



Implementation Science

What Leaders Need to Know

Literacy initiatives must have solid coordination plans for implementation of professional learning, curricula, and evidence-based practices.



Welcome

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Objectives:



- ❑ Understand the basics of implementation science for reading initiatives.
- ❑ Apply knowledge of implementation science to scale reading initiatives at the building and system levels.



“Evidence-based practices alone are not
enough to create positive change in systems”

—Aaron Lyon, 2017

Implementation Drivers

Organizational Influences:

Number and motivation of adopters

Allocated time and resources

Core Components:
Motivation of Adopters

Training
Coaching
Reflection

Social and political backdrop and availability of resources

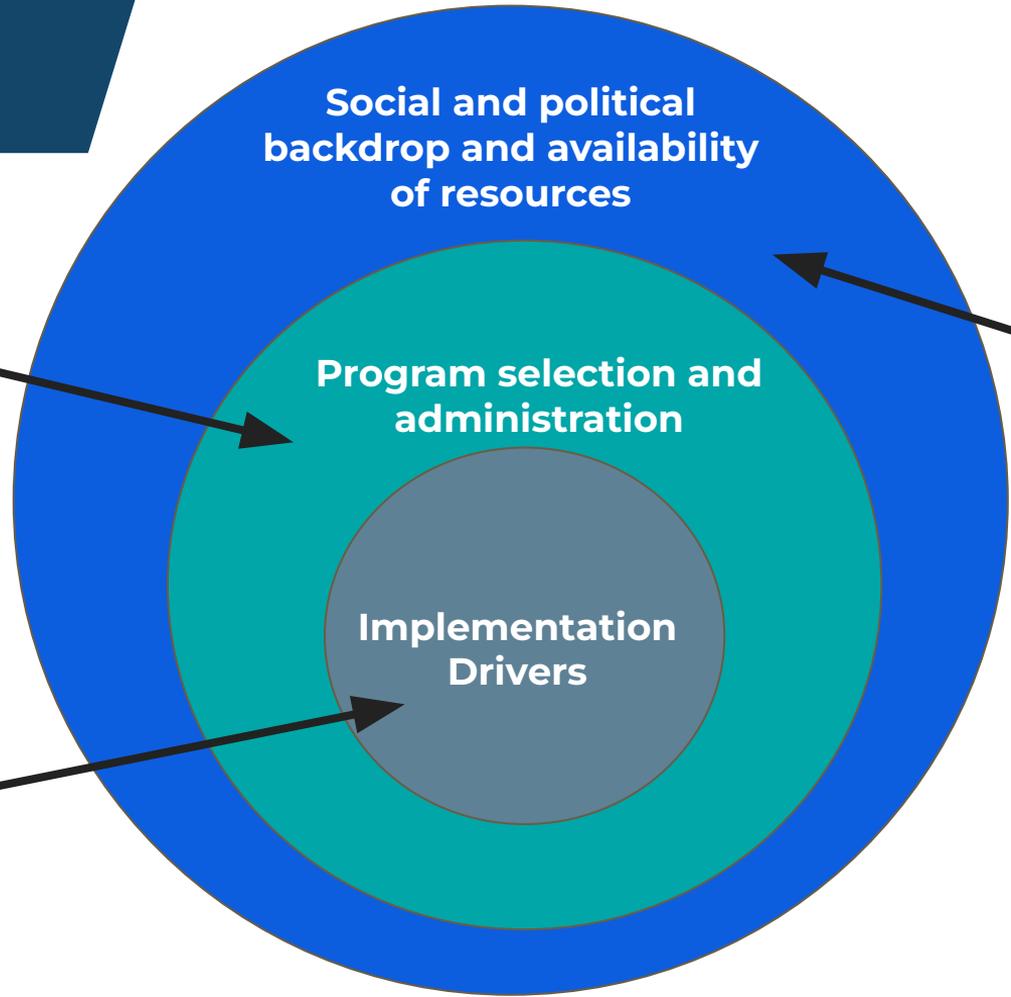
Program selection and administration

Implementation Drivers

External influences:

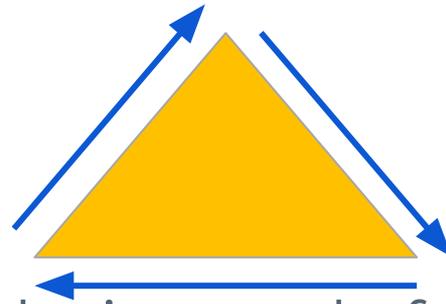
Alignment with policy and guidance

Investment of time and resources



General Principles

1. Initial considerations about the context.
2. Creating an implementation structure
 - a. synthesis systems
 - b. support systems
 - c. delivery systems
3. Sustaining the structure during and after implementation
4. Continuous improvement



Let it happen

Passive, unplanned, untargeted spread of training.

Help it happen

Targeted distribution of information on training, materials, and expectations to specific audiences.

Make it happen

Strategically adopting training and change patterns of practice in specific settings.

Make it happen

Pre-Implementation

Contemplation or exploration of change while maintaining current practices

Multi-leveled

Addressing multiple levels of implementation simultaneously

Reciprocal

Evidence-based practice and the setting have reciprocal relationships



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CODE

Both Implementation and Improvement Science rely upon:

- ❑ Data
- ❑ System Improvement
- ❑ Policy and Practice
- ❑ Improvement Cycles
- ❑ Practitioner Needs

Implementation vs. Improvement

Implementation Science

- Emphasis on continual training, and coaching.
- Leadership role to move evidence-based practices or programs into classroom/system routine use.



Improvement Science

- Begins with a problem that requires addressing.
- The focus is improvement of general practice.



“More than ever before, we know what strategies and practices have the greatest impact on student learning...Unfortunately, outstanding results are more often the exception than the norm.”

Pettersson & Snelson, 2019

Teachers want their students to be successful



Principals and leaders are the drivers of implementation strategies



Stages of Implementation

Exploration

- ❑ Identify the need for change
- ❑ Identify the possible solutions
- ❑ Learn what it will take for fidelity of implementation at the system level
- ❑ Decide to proceed (or not)

Installation

- Establish resources required for implementation
 - ❑ Professional development
 - ❑ Curriculum Scope and Sequence
 - ❑ Materials
 - ❑ Schedules
 - ❑ Assessment

Initial Implementation

- ❑ Early adopters support new implementation
- ❑ Spread the word
- ❑ Leaders than plan for growth to other classrooms and schools

Full Implementation

- ❑ Intervention is well defined and practiced throughout the system
- ❑ Routinely supported by administration at the building and district levels
- ❑ Vision and mission are aligned with the implementation success

What Leaders Need to Know

Step 1 - Set and Prioritize Goals



- ★ Set goals that are attainable and ambitious.
- ★ Create ONE PLAN.
- ★ Over-communicate goals.

What Leaders Need to Know

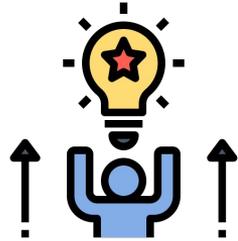
Step #2 Create and sustain a culture of continuous professional learning



- ★ For implementation to be successful, teachers need to feel safe trying new strategies and collaborating with their peers.
- ★ School leaders have the opportunity and responsibility to nurture a supportive, growth-oriented culture.

What Leaders Need to Know

Step #3 Set high expectations for teachers



- ★ Leaders can: promote regular, constructive, honest feedback systems
- ★ Establish clear expectations.
- ★ Approach and encourage teachers who are hesitant to take risks

What Leaders Need to Know

Step #4 See teacher learning in action (walk-throughs)



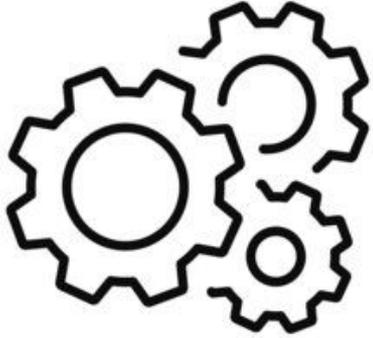
- ★ Leaders must implement inquiry cycles with their teachers and work collaboratively to analyze student data collected through short-term assessments.
- ★ Designing evidence-based instructional adjustments that are responsive to student needs as demonstrated through short-term assessment analysis.

