

# *EFFECTIVE BASED PRACTICES: IMPROVING STUDENT OUTCOMES*

WASA Special Education Director Academy

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LEARNING  
NEVER  
ENDS



## TARGETS FOR TODAY'S LEARNING EVIDENCE BASED PRACTICES

- There is a strong collection of educational Evidence Based Practices, that when used with fidelity, will improve educational outcomes for students with and without disabilities
- There is a research-to-practice-gap in our schools
- As a Special Education Leader, you can use your authority and influence to increase the implementation of Evidence Based Practices in our schools

# LEADERSHIP REMINDER



## Circle of Concern

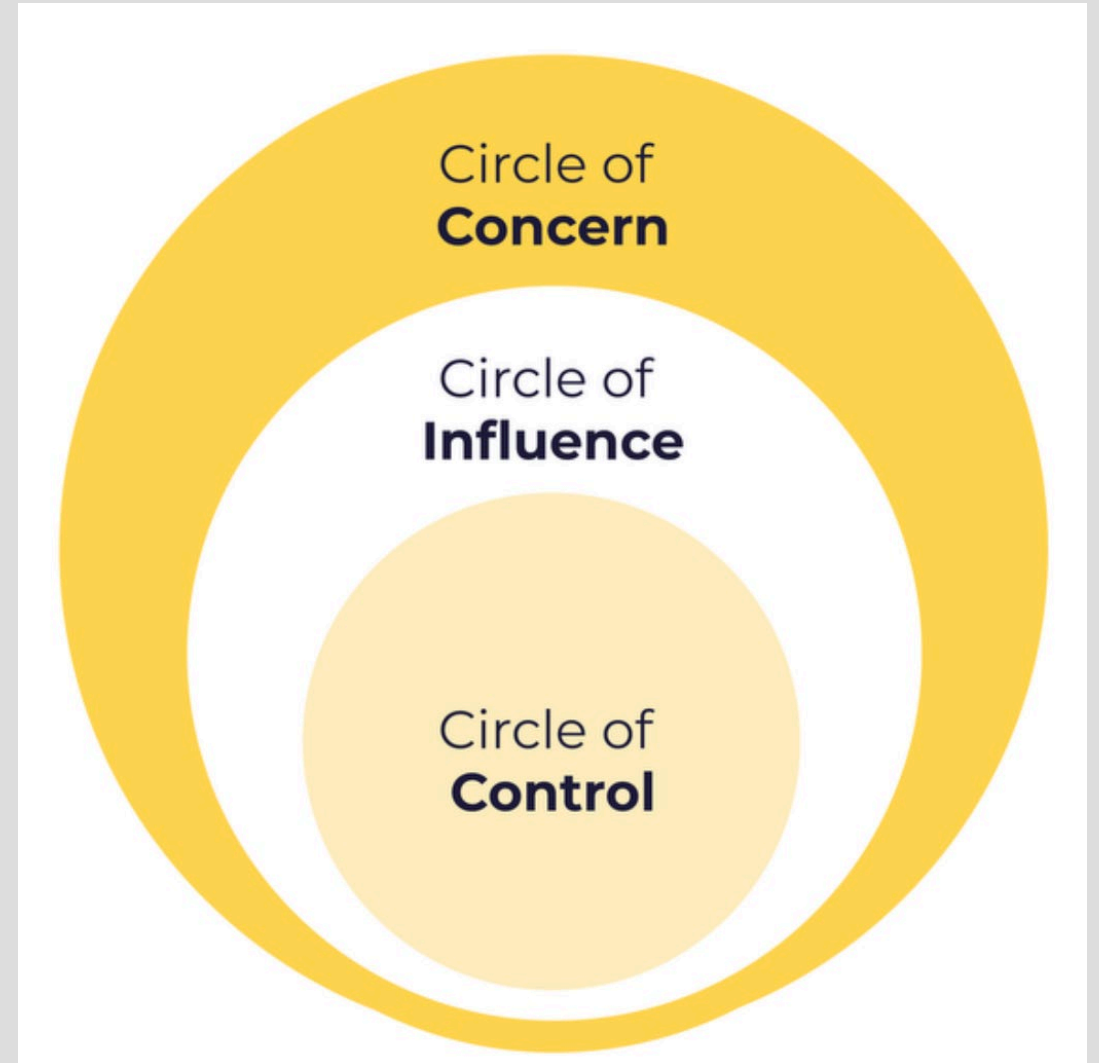
- It encompasses the wide array of things we care about or feel affected by, ranging from personal health and relationships to global issues like climate change or political unrest.
- This often leads to feelings of stress and anxiety as we dwell on factors beyond our immediate influence.

