Diagnosis, Evaluation, and Treatment of ADHD Under the BASC-3 Model of Assessment and Intervention

Cecil R. Reynolds, PhD
Texas A&M University

Conflict of Interest Notice

I am the author of the BASC-3, the assessment scale and its accompanying intervention materials that will be emphasized in today’s training. While I view my comments and opinions as expressed to be accurate, you should judge the facts and materials for yourself and make an independent decision regarding your choice of diagnostic and related techniques.

First Order of Business...Is ADHD real, or a “made up” disorder?

- In 1865, Heinrich Hoffman in Germany wrote the story of “Fidgety Phil,” which remains a good description of children with ADHD though he neglected to name it.
- In 1902, Drs. Still and Tredgold described 43 children in their clinical practice with serious problems with sustained attention and impulse control with a boy:girl ratio of 3:1.
- Dr. Still believed this was a disorder of moral development—a notion that remained with us until the late 1950s and harbored by some yet today.
- Concept has been with us in the literature for over 150 years.
FACT

ADHD is a neurobiological disorder.

MYTHS

• Children are hyperactive because their parents do not make them behave.
• Teachers just want children medicated so that they do not have to do their job.
• Hyperactivity is just “boys being boys.”
• ADHD was created by physicians and drug companies to increase business.
• Children and adolescents use ADHD as an excuse not to do work at school.
• Children and adolescents do not have ADHD, they are just lazy.
• Parents just want to say their children have ADHD so they can get accommodations at school. This is not fair to the other children.
• ADHD is only for children.
• Adults who say they have ADHD are just lazy.
• Adults use ADHD as an excuse for mistakes made at work and in relationships.
• FACT: ADHD can be a lifelong disorder.

ADHD is Real

• It is a brain disorder.
• It is a disorder of self-regulation due to hypoactivity of key communication circuitry in and between the frontal regions of the brain and the limbic and posterior portions of the brain (key dopamine, serotonin, and noradrenalin pathways especially).
• It is associated with hypodensity of the prefrontal region on average in ADHD individuals.
• We have characterized it as "like having a Ferrari brain with bicycle brakes." (C. R. Reynolds, K. Vannest, & J. Harrison, 2012. The energetic brain: Understanding and managing ADHD. NY: John Wiley and Sons)
• It also need not be limiting and can be managed effectively at all ages.

The American Academy of Pediatrics Report on Diagnosis of ADHD

In 2000, the American Academy of Pediatrics (AAP) released a report on diagnosis of ADHD (AAP Committee on Quality Improvement, 2000). Noting that ADHD is a common problem and becoming increasingly a controversial one, the AAP (2000) recommended broad diagnostic work that is largely behaviorally based.
AAP recommended that...

- The assessment of ADHD should include information obtained directly from parents or caregivers, as well as a classroom teacher or other school professional, regarding the core symptoms of ADHD in various settings, the age of onset, duration of symptoms and degree of functional impairment.

- Evaluation of a child with ADHD should also include assessment for co-existing conditions: learning and language problems, aggression, disruptive behavior, depression or anxiety. As many as one-third of children diagnosed with ADHD also have a co-existing condition.

Broad-band assessment is necessary for accurate diagnosis

In making these recommendations, the AAP appears to recognize the need, as we do and as others have noted (e.g., Goldstein, 1999), for a broad-based assessment of the behavior and affect of children suspected of having ADHD.

Why is this important?

- Narrow-band scales tend to over-diagnose.
- Mimics are common.
- Comorbidities are common.
- Behaviors may be specific to a single setting—information from home, school, and community are crucial to triangulate as are data from a clinical interview.
- Pervasiveness of the presentation is important to diagnosis and to intervention.
- Secondary and other comorbidities should influence choices and sequences of treatments.

It is important because...

These recommendations apply not just to ADHD and other DSM diagnoses

The criteria for categorization of a student as emotionally disturbed under IDEIA requires that we look broadly at children, the context of their behavior, and its acuteness/chronicity—its history.

Emotional disturbance

• The term means a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child’s educational performance:
  – An inability to learn that cannot be explained by intellectual, sensory, or health factors;
  – An 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;
• The term includes schizophrenia. The term does not apply to children who are socially maladjusted, unless it is determined that they have an emotional disturbance.

