

# Are We Using It, Is It Working, and What's Next?

Implementing and Evaluating Evidence-Based Interventions



MISSISSIPPI  
DEPARTMENT OF  
EDUCATION

Ensuring a bright *future* for every child

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# Introductions

Dr. Dana Seymour

Bureau Director,  
Program Evaluation

# Introductions and Setting Intentions

Your DISTRICT and/or SCHOOL, and the NAMES of the people here with you on your team and WHY you came today.

## VISION

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To create a world-class educational system that gives students the knowledge and skills to be successful in college and the workforce, and to flourish as parents and citizens

## MISSION

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To provide leadership through the development of policy and accountability systems so that all students are prepared to compete in the global community

# State Board of Education Goals

1

All Students Proficient and Showing Growth in All Assessed Areas



2

Every Student Graduates from High School and is Ready for College and Career



3

Every Child Has Access to a High-Quality Early Childhood Program



4

Every School Has Effective Teachers and Leaders



5

Every Community Effectively Uses a World-Class Data System to Improve Student Outcomes



6

Every School and District is Rated "C" or Higher



# FRAMING THE DAY

## GOALS OF THE WORKSHOP

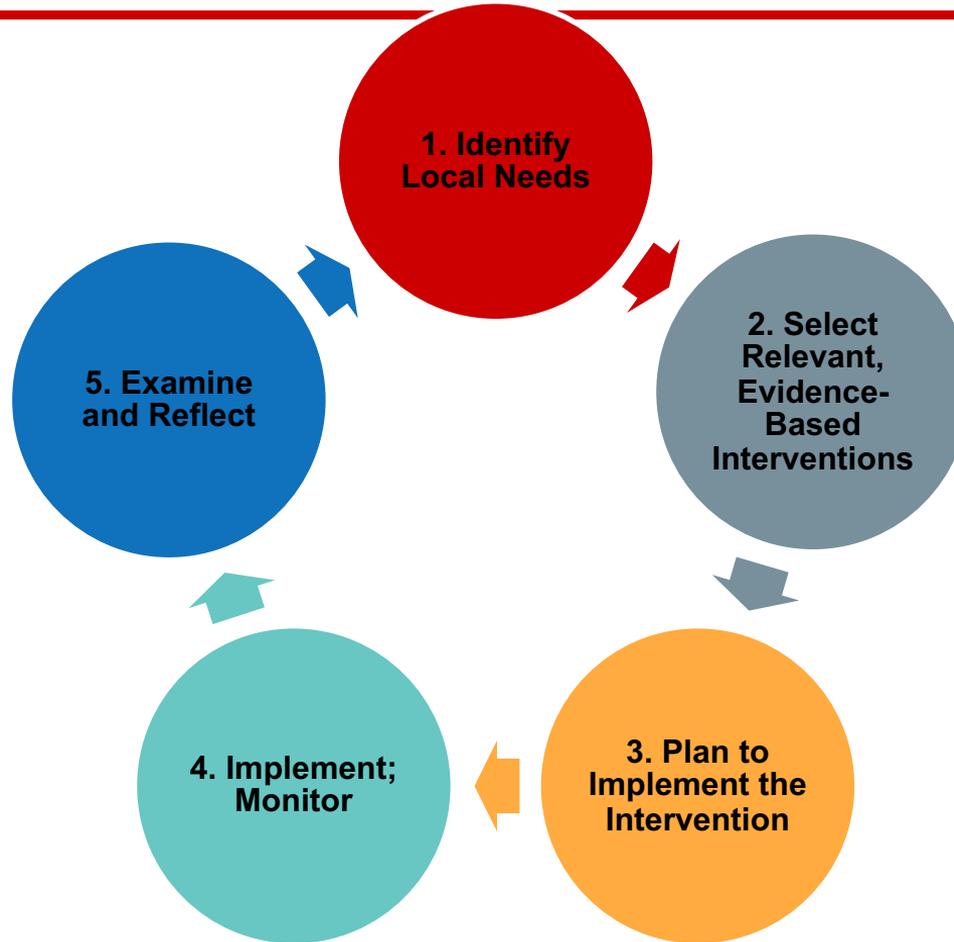
1. Build an implementation plan that fosters buy-in and support
2. Create a monitoring plan that includes SMART goals and data collection methods

# By lunch, you will be able to...

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- Discuss the importance of rigor, relevance, and reward when choosing interventions
- List factors that impede and support implementation
- Describe the importance of collaborative, systematic implementation plans

# ESSA Cycle for Continuous Improvement



Adapted from  
<https://www2.ed.gov/policy/elsec/leg/essa/guidance/ncouseinvestment.pdf>

# Step One: Identifying Local Needs

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- ESSA requires a needs assessment before selecting interventions
- SIG plan, 1003A, Title I Consolidated and Schoolwide Plans

# Schools in Need of Comprehensive Support

Schools that are identified for comprehensive support must, **in partnership with stakeholders**, develop an improvement plan that:

- Includes long-term goals for student performance
- **Includes evidence-based interventions**
- Is based on a school-level needs assessment
- Identifies resource inequities
- Is approved by the school, LEA, and the SEA
- Is monitored and periodically reviewed by the SEA

