

Creating Thirsty Horses: 3 Keys to Increasing Implementation Fidelity



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You Can Lead a Horse to Water But
You Can't Make...



What Actions Could You Take ?

Following this Mini-Skills You Could:

- ☐ Self-Assess Your Strengths in Implementing Interventions with Fidelity
- ☐ Plan a Protocol to Improve Installation of an Intervention.



Opening Activity

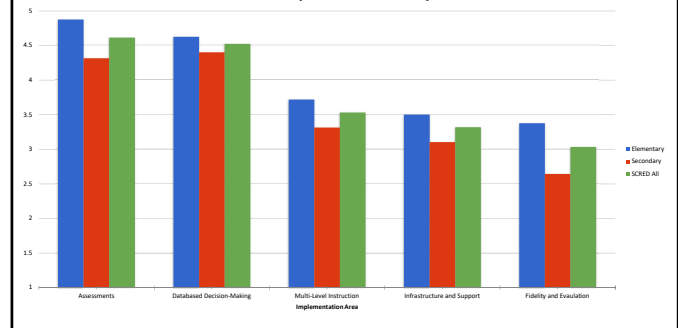
- Introduce yourself to two people near you and tell them one question you want answered during this session and one thing you already know about the topic.

Facts about the St. Croix River Education District (SCRED)



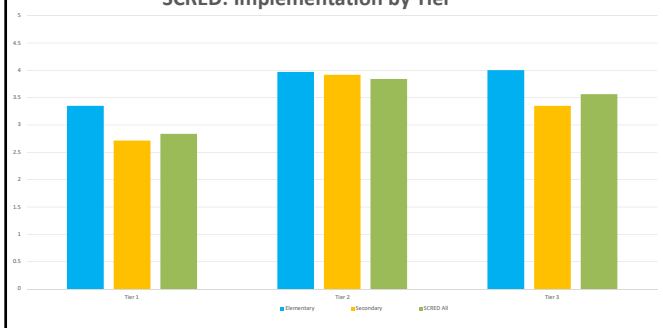
- National Recognition
- Gary Germann
- Pilot Site for CBM's (1980's)
- Early Implementation of RtI (1995)
- SLD Eligibility Using RtI (2005)
- MN RtI Center (2007-09)
- Long History of Data-Based Decision-Making

SCRED: Implementation By Area



SCRED: Implementation by Tier

Back to Alan



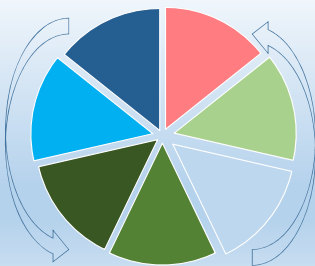
Thoughts on Sustainability

- It's hard to sustain practices over time with fidelity.
- MTSS is like a recipe. It's not a McDonald's "value menu" where you like one part but not another part.
- It takes time to understand it's a system and it all interacts with each other.
- You can't pick and choose!



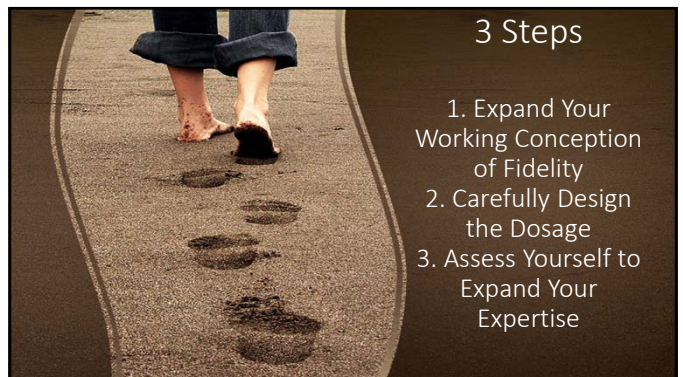
Where I Plan to Go Today

7 Elements of Fidelity



3 Steps

1. Expand Your Working Conception of Fidelity
2. Carefully Design the Dosage
3. Assess Yourself to Expand Your Expertise



Big Ideas: Key Factors in Fidelity

- 7 Pieces Implies Fidelity is Complex
- Collaborative Culture is Essential
- Not Evaluation of Implementer.
- Helps Everyone (Trainer to Teacher or Interventionist to Student) to Improve
- Never a Punitive Exercise

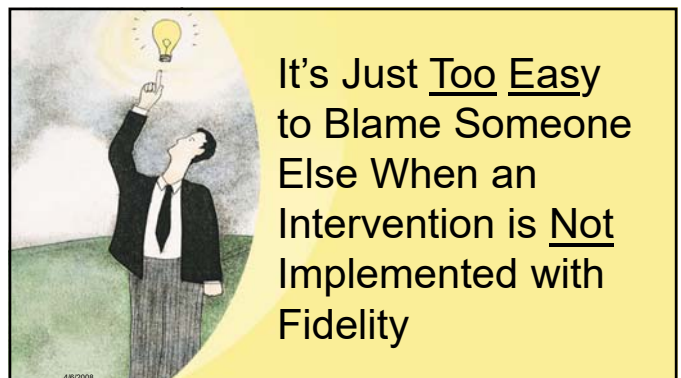


Why Measure Adult Implementation ?



Why Can Implementation be So Low?

Speculate and Give Us Some Hypotheses



It's Just Too Easy to Blame Someone Else When an Intervention is Not Implemented with Fidelity

Premise 1

Remember: 2 Types of Critical Data

Effect Data

Cause Data

Kids

State Test Scores
Benchmark Tests
Progress Monitoring

Adults


Teaching,
Curriculum,
Parental Involvement,
Leadership,
Etc.