DSM 5 Criteria For ADHD

A. A persistent pattern of inattention and/or hyperactivity that interferes with functioning or development that is characterized by (1) and/or (2).

(1) Inattention: Six (or more) of the following Sxs have persisted for at least 6 months to a degree that is inconsistent with developmental level and that negatively impacts directly on social and academic/occupational activities;[9 classes of inattentive activity are then listed]

(2) Hyperactivity and Impulsivity: Six (or more) of the following Sxs have persisted for at least 6 months to a degree that is inconsistent with developmental level and that negatively impacts directly on social and academic/occupational activities;[9 classes of inattentive activity are then listed]
Inattention Exs.
• Fails to give attention to details...
• Makes careless mistakes
• Difficulty sustaining attention
• Does not seem to listen when spoken to directly
• Does not follow through on instructions
• Difficulty organizing tasks
• Loses things
• Forgetful in everyday tasks
• Easily distracted by extraneous stimuli

Hyperactivity and Impulsivity Exs.
• Fidgets and/or squirms often.
• Leaves seat when being seated is expected.
• Runs about and/or climbs on things.
• Unable to play or be in leisure activities quietly
• Talks excessively.
• On the go or acts as if “driven by a motor.”
• Difficulty waiting turns.
• Interrupts and intrudes on others.

Add’l Required Criteria for Dx
• At least 2 Sxs of Inattention, Hyperactivity, or Impulsivity present prior to age 12.
• At least 2 Sxs are present in more than one setting.
• Clear evidence the Sxs interfere with social, academic, or occupational functioning.
• The Sxs do not appear during a psychotic disorder only and are not better explained by another mental disorder (e.g., anxiety, a mood disorder, substance abuse, personality disorder,…) [These rule outs are crucial to correct Dx.]
Common Associated Features of ADHD

- Mild delays in learning, language, social, and motor development.
- Work performance is impaired.
- Poor performance on tests of attention, memory, and executive function.
- When co-morbid with a mood disorder, conduct disorder, or substance use disorder, suicide risk is elevated.

What is the BASC-3?
A Multidimensional, Multimethod approach to assessing child and adolescent EBDs.

The Original BASC Model

BASC-3 Diagnostic Components

All Are Available via Paper and Q-Global/Digital
All Forms Except TRS are Available in English and Spanish

- SDH: Structured Developmental History
  All ages

- SOS: Student Observation System
  All ages

- SRP: Self-report of Personality
  Ages 6-7
  Ages 8-11
  Ages 12-21
  Ages 18-25

- PRS: Parent Rating Scales
  Ages 2-5
  Ages 6-11
  Ages 12-21
  Ages 18-25

- TRS: Teacher Rating Scales
  Ages 2-5
  Ages 6-11
  Ages 12-21

- PRQ: Parenting Relationship Questionnaire
  Ages 2-18
Choosing the Right Norms for ADHD: Conflicting Recommendations in the Literature

- BASC-3 Offers
  - Same Sex Normative Tables (male, female)
  - Combined Gender Normative Tables (male + female)
  - ADHD and General Clinical Norm Groups

All are presented by age level

What are norms?

- Commonly misunderstood and misapplied.
- Norms are simply reference groups (and I wish we would rename them as such in our official nomenclature—“standardization sample” is an even worse characterization!).
- Different reference groups answer different questions.

Choosing Norms: Asking Qs

- General National Norms-Does Rob have problems with depression relative to other children his age?
- Sex-based Norms-how does Michelle’s hyperactivity compare to that of other girls?
- Clinical Norms-How severe is Natalie’s psychoticism in comparison to other children diagnosed with mental health disorders of childhood, including EBDs?
- ADHD Norms-How severe are Kent’s symptoms of depression in comparison to other children diagnosed with ADHD
**Why do we need norms?**

- It's a matter of scaling.
  - Interval versus ratio scaling (and nominal and ordinal).
- It is a matter of relativity.
- It is a matter of frequency.
- In clinical assessment, ultimately it is a matter of “normality,” as much as we may dislike the term.

---

**Gender Differences on Measures of Behavior, Feelings, and Affect Abound Across Age and Reporter.**

They are present on rating scales, self-reports, and behavioral observations.

---

**BASC 3 TRS Differences in T Score Units Clinical Scales and Composites**

Positive values indicate higher female scores, negative values indicate higher male scores.
BASC-3 TRS Differences in T Score Units Adaptive and Content Scales

Positive values indicate higher female scores, negative values indicate higher male scores.

