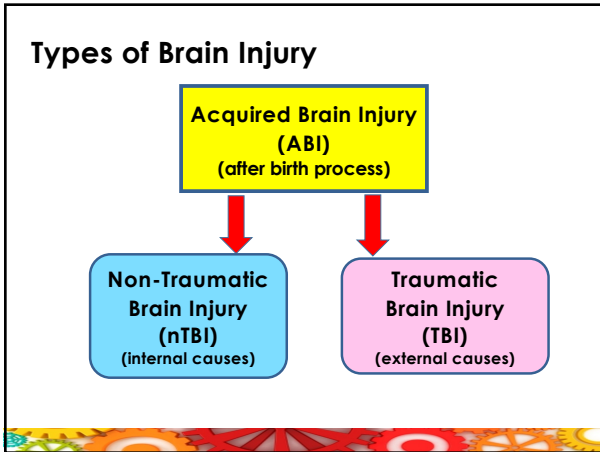
Free Trainings Available
www.brainsteps.net

5

Learning Objectives:

- Describe how brain injury can affect a child cognitively, behavioral, and emotionally in the school environment.
- Identify common challenges children may face when returning to school after a brain injury.
- Apply practical strategies to support academic success, emotional adjustment, and social participation at school.

6



7



8

Medical vs. Educational Identification

- Medically, **brain injury** is a “leading” cause of disability in children & adolescents
(Centers for Disease Control)
- Educationally, nationally, **brain injury** is considered “low incidence,” which leads to **misidentified & under-identified students with brain injuries at school, leading to inappropriate education planning.**

9

TRUE or FALSE?

The majority of teachers & other school staff receive training in the identification & academic supports needs of students with ABI.

10

Due to a Lack of TBI Training & Information Available to Teachers:

Teachers often do not:

- Know what the effects of ABI can be initially & over time
- Understand how to identify, support, & teach a student post-TBI
- ABI mimics other disabilities

11

What Are the Effects of a Brain Injury?

12

Brain Injury is an Energy Crisis

After brain injury these 3 areas are typically always impacted:

- 1. Mental Fatigue
- 2. Slowed Processing Speed
- 3. Problems with Short-Term Memory

13

Cognitive

Look for increased difficulty with:

- ✓ Paying attention
- ✓ Staying on task
- ✓ Slowed response or processing information
- ✓ Shifting attention
- ✓ Organization challenges
- ✓ Reduced academic performance
- ✓ Increased confusion
- ✓ Confusion
- ✓ Memory problems
- ✓ Difficulty thinking quickly
- ✓ Following multistep instructions



14

Communication

Look for increased difficulty with:


- Receptive Language
- Expressive Language
- Pragmatics

15

Physical

Look for increased difficulty with:

- Headaches
- Fatigue
- Blurred Vision
- Alertness
- Loss of taste
- Loss of smell
- Irritability
- Sensitivity to light or noise
- Dizziness / Off balance
- Sleep




16

Behavioral/Emotional

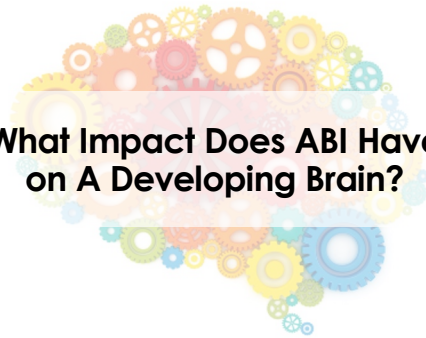
Look for difficulty with increased:

- Impulsive behavior
- Trouble starting conversations or activities
- Changes in mood
- Withdrawal and depression
- Defiance
- Confusion
- Decreased motivation



17

What Impact Does ABI Have on A Developing Brain?



18

A child's brain is not fully developed until the mid-to-late twenties.



A child/teen who sustains a prior brain injury may experience new difficulties with behavior & learning as the years progress.