# Schools in Need of Targeted Support

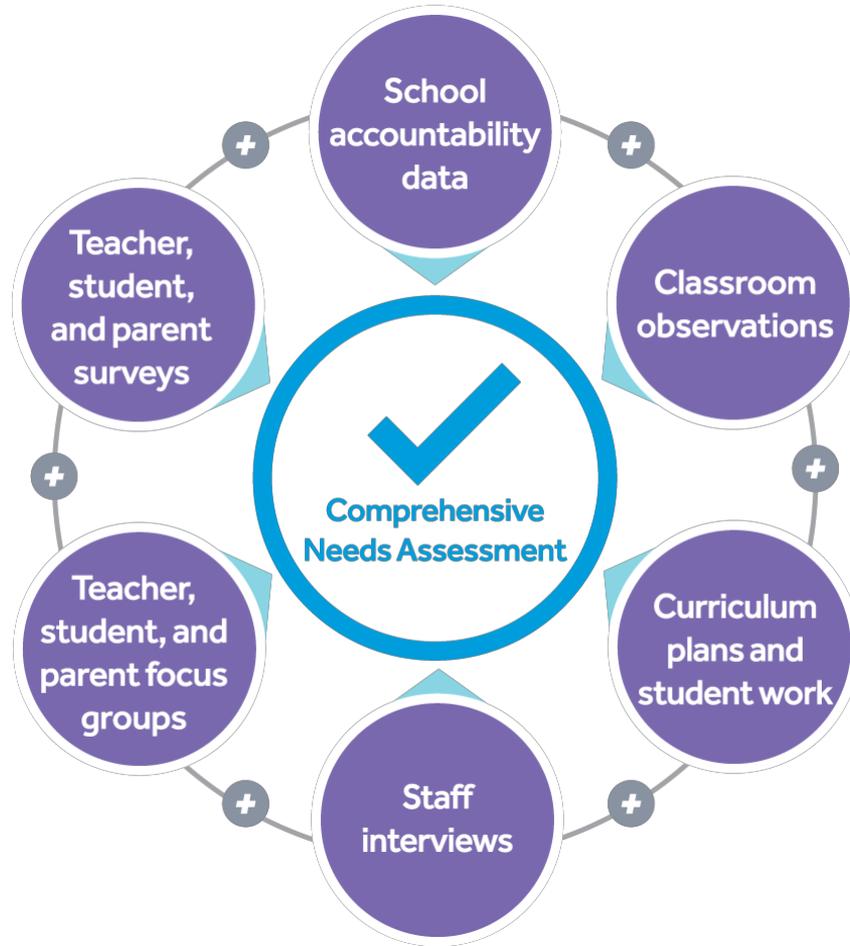
Each notified school must, **in partnership with stakeholders**, develop an improvement plan that:

- Includes long-term goals for student performance
- **Includes evidence-based interventions**
- Is approved by the LEA
- Is monitored by the LEA
- Results in additional action following unsuccessful implementation of such plan after a number of years determined by the LEA

# Schools in Need of Targeted Support

- States must notify each LEA of any school in which any subgroup of students is consistently underperforming
- LEAs must notify schools with respect to which subgroup of students in the school are consistently underperforming

# STEP ONE: Identifying Local Needs





# Step One: Identifying Local Needs

Include an honest evaluation of

- Funding
- Space
- Technology
- Teacher capacity and teacher turnover

All of these have implications for the intervention you choose.

# Step One: Identifying Local Needs

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Include an honest evaluation of

- Whether the intervention aligns to district/school goals
- Implementation TIME
- Whether you have aligned materials or will need to purchase

All of these have implications for the intervention you choose.

# Step One: Identifying Local Needs

Include an honest evaluation of

- Sustainability
- Professional development needed to implement a new program with fidelity

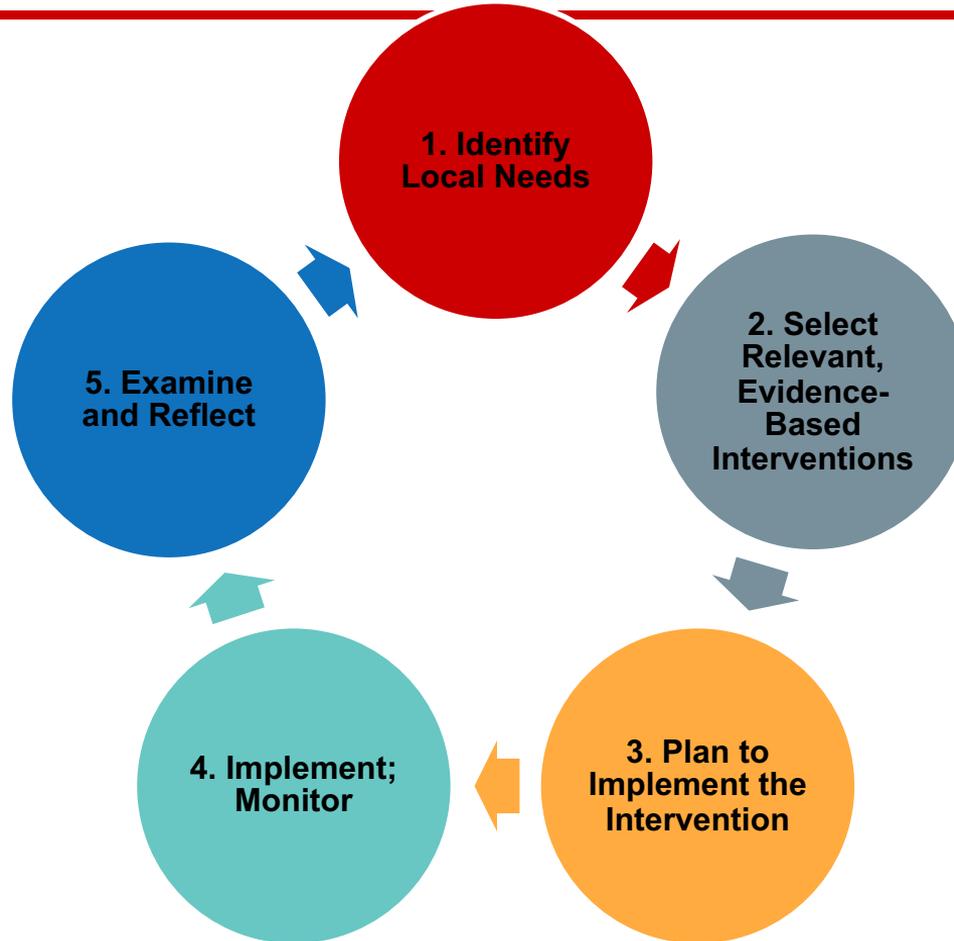
All of these have implications for the intervention you choose.