## Circle of Influence:

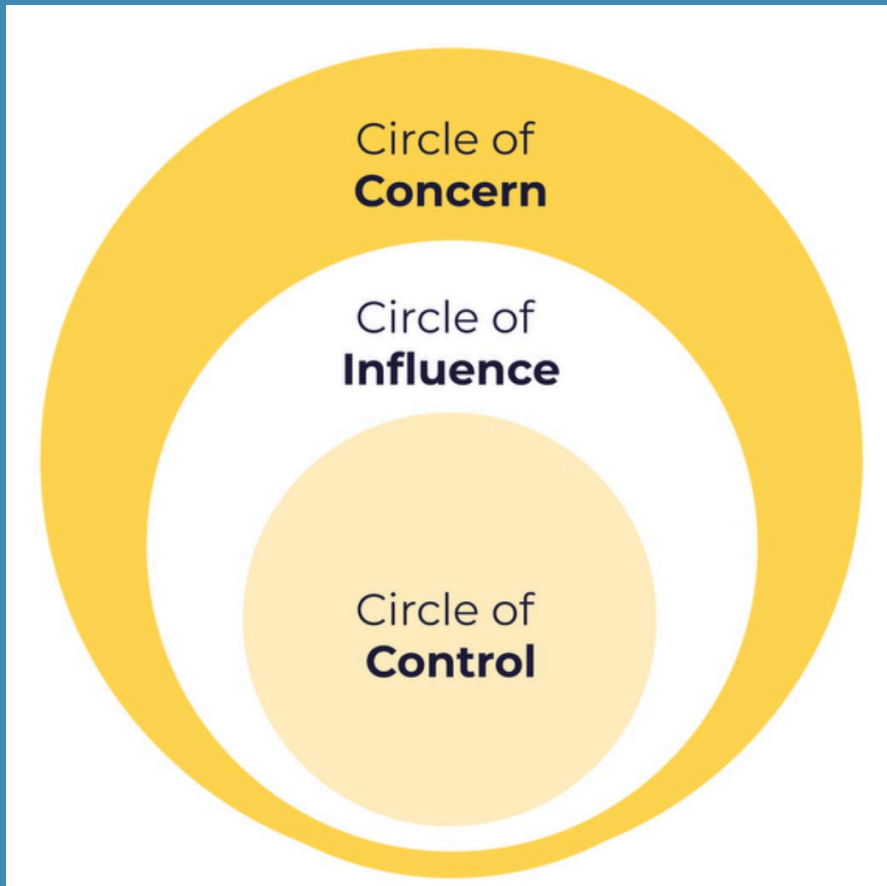
- Lies within the Circle of Concern and comprises the aspects we can directly impact through our actions and choices.
- By focusing our energy here, we can effect positive change and exert control over certain aspects of our lives.

## Circle of Control

- The innermost circle represents elements entirely within our grasp.
- These are the areas where we have direct power to make decisions and take action, leading to a sense of empowerment and efficacy.



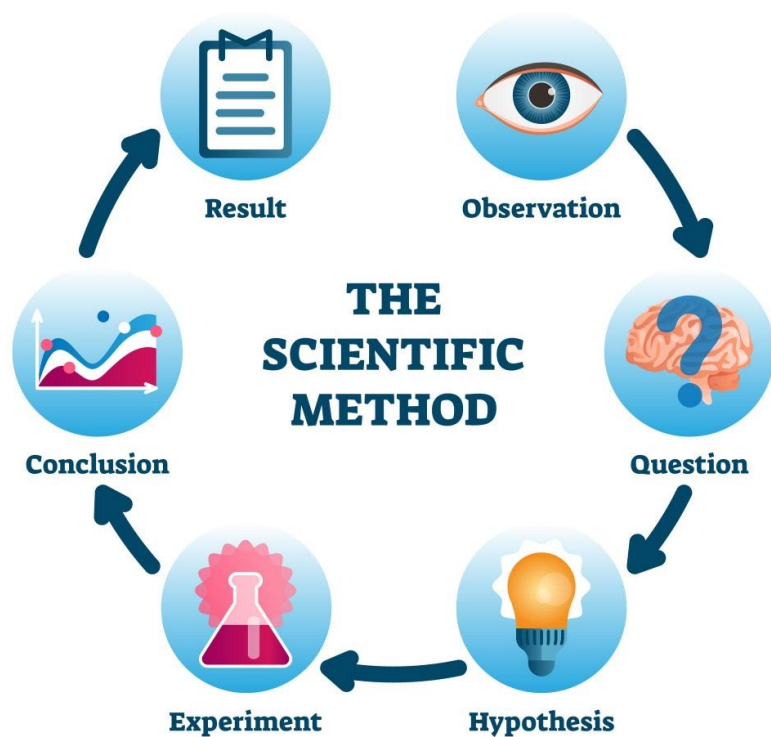
## REMAIN PROACTIVE



— Stephen R. Covey, [The 7 Habits of Highly Effective People: Powerful Lessons in Personal Change](#)

- **Proactive** people focus their efforts in the **Circle of Influence**.
- They work on the things they can do something about.
- The nature of their energy is positive, enlarging and magnifying, causing their Circle of Influence to increase.
- Reactive people, on the other hand, focus their efforts in the Circle of Concern.
- The negative energy generated by that focus, combined with neglect in areas they could do something about, causes their Circle of Influence to shrink.”

# CLARIFYING DEFINITIONS



from the IRIS Center

<b>Evidence-based practice</b>	<ul style="list-style-type: none"><li>• Shown to have a positive effect on student outcomes</li><li>• The research design allows one to infer that the practice led to child or student improvement</li><li>• Multiple high-quality studies have been conducted</li><li>• Reviewed by a reputable organization (e.g., What Works Clearinghouse)</li></ul>
<b>Promising practice</b>	<ul style="list-style-type: none"><li>• Shown to have positive effects on learner outcomes</li><li>• The research design does not clearly demonstrate that the practice led to child or student improvement</li><li>• Insufficient number of studies conducted to demonstrate its effectiveness</li></ul>
<b>Research-based practice</b>	<ul style="list-style-type: none"><li>• Some research studies have demonstrated positive effects on student outcomes while other studies have not</li><li>• Based on research that may or may not clearly demonstrate that the practice led to improved child or student outcomes</li><li>• Multiple studies have been conducted</li></ul>
<b>Emerging practice</b>	<ul style="list-style-type: none"><li>• Anecdotal evidence of effectiveness</li><li>• Research has not been conducted</li></ul>

## BE AN INFORMED CONSUMER: DO YOUR HOMEWORK

- Was the research on an effective social skills program, conducted on a population of students matching your districts?
- Does the research on an effective math program, include the instructional needs of students with certain types of disabilities?
- If a writing curriculum was effective in a neighboring district for improving written language skills, does your district have similar resources needed for implementation?
- Does the evidence-based practices address the root cause of your identified gap?
  - Example: Post-secondary transition practices focus on improving individual student skills/actions, however in many communities the barriers caused by systematic racism and economic differences play a larger role in student's failure to obtain their post-secondary goals.