19

Injury to the Developing Brain

- Can cause devastating life-long consequences
- Skills in a rapid state of development at the time of the brain injury are more vulnerable to disruption
- Infants who sustain an ABl have little prior knowledge & life experiences to support their recovery

20

Neurocognitive Stall

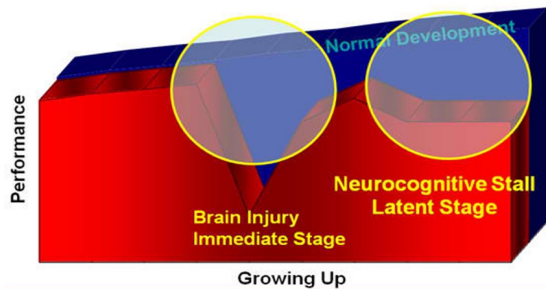
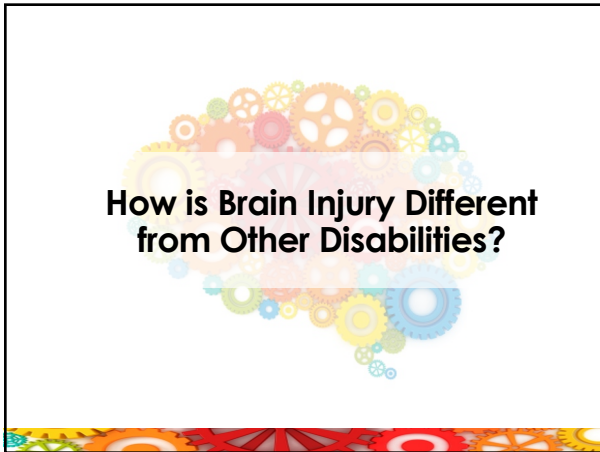
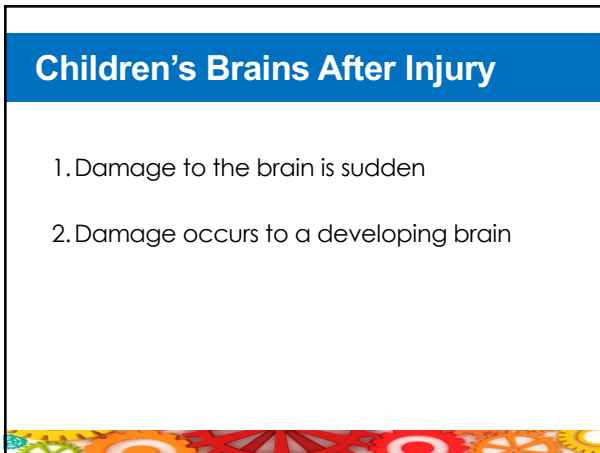