Here's Kim

Think/Pair/Share

1. What's Your Practical Definition of Implementation Fidelity ?
2. Pick a number between 1-5
3. # Shout Outs



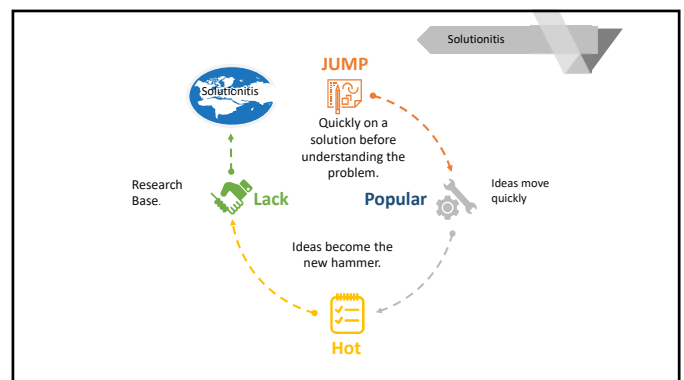
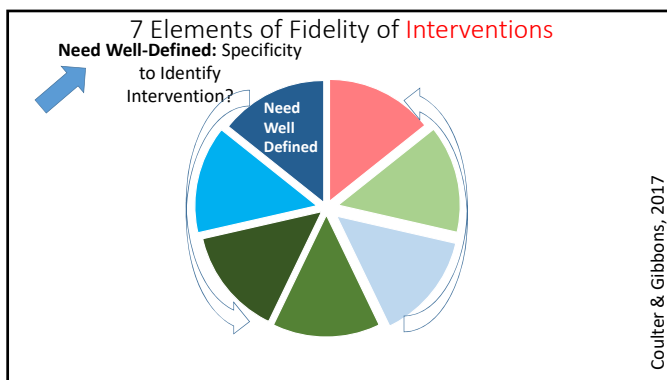
Premise 3 - Interchangeable Terms:

- ✓ Integrity
- ✓ Fidelity
- ✓ Procedural Reliability

Definition:
 “a system of interrelated components, inc. adherence, participant responsiveness, quality of delivery,” ... Leading to Implementation as Intended by the Supporting Evidence
 (Edmunds et al., 2016)


Key #1

Expand Your Working Conception of Fidelity

Need Well-Defined

- ✓ Student Need Operationalized
- ✓ Actionable Definition
- ✓ Can be Linked to Evidence-Based Interventions

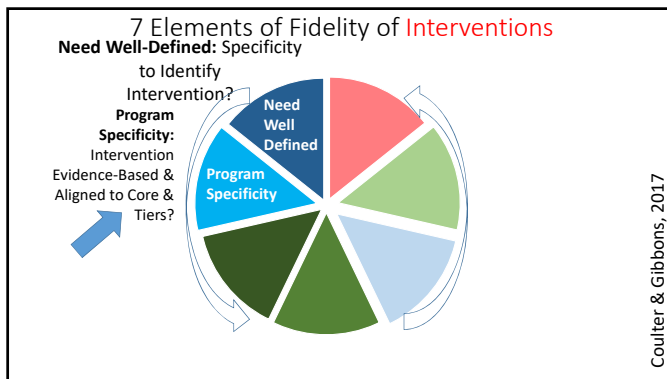


Back to Alan
“A Problem Well-Put, is Half-Solved.”
 John Dewey

Coulter & Gibbons, 2017

Need Well-Defined?

- Only 45% of first graders have met the fall literacy benchmarks. It is expected that 80% of students will reach benchmarks.
- Because they have not yet mastered letter sound correspondence and blending sounds to make words.
- Intervention – PALS classwide, Phonics program small group



Program Specificity

- ✓ Note: Fidelity Hard to Measure if the Intervention is Not Well-Defined!
- ✓ Intervention Meets Criteria for Evidence-Based
- ✓ Current Intervention Inventory?

Coulter & Gibbons, 2017

National Center on Intensive Intervention

National Center on
INTENSIVE INTERVENTION
An American Institutes for Research

Instruction and Intervention Inventory

Question	Reading	Mathematics	Behavior
What core instructional materials are used in your school?			
What standardized intervention programs are currently available at the secondary (1 thru 12) level in your school?			

Evidence-Based Practice/ Intervention

SUCCESS

What is an E-B Practice/Intervention? Really ?

"Evidence Based" & ESSA

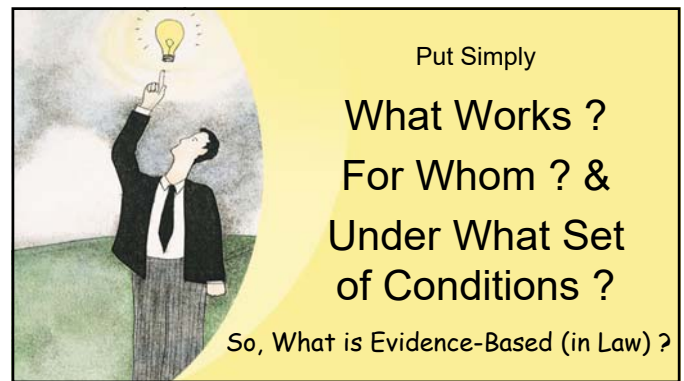
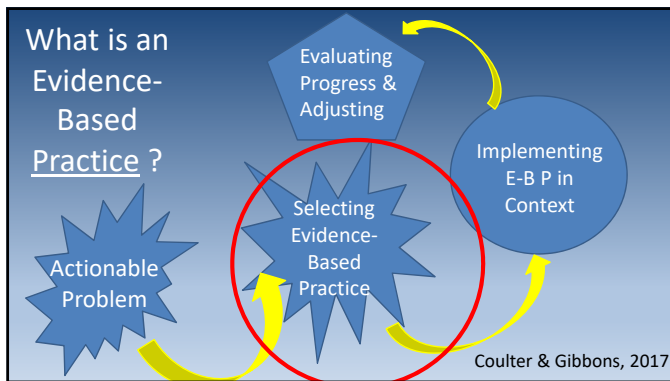
WestEd

- ✓ Appears 58 times in ESSA
- ✓ Governs Use of Funds & Selection of Interventions
- ✓ Note: Variation in How Levels of Evidence are Applied & When States & Districts Elect to Use Specific Funds to Support an Intervention or Strategy

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The Replication Crisis ?