# WAYS TO EVALUATE SCIENTIFIC CLAIMS

## STRIP IT

If I do X, there there is Y percent chance that Z will happen

Example: “If my child uses this reading software an hour each day for five weeks, there is a 50 percent chance that she will double her reading speed.”

## FLIP IT

Change how the outcome of the “intervention” is framed

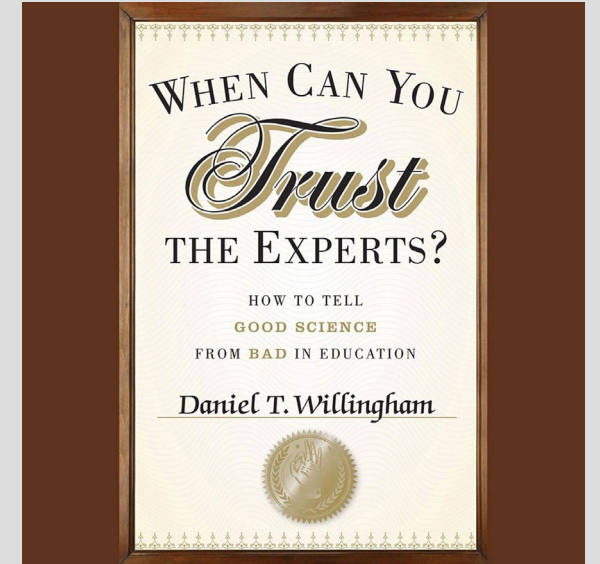
Example: A statement claiming that “the curriculum will get 85% of the students reading at grade level,” when FLIPPED says “the curriculum will mean 15% of students will not be reading at grade level.”

## TRACE IT

Who is making the claim, is it logical, what is their background and has it been peer reviewed

## ANALYZE IT

Look for research, not just anecdotal testimony; compare the improvement “claim” to your current data







## TRUSTED SOURCES FOR EVIDENCE BASED PRACTICES

# IES PRACTICE GUIDES

[HTTPS://IES.ED.GOV/NCEE/WWC/PRACTICEGUIDES](https://ies.ed.gov/ncee/wwc/practicguides)

## EACH PRACTICE GUIDE INCLUDES...



- A summary of the existing research on a key topic



- Definitions of key terms and concepts



- A discussion of practices that are supported by research evidence



- Specific recommendations for how to address educational issues



- Key examples to demonstrate the concepts discussed



- A system of evidence levels for each recommendation

## Teaching Elementary School Students to Be Effective Writers

**Released:** June 2012  
(Revised October 2018)

**Summary document (1029 KB)**

**Full Guide (5.2 MB)**



**Recommendations**

**Details**

**Panel**

**Related Resources**

This practice guide provides four recommendations for improving elementary students' writing. Each recommendation includes implementation steps and solutions for common roadblocks. The recommendations also summarize and rate supporting evidence. This guide is geared toward teachers, literacy coaches, and other educators who want to improve the writing of their elementary students.

## 3 LEVELS OF EVIDENCE



**1** Provide daily time for students to write.

[▼ Show More](#)

MINIMAL  
EVIDENCE

TIER  
**4**  
HAS  
RATIONALE

**2** Teach students to use the writing process for a variety of purposes.

[▼ Show More](#)

STRONG  
EVIDENCE

TIER  
**1**  
STRONG

**3** Teach students to become fluent with handwriting, spelling, sentence construction, typing, and word processing.

[▼ Show More](#)

MODERATE  
EVIDENCE

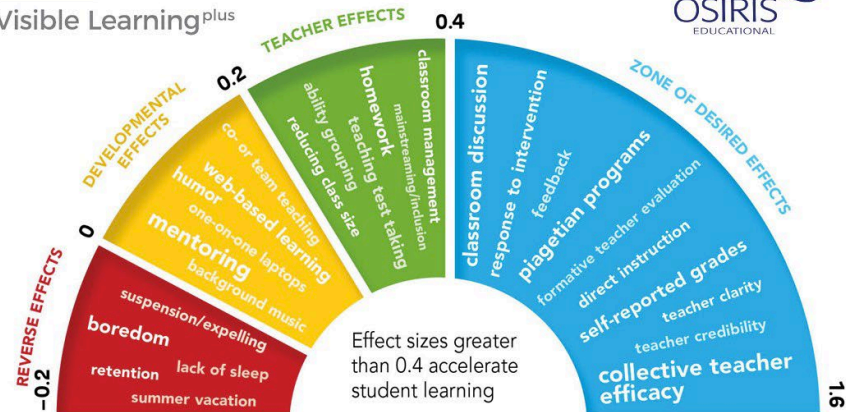
TIER  
**2**  
MODERATE

**4** Create an engaged community of writers.

[▼ Show More](#)