Diagram by Dr. Sandra Chapman, University of Texas

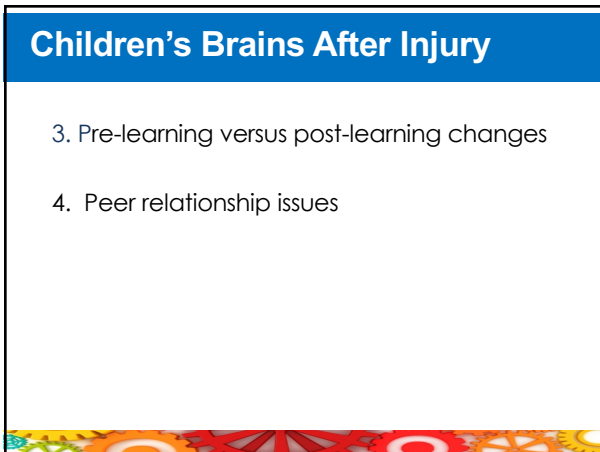
21



22



23




24

Children's Brains After Injury

5. Teaching students is challenging

6. One symptom can trigger other symptoms




25

Children's Brains After Injury

7. Mental health issues

8. May exhibit a lack of awareness




26

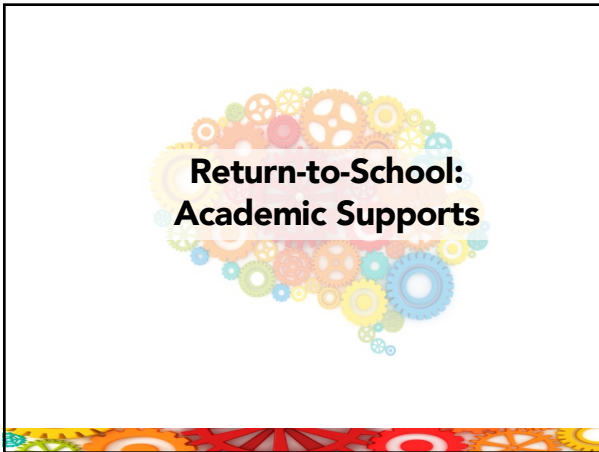
Children's Brains After Injury

9. More extreme discrepancies among abilities.

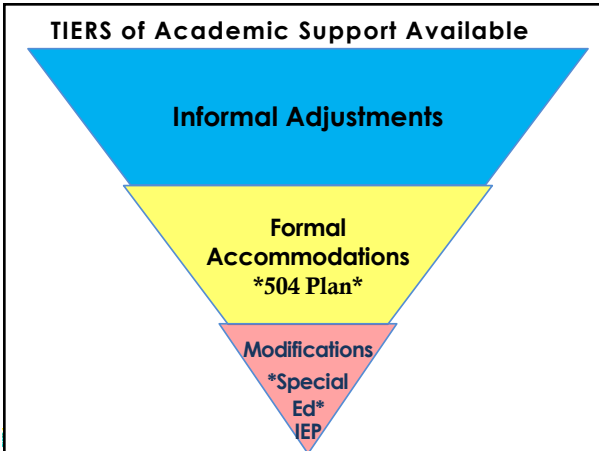
10. Rapid gains tend to occur during the first few years after injury.



27



28



29



30

Who is Eligible for a 504 Plan?

504 Regulation 34 C.F.R. 104.3(j-l):

“a person with a disability as any person who has a physical or mental impairment that **substantially** limits one or more major life activities*, has a record of such impairment, or is regarded as having such impairment.”

31

Section 504 of the Rehabilitation Act

- The physical or mental impairment must impact at least 1 of 13 listed major life activities (*Dr. Perry Zirkel, 2010*):

Seeing *	Concentrating *
Hearing *	Sleeping *
Walking *	Eating
Learning *	Bowel Functions
Breathing	Bladder Functions
Reading *	Digestive Functions
Thinking *	

* = Denotes common brain injury impacts

32

Special Education

Individualized Education Program (IEP)

33


13 Categories for Special Education
 Per Federal Law IDEA **(some states have state specific definitions)*

1. Intellectual disability
2. Hearing impairment
3. Speech or language impairment,
4. Visual impairment (including blindness)
5. Emotional disturbance
6. Orthopedic impairment
7. Autism
- 8. Traumatic brain injury**
9. Other health impairment **(nonTBIs)**
10. Specific learning disability
11. Deafness
12. Deaf-blindness
13. Multiple disabilities

34

Special Education Classification

Traumatic Brain Injury (TBI)



Traumatic Brain Injury was added into the Special Education Law (IDEA) in 1990 as a **specific category** requiring specialized understanding.

Public Law 101-476
 [34 Code of Federal Regulations § 300.7(c)(12)]

35

Traumatic Brain Injury is Defined as...

“...an acquired injury to the brain caused by an external physical force, resulting in total or partial functional disability or psychosocial impairment, or both, that adversely affects a child's educational performance. The term applies to open or closed head injuries resulting in impairments in one or more areas such as cognition; language; memory; attention; reasoning, abstract thinking; judgment; problem solving; sensory, perceptual, and motor abilities; psychosocial behavior; physical functions; information processing; and speech. The term does not apply to brain injuries that are congenital or degenerative, or to brain injuries induced by birth trauma.”