# Questions about Identifying Local Needs?

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**LET'S PRACTICE!**

# ESSA Cycle for Continuous Improvement



Adapted from  
<https://www2.ed.gov/policy/elsec/leg/essa/guidance/ncouseinvestment.pdf>

# Every Student Succeeds Act (ESSA) Overview

- ESEA (1965) was designed to increase the role of research in educational decisions.
- No Child Left Behind (NCLB) "scientifically based research" ....often called "research-based" or "data driven"
- Every Student Succeeds Act (ESSA) "evidence-based interventions"
- Research that follows experimental scientific design (e.g., medicine, agriculture)

# Step Two: Evidence-Based Interventions

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**Programs in Titles I, II, III, and IV to include “evidence-based interventions”**

**Some programs recommend “evidence-based,” while some (Title I, section 1003) require “evidence based”**

# Evidence-based Interventions

“Any program [or strategy or practice] can find *some* research that supports the principles it incorporates” (Slavin, 2007), but usually has **no proof** that the program will be effective.

# Evidence-based Interventions

Evidence-based interventions are programs, strategies, or practices that have been shown to be effective in leading to a particular outcome. **There is definitive evidence to show they produce results when implemented correctly.**

--adapted from CA Department of Education (2017)

# Research-Based vs. Evidence-Based

## Research-Based

- Theoretical
- Descriptive
- Brief duration
- May not have been tested at all
- Correlational
- “When that school used Math Program X, overall scores went up.”

## Evidence-Based

- Hard data
- Experimental (randomized) or quasi-experimental (rigorously chosen comparison groups)
- Pre/post designs
- Longer duration
- Generalizable
- “If we use Math Program X, we can reasonably EXPECT that math scores WILL go up.”



# RIGOR

# RIGOR

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- When we talk about the RIGOR of research, we mean the quality of the study. Was it a true experimental design? Correlational?
- How long was the study?
- How many participants?
- How were teachers trained?
- WHO PAID FOR THE RESEARCH?

# STRONG Evidence

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- **Experimental design: randomized, controlled trial**
- Study participants (students, teachers, classrooms) are **randomly assigned** to experimental or control group
- “This program caused....”

# MODERATE Evidence

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- **Quasi-experimental design**
- **Not truly “experimental” because groups are not randomly assigned**
- **Statistically significant, positive effect**
- **“This program seems to cause....”**

# PROMISING Evidence

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- **Correlational study**
- **Statistical controls for selection bias**
- **“This program is associated with a rise in scores.”**

# Finding Evidence Bases

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- What Works Clearinghouse
- Evidence for ESSA
- Regional Education Laboratories

# RELEVANCE

All of these have strong evidence. Which car should you buy?



A



B



C

# RELEVANCE

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- How similar are the students in the study to YOUR students?
- How similar are the identified CAUSES in the study to YOUR identified causes?
- What about teachers, staffing, volunteer levels?

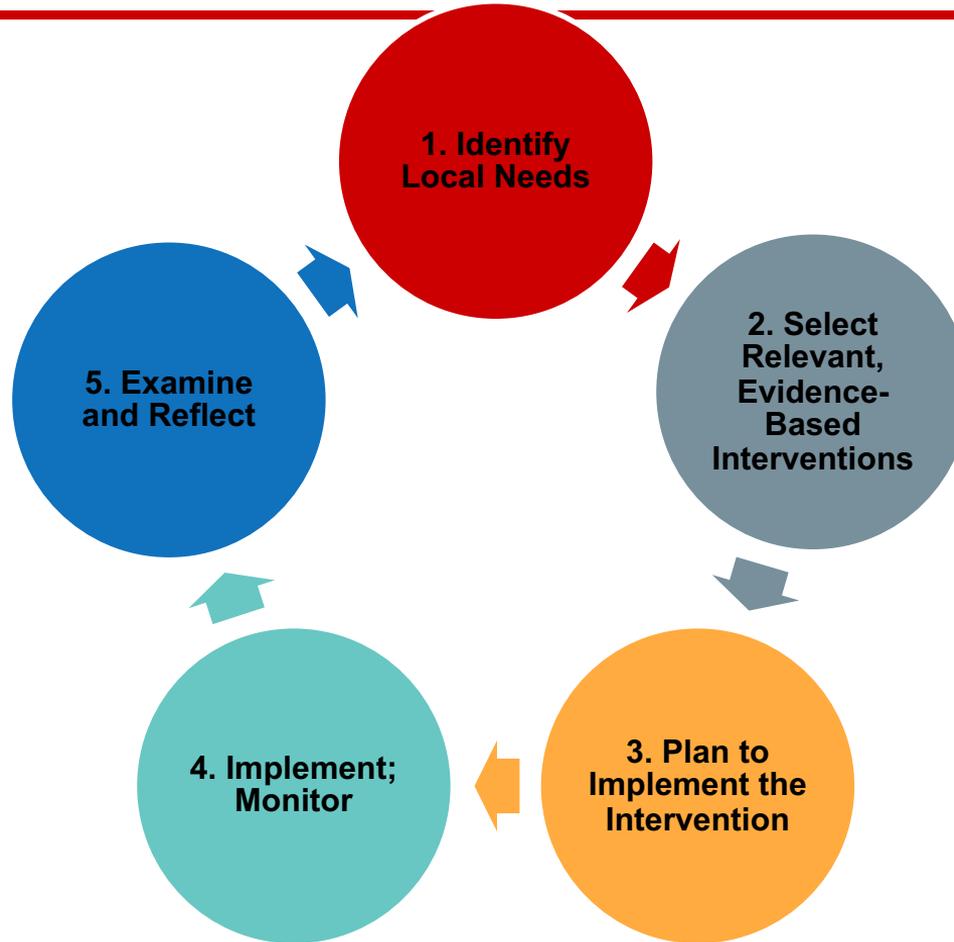
# RETURN

# RETURN

- “Effect size” is the measure of how much scores (or positive behaviors, etc) improved
- Not just the initial cost—factor trainings and subscriptions
- Some programs have high price tags, small effect sizes
- Some interventions are free, with big effect sizes
- If a vendor won’t give you some idea of the MEASURABLE effects of the program, proceed with extreme caution

# Questions about Selecting Relevant, Evidence-Based Interventions?

# ESSA Cycle for Continuous Improvement



Adapted from  
<https://www2.ed.gov/policy/elsec/leg/essa/guidance/essainvestment.pdf>

# Step 3: PLANNING for Implementation

- Implementation is KEY to the success of your intervention
- Studies have found that 75% of failed interventions were not implemented effectively...
- AND, about 20% of how effective an intervention is can be tracked back to how it was implemented.
- Even with the best ideas...implementation is make-or-break

# GREAT idea....bad implementation

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- Have you ever seen a “problem” or failed implementation?
- What happened?
- What was the eventual impact?
- What could have been changed?