BASC-3 TRS Differences in T Score Units Clinical Probability Indexes

Positive values indicate higher female scores, negative values indicate higher male scores.

BASC-3PRS Differences in T Score Units Clinical Scales and Composites

Positive values indicate higher female scores, negative values indicate higher male scores.
Positive values indicate higher female scores, negative values indicate higher male scores.
Homogeneous Gender Norms Equate Males and Females on All Variables

- Does this reflect reality?
- Are boys and girls really different in how they think, feel, and behave?
- Yes. Use combined gender norms to preserve differences.
- No—the differences are artifacts of measurement bias. Use homogenous gender norms to remove all observed differences, thereby equating boys and girls on all variables.

What happens when we equate boys and girls? Exs.

- Girls and anxiety disorders?
- Boys and externalizing disorders?
- Are boys less adversely affected and girls more adversely affected by a common set of symptoms of inattention?
- What if judges used homogeneous gender norms for sentencing considerations?
Use of Homogenous Gender Norms Will Deny Identification and Treatment of Disorders Across Gender for Groups with Higher Prevalence Rates and Yield Unnecessary Diagnoses and Treatment on Those with Lower Prevalence Rates

Homogenous Gender Norms
Lessen Diagnostic Accuracy: ROC Curves for ADHD

ADHD: Diagnostic Accuracy of Teacher Ratings for Ages 6 yrs-11 yrs Using Combined Gender Versus Same Gender Norms
ROC Curve Summary

- In some cases the differences are small, but in every case at both age groups displayed, and across both parents and teachers as raters, combined gender norms were more accurate at the sweet spot of sensitivity and specificity.
- For really extreme cases, it does not matter which norm set we use, as the ROC Curves merge, but these are the cases where we have the fewest and least difficult diagnostic problems.

Combined or Same Sex Norms?

- Combined gender norms preserve known and documented differences on key behavioral and emotional constructs, e.g., anxiety, hyperactivity.
- Combined gender norms preserve known and accepted differences in prevalence rates of disorders known to differ as a function of gender.
- Combined gender norms are more accurate overall in the diagnostic process with the exception of the most extreme cases—in really extreme cases, choice of norms is irrelevant, but these are not the cases that worry us.

Differential Diagnosis is Crucial to Success

- Treatment of child and adolescent emotional and behavioral disorders should never be “one-size” fits all.
- The evidence-based research literature argues strongly in favor of matching treatments to specific diagnoses if we are to be effective in treatment.
- Students with EBDs deserve treatment—not just management.
- A declaration of eligibility (i.e., Randy is ED) is insufficient to guide Rx.
One size fits all does not work

We must match the Rx to the Dx

The BASC-3 Model Provides Guidance and the BASC-3 Materials the Wherewithal to Make Accurate Diagnoses of ADHD

- History and Context (SDH)
- Current behavior in multiple settings (PRS/TRS)
- Assessed via multiple methods (e.g., Rating Scales, SOS, self-report)
- Evaluation of feelings, emotions, and self-perceptions (SRP) and Parenting (PRQ)
- Links to evidence-based interventions and monitoring forms (e.g., BIG, Flex Monitor, Treatment Fidelity)
Do not interpret test data blindly

Sorry, Bugs and Rorschachs Just Seem to go Together

History and Context are Crucial

Berg, Franzen, and Wedding (1987) suggest that

“A careful history is the most powerful weapon in the arsenal of every clinician, whether generalist or specialist. Brain-behavior relations are extremely complex and involve many different moderator variables, such as age, level of premorbid functioning, and amount of education. Without knowledge of values for these moderator variables, it is virtually impossible to interpret even specialized, sophisticated test results.” (p.47)

Context is Always Important

Know who you are evaluating: Remember, “Symptoms” do not mean the same thing for everyone.