34 Code of Federal Regulations 300.7 (c)(12)

36


Special Education/IEP

- Placement may be any combination of special education & general education classrooms.
- **Related services may include (if required via assessment):**
 - speech and language therapy,
 - occupational therapy,
 - physical therapy,
 - counseling services,
 - psychological services,
 - social services, and
 - transportation.

37


Medical Diagnosis of Brain Injury vs. Educational Eligibility

- A medical diagnosis does **not** automatically entitle a student to special education services under IDEA or a Section 504 Plan



38

BrainSTEPS: Guided IEP for Brain Injury Handout



Guided IEP for Students with Brain Injury in Pennsylvania

Pennsylvania IEP Section	BrainSTEPS Considerations to Discuss with School Team
Student Demographics & Team Meeting Information Annotated IEP Reference Page Number(s) 9-16	<ul style="list-style-type: none"> • Students with BRAIN INJURY need their IEPs reviewed every 1-3 months during the initial 1-2 years depending on the time since the injury. • The team needs to include professionals knowledgeable about BRAIN INJURY • At least one BrainSTEPS team member should be included in the IEP meeting.
SECTION I Special Considerations the IEP Team Must Consider Before Developing the IEP Annotated IEP Reference Page Number(s) 17-23	Considerations of Students with BRAIN INJURY: 1. Early Stage After Brain Injury: <ul style="list-style-type: none"> a. Safety: Prioritize student safety. b. Medical Concerns: Address issues like pain & potential seizures. Medication levels might still be under adjustment. c. Fatigue: Be aware of the student's increased fatigue. d. Sensory Needs: Manage sensory & sensory-motor challenges by creating a balanced environment. e. Attention & Concentration: Support limited attention spans & concentration abilities for academic tasks. f. Family Support: Recognize the need for family support during this challenging period. Include parents in any TBI training you hold. 2. Middle Stage After Brain Injury (Evolving Skills): <ul style="list-style-type: none"> a. Alertness: The student may still exhibit decreased alertness. b. Impulsivity: Monitor & manage increased impulsivity. c. Orientation: Address any ongoing disorientation.

39



How Can You Help School Staff Understand Your Child's Needs?

40

Parents Can Initiate the School-Based Process for Academic Supports (504 Plan / Special Education) By Sending a Letter

A written parent request will trigger the start of a formal timeline that the school must follow

41

Parent-to-School Notification of Brain Injury

Write a letter to your child's principal, special education director, school counselor, & school nurse.

- Notify them that your child has had a brain injury & at what age.
- List what symptoms your child continues to experience.
- List any difficulties your child may be experiencing since the brain injury.
- List any pre-and-post changes you have noticed.
- Ask that this letter be placed in your child's permanent educational file, so if there are future learning or behavior concerns, the brain injury diagnosis will not be forgotten.

42

Include in the Letter:

- If parent has the following – include with letter. If not -obtain copies of the following and immediately send to the school:
 1. Include all medical diagnosis paperwork from physician
 2. Include any recent medical, rehabilitation, or neuropsychological reports

43

STRATEGIES TO HELP THE SCHOOL UNDERSTAND YOUR CHILD'S INJURY

44

First: Investigate Your Child's Medical & Rehabilitation Records

45

Medical Records

- Review your child's medical records.
 - Frontal lobes
 - Occipital lobes
 - Parietal lobes
 - Temporal lobes
 - Cerebellum
 - Midbrain

46

3/30/26

FRONTAL LOBE

- Executive Functions
- Emotional Control
- Behavioral Control
- Verbal Expression
- Problem Solving
- Decision Making
- Social Control
- Motivation
- Attention

PARIETAL LOBE

- Tactile Performance
- Spatial Orientation
- Sensory Integration
- Academic Skills
- Object Naming
- Visual Attention
- Eye-Hand Coordination

OCCIPITAL LOBE

- Visual Processing

TEMPORAL LOBE

- Memory
- Object Categorization
- Auditory Processing
- Emotional Responses
- Face Recognition
- Language Comprehension
- Selective Attention
- Expressive / Receptive
- Locating Objects

CEREBELLUM

- Coordination, balance, procedural learning

©EBIG, ACBIS, BIAA, 2026

47


Medical Records

- Review your child's medical records.
 - Was there a skull fracture?
 - Was there a brain bleed?
 - Was there a cut, bruise, or bump on the outside of their head?

