Active Implementation Frameworks: Their Importance to Implementing and Sustaining Effective Mental Health Programs in Rural Schools

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An estimated 15 million of our nation's youth can be diagnosed with mental health needs, yet only about 7% of these young people receive appropriate help from mental health professionals (U.S. Public Health Service, 2000) . School mental health programs can improve access to services for children and adolescents, but implementing and sustaining such programs can be a challenging and multifaceted process. Over the past several decades, considerable research, policy, and funding have been focused on the use of evidence-based programs and practices. Evidence-based programs, however, are only effective when fully implemented with high fidelity (Lipsey, 2009; Sanetti & Kratochwill, 2014). Unfortunately, that same focus has not been placed on *how* these programs are implemented. That gap between *identification* of evidenced-based programs and *implementation* of those same programs is critical because students will not benefit from interventions they do not receive.

Implementation can be defined as a *specified set of activities* designed to put into practice an activity or program of *known dimension* (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005). Based on the findings of Fixsen et al. (2005), the National Research Implementation Network developed five overarching frameworks referred to as the Active Implementation Frameworks: Usable Innovations, Implementation Drivers, Implementation Teams, Improvement Cycles, and Implementation Stages. The purpose of these frameworks is to guide the process of implementation from identification of the program through full and effective use of that program. They will support the selection of who will be responsible for doing the work and help identify and appropriately sequence important steps to the implementation process. They additionally guide the use of both implementation and program evaluations in order to determine whether the improvements anticipated were realized, and to know at what point there is enough program support and implementation fidelity to sustain it and to replicate it in other schools or classrooms.

The information in this chapter is intended to help educators and mental health professionals become familiar with these Active Implementation Frameworks and their importance to implementing effective mental health programs in rural educational settings.

Framework 1: Usable Innovations

Selection

Successful implementation of a school mental health program begins with selection of an

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evidence-based program that meets the needs of the population. Careful exploration must take place to consider the needs of the students, the evidence supporting successful implementation of the proposed program, and the readiness and capacity of the community to fully implement the program. By examining district data, researching any available published materials, and contacting professionals already training or using the program, the district can get valuable information in response to questions needed for the selection process such as:

What Do the Data Indicate as the Needs of the Population?

School districts already have access to data concerning a student's family, socioeconomic factors, academic assessments, and disciplinary records. Some districts may use mental health or social-emotional "screeners" for early identification of potential needs. Community surveys and interviews may provide additional insight and there may also be partnership agreements with local agencies that allow for sharing of information in order to best match needs with services. Collecting and analyzing this kind of data can support the identification of the most critical needs of the rural district in order to optimize its resources.

Is the Proposed Program a Good Fit with Our School and Our Community?

By exploring what is already being done in the school and community, the district can create a resource map. This will identify what is already provided and what may be missing. The discussion that occurs regarding these existing supports and gaps in service gives an opportunity to see what role this new program would fill and how much more would have to be done to implement it.

What Are the Necessary Resources to Support Full Implementation of the Program?

The district needs to know what must be provided as supports for the new program to be successful. Details regarding what fiscal and human resources and the time commitment that will be required will inform the district whether the program is even a potential consideration.

Is There Sufficient Evidence for the Desired Outcomes of the Program?

Before selecting a program, important factors for consideration include how effective the program was when implemented in other sites, how wide the implementation sample was that led to the development of this program, what evidence was used as an indicator of success, and how similar that situation was to this district.

Has the Program Been Successfully Replicated in Other Districts and Communities?

Consideration should be given to the likelihood that a program could be successful in the local district and community. Confidence in that success could increase if the program under consideration has demonstrated successful results in multiple environments, including similar districts and communities.

Do Our District and Community Have the Capacity to Implement?

Only after this information is gathered can the local district and community compare what is required to what is available and whether all the components of the new program can be supported with fidelity.