### Symptoms Common to 3 Disorders

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Affective</th>
<th>Physical</th>
<th>Cognitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional lability</td>
<td>Accident proneness</td>
<td>Attention problems</td>
<td></td>
</tr>
<tr>
<td>Quick temper</td>
<td>Restlessness</td>
<td>Memory deficit</td>
<td></td>
</tr>
<tr>
<td>Hyperirritability</td>
<td>Overactivity</td>
<td>Learning problems</td>
<td></td>
</tr>
<tr>
<td>Exaggerated startle responses</td>
<td>Sleep problems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decreased self-esteem</td>
<td>Enuresis</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Attention Deficit Hyperactivity Disorder, Overanxious Disorder of Childhood, and Post-Traumatic Stress Disorder

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Affective</th>
<th>Physical</th>
<th>Cognitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional lability</td>
<td>Accident proneness</td>
<td>Restlessness</td>
<td>Attention problems</td>
</tr>
<tr>
<td>Quick temper</td>
<td>Restlessness</td>
<td>Overactivity</td>
<td>Memory deficit</td>
</tr>
<tr>
<td>Hyperirritability</td>
<td>Overactivity</td>
<td>Sleep problems</td>
<td>Learning problems</td>
</tr>
<tr>
<td>Exaggerated startle responses</td>
<td>Enuresis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decreased self-esteem</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Clinical Probability Indexes From BASC-3

Include ADHD

<table>
<thead>
<tr>
<th>Index</th>
<th>Teacher Rating Scale</th>
<th>Parent Rating Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADHD Probability</td>
<td>P: 2-5, C: 6-11, A: 12-21</td>
<td>P: 2-5, C: 6-11, A: 12-21</td>
</tr>
<tr>
<td>Emotional Behavior Disorder Probability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autism Probability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Functional Impairment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Clinical Probability</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

BASC-3 ADHD Probability Index

Children who present with elevated scores on this index likely experience problems that will adversely affect their academic performance, such as difficulty focusing or maintaining attention, inability to organize tasks effectively, difficulty making decisions, or difficulty moderating their own activity level. These problems center around the key diagnostic features of ADHD and discriminate at a high level between normal children and those with a Dx of ADHD. Does not differentiate by subtype. Highest Clinical Probability Index in ADHD samples.
**BASC-3 Functional Impairment Index**

Indicates the level of difficulty a child has engaging in successful or appropriate behavior across a variety of interactions with others, performing age-appropriate tasks, regulating mood, and performing school-related tasks. Indicates the degree to which maladaptive behaviors interfere with daily functions of life and its enjoyment/success. Functional impairment is central to any Dx. Second highest Clinical Index in ADHD behind the ADHD Index.

---

**Executive Functioning Indexes New to BASC-3 TRS and PRS: ADHD Kids Perform Poorly on These on Average**

- **Problem Solving Index**
- **Attentional Control Index**
- **Behavioral Control Index**
- **Emotional Control Index**
- **Overall Executive Functioning Index**
  (Their worst score of all the content scales)

---

**ADHD Profiles on the BASC-3:TRS**

- **Composite Scales:**
  Highest score=School Problems
  Lowest Score=Adaptive Skills
- **Clinical Scales:**
  Highest Scores: Attention Pxs, Hyperactivity, Learning Pxs
  Lowest Score: Somatization
- **Adaptive Scales:**
  Highest Score: none above 50
  Lowest Scores: Study Skills, Leadership
- **Content Scales:**
  Highest Scores: Executive Functioning, Emotional Self-control
  Lowest Score: Resiliency
ADHD Profiles on the BASC-3:PRS

- **Composite Scales:**
  - Highest score = Externalizing Problems
  - Lowest score = Adaptive Skills (even lower than TRS)

- **Clinical Scales:**
  - Highest Scores: ATT, HYP, AGG, CON (all higher than TRS)
  - Lowest Score: Somatization

- **Adaptive Scales:**
  - Highest Score: none above 45
  - Lowest Scores: Activities of Daily Living, Leadership

- **Content Scales:**
  - Highest Score: Executive Functioning, Anger Control
  - Lowest Score: Resiliency

Clinical Profiles on The BASC-3 PRQ

- **ADHD**
  - Low on Attachment & Involvement
  - High on Relational Frustration

- **Emotional/Behavioral Disturbance**
  - Low on Discipline Practices & Parenting Confidence
  - High on Relational Frustration

- **Autism Spectrum Disorder**
  - Low on Communication & Discipline Practices
  - High on Parenting Confidence and Satisfaction With School

Effective Interventions for ADHD

- **Medication:** There are multiple medications, primarily stimulants (e.g., Ritalin), which work best, but have the greatest side effects, and also noradrenalin and related reuptake inhibitors (e.g., Strattera), which are usually less effective overall but have fewer side effects.