48

Medical Records


- Review your child’s medical records.
 - Do they mention:
 - Brain swelling? (or reference to having a Craniotomy or Burr hole)
 - Lack of oxygen to the brain?
 - Diffuse Axonal Injury (DAI)?



49

Medical Records


- Brain injuries often happen with **NO VISIBLE SIGNS** on CT or MRI brain scans.
- Your child can still experience ongoing signs & symptoms of brain injury with no visible signs on scans!



50

Neuropsychological Report

- Look at the end of your child’s neuropsych report (if they were evaluated by a neuropsychologist)
- It SHOULD provide a list of school support recommendations towards the end.
- Review the **Summary/Conclusions** section for a concise overview of your child’s **strengths** & areas of **need**. This can help you communicate effectively with school staff.
- Share the report with your child’s school.



51

Rehabilitation Therapies: Speech, Occupational, Physical Reports

- Review the Summary/Conclusions section of these reports for a concise overview of your child's **strengths** & areas of **need**.
 - Take notes
- This can help you communicate effectively with school staff.
- Share the reports with your child's school.

52

Contact:

1. Your State's Department of Education, Bureau of Special Education
2. Your School District's Administration

53

Monitor for New Issues:

- Monitor your child for new issues over the years that could be related to their prior brain injury.
- Alert school staff if you notice any changes to their grades, academic performance, or behaviors over time

54

Prepare for Transitions:

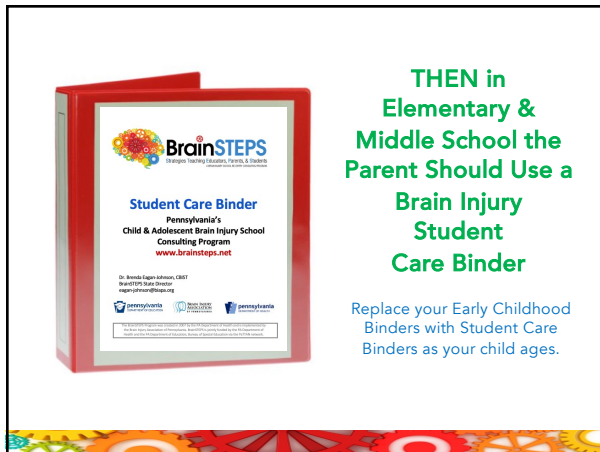
- Request that the school hold a **transition meeting** during the summer, prior to your child's transition so you can discuss your child and their brain injury-related needs with the upcoming new school staff.
- Always ask to **tour the new school or classroom** prior to the school year starting with your child.

55



**Early Childhood
Brain Injury
Care Binder**

56




**THEN in
Elementary &
Middle School the
Parent Should Use a
Brain Injury
Student
Care Binder**

Replace your Early Childhood Binders with Student Care Binders as your child ages.

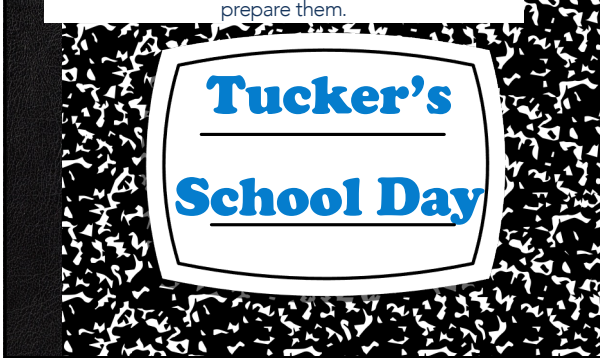
57

In 9th Grade:
Replace the Student Care Binders with a 1-page
Student Brain Injury Passport for High School



58

For young children with brain injury who are entering school or for children with more severe injury who are returning to school, make a **Picture Book** to prepare them.