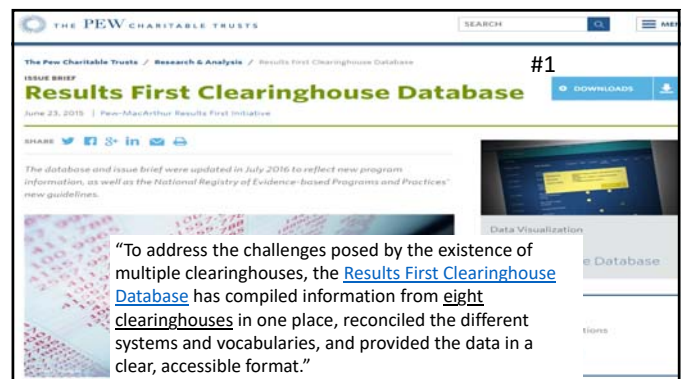
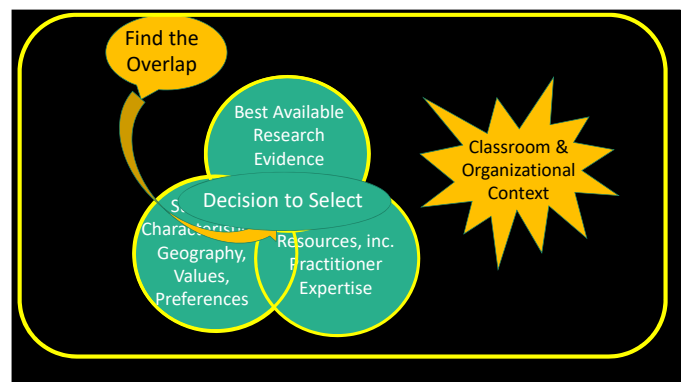
- ✓ Methodological **Crisis** in Science
- ✓ Scientists found Results of many Scientific Studies Difficult or Impossible to **Replicate** ,
- ✓ Either by Independent Researchers or Original Researchers Themselves.



Unpacking Definition of "Evidenced-Based" in ESSA

WestEd wested.org

Strong	• At Least 1 Well Designed & Well Implemented Experimental Study (i.e., Randomized).
Moderate	• At Least 1 Well Designed & Well Implemented Quasi-Experimental Study (i.e., Matched).
Promising	• At Least 1 Well Designed & Well Implemented Correlational Study With Statistical Controls for Selection Bias.



SOCIETY OF CLINICAL CHILD & ADOLESCENT PSYCHOLOGY **DIVISION 53**

Effective Child Therapy Online Education

<http://effectivechildtherapy.fiu.edu/>

Welcome to the Effective Child Therapy Online Education website! ECT Online Education was developed by the Society of Clinical Child and Adolescent Psychology (Division 53 of the American Psychological Association) in collaboration with the Center for Children and Families at Florida International University and The Children's Trust. Click on the links to the left for more information on the developers and sponsors of this website.

On this site you will find video resources for both parents and professionals about evidence-based practices that promote child and adolescent mental health.

Parents **Professionals**

<https://healthysafechildren.org/topics/evidence-based-interventions>

MENTAL HEALTH PROMOTION & YOUTH VIOLENCE PREVENTION

Grantee Programs Resources Learning Portal Grantee/Field Spotlights Trending Topics About Us

Home » Safe Schools » Healthy Students » Evidence Based Interventions

Evidence Based Interventions

Evidence-based interventions are practices or programs that have peer-reviewed, documented empirical evidence of effectiveness. Evidence-based interventions use a continuum of integrated policies, strategies, activities, and services whose effectiveness has been proven or informed by research and evaluation.

The SSHS Initiative and its grantees use data-driven strategies, identify needs and gaps, prioritize needs, identify evidence-based practices, and implement strategies to achieve successful outcomes for children, families, schools, and communities. The initiative targets several specific outcomes:

- Decreasing the number of students who abuse substances
- Improving school climate
- Increasing the number of students who receive mental health services
- Reducing the number of students who are exposed to violence

SAMHSA **Substance Abuse and Mental Health Services Administration**

<https://www.samhsa.gov/capt/tools-learning-resources/finding-evidence-based-programs>

Find information on evidence-based prevention programs and practices for prevention practitioners and individuals working in related behavioral health fields:

Behavioral Health Resources

Behavioral Health

- Blueprints for Healthy Youth Development** identifies youth violence, delinquency, and drug prevention and intervention programs that meet a strict scientific standard of program effectiveness.
- Evidence-Based Behavioral Practice (EBBP)** is a project that creates training resources to help bridge the gap between behavioral health research and practice.
- The Guide to Community Preventive Services** provides recommendations regarding generic programs and policies on a variety of public health areas, including substance misuse, mental health, and HIV/AIDS. The Guide is sponsored by CDC.
- The Matrix of Children's Evidence-Based Interventions at Co-Occurring Disorders Information Center**—2006 (PDF: 1,165 KB) developed by HHS, Inc., provides a brief but comprehensive snapshot of prevention, intervention, and/or treatment programs related to child and adolescent mental health services.
- SAMHSA's Evidence-Based Practice Implementation Resource Kits** are 11 downloadable resource kits that encourage the use of evidence-based practices in mental health.
- SAMHSA's Suicide Prevention Research Center (SPRC)** Best Practices Registry identifies, reviews, and disseminates information about best practices that address specific objectives of the National Strategy for Suicide Prevention—2012.

