THE SCIENCE OF IMPLEMENTATION: AN EVALUATION OF YOUR PRACTICES

The National Technical Assistance Center on Transition: The Collaborative

Capacity Building Institute 2024

Charlotte, NC

PROJECT SIMPLE

AGENDA

1. Defining Implementation Science
2. Implementation Science Frameworks
3. The Hexagon Tool
4. Self-identification and discussion
5. Lessons learned for project SIMPLE

IMPLEMENTATION SCIENCE: GROUP DISCUSSION

What are practices that you are trying to implement at the:

- State level
- School level
- Teacher level

How much consideration do you give, thinking about *how* to implement those practices?

- State level
- School level
- Teacher level

IMPLEMENTATION SCIENCE *DEFINED*

"Implementation research is the scientific inquiry into questions concerning implementation—the act of carrying an intention into effect, which in health research can be policies, programs, or individual practices (collectively called interventions)."

The intent is to understand what, why, and how interventions work in "real world" settings and to test approaches to improve them

IMPLEMENTATION SCIENCE

- ”Implementation research is especially concerned with the users of the research and not purely the production of knowledge.”
- “One important implication is that often these actors should be intimately involved in the identification, design, and conduct phases of research and not just be targets for dissemination of study results”

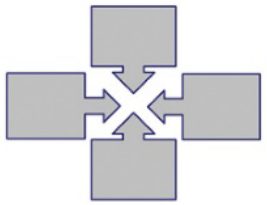
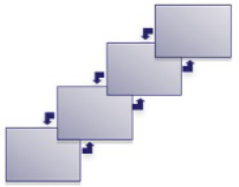
IMPLEMENTATION OUTCOME VARIABLES

Outcome Variable	Defined
Acceptability	The perception among stakeholders that an intervention is agreeable
Adoption	The intention, initial decision, or action to try and employ a new intervention
Appropriateness	The perceived fit or relevance of the intervention in a particular setting or for a particular target audience
Feasibility	The extent to which an intervention can be carried out in a particular setting or organization
Fidelity	The degree to which an intervention was implemented as it was designed in an original protocol, plan or policy
Implementation Cost	The incremental cost of the implementation strategy. The total cost of implementation would also include the cost of the intervention itself
Coverage	The degree to which the population that is eligible to benefit from an intervention actually receives it
Sustainability	The extent to which an intervention is maintained or institutionalized in a given setting

IMPLEMENTATION SCIENCE FRAMEWORKS

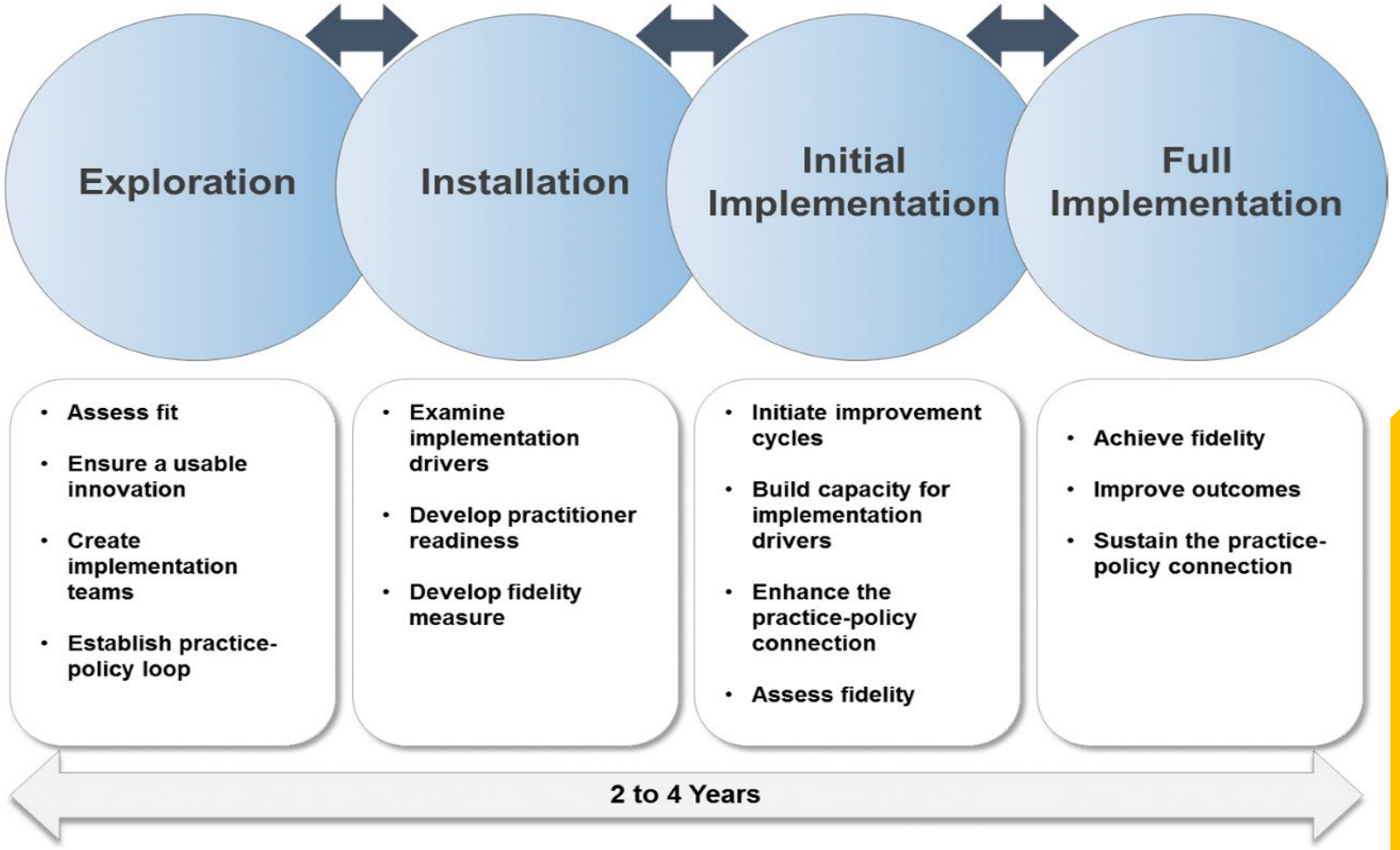
DETERMINANT FRAMEWORKS:

ACTIVE IMPLEMENTATION FRAMEWORK (NIRN; BLANCHARD ET AL., 2017)

Usable Innovations	Stages	Drivers	Cycles	Teams
				
Innovations need to be fully operationalized through identification and description of a shared philosophy, essential functions, operational definitions, and a fidelity assessment	Implementation strategies need to be stage-appropriate; stages include exploration, installation, initial implementation, and full implementation	Clearly defined infrastructure components are necessary to support the innovation; includes organizational supports, competency supports for practitioners, and leadership capacity	Data-driven processes, such as PDSA cycles, should be used to inform decision making around innovation improvement and institutionalization of policy-practice feedback loops	Accountable structures are needed in the form of implementation teams to move innovations through the stages of implementation