Analyzing the data, resource mapping of current programming, identifying potential programs and evidence of effectiveness for the identified student population, comparing what it will take to implement a potential program to what additional resources may be available, and considering the program alignment to the social and cultural norms of the community can help a district make an informed program selection. In rural school districts with fewer resources and limited access to partner agencies, it is particularly important to begin by selecting programs with the best potential for success.

See Appendix 1, *The Hexagon Tool*, for a planning tool to guide the program selection process.

Usable Innovation Criteria

Selection of an evidence-based program that addresses the questions above is just the first step. It is critical to ensure that the selected program is also *usable*. To be usable, it is necessary to have sufficient detail about the key components of an innovation necessary to operationalize the process. The innovation needs to be teachable, learnable, doable, and readily assessable in practice. For example, consider the Positive Behavioral Interventions and Supports program (see www. pbis.org). This program requires, among other things, the creation of a school team to oversee the direct teaching of acceptable behaviors, the reinforcement of these behaviors when observed by staff, a data collection system and regular meetings for data analysis and intervention development for problem areas, fidelity tools used to examine whether the adults are doing what is required, and continuous orientation of new staff and new students to the program. If a district is not aware that all of these components are needed to be successful, how can it expect to replicate the program's success? How will they know whether it even has the capacity to support such a program or what to do when what they are doing is not working?

With an understanding of the key components, the district can train mental health professionals and educators to implement a program with fidelity, replicate it across multiple settings, and measure the use of the innovation. Necessary criteria for clearly defining an innovation so that it can be fully and effectively implemented include a clear description of the program, identification of essential program functions, operational definitions of program functions, and a practical performance assessment of those implementing the program (Fixsen, Blase, Metz, & Van Dyke, 2013).

A clear description of the program, including the underlying philosophy, values, and principles, provides the necessary foundation for the school district and community to inform program decisions that arise during the life of implementation. Specifying inclusion and exclusion criteria that define the appropriate program population helps to ensure that the core components are applied appropriately to support those students for whom the program is intended.

Essential functions refer to the core components that define a program. Without including these key components in the implementation process, the program cannot be implemented with fidelity, and so expected outcomes cannot be achieved. Once identified, these core components need *operational definitions* that provide clear, *behaviorally based descriptions* of each key component. These descriptions provide specific *observable indicators* that core components are in place, and promote consistency across classrooms, schools, and districts. This consistency allows for greater success in the replication of the program. One process for developing operational definitions of core components is through the use of a Practice Profile (see Appendix 2, *Practice Profile Planning Tool*). This tool provides an easily recognizable and accessible format for teams to develop behavioral descriptions of a program's core components that are both measurable and observable.

Once consensus is reached regarding core components and their operational definitions, the district is ready to create a *practical performance assessment*. The use of this assessment of the performance of teachers and mental health professionals who are delivering the school mental health program provides critical information about the degree to which staff are using the new skills with fidelity. The assessment should be grounded in the core components of the program and related to the behavioral descriptions defined in the Practice Profile. Performance assessments should be practical in that they can be conducted repeatedly at each level of the system (building, district, region, etc.) to inform decision-making about next steps in implementation of the program such as whether additional coaching is needed with current users, a need exists for changes in training before it is replicated with another group, or to identify roadblocks that may be getting in the way of using the new skills. Without performance assessments, there is no way to know to what extent the new skills are being used or whether, if they are being used, it is

with confidence and fluency. Rather than an evaluation of the educator or mental health provider, the *purpose of a performance assessment is to inform systems change* in order to create sufficient support for the use of the new practices. Performance assessments will provide evidence that the innovation is achieving expected outcomes when used as intended.

Districts should approach the selection of an evidence-based program with considerable forethought and investigation. This includes giving consideration to how well it will address an identified need, whether it is aligned with other activities already under way in the district, and how adequate resources can be provided to launch, implement, scale-up, and sustain the program. This begins with a clear description of the essential functions of a program, including operational definitions of its core components and a practical performance assessment to determine the extent to which staff members are acquiring the new skills.