<https://store.samhsa.gov/shin/content/SMA11-4634CD-DVD/EBPsPromisingPractices-IDBD.pdf>

EVIDENCE-BASED PRACTICES KIT

Knowledge Informing Transformation

Guide to EBPs

Evidence-Based and Promising Practices

Interventions for Disruptive Behavior Disorders

STRAIGHT TALK ON EVIDENCE

Others You Use ?

How "official" evidence reviews can make ineffective programs appear effective

Policy Area: Crime/Juvenile

STRAIGHT TALK ON EVIDENCE

An important—but fixable—flaw in the What Works Clearinghouse that can make ineffective programs appear effective (part three in a series)

January 16, 2018 | Early Childhood, K-12 Education

Highlights: This report, like the previous one, offers constructive criticism of the What Works Clearinghouse (WWC), a widely-cited repository of evidence on "what works" in education that has successfully advanced rigorous evidence standards but also has flaws that...

<http://www.straighttalkonevidence.org/category/k-12-education/>

Policy Area: Crime/Juvenile

AIR
AMERICAN INSTITUTES FOR RESEARCH

General Resource on ESSA

<http://www.air.org/page/essa-co-pilot>

ESSA Co-Pilot

Your Partner for ESSA-Related Resources and Support

Implementing the Every Student Succeeds Act (ESSA) presents policymakers and stakeholders with opportunities to improve outcomes for schools and students as well as teachers and leaders. AIR's ESSA Co-Pilot will help you navigate the most current information, key topics, and research-based resources that you can use in planning and implementing ESSA at the state and local level.

FREE RESOURCES AND EXPERTISE

Organized by topic, plan section, or state to provide your team with research-based tools and support from AIR they can rely on.

ESSA SUPPORT

- Navigate ESSA Plan Components
- Topics
- Plan Sections
- Resources for States
- Latest News and Calendar
- Official State Websites and Plans
- ABOUT ESSA AT AIR
- Official ESSA Resources

Activity

➤ Stand up and tell the person next to you two important things you have learned so far!

Careful !

Too Many Interventions ? Here's Kim
What's Your Capacity to Implement ?

7 Elements of Fidelity of Interventions

Need Well-Defined: Specificity to Identify Intervention?

Program Specificity: Intervention Evidence-Based & Aligned to Core & Tiers?

Interventionist Engagement: How Acceptable is Intervention/Activity? Bought In?

Coulter & Gibbons, 2017

Interventionist Engagement

Acceptable/Feasible to Interventionist

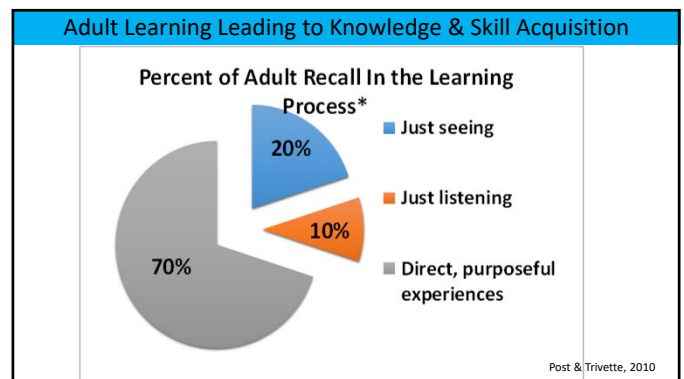
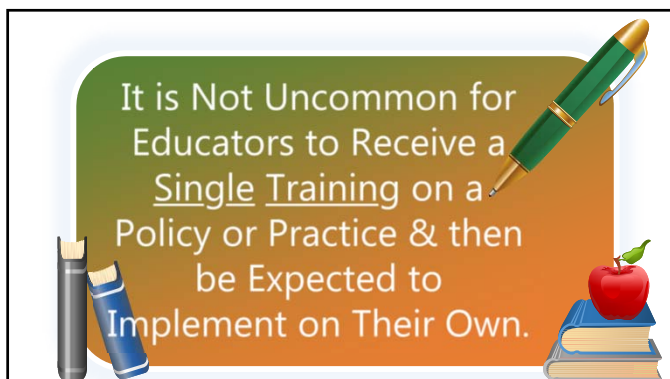
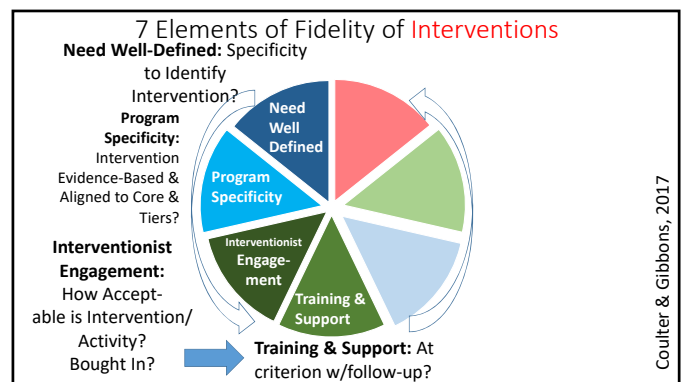
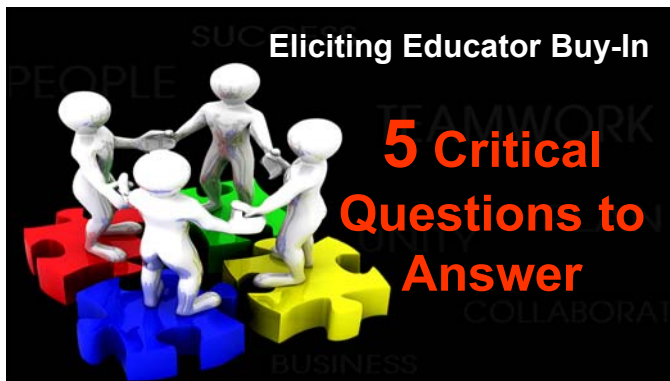
1. Easy to implement
2. Positive
3. Perceived Effectiveness
4. Compatible with Instructional Environment