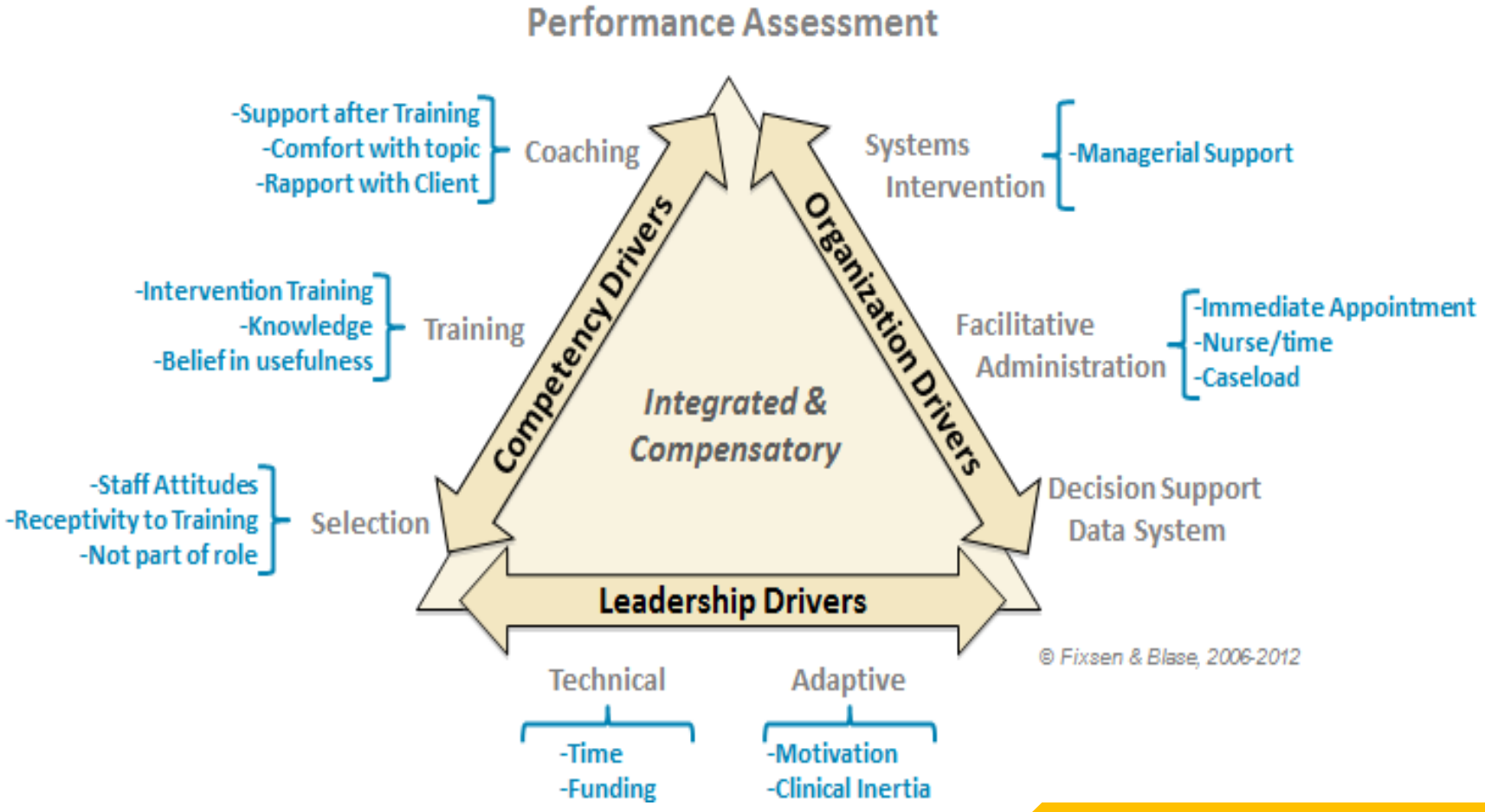
DETERMINANT FRAMEWORKS CONT

ACTIVE IMPLEMENTATION FRAMEWORK (NIRN; BLANCHARD ET AL., 2017)



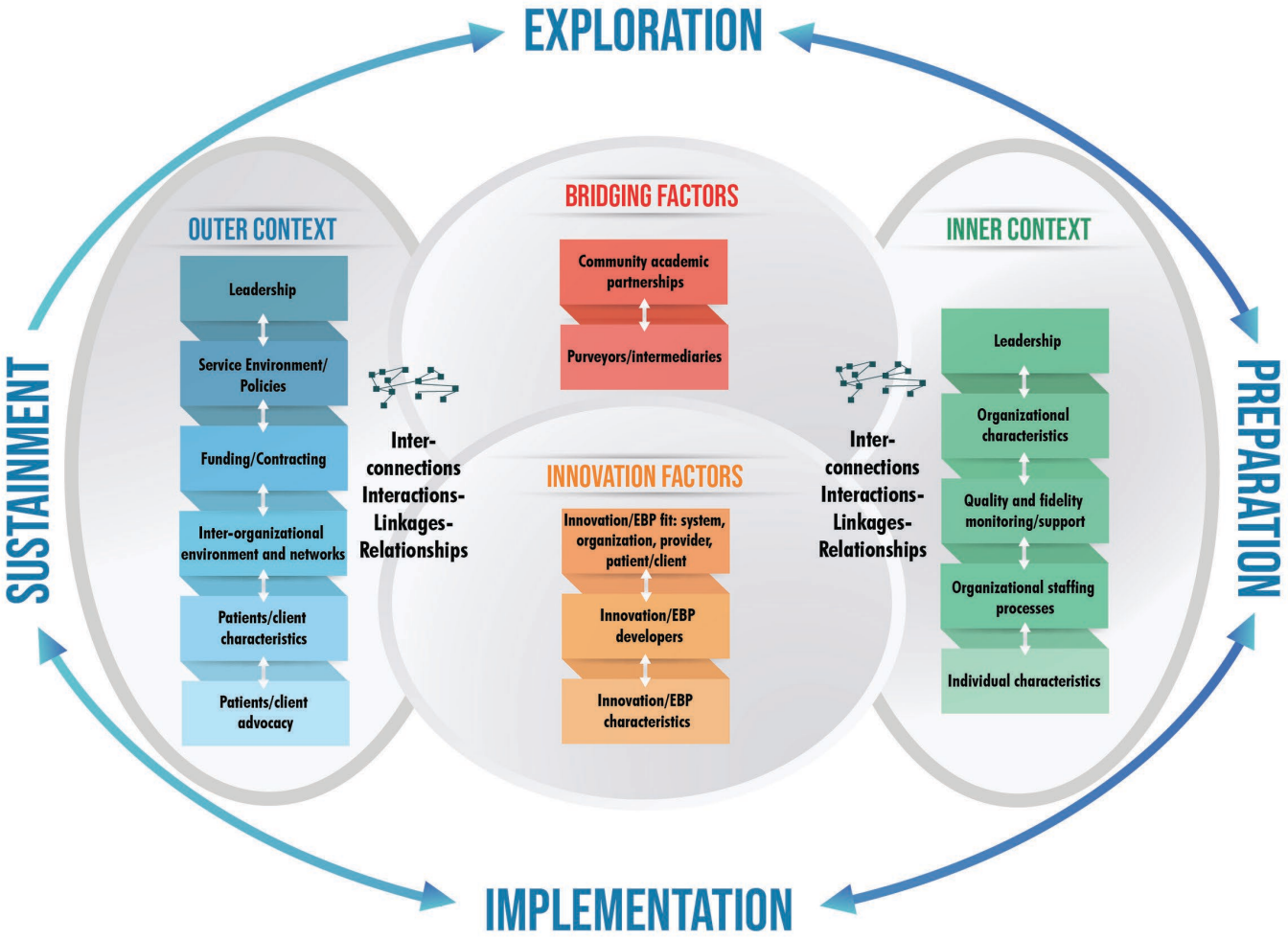
DETERMINANT FRAMEWORKS CONT.:

ACTIVE IMPLEMENTATION FRAMEWORK (NIRN; BLANCHARD ET AL., 2017)



EPIS FRAMEWORK:

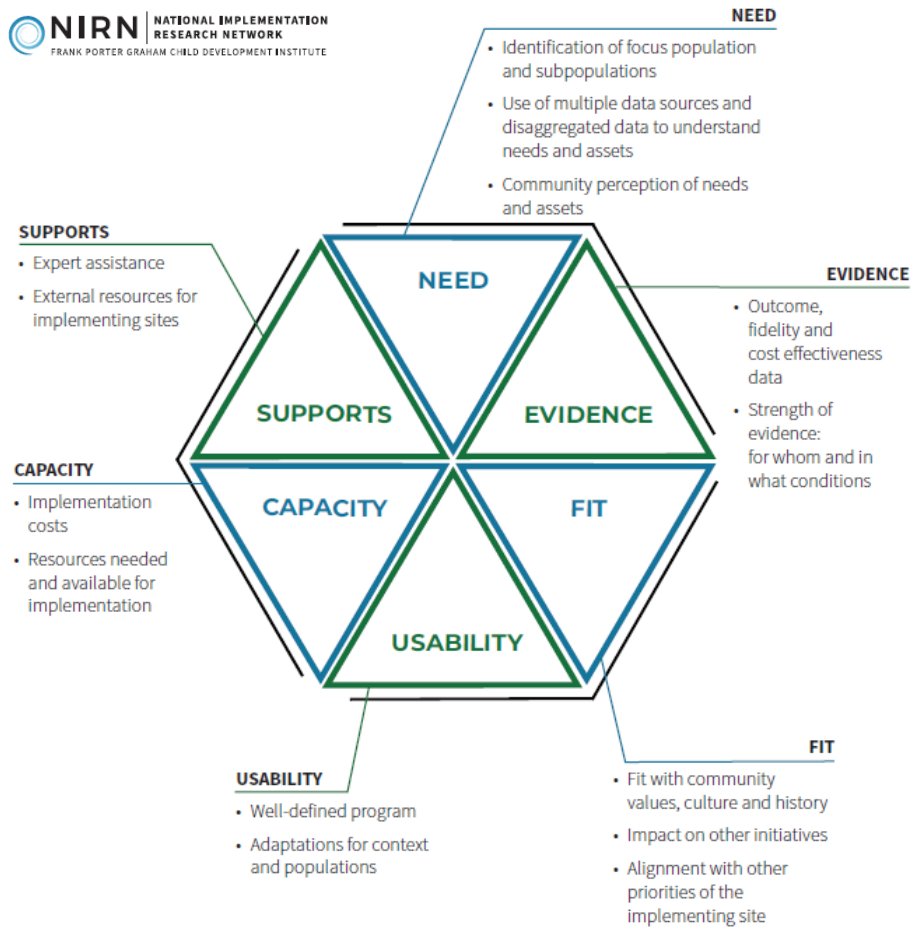
MOULLIN ET AL., 2019



THE HEXAGON TOOL:

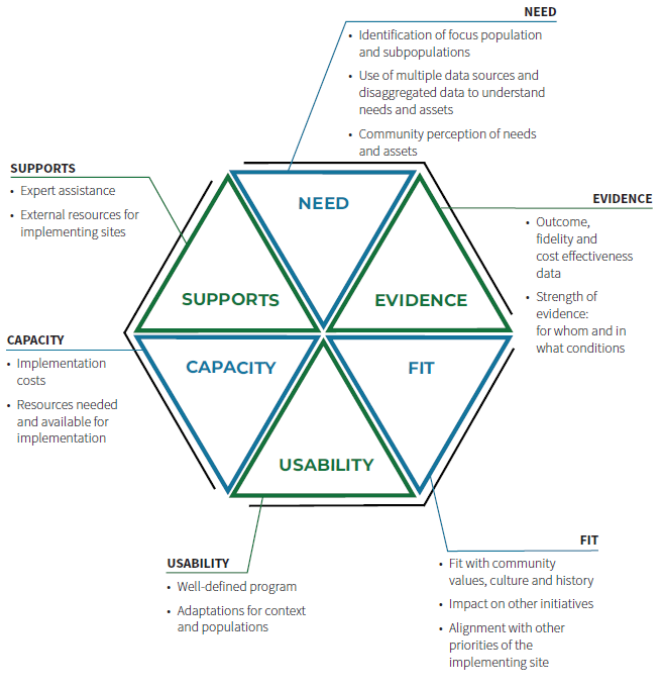
THINKING ABOUT USABLE INNOVATIONS

ACTIVE IMPLEMENTATION FRAMEWORK HEXAGON TOOL



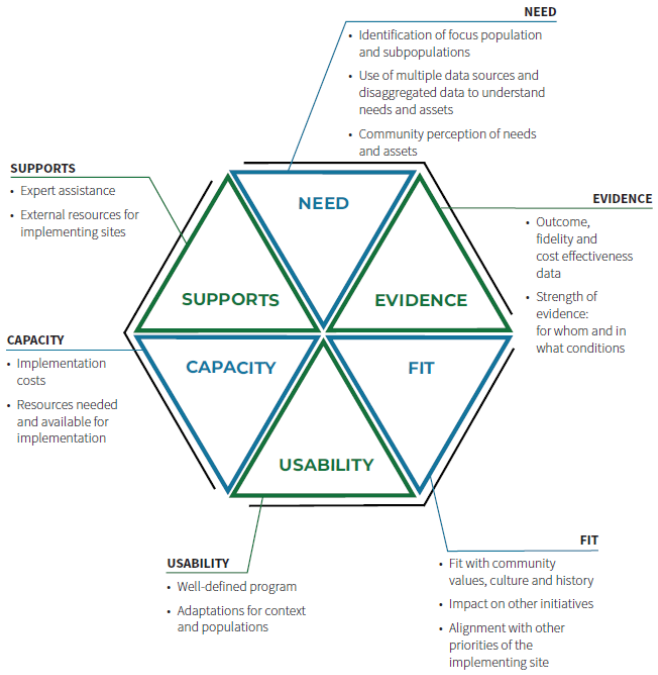
- Used to help make decisions about what Evidence-Based Practice to implement, based on:
  - **Program Indicators**
    - Evidence
    - Supports
    - Usability
  - **Implementation Site Indicators:**
    - Need
    - Fit
    - Capacity