MINIMAL  
EVIDENCE

TIER  
**4**  
HAS  
RATIONALE



## Desired Effects

Collective teacher efficacy	1.57	Classroom discussion	.82
Self-reported grades	1.33	Teacher clarity	.75
Response to intervention	1.29	Feedback	.70
Piagetian programs	1.28	Direct instructions	.60
Teacher credibility	.90	Formative teacher evaluation	.48

## Typical Teacher Effects

Classroom management	.35	Homework	.29
Ability grouping	.30	Mainstreaming/inclusion	.27
Teaching test taking	.30	Class size	.21

## Developmental Effects

Co-/team teaching	.19	Mentoring	.12
Web-based learning	.18	Background music	.10
One-on-one laptops	.16	Humor	.04

## Reverse Effects

Summer vacations	-.02	Suspension/expelling	-.20
Lack of sleep	-.05	Moving Between Schools	-.34
Retention	-.32	Boredom	-.49

## John Hattie: Visible Learning

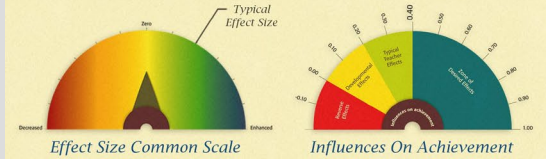
<https://visible-learning.org>

## How to have an effect on student achievement

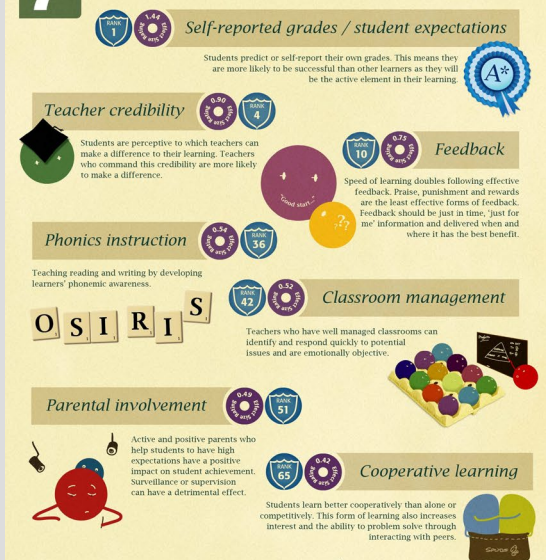
Based on the research by Professor John Hattie and Visible Learning<sup>plus</sup> team

## The Research Scope

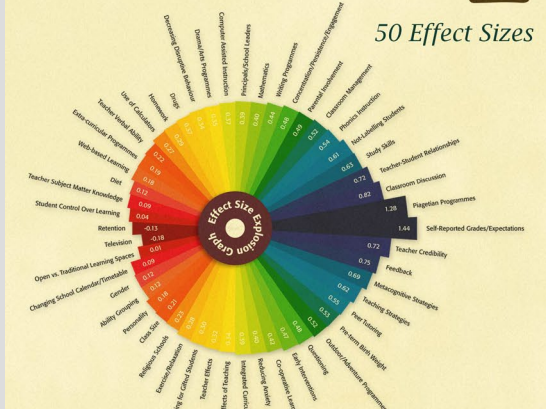
1000<sup>plus</sup> meta-analyses  
50,000<sup>plus</sup> studies  
240,000,000<sup>plus</sup> students



## 7 Top Effects and why they work



## 50 Effect Sizes



## Early Identification System (EIS) Intervention Hub

(formally Missouri EBI Network)

- <https://ruralsmh.com/intervention-hub/>



## Early Identification System (EIS) Intervention Hub

The EIS intervention hub connects to interventions across 7 risk areas known to be related to later mental health problems. Within each area, you will find prevention strategies and interventions for elementary, middle, and high schools across three tiers.

Tier 1 is universal, meaning that it benefits all students. Tier 2 (selective) offers interventions for a targeted group of students. Tier 3 (indicated) interventions are aimed to provide individualized support for students who have increased levels of risk. **Click on an area below to learn more.**



Attention and  
Academic Issues



Peer Relationship  
Problems



Externalizing  
Behaviors



Internalizing  
Behaviors



Emotional  
Dysregulation



School  
Disengagement



Bullying  
Behaviors





# The National Professional Development Center on Autism Spectrum Disorder

- [List of 28 Evidence Based Practices](#)
- [AFFIRM Models for Professional Development on each EBP](#)

## EVIDENCE-BASED PRACTICES FROM 2014 NPDC REVIEW

Select the practice to access the AFIRM module and downloadable resources.

<b>ABI</b> <i>Antecedent-based Intervention (ABI)</i>	<b>NI</b> <i>Naturalistic Interventions (NI)</i>	<b>SM</b> <i>Self-management (SM)</i>
<b>CBI</b> <i>Cognitive Behavioral Intervention (CBI)</i>	<b>PII</b> <i>Parent-implemented Interventions (PII)</i>	<b>SN</b> <i>Social Narratives (SN)</i>
<b>DR</b> <i>Differential Reinforcement (DR)</i>  Previously Differential Reinforcement of Alternative, Incompatible, or Other Behavior	<b>PMII</b> <i>Peer-mediated Instruction and Intervention (PMII)</i>  Previously Social Skills Groups	<b>SST</b> <i>Social Skills Training (SST)</i>



Autism Focused Intervention  
Resources & Modules

Login | Sign Up

AFIRM Modules

Timely Toolkits

Earn CE Credits

Selecting EBPs

AAA

### Time Delay

#### Time Delay (TD)

TD

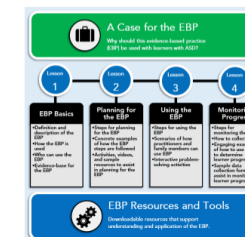
Time delay (TD) can be used to increase academic, communication, social, motor, and play skills.