59

This is my school!



60

I am going to ride a bus like this
to school every morning.
It will pick me up at the end of my driveway.



61



62

Visual After School Home Schedule

Time	Activity	Details/Instructions
4:00–4:30pm	Snack & Relax	Eat a healthy snack. Quiet activity: read, listen to music, draw, or talk about your day.
4:30–5:00pm	Math Homework	Complete assigned pages/problems (e.g., pages 67–72, odd numbers). Place finished work in Math folder in backpack.
5:00–5:30pm	Break –Videogames	Move around: stretch, walk, or play outside. Use bathroom, get a drink of water. Play videogames.
5:30–6:00pm	Science or English Homework	Work on science or English assignments. Place finished work in Science or English folder in backpack.
6:00–6:30pm	Dinner	Eat dinner and share about your day.
6:30–7:00pm	Reading Homework	Read assigned pages, practice a poem, or finish English homework. Place finished work in English folder in backpack.
7:00–7:15pm	Pack Up Backpack & Prepare for Tomorrow	Check all homework is in the right folders and in your backpack. Place backpack by the door. Lay out clothes for tomorrow.
7:15pm-8:00pm	Shower. Brush teeth, Bed!	

63

Small Communication Notebook for Home to School to Home

Parent's Note (Morning/Home)	Teacher's Note (School Day)	Follow-Up Needed?
How my child slept, mood, any changes at home, questions for teacher	What went well, challenges, reminders, notes for home, questions for parent	Yes / No (& details if needed)

64

Helping them Study: **Spaced Retrieval**

1. The child is asked to remember a piece of information (such as a homework routine, a fact, or a schedule).
2. They are prompted to recall it after a short period
 - (e.g., 1 minute).
3. If correct, the interval is increased
 - (e.g., 5 minutes, then 15 min, then 30 min, etc.).
4. If incorrect, process is repeated and the interval is shortened again.
5. This method helps move information from short-term to long-term memory.

65

Helping them Study: **Spaced Retrieval**

Example: If your child needs to remember to put finished homework into their backpack:

1. Remind them of the step ("When I finish my homework, put it in my backpack.").
2. Ask them to repeat the step after 15 seconds, then 30 seconds, then 1 minute.
3. If correct, ask again after 5 minutes, then after dinner, then before bed.
4. If incorrect, give the right answer immediately and ask the question again starting at #2 (15 seconds).
5. Over days, increase the time between reminders.

66

Cue Cards

Cue cards teach students what TO DO or steps TO LEARN.

In the beginning, students will need cues to takeout and USE the cue cards

67

Cue Card –

for independent seat work AFTER Directed Lesson

1. Read the directions
2. Try the first one on your own
3. Raise hand if stuck - stay in seat
4. Wait for assistance from teacher
5. Staff will do one **for** you - WATCH!
6. Staff will do one **with** you
7. Staff will watch you do one **on your own**
8. Try to do the rest on your own.

68

Cue Card: Math Assignment

1. Page 54 problems 25-45 (odd only)
2. Copy the problem onto the paper
3. Use your number line
4. Add the ones column
5. Add the tens column
6. Write the answer
7. Check with the calculator
8. Do the next one
9. Turn your work into COMPLETED bin when finished
10. Take out a book to read until lunch time.