✓ Try IAM (Implementation Acceptability Measure) or IRP (Intervention Rating Profile) Coulter & Gibbons, 2017

Test Drive to Reduce Resistance

- Teachers who were Resistant to Implementing New strategies
- Implemented w/ **Higher Rates of Fidelity** when
- Able to **"Test Drive"** Several Strategies & Select One Found Most **Acceptable**.
- Higher Levels of Implementation Fidelity Associated w/**Increased Student Engaged Time**.

Dart et al., 2012



Impact of Training Components on Teacher Learning and Use

Training Component	Concept Understanding	Skill Attainment (Mechanical Use)	Application
Presentation of Theory	85%	15%	5-10%
Modeling by Trainer	85%	18%	5-10%
Practice & Low-Risk Feedback	85%	80%	5-10%
Coaching (on-site)	85%	90%	80-90%

Common vs. Recommended Uses of Instructional Coaches

Common Use	Supporting Implementation Use
The teacher contacts the coach when support is needed.	The coach has a schedule of working with specific teachers and grade levels.
The coach works on practices that are requested by the teacher.	The coach focuses on the school improvement efforts that have been prioritized by the BLT.
The coach spends most of their time meeting and talking with teachers and grade-level teams.	The coach spends time observing and modeling classroom instruction. Conversations may support these efforts, but do not replace observation and modeling.
The primary data used during 1:1 and grade level instruction are teacher anecdotes	Student data and implementation data are used during each reflection conversation.

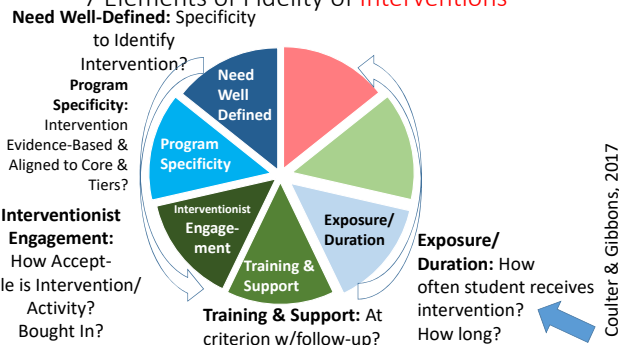
Training & Support

- ✓ Adhere to Principles of Effective Professional Learning.
- ✓ Review Fidelity Measure(s) to be Used w/Intervenors
- ✓ Measure Related Knowledge & Skills
- ✓ Make Training Replicable (Modularize It)
- ✓ Design Support Before Training is Completed & Commit
- ✓ Practice Measuring Student Performance & Emphasize Visual Comprehension (Graphing)
- ✓ Note: Scripts Very Helpful

Activity

- With your shoulder mate, identify one issue, problem, or concern related to professional learning in your building or district?
- How can you help address this issue?

7 Elements of Fidelity of Interventions



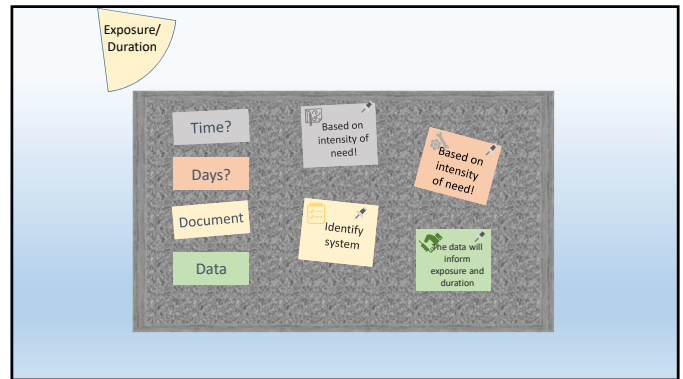
Exposure & Duration

Key Questions:

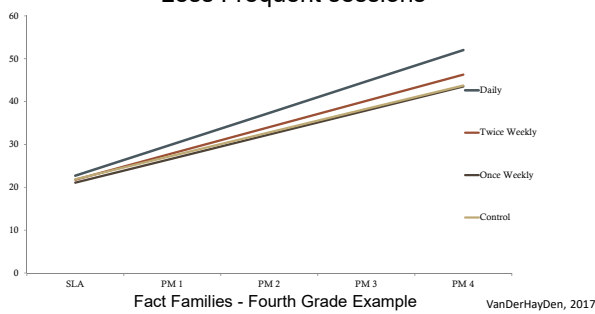
- Is the intervention provided for a sufficient duration & intensity to allow for success as predicted by evidence?
- Is intervention fitted to time available? Or
- Is adequate time allotted to do the intervention 'right'?