WORKING THROUGH THE HEXAGON TOOL



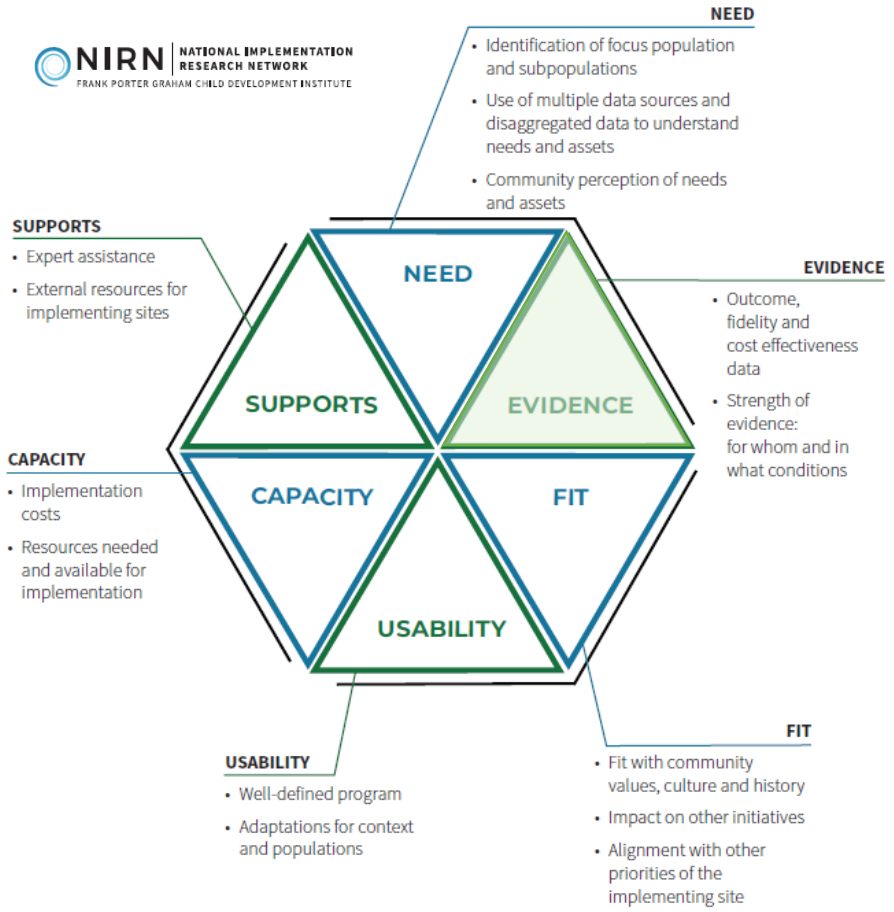
- Think of an innovation, program, initiative, intervention that your state is implementing or going to implement in your schools:
  - Examples:
    - Student led IEPs
    - Professional development and coaching on compliant IEP goals
    - Implementation of Pre-ETS with VR counselors
    - Self-determination curriculum

WORKING THROUGH THE HEXAGON TOOL CONT.



- Think of the context:
  - Who is your target population?
  - What settings will the innovation be implemented in?
  - As the trainer or installer of the innovation, are you ready to start implementing?

IMPLEMENTATION PROGRAM INDICATOR: EVIDENCE

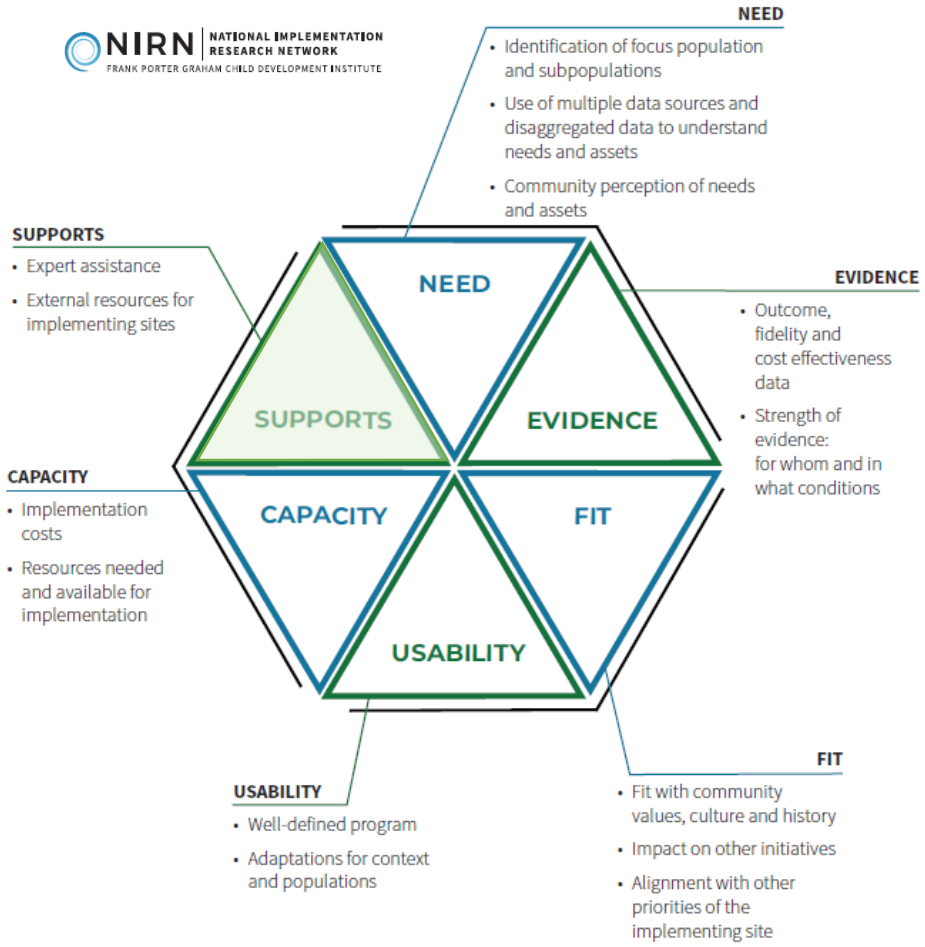


- Are there research data available to demonstrate the effectiveness of the program or practice?
- What is the strength of the evidence?
- What outcomes are expected when the program or practice is implemented as intended?
- Is there practice-based evidence or community-defined evidence to indicate effectiveness?
- Is there a well-developed theory of change or logic model that demonstrates how the program or practice is expected to contribute to outcomes?