# Implementation Roadblocks

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- Poor quality needs assessment

# Implementation Roadblocks

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- No needs assessment
- Mandated, top-down

# Implementation Roadblocks

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- Mandated, top-down
- “Train and Pray”

# Implementation Roadblocks

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- No (or cursory) needs assessment
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- No (or cursory) needs assessment
- Mandated, top-down
- “Train and Pray”
- Teacher turnover
- Innovation burnout
- Lack of capacity

# Brainstorming Solutions

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- No (or cursory) needs assessment
- Mandated, top-down
- “Train and Pray”
- Teacher turnover
- Innovation burnout
- Lack of capacity

# Implementation Routes

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- Visionary and committed leaders

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- Implementation PLAN

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- Implementation PLAN
- Implementation TEAM

# Implementation Routes

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- Visionary and committed leaders
- Implementation PLAN
- Implementation TEAM
- ONGOING learning and support

# Professional Learning is Effective When:

- The presenter/coach is an expert in the chosen practice.
- Pre-, post-assessments and formative checks to monitor knowledge, use, and skill growth.
- Coaching to all staff AND procedures in place for new staff learning in subsequent years
- Staff members have a clear understanding of the WHY and the impact their own growth has on student learning.

# Professional Learning

IS IT...

- Intentional and sustainable?
- EXPLICITLY aligned to goals and outcomes?
- Job embedded and collaborative?
- Evaluated for knowledge growth and transfer to classroom practice?
- Data driven?

# Implementation Routes

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- Visionary and committed leaders
- Implementation PLAN
- Implementation TEAM
- Ongoing learning and support
- Ongoing reflection, monitoring, and evaluating the IMPLEMENTATION

# Implementation Routes

- Visionary and committed leaders
- Implementation PLAN
- Implementation TEAM
- Ongoing learning and support
- Ongoing reflection, monitoring, and evaluating the IMPLEMENTATION
- Sustainability and culture change

- [Implenting a New Curriculum @ The Teacher Channel website](#)

# WHAT DID YOU SEE?

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- How does the leadership team support ELA teachers as they implement a new curriculum?
- Why are flexibility and accountability both important in new program adoption?
- What structures helped to ensure the effective implementation of a new program?

# Shaw Middle School

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- **FIRST:** meeting of district leadership to discuss pros/cons
- **THEN:** put together implementation or leadership team
- **FINALLY:** rolled out to all staff, with support of implementation team

# Shaw Middle School

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- Implementation team regularly met with other teachers to talk about challenges to implementation and brainstorm solutions
- What is was NOT: “We’re buying (or we’ve already bought) something new. Use it.” (top-down approach)

- Instead, teachers could brainstorm with teacher leaders and coaches so that it fit their natural style of teaching/practice and become their STUFF.
- “I didn’t think of this...it doesn’t excite me. It feels like I’m teaching SOMEONE ELSE’S STUFF.”
- “I was afraid it was gonna be, ‘This is what you’re going to do,’” but it wasn’t like that.

# Shaw Middle School

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# Planning Questions

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- Who will be on the implementation team?
- What are indicators of successful implementation?
- What do teachers or other staff need at each stage?
- What's the timeline for each stage?
- Who is responsible for each plan element?
- Who will monitor progress of implementation?

# Making an Implementation Plan

- Assuming you've conducted a quality needs assessment, and made certain you have capacity for the intervention (money, space, technology, teacher capacity, etc.)
  1. Build an implementation team
  2. Make a plan that includes benchmarks and indicators
  3. Train and support teachers
  4. Monitor the implementation

# Building the Implementation Team

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- 3-5 members
- Different people may have different roles
- Some people may have one main role, but help with others
- Consider letting people bring in their own reinforcements, without making core team larger

# Selecting Implementation Team Members

Potential Team Member	Content Expertise	Authority	Communication	Leadership	Possible Roles/Responsibilities
1.					
2.					
3.					
4.					
5.					

# Indicators of Successful Implementation

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Who will be on the implementation team?

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- Implementing New Instructional Strategies @ The Learning Channel

# WHAT DID YOU SEE?

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- What role did the leadership team and math content team play in the implementation schoolwide?
- Why was the demonstration lesson important to the implementation process?
- How does the implementation of new programs or strategies at your school compare to the implementation process featured in the video?