Key #2

Carefully Design the Dosage



Daily 10-min Superior to Longer Duration, Less Frequent sessions

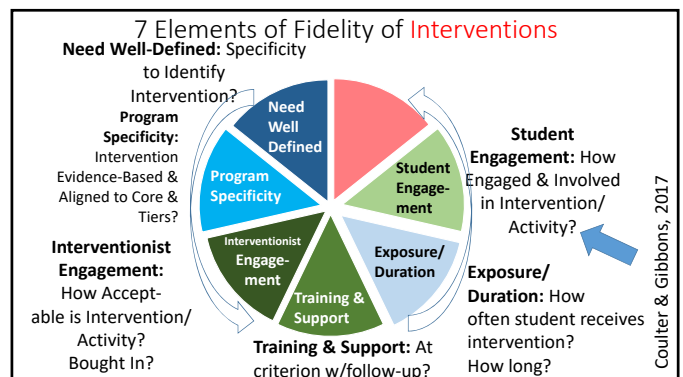


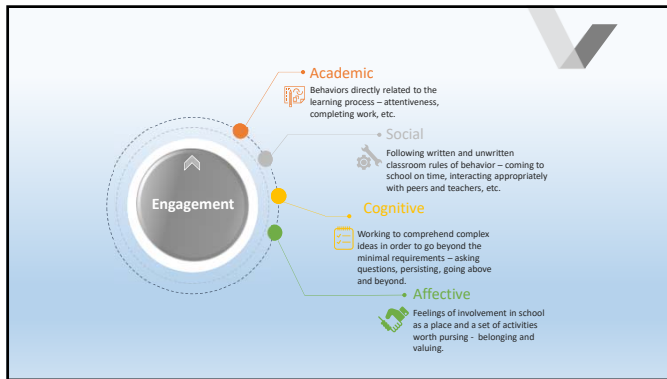
Think about This

“Compared to the General Practice of Education, Special Education is Instruction that is More Urgent, More Intensive, More Relentless, More Precisely Delivered, More Highly Structured & Direct, and More Carefully Monitored for Procedural Fidelity & Effects.” (Kauffman, 1996, p. 206)

Pop-Up: How is dosage determined?

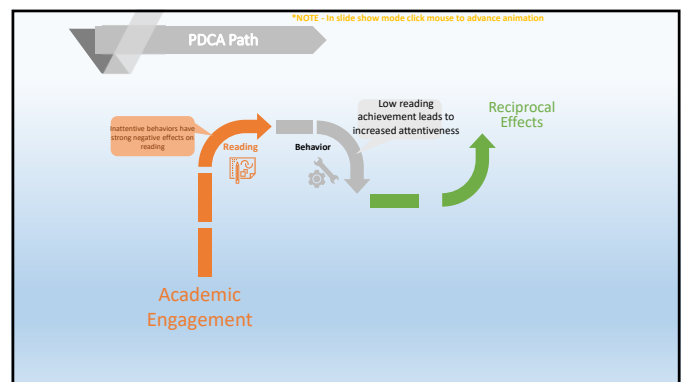
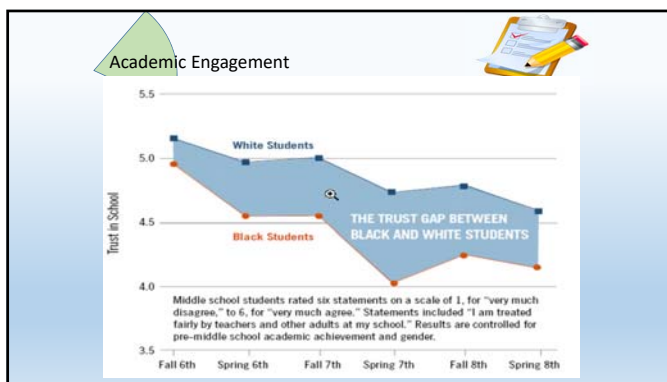
- Based on a predetermined schedule?
- Based on the intervention requirements?
- Based on student needs?
- Based on recommendations from a team?
- Intensive interventions are more intensive than supplemental (Tier 2) interventions.





Academic Engagement

- ✓ Students who exhibit academic engagement behaviors achieve at higher levels than their less academically engaged peers at all grade levels (Finn & Zimmer,).
- ✓ Strong correlations between paying attention and student achievement.
- ✓ Rowe and Rowe (1992): Regardless of age group or other risk factors (SES, Gender), significant negative correlations between lack of attention and reading achievement (r 's from $-.87$ to $-.48$)



STUDENT ENGAGEMENT PROJECT

Sample Resource

Nebraska CEHS SECD Student Engagement Project Links

ABOUT USING STRATEGY BRIEFS GRADUATION & DROPOUT BEHAVIOR & DISCIPLINE USING DATA POLICY ISSUES

Related Links & Resources

Building & Sustaining Student Engagement

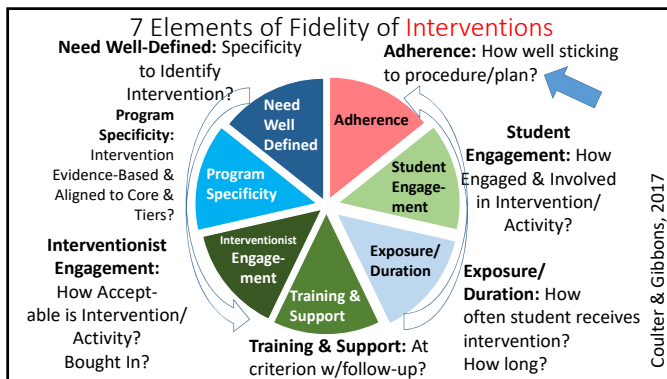
National and Nebraska Department of Education Links