IMPLEMENTATION PROGRAM INDICATOR: LEVELS OF EVIDENCE

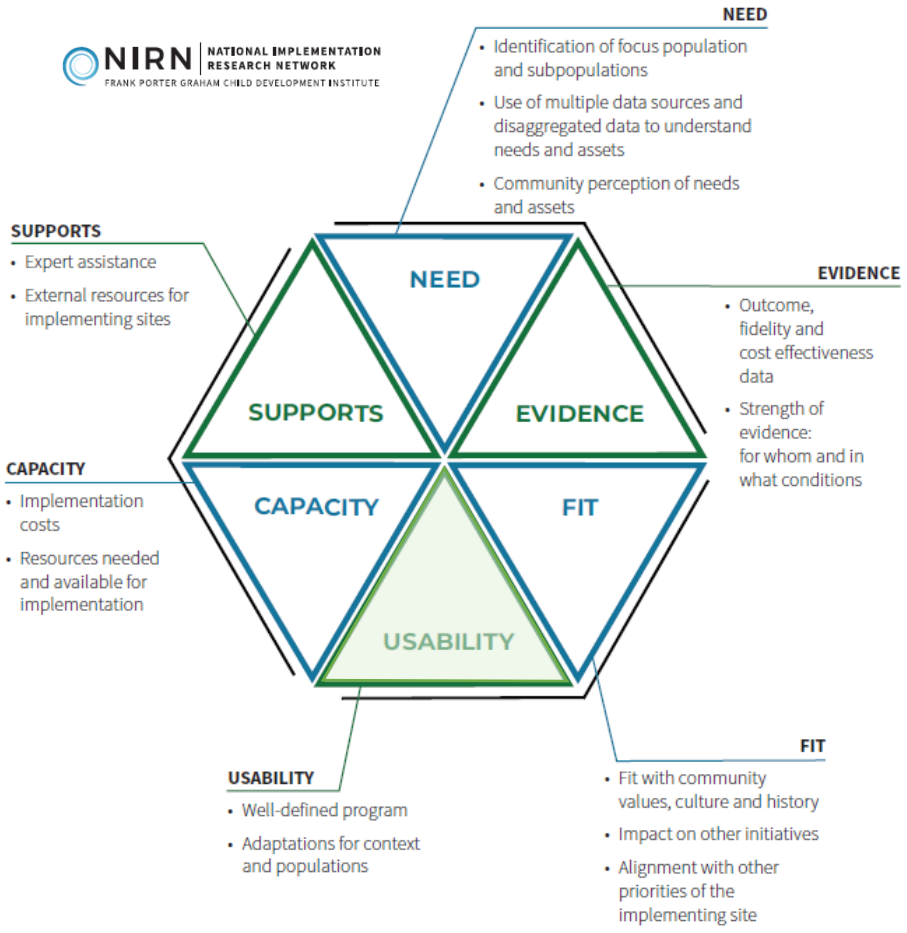
Evidence-based Practices	• Are based on rigorous research designs • Have demonstrated a record of success for improving student outcomes • Have undergone systematic review process using quality indicators to evaluate level of evidence
Research-based Practices	• Are based on rigorous research design • Have demonstrated a record of success for improving student outcomes
Promising Practices	• Are based on research • Have demonstrated limited success • Have used a 'weak' research design
Unestablished Practices	• Are not based on research • Have no data to support effectiveness • Based on anecdotal evidence and/or professional judgement

PROGRAM INDICATOR: SUPPORTS



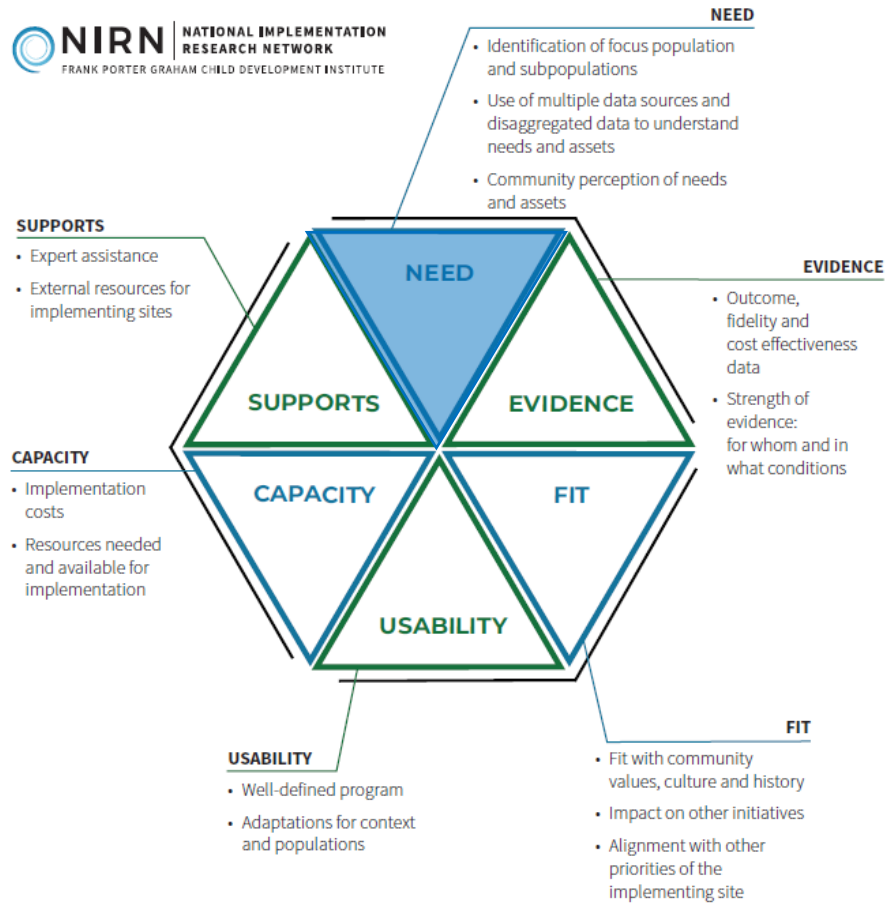
- Is there a qualified “expert” who can help with implementation over time?
- Are there start-up costs for implementation of the program or practice (e.g., fees to the program developer)?
- Are there curricula and/or other resources related to the program or practice readily available?
- Is training and professional development related to the program or practice readily available?
- Is coaching available for the program or practice?

PROGRAM INDICATOR: USABILITY



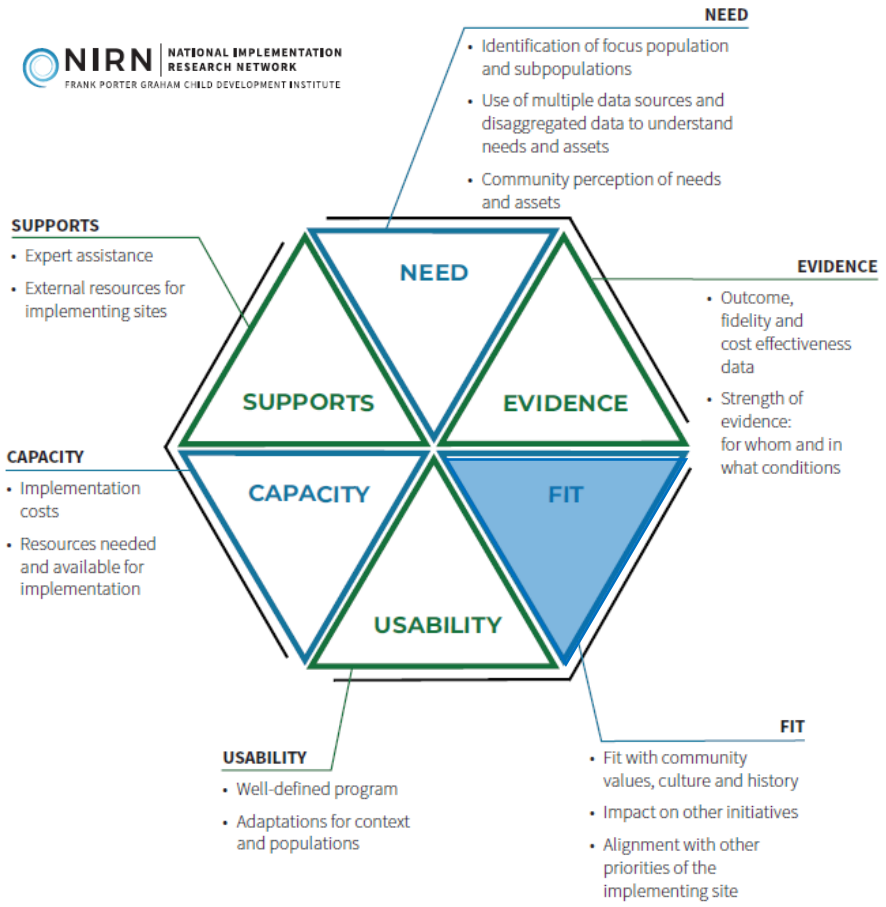
- Is the program or practice clearly defined (e.g. what it is, for whom it is intended)?
- Are core features of the program or practice identified, listed, named (e.g. key components required to be effective)?
- Is each core feature well operationalized (e.g., staff know what to do and say, how to prepare, how to assess progress)?
- Is there guidance on core features that can be modified or adapted to increase contextual fit?
- Is there a fidelity assessment that measures practitioner behavior (i.e., assessment of whether staff use the practice as intended)?