# Sylvester Middle School

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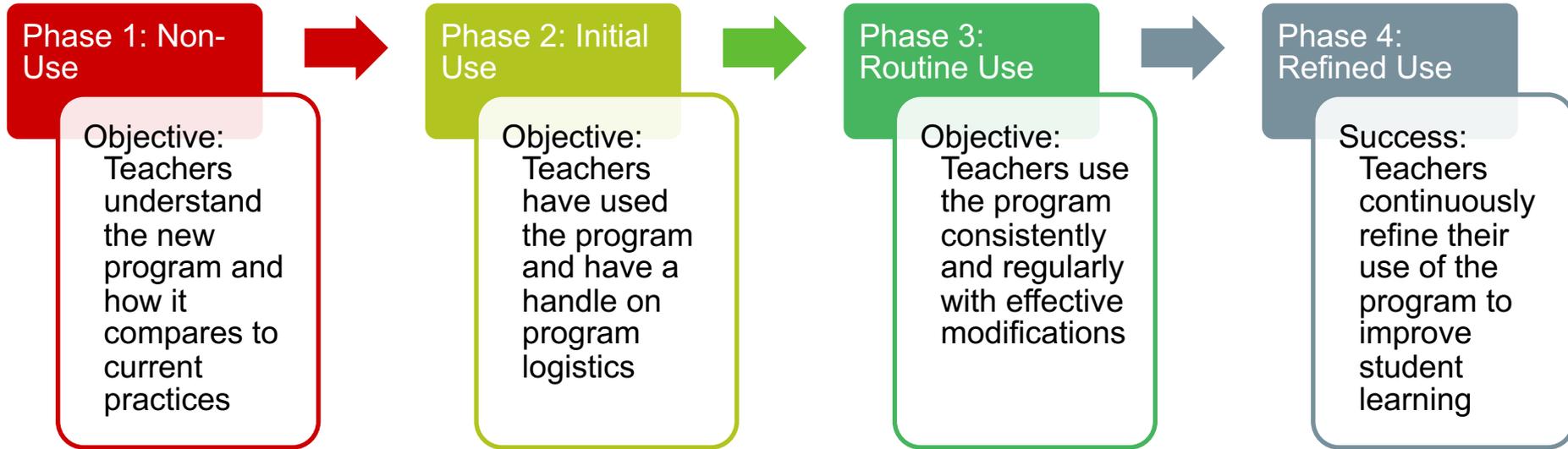
- NOT top-down
- Math teachers selected “proxy students”, and developed strategies to differentiate instruction for that group of students -- ELL, ADHD, high-ability
- Planned the lesson together, and observed a volunteer teach the lesson

# Sylvester Middle School

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- Came back together to debrief, looked for impacts of the intervention, and made adjustments when they needed to
- Leadership team attended those meetings and asked principal if math team could train ALL the teachers and share tips for all subjects to implement
- **TWO WAY COMMUNICATION**

# Indicators of Successful Implementation



# Indicators of Successful Implementation

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Who will be on the implementation team?

What are indicators of successful implementation?

- What do teachers or other staff need at each stage?
- What's the timeline for each stage?
- Who is responsible for each plan element?
- Who will monitor progress of implementation?

# By this afternoon, you will be able to...

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- Build a shared understanding of how teachers move through each phase of the implementation process
- Create SMART goals for monitoring success
- Establish a plan to monitor your progress toward those SMART goals
- Make informed, data-driven decisions about program changes

# Questions?

# Indicators of Successful Implementation

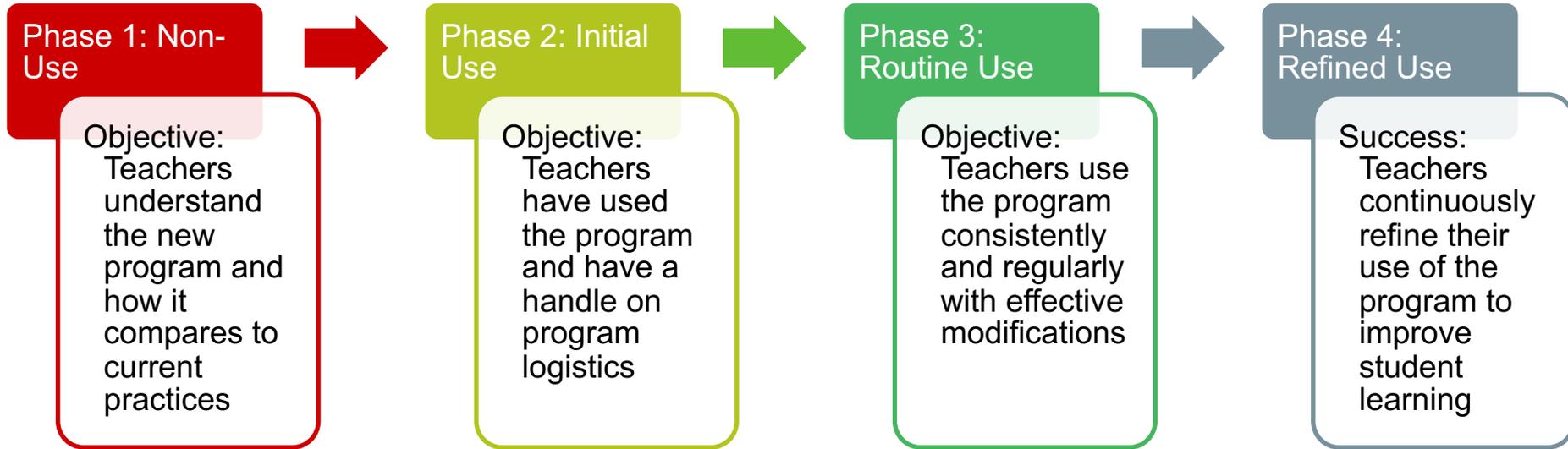
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# Indicators of Successful Implementation



# Supporting Implementation

## Phase One: Non-Use

Teachers understand the new program and how it compares to current practices.

Success at this Phase	Support Needed	Support Provided	Deadline	Possible Roles/ Responsibilities

# Supporting Implementation

## Phase One: Non-Use

Teachers understand the new program and how it compares to current practices.

Success at this Phase	Support Needed	Support Provided	Deadline	Possible Roles/ Responsibilities
All science teachers receive the initial summer professional training				
We have conducted an audit of existing materials for alignment and communicated those results to teachers.				

# Supporting Implementation

## Phase Two: Initial Use

Teachers have used the program and have a handle on program logistics.

Success at this Phase	Support Needed	Support Provided	Deadline	Possible Roles/Responsibilities

# Supporting Implementation

## Phase Two: Initial Use

Teachers have used the program and have a handle on program logistics.

Success at this Phase	Support Needed	Support Provided	Deadline	Possible Roles/ Responsibilities
Teachers have built the program into lesson plans				

# Supporting Implementation

## Phase Three: Routine Use

Teachers use the program consistently and regularly with effective modifications

Success at this Phase	Support Needed	Support Provided	Deadline	Possible Roles/Responsibilities

# Supporting Implementation

## Phase Four: Refined Use

Teachers continuously refine their use of the program to improve student learning

Success at this Phase	Support Needed	Support Provided	Deadline	Possible Roles/ Responsibilities

# Supporting Implementation

## Phase One: Non-Use

Teachers understand the new program and how it compares to current practices.