Framework 2: Implementation Drivers

Once an innovation or program has been carefully selected, then operationally defined to ensure usability, the district knows *what* it will implement. Then it is necessary to consider *how* the innovation will be implemented to produce positive outcomes for students. The implementation planning process should include answering many questions before trying to actually launch a new program. What does the district need to have in place to support bringing this new program into the district? Whom should they select to do the work and how should they go about deciding? How can the first implementers be trained and coached to become fluent in the new skills? How will the district know when they have reached fluency in their skill building process and whether they are ready to coach others? What systems need to be established to support the data needs, meeting schedules and problem solving that usually accompany a new initiative? How will they be able to keep improving their implementation

until they are ready to scale it to other schools in the district? What kind of leadership will this work require from administrators?
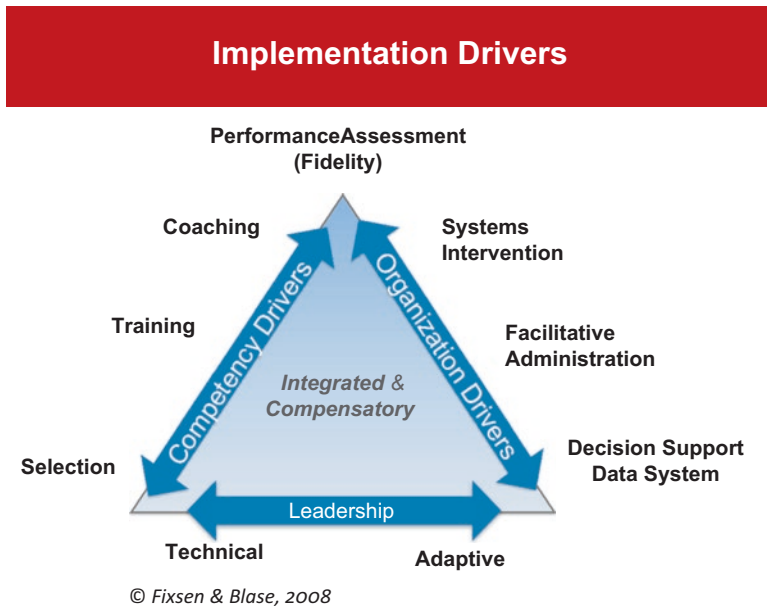
Developing answers to these questions will lead to an examination of what are known as *Implementation Drivers* that will "drive" the new program across the district by creating the necessary systems and processes for quality implementation and future sustainability. These Implementation Drivers are key elements of capacity and infrastructure that influence a program's success (Metz & Bartley, 2012). They are the core components needed to develop, improve, and sustain the ability of educators and mental health professionals to implement an innovation as intended and create an enabling context for the new ways of work. Implementation Drivers are based on common features that exist among many successfully implemented programs and practices. The structural components and strategies that comprise each Implementation Driver contribute to the effective and sustainable implementation of school mental health programs.

Some programs such as Positive Behavioral Interventions and Supports (PBIS) have been developed based on implementation science research and already provide guidance and tools for the district. The specific components of PBIS are clearly defined; recommendations exist for selection of team members for leading the work along with training and coaching ideas; performance assessments are readily available for use in districts to determine fidelity of implementation; collection, analysis and action planning around a variety of student outcome data is an inherent part of the program; and there is even a system already developed to support data needs if a district chooses to use it. In other words, the district can quickly see what readiness looks like, what work needs to still be accomplished and have access to tools to guide their work. However, when that is not the case, districts will need to do most of the work themselves to clearly define the program and then create and monitor a supportive environment.

There are three types of Implementation Drivers that, when used together, can help to ensure successful and sustainable program

implementation: Competency   Drivers, Organizational Drivers, and Leadership Drivers. Competency Drivers are processes that lead to the skillful use by adults of any new practices; Organizational Drivers refer to the systems, resources, and administrative supports that must be available to allow these practices to occur; and Leadership Drivers address technical as well as emotional supports staff members may need from administrators as they move through the change process. The Drivers are *integrated* in that they are all part of a dynamic process, each Driver affecting the others; and *compensatory* in that where there are weaknesses in one Driver, there is some potential to make up for it in another.