IMPLEMENTATION SITE INDICATOR: NEED



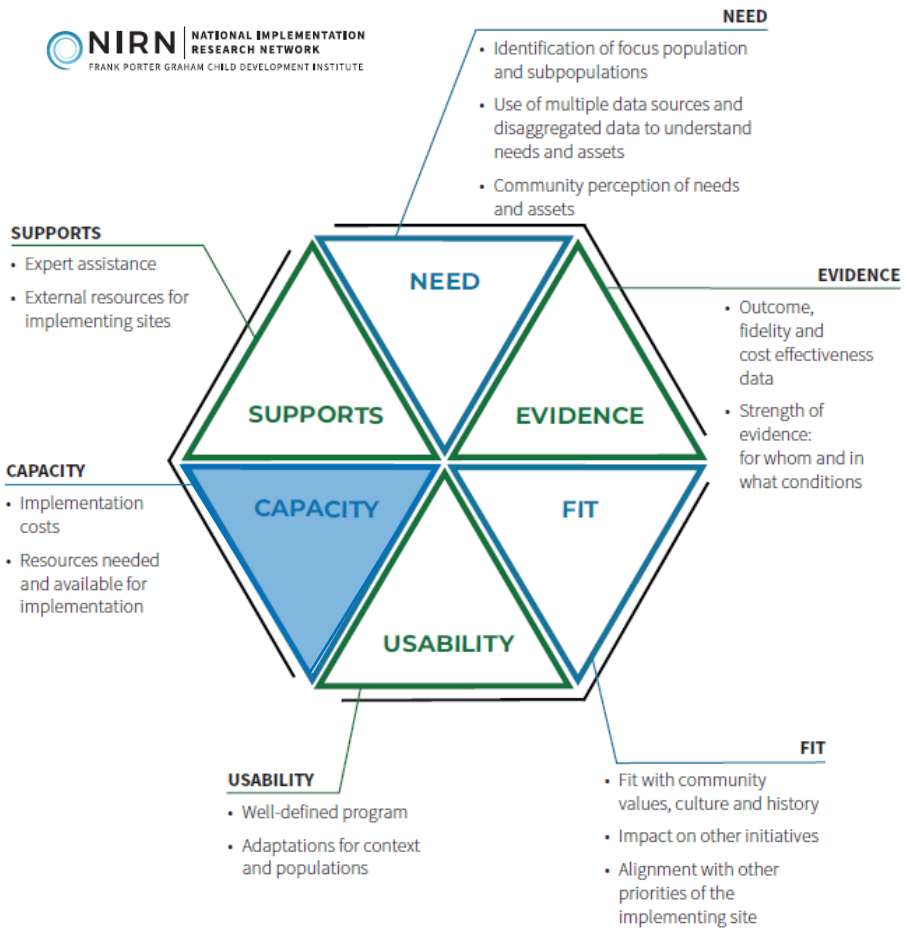
- Who is the identified focus population?
- What is/are the identified needs of these population(s)?
- Was an analysis of data conducted to identify specific area(s) of need relevant to the program or practice?
- How do members of the focus population perceive their need? How were community members engaged to assess perception of need?
- If the program or practice is implemented, what could potentially change for these population(s)?

IMPLEMENTATION SITE INDICATOR: FIT



- How does the program or practice fit with priorities of the implementing site?
- How does the program or practice fit with family and community values, including the values of racially, ethnically, culturally and linguistically specific populations?
- What other initiatives currently being implemented will intersect with the program or practice?
- How does the program or practice fit with other existing initiatives?
- Will other initiatives make it easier or more difficult to implement the proposed program and achieve the desired outcomes?

IMPLEMENTATION SITE INDICATOR: CAPACITY



- How much does it cost to run the program or practice each year? Are there resources to support this cost?
- What are the staffing requirements for the program or practice (number and type of staff)?
- Does the implementing site have access to staff that meet these requirements?
- What administrative practices must be developed or refined to support the use of this program or practice?
- Is leadership knowledgeable about and in support of this program or practice?

GROUP EXAMPLE DISCUSSION

- What was the innovation you are implementing in your state?
- What area(s) of the hexagon did you rate your innovation the highest?
  - Why?
- What area(s) of the hexagon did you rate your innovation the lowest?
  - Why?

THE HEXAGON TOOL:

PROJECT SIMPLE

SIMPLE IMPLEMENTATION: SITE INDICATORS

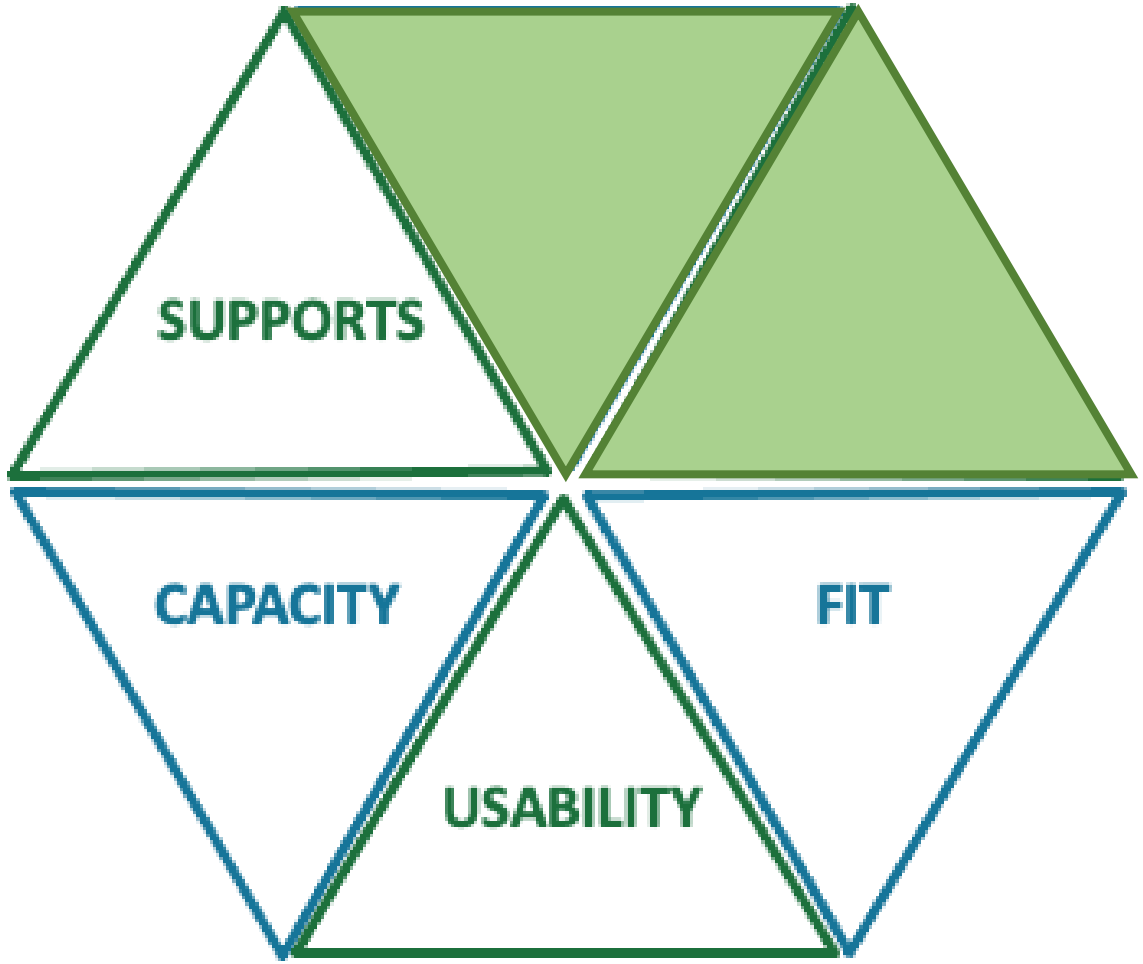
Indicator	Area of Project Focus
Need	• 1 in 5 students experience a mental health concern • Students with disabilities experience MH concerns at higher rates than their peers with out disabilities • MH impacts student behavioral and academic outcomes
Capacity	• Schools are structured to provide in-school services to students and referral to outside supports • Child-find and identification of students in need • School-based health centers provide opportunities for service provision
Fit	• Schools continue to be identified as the main source for mental health services for students • School teachers have opportunities to identify, refer, and provide services to families who may not have access to services outside of the school setting