Success at this Phase	Support Needed	Support Provided	Communications or talking points? Who needs to hear??
(Teachers understand the new program and how it compares to current practices.)	<ul style="list-style-type: none"><li>Detailed information on the program's approach, instructional and assessment strategies, scope &amp; sequence, etc.</li></ul>	<ul style="list-style-type: none"><li>Workshops</li><li>Presentations on new program</li><li>Answers to questions/concerns</li><li>Written materials from publisher</li></ul>	

# Supporting Implementation

## Phase Two: Initial Use

Teachers have used the program and have a handle on program logistics.

Success at this Phase	Support Needed	Support Provided	Communications or talking points? Who needs to hear??
(Teachers have used the various components of the program and have a handle on program logistics.)	<ul style="list-style-type: none"><li>• Practice teaching lessons</li><li>• Information on managing materials, pacing, etc.</li><li>• Contact with people who have used program</li><li>• Opportunities to observe peers teaching using new program</li></ul>	<ul style="list-style-type: none"><li>• Demonstration lessons</li><li>• Peer coaching and mentoring</li><li>• Team teaching</li><li>• Study group sessions</li></ul>	

# Supporting Implementation

## Phase Three: Routine Use

Teachers use the program consistently and regularly with effective modifications

Success at this Phase	Support Needed	Support Provided	Communications or talking points? Who needs to hear?
Teachers use the program consistently and regularly with effective modifications	<ul style="list-style-type: none"><li>• Support using the program regularly/consistently</li><li>• Opportunities to discuss issues RE use with peers</li><li>• Follow-up info or reminders about program's approach, strategies</li></ul>	<ul style="list-style-type: none"><li>• Meetings with coaches/mentors</li><li>• Department/grade level meetings</li><li>• "Book of Knowledge" that includes school/district tips and ideas for using</li></ul>	

# Supporting Implementation

## Phase Four: Refined Use

Teachers continuously refine their use of the program to improve student learning

Success at this Phase	Support Needed	Support Provided	Communications or talking points? Who needs to hear??
(Teachers continually refine their use of the program to improve student learning.)	Opportunities to assess impact of program Differentiation strategies to meet needs of all students	Meetings w/ district data experts; Department/grade level meetings to examine data and student work Demonstration lessons	

# Parts of a Successful Implementation Plan

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Who will be on the implementation team?

What are indicators of successful implementation?

What's the timeline for each stage?

Who is responsible for each plan element?

- Who will monitor progress of implementation?

# Parts of a Successful Implementation Plan

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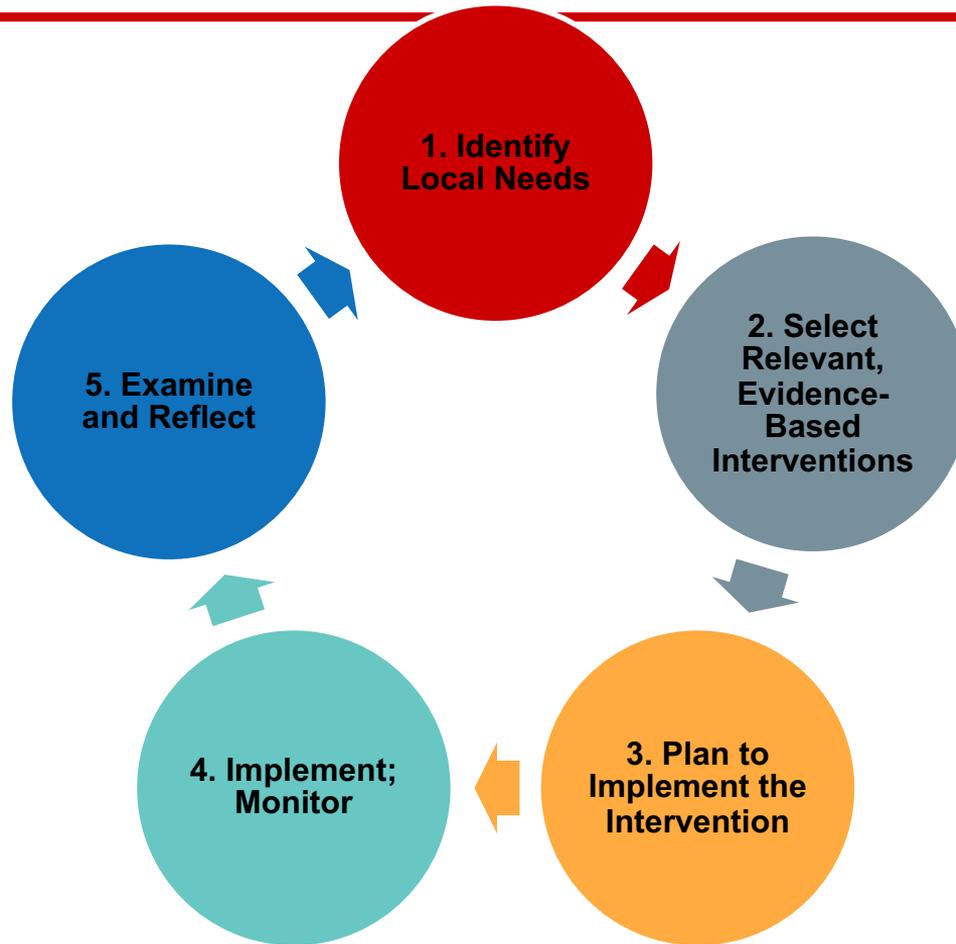
What's the timeline for each stage?

Who is responsible for each plan element?

Who will monitor progress of implementation?