- **Psychosocial Interventions:** Behavioral and cognitive – behavioral interventions are by far the most effective, but must target behavior and not be a general, one-size-fits-all plan.

- **Educational Interventions:** Use a direct instruction model to teach learning and study skills, strategic listening, time management, and organizational techniques.

- **Best Intervention**—all of the above—make an emphatic choice to adopt multiple interventions. Medication alone should never be the intervention plan, it must be accompanied by Psychosocial and Educational Interventions.
Some Things That Typically Do Not Work

- **Diets**—e.g., The Feingold Diet is effective in less than 5% of cases of ADHD.
- **Food or vitamin supplements:** The exception here is Omega-3 fatty acids from fish or krill (not flax) which have mild beneficial effects in high doses and are widely held to be safe.
- **Perceptual-motor programs, exercise programs, movement therapy, sensory-integrative therapy.**
- **Punishment Paradigms:** Persons with ADHD are extremely resistant to punishment as a means of modifying behavior except in the immediate presence of the punisher. No generalizability evidence.

Sources for Psychosocial and Educational Interventions

- **Psychosocial Interventions:**
- **Educational Interventions:**

A Comprehensive Text and Software Guide To Detailed, Specific Interventions
Interventions presented here are organized according to assessment results/problem categories

- Aggression
- Conduct Problems
- Learning Problems
- Adaptability
- Anxiety/Social Stress
- Attention Problems
- Depression
- Functional Communication
- Hyperactivity
- Social Skills/Leadership
- Somatization

For most ADHD cases, you will want to target Attention and Hyperactivity at a minimum. Other domains can be targeted based upon the specific behavioral profile of the student.

Go To The Attention Chapter And Here Is What You Would Find

- Characteristics and Conditions
- Theoretical framework
- Definitions and examples
- Annotated bibliography of research studies*
- Preparation for Intervention
- Steps for Implementation
- Examples
- Considerations

* Not in paper version of manual

Intervention Selection

- All interventions listed demonstrate evidence of effectiveness in the scientific literature.
- All interventions listed are documented to be effective with the designated population.
- All interventions listed can be done in schools.
- Professional judgment is still a requisite for effective treatment. There are multiple effective interventions for each class of behavioral and emotional issues. We need you to match them to your student and your setting.
Interventions known to be effective for Attention Problems

• Class-wide Peer Tutoring
• Computer-assisted Instruction
• Contingency Management
• Daily Behavior Report Cards
• Modified Task-presentation Changes
• Multimodal Interventions
• Parent Training
• Self-management Training

Example of Design

**SELF-MANAGEMENT**

**Incorporation**

1. Importance of self-management
   - Fosters sense of responsibility and self-control
   - Enhances independence and self-sufficiency
2. Self-monitoring and self-evaluation
   - Regularly track progress and set goals
   - Use data to adjust strategies
3. Self-reinforcement
   - Positive feedback for successful efforts
   - Rewards for meeting targets

**Implementation**

1. Setting clear objectives
2. Planning and organizing
3. Budgeting and time management
4. Monitoring and self-assessment
5. Reflecting on progress and adjusting strategies

**Instructions**

- Recipe for self-management:
  - Assess self-
  - Monitor self-
  - Evaluate self-
  - Reflect on self-
  - Adjust self-

**Case Study**

- Example of a student implementing self-management:
  - Set daily goals and objectives
  - Use a planner to organize activities
  - Track progress using a self-monitoring chart
Example Considerations

For Teaching
Self-management techniques can be effective even when a child is inaccurate in self-recording. Accuracy and thus attention to detail, can be encouraged by matching the child and teacher ratings. If teacher ratings are not available or viable, the child can submit self-recorded information to another adult (for a contingent reward). The most efficacious rewards however are self-rewards (i.e., those given by the child to the child), not rewards from the adult.

Self-management techniques can be effective in improving many aspects of a child’s life that require attention. Thoughtfully consider the goal of the intervention. If the goal is to increase attention for academic tasks...