SIMPLE IMPLEMENTATION: PROGRAM INDICATORS

Indicator	Area of Project Focus
Usability	• There are numerous research-informed and evidence-based interventions designed to be implemented in schools • MH screeners have been widely implemented in schools and are often used across grades
Evidence	• Universal MH screening is a more equitable way to identify students with MH concerns than teacher referral • School-based mental health and Social Emotional Learning interventions can make a positive impact on student outcomes
Supports	• Schools often have trained professionals to support implementation of services (e.g., School Psychologist, Counselors) • School Administrators have opportunities to support professional development based on special educator and student needs

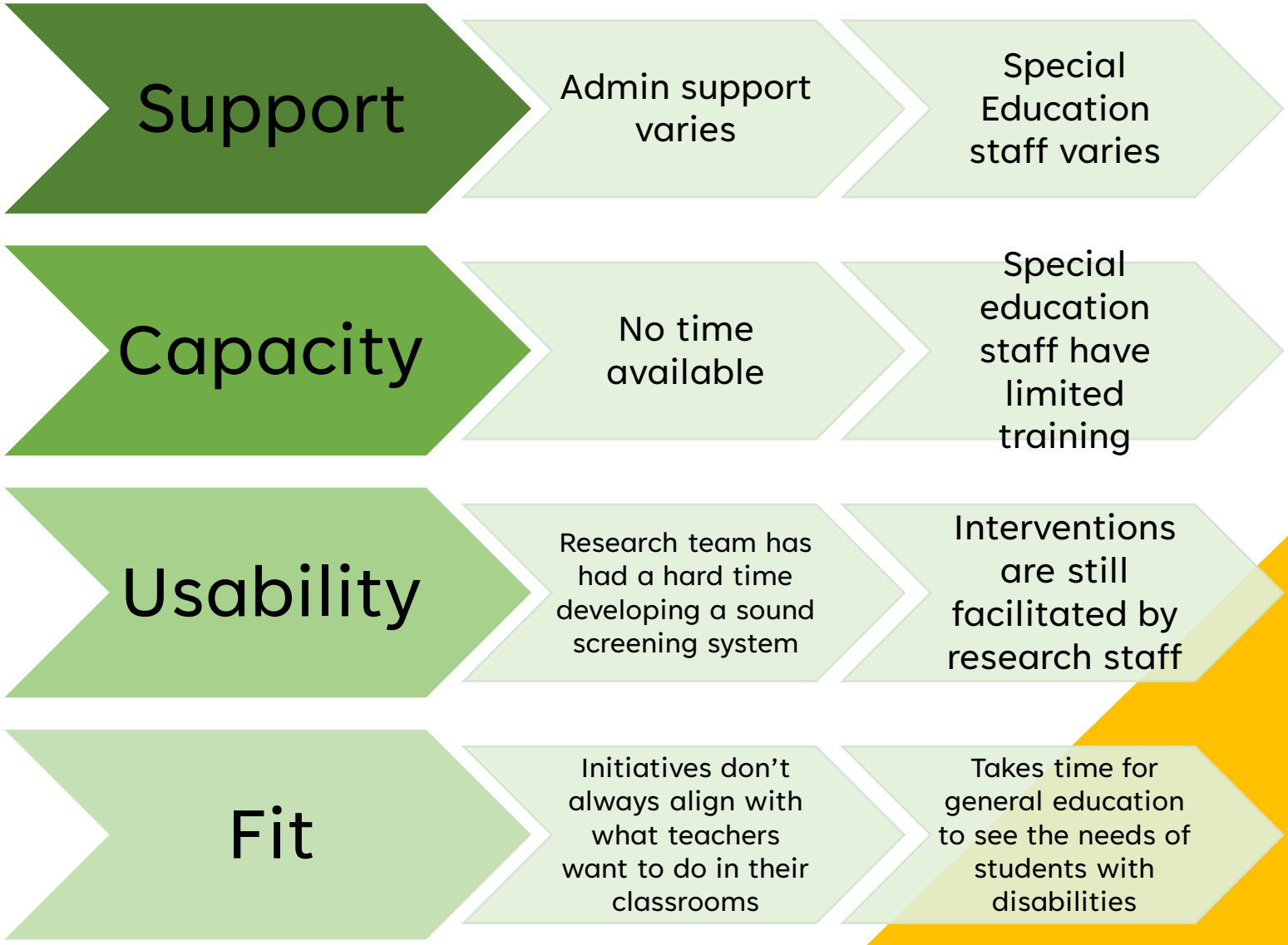
SIMPLE

IMPLEMENTATION: BARRIERS



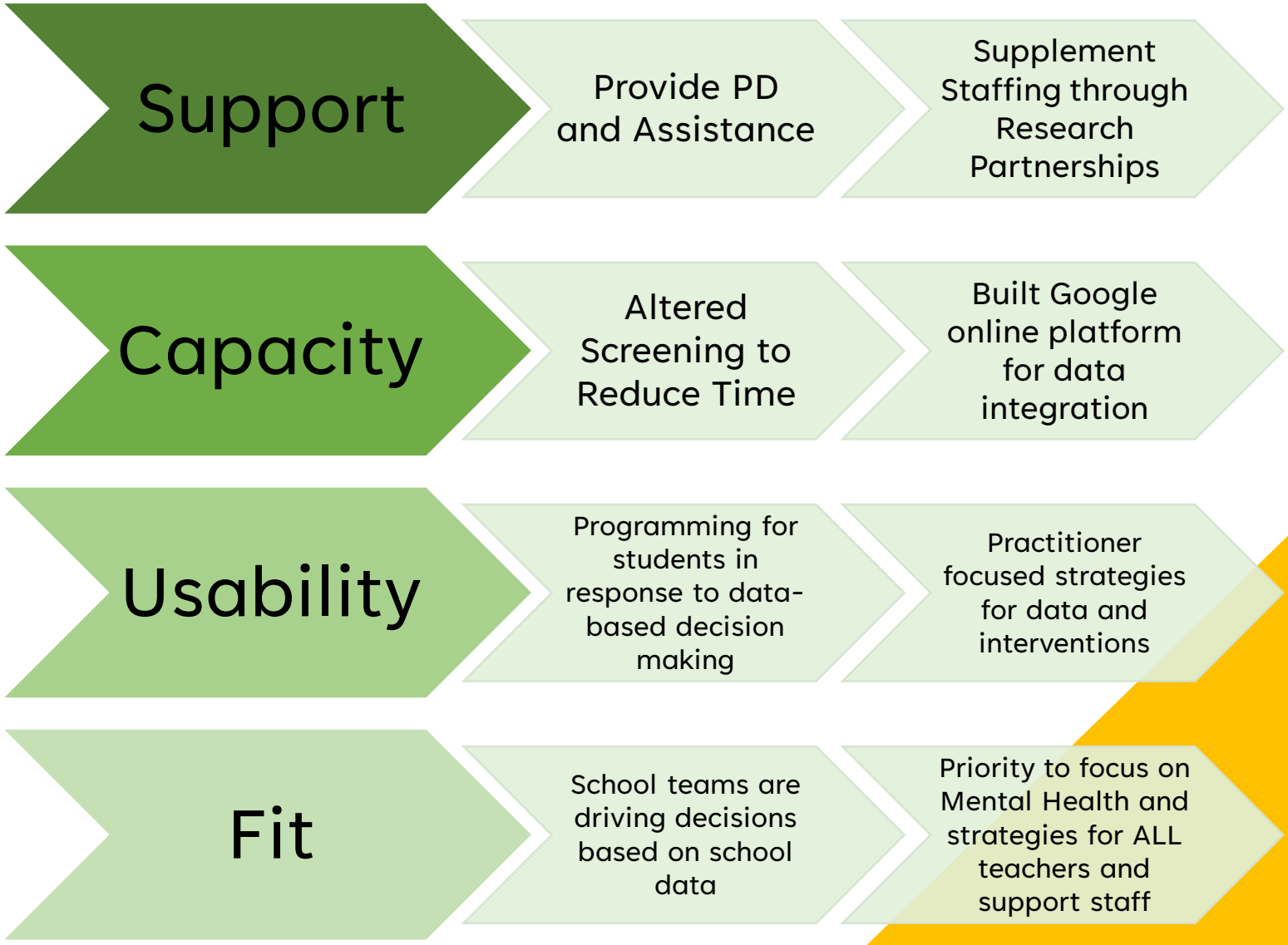
SIMPLE

IMPLEMENTATION: BARRIERS CONT.



SIMPLE