#### What Will I Learn?

The AFIRM model guides the learner through four lessons to facilitate:

- Learning basic knowledge about time delay (TD).
- Applying TD in activity based scenarios that promote real-world application.

The TD module will take approximately 1.5 to 2 hours to complete. However, the module is broken into individual lessons to help guide your learning:



[Click to view AFIRM model](#)

Lesson	Time to Complete
A Case for TD	10 minutes
Lesson 1: Basics of TD	20 minutes
Lesson 2: Planning for TD	25 minutes
Lesson 3: Using TD	25 minutes
Lesson 4: Monitoring TD	25 minutes
Applying TD	10 minutes

#### Suggested citation:

Sam, A., & AFIRM Team. (2015). *Time delay*. Chapel Hill, NC: National Professional Development Center on Autism Spectrum Disorder, FPG Child Development Center, University of North Carolina. Retrieved from <http://afirm.fpg.unc.edu/time-delay>

# BEST EVIDENCE ENCYCLOPEDIA (BEE)

<https://bestevidence.org>



The screenshot shows the homepage of the Best Evidence Encyclopedia (BEE). At the top, there is a header with a cartoon bee logo wearing glasses and a backpack, the title "Best Evidence Encyclopedia" in large yellow and black text, and the tagline "Empowering Educators with Evidence on Proven Programs". Below the header is a dark navigation bar with the site name "Best Evidence Encyclopedia" on the left and links for "HOME", "ABOUT THE BEST EVIDENCE ENCYCLOPEDIA (BEE)", and "SIGN UP FOR NEWS" on the right. A search icon is also present. On the left side, there is a vertical menu with various topics: "Program Reviews", "READING", "MATHEMATICS", "WRITING", "SCIENCE", "COMPREHENSIVE SCHOOL REFORM", "EARLY CHILDHOOD", "RESEARCH METHODS", "EVIDENCE BASED REFORM", "SPECIAL AND REMEDIAL EDUCATION", "SUMMER SCHOOL", "COVID LEARNING LOSS", and "SPECIAL FOCUS". The main content area features a large image of students working on a laptop with the text "Welcome to the BEE" and "This website aims to empower educators with evidence on proven programs." Below this, there is a section titled "Check out additional educational research-related resources from our center:" followed by links to "Evidence for ESSA" and "Evidence for ESSA". On the right side, there is a "SPOTLIGHT" section featuring a portrait of Robert Slavin and the title "ROBERT SLAVIN'S BLOG ARCHIVE". Below this, there is a paragraph about the blog archive and a link to "See Robert Slavin's blog archive about education-".

**Best Evidence Encyclopedia**  
Empowering Educators with Evidence on Proven Programs

Best Evidence Encyclopedia

HOME ABOUT THE BEST EVIDENCE ENCYCLOPEDIA (BEE) SIGN UP FOR NEWS

Program Reviews

READING

MATHEMATICS

WRITING

SCIENCE

COMPREHENSIVE SCHOOL REFORM

EARLY CHILDHOOD

RESEARCH METHODS

EVIDENCE BASED REFORM

SPECIAL AND REMEDIAL EDUCATION

SUMMER SCHOOL

COVID LEARNING LOSS

SPECIAL FOCUS

Welcome to the BEE

This website aims to empower educators with evidence on proven programs.

Check out additional educational research-related resources from our center:

Visit [Evidence for ESSA](#) and sign up for [Evidence for ESSA](#)

**SPOTLIGHT**

**ROBERT SLAVIN'S BLOG ARCHIVE**

Blog archive from the late Robert Slavin, who served as the Director of the Center for Research and Reform in Education at Johns Hopkins University

See [Robert Slavin's blog archive](#) about education-

# NATIONAL TECHNICAL ASSISTANCE CENTER ON TRANSITION

<https://transitionta.org/topics/effective-practices/>

The screenshot shows the NTACT (National Technical Assistance Center on Transition) website. The header includes the NTACT logo and navigation links for 'About Us', 'Training & TA', and 'Tools'. A search bar is prominently displayed with the instruction 'Search below to find practice descriptions and lesson starters.' Below the search bar, a list of skill categories is shown, with 'Community Engagement Skills' selected and expanded to show sub-categories like Basic Finance, Communication Skills, Fine Motor Tasks, Food Preparation, Grocery Shopping, Home Maintenance Skills, Interviewing Skills, Leisure Skills, Purchasing Skills, Safety Skills, and Use of an iPad or iPhone. Other categories like Academic Skills, Employment Skills, Family and Agency Involvement, Self-Determination / Self-Advocacy Skills, Social Skills, and Student Support are also listed. On the right side, three practice descriptions are visible, each starting with a date and a title: 'Video Modeling to Teach Home Maintenance Skills' (August 2, 2022), 'Video Modeling to Teach Leisure Skills' (March 2, 2022), and 'Video Modeling to Teach Use of an iPad or iPhone' (March 2, 2022). Each description includes a brief overview and a link to 'Predictors'.