Implementation Drivers

PerformanceAssessment (Fidelity)

Coaching

Systems Intervention

Competency Drivers

Organization Drivers

Training

Facilitative Administration

Integrated & Compensatory

Selection

Decision Support Data System

Leadership

Technical

Adaptive

© *Fixsen & Blase, 2008*

Competency Drivers

Competency Drivers build staff competence and confidence to implement the school mental health program as intended by addressing the necessary selection practices, training and coaching supports, and ongoing performance assessment processes to ensure that staff are effectively supported throughout the implementation of the program.

Selection of staff to implement the program involves the identification of specific skills, experiences, and characteristics necessary for delivery of the program. Once identified, the school mental health program should define a process for recruiting, interviewing, and selecting individuals with these prerequisite qualifications.

Development and use of protocols such as role-playing scenarios to highlight comfort using data and receptivity to coaching will help to yield a better match between staff skills and program requirements. In rural areas, with fewer human resources available, the district may have limited flexibility for selection and thus be unable to find a candidate to match all the criteria. They may need to rely more heavily on the training and coaching of these individuals to compensate for any initial gaps in their skills.

Training for staff implementing the school mental health program should be founded in evidence-based adult learning theory. Strategies such as pre-training readings and exercises, application and practice of new skills through role-playing and simulations, and opportunities

to receive feedback and participate in self-assessment in a safe environment can help staff more effectively apply new skills and practices (Dunst & Trivette, 2012).

While most skills for the school mental health program can be introduced through training, they will be practiced and mastered on the job. Joyce and Showers (2002) found that providing onsite *coaching* supports following training can increase staff application of new skills from 5% to as much as 95%. School mental health programs should develop coaching support structures that include direct observation to improve and maintain staff skills and program fidelity. It may be necessary to begin with external coaches; however, when it is possible to develop the expertise within existing staff, this support may later be more readily available and less costly as the program expands. Rural districts should keep this in mind as they develop the selection criteria for initial implementers.

The ongoing use of multiple sources of data is vital to achieving and maintaining fidelity of implementation of the school mental health program. The school district and community mental health systems should develop clear, transparent staff performance assessments to evaluate their selection, training, and coaching processes. Routine review of these performance assessments, combined with coaching data, practice profile reviews, and student outcome data, will ensure that any needed supports can be offered to staff as early as possible. School mental health programs can stay on track with early identification of strengths and needs in the implementation process. Frequent review of these data allows the district to quickly recognize and operationalize successes and to catch implementation errors before they are institutionalized.

Organizational Drivers

Well-trained staff cannot effectively implement a school mental health program without a systemically supportive environment. Remember, the purpose of performance feedback is for districts to address *system* revisions to better support staff

members in their use of new practices. Organizational Drivers include Decision Support Data System, Facilitative Administration, and Systems Intervention. These are the supports and infrastructures needed to create hospitable organizational environments for the school mental health program.

Creating a culture that embraces the ongoing use of data to assess both adult implementation of the program and student outcomes is vital to becoming a learning environment that can improve and sustain implementation over time. *Decision support data systems* should include both *fidelity data* (as previously explained) and *outcome data* that are timely, actionable, and reliable. For a behavior program, for example, that might mean fidelity data showing the extent to which the adults are using the skills required such as direct teaching of desired behaviors, reinforcing positive behaviors and creating interventions based on office discipline referral data to address problem areas. Student outcome data might include data showing a reduced or increased number of discipline referrals, absences, or classroom tardiness. Teams may also look at changes in academic behavior such as homework completion and performance on quizzes and tests. Frequent collection and review of these data is key to preventing the institutionalization of implementation errors, and to operationalizing successes.