IMPLEMENTATION: ACTIONS



SIMPLE

IMPLEMENTATION: ACTIONS EXAMPLES

Whole School Teacher Training

- School 1 – Brief teacher intervention to support students in need
- School 2 – Universal Design for Learning and Mental Health Literacy

Teacher Training

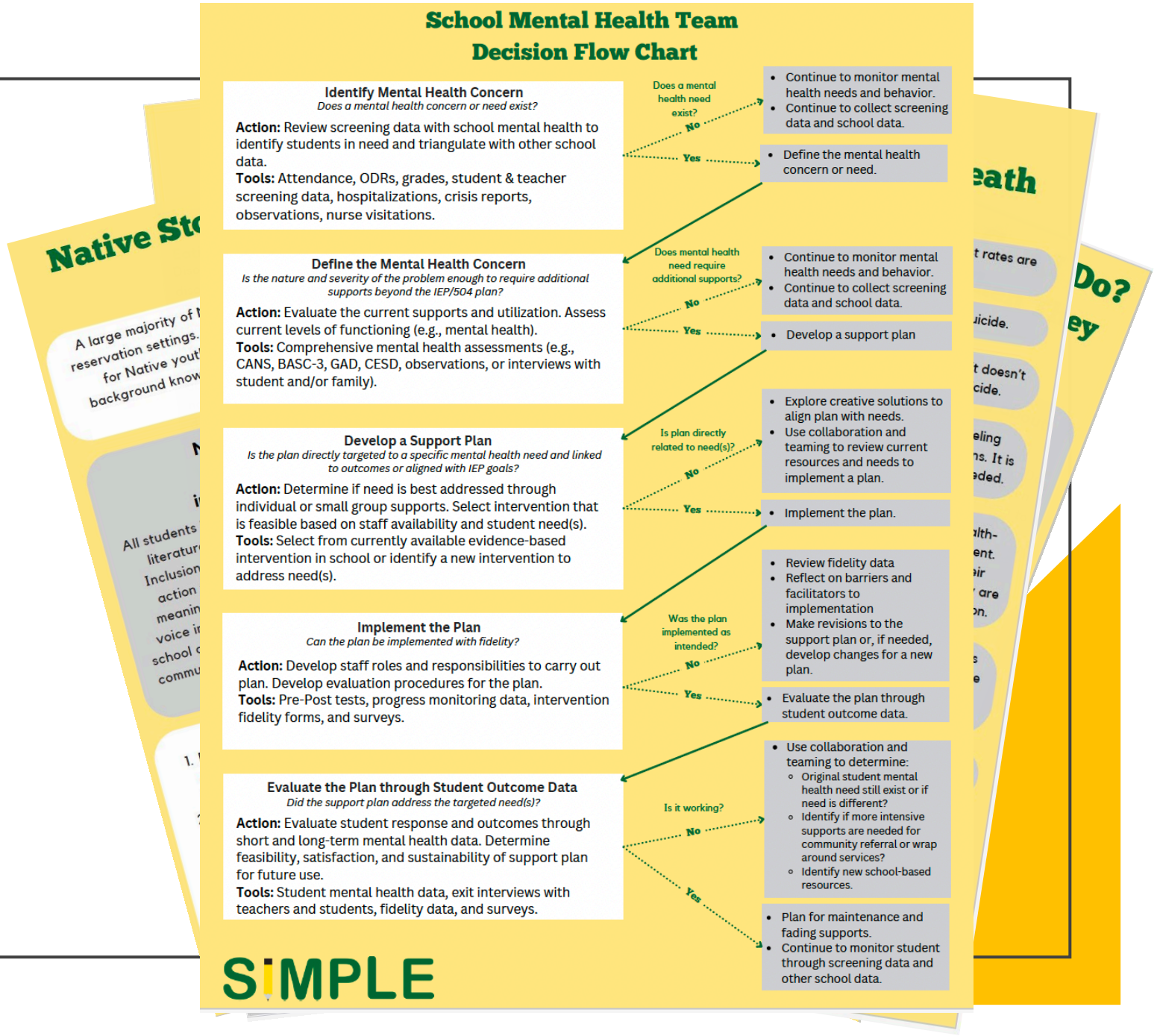
- School 1 – Data-based Decision Making
- School 2 – Behavior management for SPED teachers
- School 2 – Mental health literacy training for Educational Assistants

Teacher Observations

- School 3 – Observing classrooms

SIMPLE

IMPLEMENTATION: ACTIONS POSTERS



QUESTIONS?

SIMPLE

James Sinclair

- jamesin@uoregon.edu

Project SIMPLE

- simple@uoregon.edu
- https://blogs.uoregon.edu/simple/

RESOURCES

NIRN | NATIONAL IMPLEMENTATION RESEARCH NETWORK
AT THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

- National Implementation Research Network
- The Hexagon: An Exploration Tool
- What is implementation science
- Implementation Science in Schools Brief