For Age and Developmental Level
Sometimes attending to particular stimuli for long periods is a challenge beyond the child’s capabilities. The boredom factor in inattention is a lack of stimulation that everyone has experienced at one time or another in long meetings or social activities. Individuals with strong social skills...individuals with low levels of social skills...It is important to teach children socially acceptable methods of operating in a boring environment. For example, telling the geometry teacher the class is boring has worse consequences than the results of a lesson in social skills and strategic listening that may lead to occasional doodling during the lecture to ward off boredom.

Chapter 4: Interventions for Hyperactivity

Since ADHD is a disorder of self-regulation and often shows EF deficits—why don’t I recommend EF Coaching?
Some Comments and Directives on EF Coaching: Can We Teach or Improve EF?

• Yes, but....
• The generalizability problem is always with us.
• The solution is twofold: to train the specific, needed skills, and enhance the knowledge-base of the brain—i.e., enhance the input into EF where we can.
• EF is itself a method of the brain—give it better input to improve output.

Three Keys to Understanding What to Train—and to understanding EF

• The brain is an interdependent systemic network that functions in a constant state of reciprocal determinism.
• Higher cognitive processes in the brain are subject to the principle of dynamic localization of function.
• Process training has been notoriously unsuccessful in more than 500 years of such efforts. Why? The generalizability bugaboo—and yes, it is a big and scary one.
• So, train the specific needed skills, and enhance the knowledge-base of the brain—enhance the input into EF where we can.

Examples of What to Train and When

• Johnny can’t organize his study materials or figure out what to study in what sequence.
• Is this an EF problem?
• What to do for remediation?
  --Train his sequencing skills??
  --Hire an EF coach??
  --Other??
Johnny and Studying

• Avoid attempting to train any cognitive processes.
• Studying is a skill that can be taught directly.
• Teach Johnny Study Skills via a model of direct instruction.

If Johnny has Pxs Studying...

Teach Johnny to:
• Develop associations with prior learning.
• Use self-talk when studying.
• Use concept maps.
• Use multiple sources of information.
• Improve his concentration when studying.
• Improve his memorization skills.

Louisa has trouble listening and attending to the teacher during class

• EF Px or Skill Px?
• EF is a method or process of the brain.
• Process training has a 500 year Hx of failure as a means of academic remediation.
• Solution?
Teach Louisa Strategic Listening Skills and How to Improve Her Attentional Skills

Teach Louisa to:

• Become an active listener.
• Listen for and recognize teacher cues.
• Be prepared to listen.
• Self-manage and self-monitor her attention.

In Both Instances and Many Others There are Direct Actions the Teacher Can Undertake as Well to Improve a Student’s Performance in the Classroom

When Remediating Skill Deficiencies, One Size Fits All Does Not Work

• Let assessment guide the selection of interventions.
• Target skill problems, not processes.
The Key Is to Identify and Attack the Skill Deficiency

- Process remediation or process training of EF or EF coaching is rarely the answer.
- Identify the skill deficit.
- Attack the skill deficit directly.
- Remember, the best remedial program for a child who can’t read, is to teach the child to read—once we know the reading skill deficits, we know what to teach (and these are most often lack of fluency and a failure to know/use comprehension strategies).
- The same is true of EF—identify the skill deficit and attack it directly.
- Education science also says to use direct instruction models to teach these skills.

Involve Parents: Recent research summarized in the APA clinician’s digest...

Including an extensive meta-analysis, demonstrates that when parents are included as part of the treatment/intervention process for children and adolescents with EBDs, treatment effects improve between .5 and 1.0 SDs.

We Must Also Partner With Parents: Parent Tip Sheets
Tools For Partnership

Multiple Steps and Examples

Communication with Caregivers
Tip Sheets Exist in All Areas of Concern

Educational Interventions: Strategies for Academic Success
For most students with ADHD, you will want to teach learning and study skills, strategic listening, time management, and organizational techniques—however, you can also assess such areas and tailor the teaching to the individual student.