NTACT  
THE COLLABORATIVE  
National Technical Assistance Center on Transition

About Us Training & TA Tools

More about Effective Practices

Search below to find practice descriptions and lesson starters.

Search

Showing: 1 - 10

**Video Modeling to Teach Home Maintenance Skills**  
August 2, 2022  
This practice implemented teaching home maintenance skills using video modeling with embedded prompting strategies.  
Predictors: [Self-Care/Independent Living Skills](#)

**Video Modeling to Teach Leisure Skills**  
March 2, 2022  
This practice implemented teaching leisure skills like origami, selfies, hanging streamers and party signs, decorating using video modeling.  
Predictors: [Community Experiences](#), [Self-Care/Independent Living Skills](#), [Social Skills](#)

**Video Modeling to Teach Use of an iPad or iPhone**  
March 2, 2022  
This practice used video modeling to teach use of an iPad or iPhone.  
Predictors: [Self-Care/Independent Living Skills](#)

**Video Modeling to Teach Food Preparation Skills**  
March 1, 2022  
Video modeling is a form of video response prompting. This practice implemented teaching food preparation skills using video modeling.  
Predictors: [Self-Care/Independent Living Skills](#)

- ☐ Academic Skills
- ☒ Community Engagement Skills
  - ☒ Basic Finance
  - ☒ Communication Skills
  - ☒ Fine Motor Tasks
  - ☒ Food Preparation
  - ☒ Grocery Shopping
  - ☒ Home Maintenance Skills
  - ☒ Interviewing Skills
  - ☒ Leisure Skills
  - ☒ Purchasing Skills
  - ☒ Safety Skills
  - ☒ Use of an iPad or iPhone
- ☐ Employment Skills
- ☐ Family and Agency Involvement
- ☐ Self-Determination / Self-Advocacy Skills
- ☐ Social Skills
- ☐ Student Support
- ☐ Select All

Search Reset



# IRIS CENTER AT VANDERBILT

[https://iris.peabody.vanderbilt.edu/resources/ebp\\_summaries/](https://iris.peabody.vanderbilt.edu/resources/ebp_summaries/)

Search

Search

Reset

▼ Topics

☐ Assessment (includes Progress Monitoring)

☐ Behavior and Classroom Management

☐ Content Instruction

☐ Diversity

☐ Early Intervention/Early Childhood

☐ Learning Strategies

☐ Mathematics

☐ MTSS/RTI (includes intensive intervention)

☐ Reading, Literacy, Language Arts

☐ School Improvement/Leadership

☐ Transition



## Evidence-Based Practice Summaries

These research summaries covering instructional strategies and interventions offer information that includes level of effectiveness as well as the age groups for which a given strategy or intervention is designed. Links to the original reports are also provided for those who might wish to explore further.

Assessment (includes Progress Monitoring)



Behavior and Classroom Management



Content Instruction



Diversity



Early Intervention/Early Childhood



Learning Strategies



Mathematics



MTSS/RTI (includes intensive intervention)



Reading, Literacy, Language Arts



School Improvement/Leadership



Transition



# AMERICAN INSTITUTE OF RESEARCH (AIR)

**AIR**  
Advancing Evidence.  
Improving Lives.

**Center on  
Multi-Tiered System of Supports**

SEARCH  
RESOURCE LIBRARY

ESSENTIAL COMPONENTS ▾ IMPLEMENTATION REQUEST SUPPORT SPECIAL TOPICS ▾ ABOUT US ▾

## Welcome to the MTSS Center

Since 2007, the MTSS Center has been a national leader in supporting states, districts, and schools across the country in implementing an MTSS framework that integrates data and instruction within a multi-level prevention system to maximize student achievement and support students' social, emotional, and behavior needs from a strengths-based perspective.



**PROGRESS Center**  
Promoting Progress for Students with Disabilities

DEVELOPMENT IMPLEMENTATION NEWS & EVENTS ▾ RESOURCES & TOOLS ▾ TRAINING ABOUT ▾ CONTACT

## Center Advisors


Home > About > Center Advisors

**National Center on  
INTENSIVE INTERVENTION**  
at the American Institutes for Research®

Search

About DBI ▾ Tools Implementation & Intervention ▾ Training ▾ Special Topics ▾ Resource by Audience ▾ News & Events

## What is DBI? Learn about NCI's approach to intensive intervention!



## KNOW & UNDERSTAND GUIDANCE FROM PROFESSIONAL ORGANIZATIONS

- [American Speech & Hearing Association \(SLP/Audiologist\)](#)
- [American Physical Therapy Association](#)
- [American Occupational Therapy Association](#)
- [National Association of School Psychologists](#)
- [National Association of School Nurses](#)
- [CEC](#)
  - [CEC/DLD/DR Practice Alerts](#)
  - [Council of Administrators of Special Education](#)

## FACT: THERE IS A RESEARCH-TO-PRACTICE GAP IN SCHOOLS



- "Practices known to be ineffective are used commonly; and practices without evidence supporting their effectiveness, and even practices known to be ineffective, are applied in many classrooms."
- "Findings from observational research indicate that teachers seldom use practices in their teaching that are supported by research as effective."
- "The research-to-practice gap likely causes greatest harm to students with disabilities, who require highly effective instruction to meet their goals."