# Questions about Planning to Implement the Intervention?

# ESSA Cycle for Continuous Improvement



Adapted from  
<https://www2.ed.gov/policy/elsec/leg/essa/guidance/ncouseinvestment.pdf>

# Implementing and Monitoring

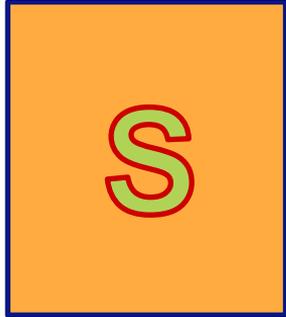
Monitor the implementation so that you can:

- Make needed changes mid-course
- Maintain consistency from the plan for the program to implementation to desired outcomes—helpful for troubleshooting
- Understand strengths and weakness of implementation for future planning

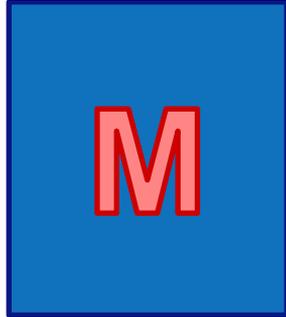
# Implementing and Monitoring

- Start this evaluation before the implementation starts and continue.
- Do BOTH a process (How's that implementation going?) AND an outcome (Does this program even work?) evaluation
- Designing a monitoring plan is easy with SMART goals

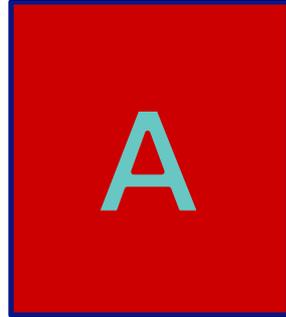
# SMART Goals



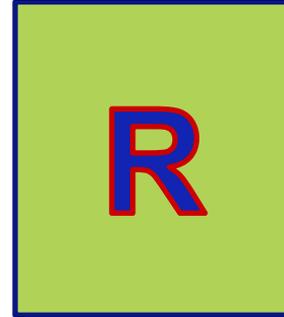
SPECIFIC



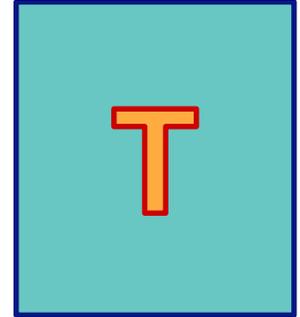
MEASURABLE



ATTAINABLE



RELEVANT



TIME-BOUND

# Specific

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- Well-defined, outcome is clear
- Clear to anyone having basic knowledge of the project
- Provides enough detail so there is no indecisions as to what is to be done

# Measurable

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- Know what the benchmark is
- Know when it has been achieved
- Identify the data or measurement to be used
- Able to determine whether you've met the goal because you can SEE or COUNT it

# Attainable

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- Achievable—may be a stretch, but possible with the CURRENT team and resources
- Clearly defined steps

# Relevant

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- Aligned with the results expected and the direction provided by district and building goals
- Based on a quality needs assessments
- Written with your current students in mind

# Time-bound

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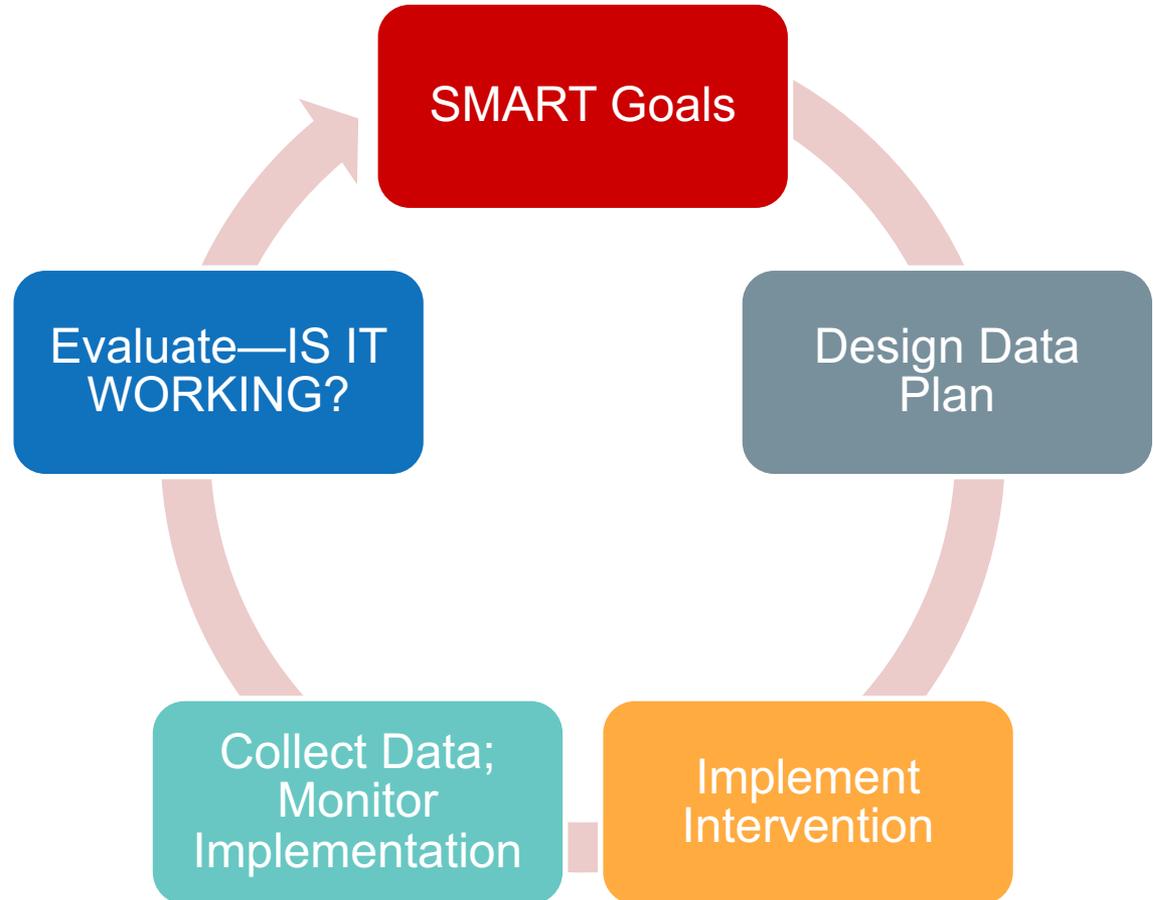
- A specific date has been set for achieving the goal
- Timing is appropriate for keeping goal performance focused and on target
- Be careful about planning too far out—perhaps think about short-term and intermediate steps toward a larger objective