Facilitative administration involves those strategies that administrators can employ to provide a hospitable environment for the successful implementation of a school mental health program. These strategies encompass a wide range of activities to provide support to the overall program, including data collection, staff support and recognition, and administrative policy and procedure changes. Facilitative administration strategies may include providing access to necessary technology to support collection and aggregation of data in real time, and changing schedules to allow educators and/or mental health professionals to observe one another and meet with one another to discuss observations for shared learning and planning. Establishing clear communication protocols and feedback loops; realigning

responsibilities to allow participating staff sufficient time to learn and implement the school mental health program; and removing administrative barriers to learning, implementing, and assessing the program are other examples of facilitative administration. Spending the time to have as many of these supports in place up front will save time later by making the implementation process proceed more smoothly initially and providing continuing support as the program expands.

Systems intervention strategies involve those for interacting with external organizations, systems and funders to ensure the necessary fiscal and human resources and regulatory support for the school mental health program. In the case of a program involving the partnership of agencies, such as mental health and education a key systems intervention would be the establishment of a partnership agreement outlining communication, funding, and decision-making process in support of the program. Systems intervention strategies may include developing a frequent, transparent, shared communication process; establishing a parent-community network in support of the program; and maintaining agency and community support through frequent communication of rationales, progress data and outcomes data.

Leadership Drivers

Implementing a school mental health program and providing a supportive implementation environment requires that administrators attend to both technical and adaptive problems as they make decisions, provide guidance, and support organization functioning. Leadership drivers focus on matching leadership strategies, both technical and adaptive strategies, to challenges as they arise.

Heifetz, Grashow, and Linsky (2009) describe *technical challenges* as those that, though complex, have relatively clear definitions and solutions. Technical challenges can be addressed through traditional management strategies. These strategies may involve identifying a team, agreeing upon a solution, creating a plan, assigning tasks, and carrying out the plan. Heifetz and col-

leagues describe *adaptive challenges* as those characterized by different, often competing, views of what the problem is, and equally diverse opinions as to the solution. Strategies for addressing adaptive challenges include creating a safe environment for diverse opinions to be expressed and creating a culture that helps staff participate in and take on responsibility for making the necessary changes to move the work forward.

Implementation is a complex process. However, if a rural district takes care to install and maintain Implementation Drivers to navigate through that process, they will build a road for the mental health program to be delivered by competent staff members in an environment prepared to support the program with administrative leadership that uses both technical and adaptive practices to work through challenges.

Framework 3: Improvement Cycles

The implementation of a school mental health system will, as a matter of course, require changes to the status quo. Changes will need to be made both in the practices employed by educators and mental health professionals, and in the systems supporting those practices. How will implementers know which changes should be made, and if the right changes are being made? The frequent, intentional collection and review of data to guide decision-making can establish a "trial and learning" process of improvement. Improvement Cycles support the purposeful process of change. Improvement Cycles help to solve problems, improve practices, and create "hospitable" environments for new ways of work. The common structure for improvement cycles is the Plan, Do, Study, Act Cycle or PDSA (Deming, 1986; Shewhart, 1931).

- Plan: Detail the specific objectives and processes for the work
- Do: Implement the plan as defined
- Study: Review and analyze data about the process and outcomes achieved
- Act: Make changes to the next iteration to improve the process and/or outcomes

The cycle then begins again with a plan for next steps to continue to improve the process or to operationalize the success. Taylor et al. (2014) found that the PDSA cycle is often not followed fully. It is important for the implementation team to frequently review data, and use that data to inform the decisions of each revision of the plan. It is the repetition of this process that makes it such an effective continuous improvement strategy. Two specific types of PDSA Cycles addressed below are Usability Testing and the Practice-Policy Communication Cycle.