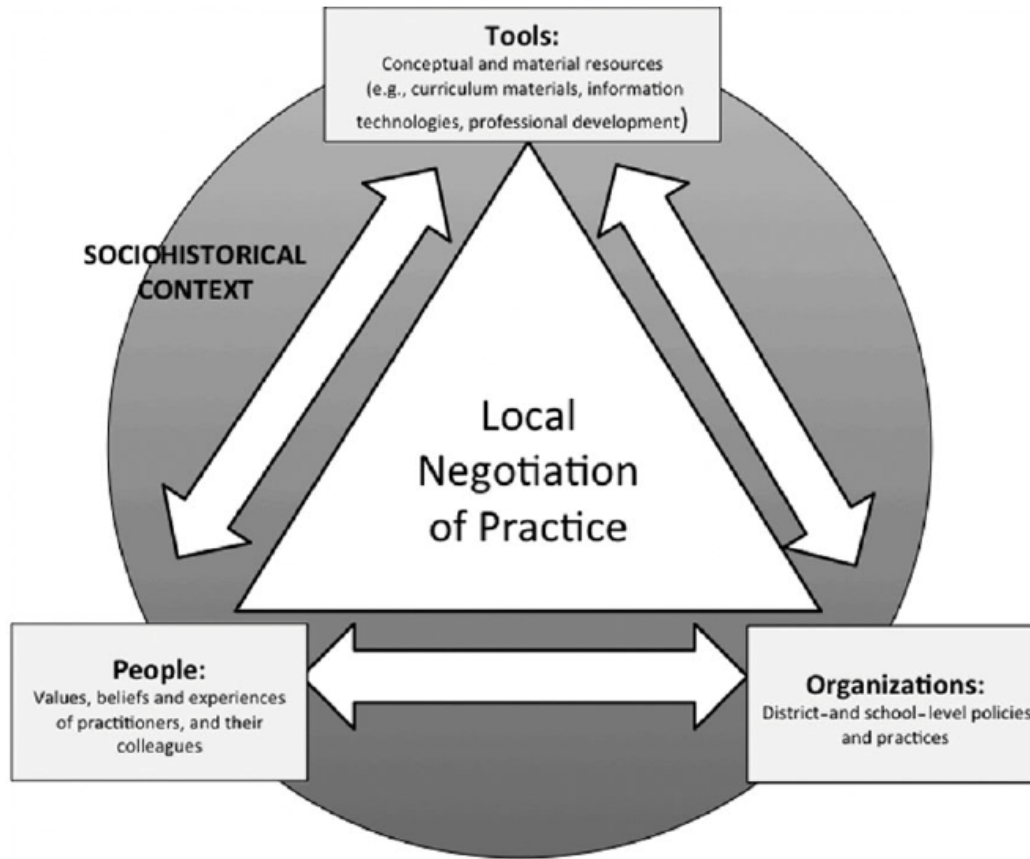
## CONSIDER THE VIEWS OF STAFF IMPLEMENTING EBP



- Definitive Supporters
  - Hold “clear and positive views about the importance of research in decisions about classroom practice.”
- Cautious Consumers
  - Feel that “research *could* be useful, but often did not reflect characteristics and needs of their individual students.”
- The Critics
  - “Expressed skepticism about the value of research for decisions about classroom practice.”

Hudson et. al article, 2016

# STAFF NEED SUPPORT TO IMPLEMENT EVIDENCE BASED PRACTICES



Staff use of EBP is impacted by:

- The experience and beliefs of the **PEOPLE** around them
- The **TOOLS** available to them for effective implementation and
- The policies and practices of the **ORGANIZATION**

Figure 1. Relationships between people, organizations, and tools. Adapted from McDiarmid & Peck (2012).





“Administrators equipped with the relevant knowledge and skills are poised to provide both leadership and support necessary the implementation of instructional practices grounded in research.”

“Special Education administrators are now at a crossroads in the evolution of the field and are faced with the challenge of promoting collaboration between general and special education teachers and administrators to assure high-quality educational programs are accessible to all students.”

Boscardin, Garand, & Tudryn, 2015, in assessment for intervention





# SOLICIT AND BUILD COLLABORATION AROUND EVIDENCE BASED PRACTICES

- Create a culture where:
  - Staff routinely gather and share best practice information
  - Best practice information is shared in ways that meaningfully engage other district leaders
  - Investigate and collaborate with others to identify concerns/issues that need to be addressed
  - Involve leaders and stakeholders in the exploration and selection of "best practice" that match with your identified concern/issue and context

## LEARN A LESSON FROM EFFECTIVE DISTRICTS...

- **Leadership:** “School & district leaders how believe in the capacity of schools to make kids smarter and work relentlessly to ensure that they do.”
- **Scientific Method:**
  - a) identify a problem based on evidence,
  - b) propose a solution based on local data and existing research;
  - c) c) implement it,
  - d) d) gather data,
  - e) e) analyze an determine effectiveness of solution; and
  - f) f) if solved expand/ if not; adjust or start over
- **Systems of Support**
  - a. Time for staff to meet/plan and provide interventions
  - b. Formative assessment data that is useful and helpful
  - c. Build culture of trust: everyone is open to learning
  - d. Disseminate research information about how students learn

From: Chenoweth, K. (2021) districts that succeed: breaking the correlation between race, poverty, and achievement