# Implement, Monitor: SMART Goals

Grade	Goal Statement Example	How is this goal SMART?	
<p><b>Second</b></p>	<p>Using the CFA Addition Assessment, students will show growth in adding numbers to 20 fluently by June 2015 in the following manner:</p> <ul style="list-style-type: none"> <li>• Subgroup (A) Students scoring 3-20% accuracy will increase their accuracy to at least 65% or better</li> <li>• Subgroup (B) Students scoring 21-50% accuracy will increase their accuracy to at least 81% or better;</li> <li>• Subgroup (C) Students scoring 51-94% accuracy will increase their accuracy to at least 97% or better and will begin work on products of two one-digit numbers.</li> </ul>	<p><b>S</b></p>	<p>Adding numbers up to 20 (all sums of two one-digit numbers)</p>
		<p><b>M</b></p>	<p>Category 2: district approved Addition Assessment</p>
		<p><b>A</b></p>	<p>2nd grade standard: Math – Addition, 2.OA.2 (CCSS Operations and Algebraic Thinking)</p>
		<p><b>R</b></p>	<p>Students divided into three subgroups with growth targets identified.</p>
		<p><b>T</b></p>	<p>By June 2015</p>

## STEP FOUR: Implement and Monitor

- ❖ **SMART goals may change year to year (immediate, short term, medium term, long term)**
- ❖ **Be specific about WHO will collect the data, and WHEN**
- ❖ **Your plan for monitoring is A LIVING DOCUMENT**



# Analyze BOTH Adult AND Student Data

## Adult data

- Teacher surveys
- PD feedback
- Teacher attendance/retention
- Climate/Culture data
- Meeting minutes
- Implementation Commitment (classroom walk-throughs and lesson planning)

# Analyze BOTH Adult AND Student Data

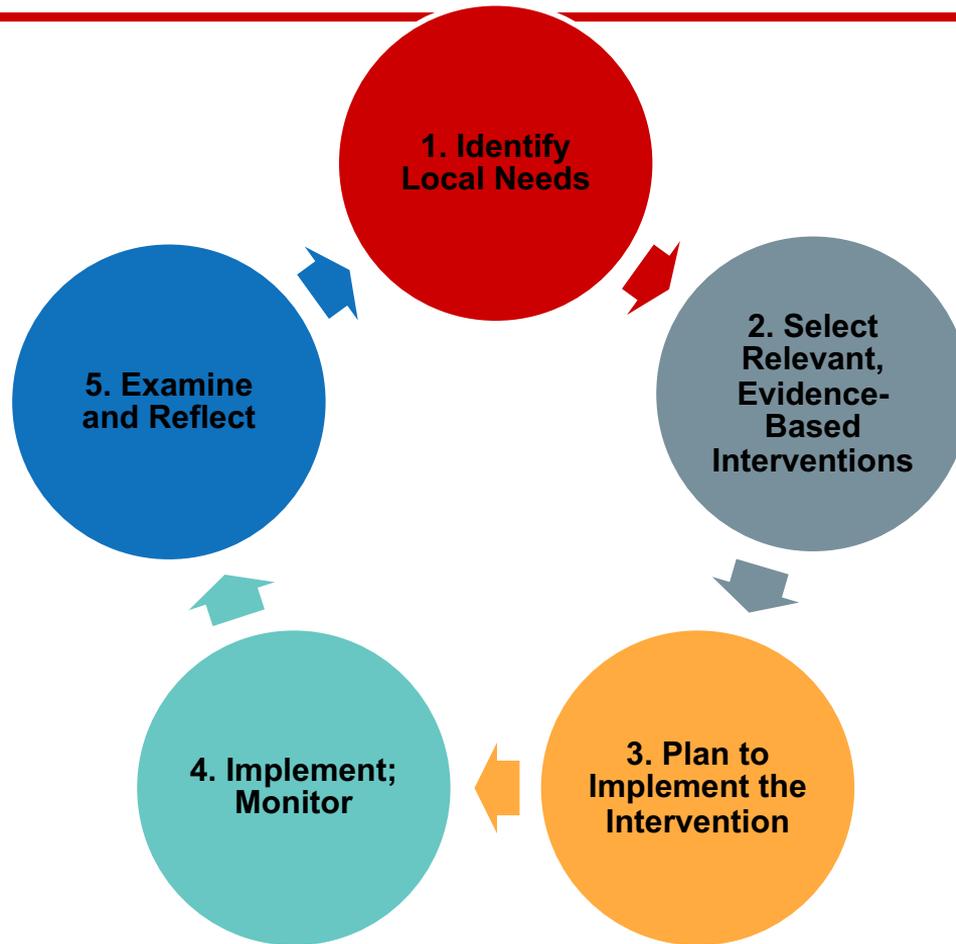
## Student data

- Performance by grade level...subgroup....
- Behavioral
- Attendance
- Climate/Culture
- Attitudes/acceptance of intervention
- Focus groups

# Monitoring Framework

<b>OUTCOME (S of SMART goal)</b>	<b>INDICATOR (M of SMART goal)</b>	<b>DATA SOURCES (How data will be collected)</b>	<b>DATA COLLECTION (WHO)</b>	<b>FREQUENCY (WHEN or How often)</b>	<b>EVALUATE (Timetable for making decisions)</b>
<b>IMMEDIATE and/or SHORT-TERM OUTCOMES</b>					

# ESSA Cycle for Continuous Improvement



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# Part 5: Examine and Reflect

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- Take advantage of what you learn over time to improve the program.
- Make changes without starting over—know **WHERE** it went wrong and back up or allow more time.
- Keep your program fresh and a good fit for target population

# Part 5: Examine and Reflect

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- Systematic
- How often?
- Who is responsible?
- Keep track of what works for future
- Communicate your findings back to stakeholders

# When should you pull the plug?

# Questions?



MISSISSIPPI  
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Ensuring a bright *future* for every child

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# Dr. Dana Seymour

Bureau Director, Program Evaluation

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