69

Math Cue Cards

STEPS to SOLVING WORD PROBLEMS
Check off each step as you finish it:

1. Read the problem
2. Identify WHO or WHAT and CIRCLE it
3. Identify HOW MANY
4. Write the equation
5. Solve it
6. Check the answer

KEY WORD BANK

ADD +

- Sum
- Total
- More
- In all
- All together

SUBTRACT -

- Difference
- Fewer
- Less than
- Rest
- Left

70

Strategies Must be Taught & Re-Taught


1. Establish a “**planner routine**”
2. Teach how to use planner
3. Reinforce planner use throughout day
4. Require use of planner
5. Clearly write homework on board to copy or provide close model
 - *Cue students to take out & write in it*
 - *Check to see if planner is filled out correctly*
 - *Fill in missing items (or write in for those who need it)*
6. Planner should be checked daily by teacher/parents (signed)
 - *Good for transferring daily student updates*

71

Paying Attention: Interval Timer

72

Time Timer Visual Productivity App



73

Paying attention checklist


Was I paying attention when timer went off?	
YES	NO

74

How do we get students to Self-Regulate?

Self-regulation is internalized self-talk.

-Dr. Mark Ylvisaker



75

Self-Talk Scripts

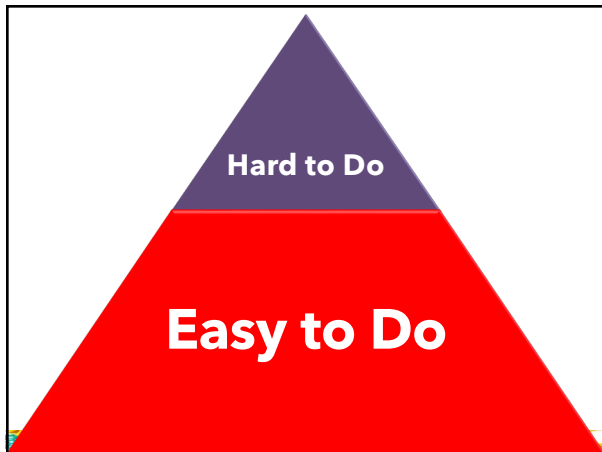
“What is my plan?”
 “How much time will this take me?”
 “If I keep on doing this it is likely that...will happen”
 “This reminds me of...”
 “There’s always something that works.”
 “If I want to quit, I’ll tell myself...”
 “When I get stuck, I will...”
 “When I’m done, I will...”

76

Example:
Self-Regulation Scripts for Students

1. Hard - Easy
2. Big Deal - Little Deal
3. Ready - Not Ready
4. Scary - Not Scary
5. Like - Don’t Like
6. Choice - No Choice

77



78



79



80



81

Example: (See Handouts) Goal-Plan-Do-Review (GPDR)

- GPDR helps students set a goal, make a plan, carry it out, and evaluate outcomes.

Example:

Goal: Finish my book summary

Plan: Re-read notes, use graphic organizer

Do: Write the summary

Check: Did I include all parts?

- Strengthens executive functions like planning, self-monitoring, and adaptability.

82

Anchor Charts

PARAGRAPH WRITING



Adverbs

Adverbs describe verbs, adjectives, or another adverb.

Adverbs tell:

When?	Where?	How?	How Often?
after	inside	quickly	always
yesterday	outside	slowly	sometimes
now	here	softly	never
later	there	loudly	often
soon	everywhere	easily	soon
early	near	hardly	before

Many adverbs end in -ly.

Adverbs can come before or after a verb.

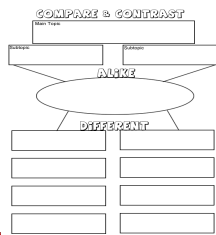
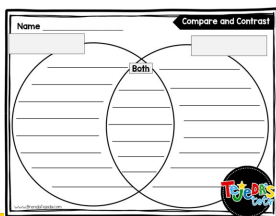
-She **quickly** walked to the store.

-She walked to the store **quickly**.

83

Graphic Organizers

- Student must be taught "how" to use
- Guides thinking process
- Assists in initiation & can alleviate anxiety
- Student **should have multiple copies** in binder at all times



84