## USE THE PROCESS OF EVIDENCE-BASED PRACTICE

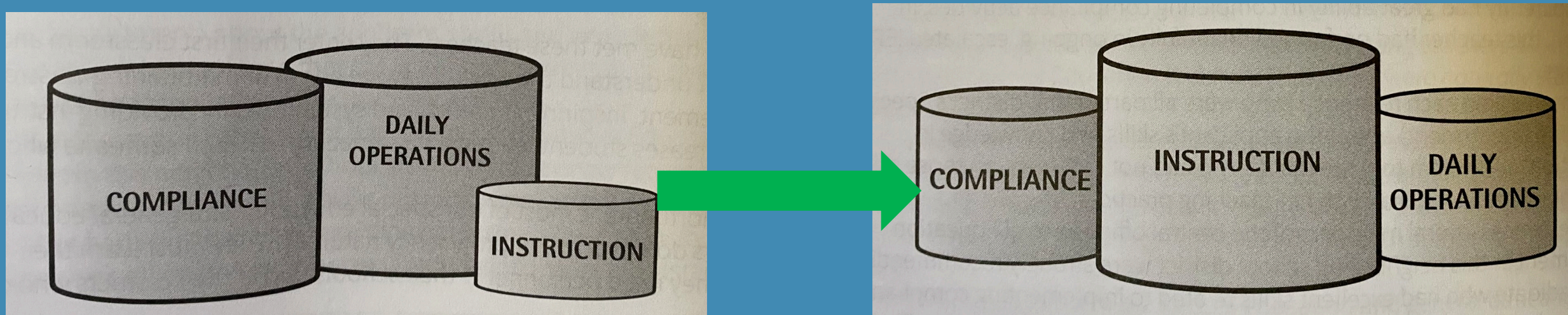
1. Identify a practical problem to be address (e.g. reading fluency for students with learning disabilities)
  2. Identify an instructional EBP that meets needs of students and can be implemented
  3. Implement with fidelity- adapting non-essential elements as needed to fit local context
  4. Conduct ongoing, formative assessment and make data-based decision
- ✓ Be sure the research evidence supports your pre-identified learning outcome
  - ✓ Check to make sure the research establish outcomes for your targeted learning population (e.g. race, age, disability)
  - ✓ Check for value alignment; acceptable to family, addresses a relevant goal
  - ✓ Can you allocate the necessary resources for teacher(s) to implement?

# PROMOTING THE USE OF EVIDENCE BASED PRACTICES IS YOUR **JOB**

- Be informed about and stay current with Evidence Based Practices
  - Websites
  - Journal articles
  - Your Professional Library
- Provide Effective Professional Development & Support
  - Avoid one-shot trainings, ongoing coaching has a strong evidence base for effective Professional Development
  - Support the collection of data to determine effective base practices for your context
- Shape School Culture
  - Define purpose, strategies and workplace norms to support the Process of Evidence Based Practices
  - Utilize tools and practices from Implementation Science

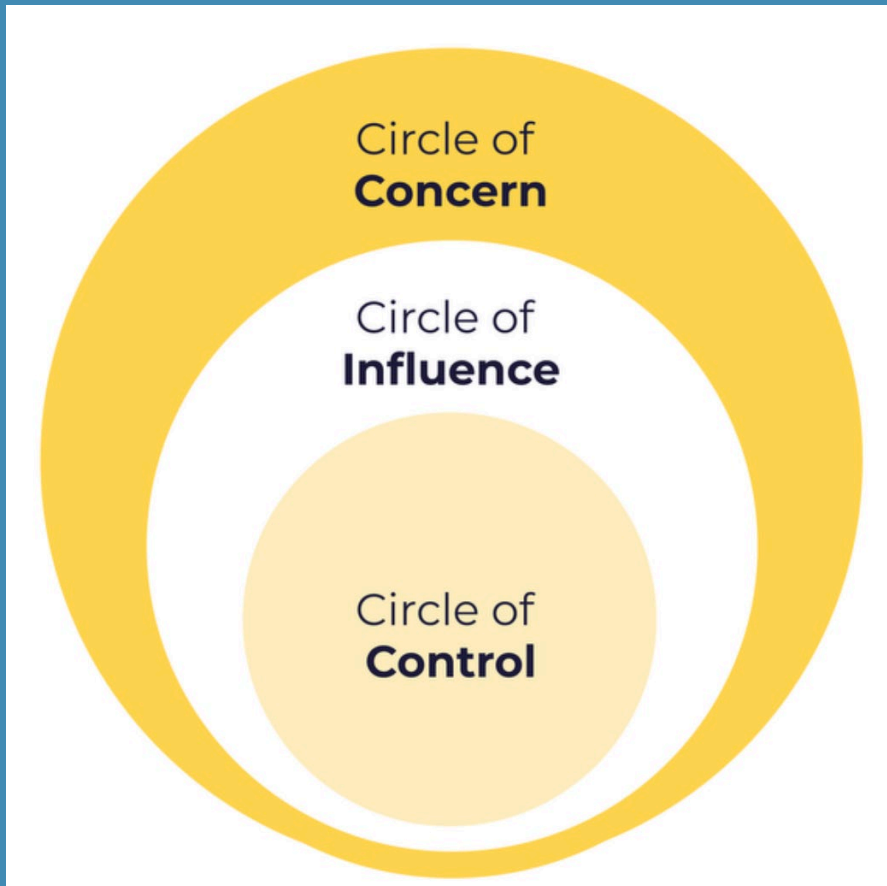


## ALTER YOUR LEADERSHIP FOCUS



From Great Instruction, Great Achievement for Students with Disabilities: A Road Map for Special Education Administrators  
by John L O'Conner

## REMAIN PROACTIVE



— Stephen R. Covey, [The 7 Habits of Highly Effective People: Powerful Lessons in Personal Change](#)

- **Proactive** people focus their efforts in the **Circle of Influence**.
- They work on the things they can do something about.
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