- [NDPC-SD Dropout Prevention and Intervention Framework](#)
- [NDE Dropout Re-entry Re-engagement Project](#)
- [National Dropout Prevention Center for Students with Disabilities](#)

Acceptability Applied to Students

- Ask Students
- Use a Survey Measure (ex. KIP – Kids Intervention Profile – Eckert et al)

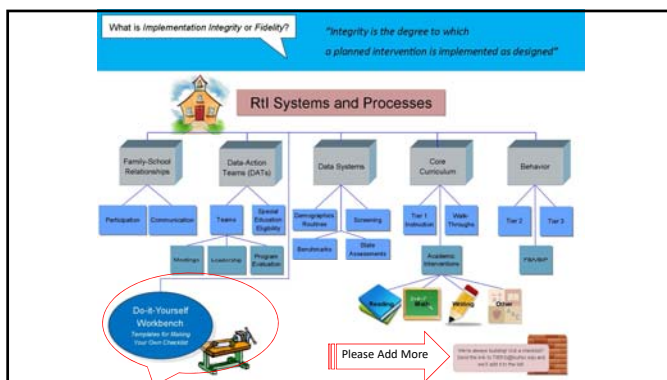
Here's Kim



Adherence

- ✓ Systematically Measure Fidelity as Feedback on Training & Support
- ✓ No Surprises (presented in 'Training')
- ✓ Unacceptable Scores - Reflection of What?
- ✓ Checklists as Common Method

Coulter & Gibbons, 2017



Check-In Check-Out SYSTEM®
Fidelity of Implementation Measure (CICO)®
Scoring Guide®

School: _____ Date: _____
District: _____ Data collector: _____

Student: _____
During the past week:

Evaluation Questions	Data Source® P = permanent product; I = Interview; O = Observation	Score® 0-2a	Yes	No	did not observe
1. Has the school identified a CICO coordinator whose job is to manage CICO (10-15 hours per week allocated)? (0 = No CICO Coordinator, 1 = CICO coordinator but less than 10 hours per week allocated, 2 = CICO Coordinator, 10-15 hours per week allocated)	Interview with Administrator & CICO Coordinator	0-2a	Yes	No	did not observe
2. Does the school budget contain an allocated amount of funding to maintain the CICO? (e.g. money for materials, DPR forms, etc. (0 = No, 2 = Yes))	CICO Budget	0-2a	Yes	No	did not observe
3. Do students who are referred to the CICO receive support within a week? (0 = more than 2 weeks between referral and CICO support, 1 = within 2 weeks, 2 = within a week)	Interview CICO Referrals & CICO Start dates	0-2a	Yes	No	did not observe
4. Does the school ensure CICO data are not consistently missing?	CICO recording forms	0-2a	Yes	No	did not observe
5. Do 90% of the students check-in daily? (Randomly sample 3 days for recording) (0 = 0-90%, 1 = 51-90%, 2 = 90-100%)	CICO recording forms	0-2a	Yes	No	did not observe
6. Do 90% of students on the CICO check-out daily? (Randomly sample 3 days for recording) (0 = 0-90%, 1 = 51-90%, 2 = 90-100%)	CICO recording forms	0-2a	Yes	No	did not observe
7. Do 90% of students on the CICO check-out daily? (Randomly sample 3 days for recording) (0 = 0-90%, 1 = 51-90%, 2 = 90-100%)	CICO recording forms	0-2a	Yes	No	did not observe
8. Student CICO points are recorded daily	CICO recording forms	0-2a	Yes	No	did not observe
9. Student CICO data is reviewed by the school behavior support team at least every two weeks	CICO recording forms	0-2a	Yes	No	did not observe
10. Process in place for CICO to be (a) linked to self-management of CICO to be effective, or (b) linked to functional-based support if CICO is not effective	CICO recording forms	0-2a	Yes	No	did not observe

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3. Do students who are referred to the CICO receive support within a week? (0 = more than 2 weeks between referral and CICO support, 1 = within 2 weeks, 2 = within a week)	Interview CICO Referrals & CICO Start dates	0-2a

Focus on the System

School: _____ Date: _____
Student: _____

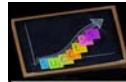
During the past week:

1. Student checked in with a designated staff member before school started.	Yes	No	did not observe
2. Check in staff person positively acknowledged student at check in, gave student a daily progress report, and ensured that the student had materials needed for first class.	Yes	No	did not observe
3. Student gave daily progress report to each teacher at the beginning of designated class periods.	Yes	No	did not observe
4. Teacher positively acknowledged student when given daily progress report.	Yes	No	did not observe
5. Teachers provided contingent feedback at end of class period.	Yes	No	did not observe
6. Student checked out with designated staff member at the end of the day.	Yes	No	did not observe

Focus on the Adult & Student

5 Steps to Using Any Implementation Fidelity Measurement

1. Select a Measure
2. Ask Teachers for Feedback on Social Validity
3. Co-Edit w/Guidelines
4. Teachers Use Measure w/Each Other
5. School Leaders/PLCs use the Measure to Improve Performance & Results



Common Errors in Developing Checklists

- ✓ Too Many Items (Not More than 10)
- ✓ Not Time-Bound
- ✓ Not Co-Created or Co-Edited
- ✓ Imposed on Users

How to Create An Integrity Checklist. . .



Core Questions



- What does the intervention Look like when it's in Use?
- What would be Seen in classrooms where it is Used?
- What will teachers and students be Doing when the intervention is in Use?

(Hall & Hord, 2001)

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Making the Checklist



- Identify the Steps in Intervention
- Create an Item for Each Step
- Yes/No Response for Each Item
- Not more than 10 items (5?)