- ❑ **What** -The system intervention that will impact literacy.
- ❑ **Who** - Invest in people.
- ❑ **When** - Begin with the end in mind - this takes time.
- ❑ **How** - Defined by system drivers

Implementation Science

The Process

What



Outcomes:

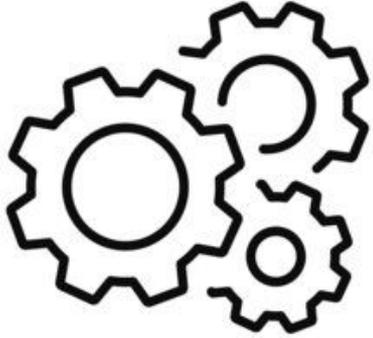
Effective interventions for literacy

All students must benefit

Results must be sustainable

- What are the core components of the reading intervention, practice, program?
- What is the evidence for student outcomes?
- What can we do to ensure this mandate will meet the needs of the students in our school system?
- What is our capacity for implementation?

Who



Outcomes:

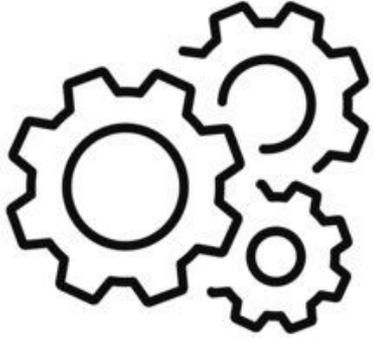
Effective interventions for literacy

All students must benefit

Results must be sustainable

- Who will be responsible for holding members accountable for making equitable decisions?
- Who will be accountable for ensuring that decisions reflect the demographics of the students served in the state/district/school?
- Who will ensure all voices are heard and everyone has a seat at the table?

When



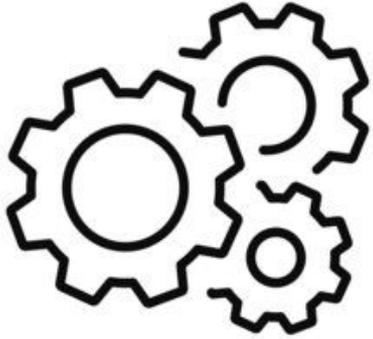
Outcomes:

Effective interventions for literacy

All students must benefit

Results must be sustainable

- When does implementation affect classroom practice?
- When does implementation affect the school?
- When does implementation affect the system?
- When does the new practice become part of the culture?



Outcomes:

Effective interventions for literacy

All students must benefit

Results must be sustainable

- How do your system drivers support personnel in the use of the program or practice?
- How do your organization drivers align programs, policies, procedures, and opportunities to support continued buy-in?
- How do your leadership drivers acknowledge the importance continued support for future leaders in the organization?

Tips

- Without keeping the “end in mind” the identified program or practice could be watered down thus not achieving system intended results
- Without fidelity measures there will be no method to determine if the program or practice is effective
- Allow enough time for system changes to occur - it will not happen overnight or within one school year
- Ensure that changes are data informed and student outcome oriented
- Practice having a culture of transparency and continual learning
- Ensure the team is diverse and represents the students you serve

“We don’t buy a new car every time we need an oil change, but in education instead of making adjustments, we start something new.”

Eric Kloos



Learn more about Pathways Products contact us!

THANK YOU!

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References

Duda, M., & Wilson, B. (2015). Using Implementation Science to Close the Policy-Practice Gap. A Literate Nation White Paper, Science Panel Vol. Spring (2015). San Francisco: CA.

Eccles, M. P., & Mittman, B. S. (2006). Welcome to implementation science. *Implementation Science*, 1(1). Retrieved from <https://implementationscience.biomedcentral.com/articles/10.1186/1748-5908-1-1>

Lyon, A. (2017). Brief: Implementation science and practice in the education sector. Retrieved from <https://education.uw.edu/sites/default/files/Implementation%20Science%20Issue%20Brief%20072617.pdf>

McColskey-Leary, C. & Garman-McClaine, B. (2021). Integrating Improvement and Implementation Sciences to Enhance Educational Outcomes. National implementation Research Network, University of North Carolina at Chapel Hill.