An Educational Intervention Manual
This Intervention Manual Has 3 Sections

• Section I: An Introduction to Learning Strategies

  Chapter 1: An Introduction to Learning Strategies: Assessment and Development

  Chapter 2. The Research Evidence From the Education Sciences: How Teaching Learning and Study Strategies Enhances Learning

Section II: Strategies for Developing Learning Strengths

7 Chapters—one for each of the following areas of academic skill.

How to teach:

Study Strategies
Writing and Research Strategies
Reading Comprehension Strategies
Note-taking Strategies
Listening Skills
Time Management and Organizational Strategies
Test-taking Strategies

Ex. Chapter Outline; Section II

• Chapter 3. Teaching Study Strategies

Assessment of Study Strategies
What Are the Best Study Strategies?
Teaching the Best Study Strategies
Teaching Students to Improve Their Concentration When Studying
Teaching Students to Improve Memorization
Teaching Students to Develop Associations With Prior Learning
Teaching Students to Use Self-Talk During Study
Teaching Students to Use Concept Maps
Teaching Students to Use Multiple Sources of Information
Summary
Section III: Strategies for Overcoming Academic Liabilities

3 Chapters—one for each of the following areas.
Teaching students to:
Understand and Ameliorate Test Anxiety
Develop Concentration and Attention Strategies
Increase Academic Motivation

Section III: Strategies for Overcoming Academic Liabilities, ex.

- Chapter 11. Teaching Concentration and Attention Strategies
  Assessing Attention and Concentration in the Academic Setting
  What Are the Best Concentration and Attention Strategies?
  Teaching the Best Concentration and Attention Strategies
  Teaching Students to Organize Study
  Teaching Students Increase Focus
  Teaching Students Self-motivation to Concentrate
  Teaching Students to Self-advocate
  Teaching Students to Self-manage Attention and Concentration
  Summary

Also 2 Helpful Appendices

- Appendix A: Web Sites With Supplemental Information on Improving Learning and Study Strategies
- Appendix B: Reproducible Figures
- References
Q: What teaching strategies are most effective for teaching strategies?

A: Education science says Direct Instruction is the best way to teach strategies for academic success and our teaching guidelines, scripts, and rubrics follow this method closely:

The most effective strategy for teaching strategies is clear, direct instruction that includes 4 components:

• Direct explanation
• Modeling by the teacher
• Guided practice
• Application and Evaluation

We Must Monitor Intervention Effects

• Monitor quantitatively using instruments with known psychometric properties.
• Monitor on a regular schedule
• Avoid subjective approaches or informal surveys or checklists.
• You can use the Flex Monitor to make a sound monitoring scale that is case or program specific.

BASC-3 Flex Monitor: What is it?

• A psychometrically sound means of developing user customized behavior rating scales and self-report of personality forms tailored to the needs of:
  1) the individual practitioner
  2) an individual case
  3) an individual program need
• Reliability data and standardized scores are then obtainable for each unique form developed for your unique need.
The BASC-3 Flex Monitor can be used to monitor behavioral and emotional functioning over a desired period of time. Users have the ability to:

- Choose an existing monitoring form.
- Create a form using an item bank.
- Choose a rater (teacher, parent, or student).
- Administer digital or paper forms.
- Set up recurring administrations over a specified time period.
- Generate monitoring reports to evaluate change over time.

For custom forms, a user chooses from our item pool and starts “building” a form. Items can be filtered/searched. When building the form, the user can compute the estimated reliability of the form, based on the BASC-3 standardization data sample. Adjustments can be made to the form based on the user’s needs.

Forms can be saved, and shared with other users within a school or hierarchy. Reliability data are provided to the creator of the form based on the BASC-3 standardization sample. Reports will include T scores that are generated based on the TRS/PRS/SPR standardization samples. This enables comparisons with a normative population, describing the extremeness of scores on your unique form. Intra-individual comparisons (i.e., comparing time 1 vs. time 2, etc.) are also provided. Comparisons are based on reliable change metrics.
BASC-3 Flex Monitor – Why choose the Flex Monitor?

• Its premise is based on the authors’ desires to move the field toward better practice and to make you more efficacious in your work.
• Forms can be created for monitoring program success as well as individual success or change.
• Forms are created using heavily vetted, validated items with known characteristics and content relevance.
• No need for informal assessments or guesstimates of the accuracy of change.
• In every other area of assessment, psychometric properties of the instruments being used are paramount; however, we tend to ignore them when using monitoring tools.
• The BASC-3 Flex Monitor is a unique offering that is simply unmatched elsewhere.

We must also monitor Rx fidelity or it will not occur

BASC-3 Behavior Intervention Guide for Emotional and Behavioral Issues also has available with it, the Documentation Checklist to document and assess treatment fidelity in RTI implementation for individual cases.

THE END!!