Duet Reading



- Purpose
 - Student and teacher alternate words as they read the same passage together
 - Provides support for tracking, a delayed model for accurate reading, and establishes a slightly faster reading pace

Duet Reading



- Materials
 - ✓ Short texts that the student can read with at least 95% accuracy
 - ✓ Long enough that the student will be able to almost complete the passage in 1 minute after practicing the duet procedure

Duet Reading: Sequence



First Reading

Student reads the passage aloud. Teacher provides immediate standard error corrections.

- "That word is _____. What word?" The student repeats the word. Teacher says, "Yes. That word is _____." Student goes back to the beginning of the sentence to begin again.
- Teacher counts back (me you me you me you)

Duet Reading: Sequence



Second Reading

- Teacher and student take turns reading EVERY OTHER WORD. Teacher first this time.
- Teacher should read with excellent expression to avoid typewriter style output.
- Teacher should push the pace forward by reading each next word as soon as the student read the last word. Teacher provides standard error corrections immediately following any error.
 - "That word is _____. What word?" The student repeats the word. Teacher says, "Yes. That word is _____." Student goes back to the beginning of the sentence to begin again.

Duet Reading: Sequence



Third Reading

- Teacher and student take turns reading EVERY OTHER WORD. Student first this time.
- Teacher continues to model excellent expression and to press the pace forward.
- Teacher provides standard error corrections immediately following any error.
 - "That word is _____. What word?" The student repeats the word. Teacher says, "Yes. That word is _____." Student goes back to the beginning of the sentence to begin again.

Duet Reading: Sequence



Fourth Reading

- Student reads the entire passage out loud alone.
- May repeat sequence with a second passage, or the next section of the same passage

Example



Duet Reading
Intervention Integrity Checklist

Student Name: _____ Grade: _____ Date: _____
Staff Name: _____ Observer: _____

INTERVENTION SEQUENCE	YES	NO
Teacher provides copy of text to student		
Reading 1: Student reads passage aloud and teacher provides standard error correction procedure immediately after each student error		
Reading 2: Teacher and student sit side beside, sharing the same passage		
Teacher and student read, alternating each word. Teacher reads first word.		
Teacher reads with excellent expression		
Teacher tracks with her/his finger under the words being read		
Teacher presses the pace forward during reading.		
Teacher provides immediate error correction for each student error		
Reading 3: Teacher and student read, alternating each word. Student reads first word		
Teacher reads with excellent expression		
Teacher tracks with her/his finger under the words being read		
Teacher presses the pace forward during reading.		
Teacher provides immediate error correction for each student error		
Reading 4: Student reads entire passage alone		

Scoring the Checklist

- Observe the intervention in action
- For each checklist item evaluate - Was that step completed? Y or N
- Total "Yes" Responses
- Divide the number of "Yes" responses by the total number of items on the checklist
- Integrity percentage yielded!

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Adjustments Made

- ✓ Criterion for Acceptable Fidelity ?
- ✓ Follow Plan Developed During Training



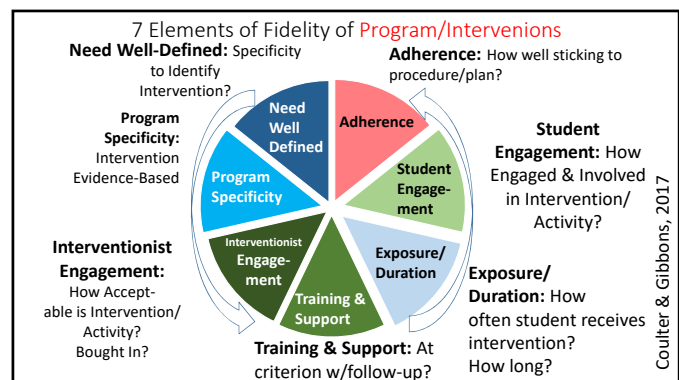
What's the
Magic Number
for Fidelity?

80%

Or 100% ?



Coulter & Gibbons, 2017



Summary: Key Factors in Fidelity

- 7 Pieces Implies Fidelity is Complex
- Collaborative Culture is Essential – Builds Ownership
- Not Evaluation of Implementer. Helps Everyone (Trainer to Teacher or Interventionist to Student)
- Never a Punitive Exercise

Back to Alan



Key #3

Assess
Yourself to
Expand Your
Expertise



Next Step: Applying Concepts of Implementation Fidelity			
Element	Your Strength	Your Challenge	One Action I could Take
Need Well Defined			
Program Specificity			
Interventionist Engagement			
Training & Support			

Find Your Handout Tool

3 Keys

1. Expand Your Working Conception of Fidelity
2. Carefully Design the Dosage
3. Assess Yourself to Expand Your Expertise



Good Intentions Aren't Good Enough

Available Research suggests Approximately Half of All Americans Make New Year's Resolutions -

Only 8% Actually Achieve Them.

Conclusion on Adult Use of Interventions

- Implementation of Interventions Requires an Extended Period of Social Adjustment. So, It's
- Unique Duty of School & District Leaders to Share Visions regarding Why,
- & to Engage in Dialogue within Their Communities about the Nature(s) of Schooling & the Intervention.

Adapted from Cho & Wayman, 2014



**Warning !
Warning !**

Ignore Implementation Fidelity at Your Own Risk

Summary: What Actions Could You Take ?

Following this Session You Could:

- ☐ Self-Assess Your Strengths in Implementing Interventions with Fidelity
- ☐ Plan a Protocol to Improve Installation of an Intervention.



Closing Activity

- From your self-assessment, pick two things you plan to do when you get back to your district. Compare your two things with your neighbor to see whether your plans for action are the same or different.

Thanks for Thinking about
How to Create Thirsty Horses

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