Moir, T. (2018). Why is implementation science important for intervention design and evaluation within educational settings? *Front. Educ.*, (3)61, doi 10.3389/educ.2018.00061

Petterssen, H., & Snelson, M. (2019). Implementation science. Published by EdDirection. Retrieved from <https://cicerogroup.com/wp-content/uploads/2019/06/Ed-Direction-Implementation-Science.pdf>

Proctor, E., Silmere, H., Raghavan, R., Hovmand, P., Aarons, G., Bunger, A., ... & Hensley, M. (2011). Outcomes for implementation research: conceptual distinctions, measurement challenges, and research agenda. *Administration and Policy in Mental Health and Mental Health Services Research*, 38(2), 65-76.



Implementation Success: Strategies and Process

The Strategies



Step 1: Set and prioritize goals

- ★ Set goals that are attainable and ambitious.
 - Leaders know their schools well enough to set goals that are realistic, relevant, and aspirational. Narrow the focus. Leaders should define a handful of clear goals with criteria for success. Using transparent processes, schools can track progress over the course of weeks, months, and the academic year.
- ★ Create ONE PLAN.
 - The plan should include short, medium, and long-term goals. Leaders should align goals to reduce redundancy, confusion, or misalignment of efforts.
- ★ Over-communicate goals.
 - Leaders should regularly share goals with students, parents, teachers, and staff. With short- and long-term results, leaders can celebrate success, inspire ongoing effort, identify weaknesses, and reorganize priorities.



Step 2: Create and sustain a culture of continuous professional learning

While experience is highly valued in education, a teacher's expertise has the greatest impact on student achievement (retrieved from Leader in Me, 2022). Expertise is what a person knows and is able to do. Faculty members who value expertise listen to people who have skills to share, even those who have relatively few years of tenure as teachers. As schools enter the transformation process, faculty members open up to learning from one another's expertise.

- ★ For implementation to be successful, teachers need to feel safe trying new strategies and collaborating with their peers. Both veteran and new teachers must feel supported and encouraged by their communities in their efforts to improve.
- ★ School leaders have the opportunity and responsibility to nurture a supportive, growth-oriented culture. To begin, school leaders can take initiative by regularly seeking out new information to improve their skills, and then share their results transparently and publicly.



Step 3: Set high expectations for teachers

Inclusive expectations for personal growth, so learning, innovating, and receiving feedback becomes a way of life at the school.

- ★ Additionally, leaders can: promote regular, constructive, honest feedback systems while also enforcing a zero-tolerance policy for disparaging or demoralizing interactions.
- ★ Establish clear expectations that implementing improvement goals is not optional; in other words, there are no “opt-outs.”
- ★ Approach and encourage teachers who are hesitant to take risks or timid to give feedback to their peers. Celebrate teams of teachers who model these principles and make real progress.



Step 4: See teacher learning in action (walk-throughs)

Administrators should see planning inquiry cycles and designing units of study that are evidence-based, clearly sequenced, and structured around regular checks for understanding.

- ★ Leaders must implement inquiry cycles with their teachers and work collaboratively to analyze student data collected through short-term assessments.
- ★ Designing evidence-based instructional adjustments that are responsive to student needs as demonstrated through short-term assessment analysis.

The Process



Exploration-

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Installation-

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Initial Implementation-

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What - The system intervention that will impact literacy.

- What are the core components of the reading intervention, practice, program?
- What is the evidence for student outcomes?
- What can we do to ensure this mandate will meet the needs of the students in our school system?
- What is our capacity for implementation?

Who - Invest in people.

- Who has the time and talent to engage in system transformation?
- Who in our system has the skills, knowledge, commitment, and authority to make and enforce decisions?
- Who will comprise our implementation team?

When - Begin with the end in mind - this takes time.

- When does implementation affect classroom practice?
- When does implementation affect the school?
- When does implementation affect the system?
- When does the new practice become part of the culture?

How - Defined by system drivers.

- How do your system drivers support, align, and sustain personnel in the use of the program or practice?
- How do your organization drivers align programs, policies, procedures, and opportunities to support continued buy-in?
- How do your leadership drivers acknowledge the importance of continued support for future leaders in the organization?