Usability Testing

Usability testing allows for limited initial use of the innovation under "real-life" conditions, to quickly discover what works and what does not. While the more traditional piloting approach uses a broader sample of users for a longer period of testing time, usability testing involves multiple iterations of a program with a small number of users (4–5) in each cycle. Research has shown that a program's usability is improved more by four tests with five users each, than by a single test with 20 users (Nielsen, 2000). Nielson found that, while one user found about 30% of the problems, four or five users were able to identify 85%.
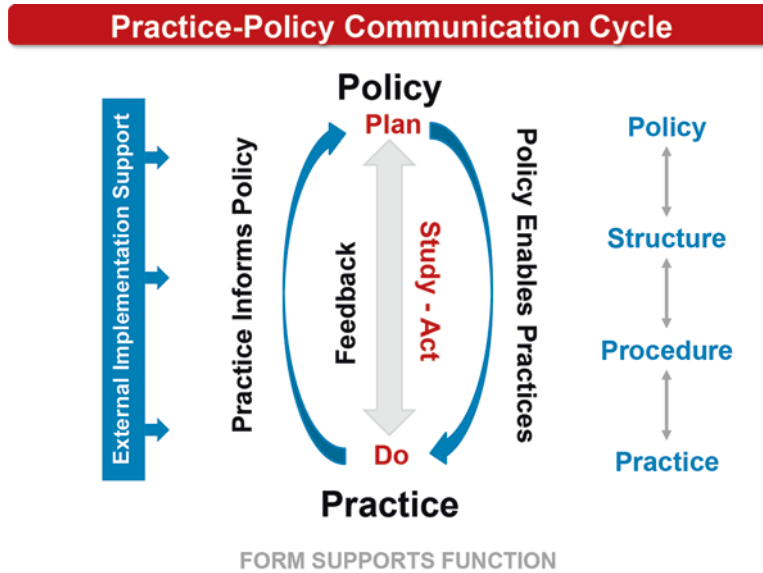
The program is first implemented with a few users or sites. A PDSA cycle is used to review data, make adjustments to the program, and begin the testing again with the revisions in place for a second iteration. The second usability determines if the revisions were effective, and uncovers additional surface problems with the program. The third test can probe more deeply into the fundamentals of the program and help to identify support structures that may be needed (Akin et al., 2013; NIRN, 2014). The process can be repeated several times until the program is ready for general use.

Practice-Policy Feedback Loops

New programs often do not fare well in existing organizational systems. Connecting policy to practice is a key aspect of reducing organizational barriers to high-fidelity implementation. Effective policy should be in place to enable good practice in the school mental health program. But those policies can only be effective if they are informed directly by educators and mental health professionals, and that communication needs to occur on a regular basis. Frequent, regularly scheduled communication between program implementers and school and mental health administrators is fundamental to this successful implementation. This ongoing communication is really the key to establishing that enabling context, or hospitable environment, in support of the work of the school mental health program.

As practice-policy feedback loops are developed, careful consideration should be given to frequency of these communication processes. If, for example, this communication occurs quarterly, then the system is only accorded three or four opportunities in a school year to make adaptations, or even a course change, in the implementation of the program. How quickly would you want to know if there is a barrier to implementation fidelity? How soon would you want to know about successful strategies that can be operationalized across the district? The frequency of these communication protocols determines how responsive the organization can be to program and student needs.

Practice-Policy Communication Cycle

Policy

Plan

Study - Act

Feedback

Do

Practice

External Implementation Support

Practice Informs Policy

Policy Enables Practices

Policy

Structure

Procedure

Practice

FORM SUPPORTS FUNCTION

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Implementation Research Network (2008).

Both the education and the mental health systems can be complex, fragmented systems, which can threaten the successful implementation of a school mental health program. Educators and mental health professionals may frequently experience barriers to service delivery that can only be solved at the policy level. The establishment of routine practice-policy feedback loops can create the supportive, adaptive systems that enable and sustain newly adopted evidence-based programs. The *Communication Protocol Worksheet* found in Appendix 3 can be used to document agreed upon practice-policy feedback loops.

Framework 4: Implementation Teams

Implementation Teams are responsible for ensuring that implementation frameworks are installed and maintained. Implementation teams are comprised of individuals (usually a minimum of 3–5) who are accountable for guiding the overall implementation of usable innovations through the stages of implementation (see Framework 5:

Stages of Implementation), while attending to each of the implementation drivers and maintaining improvement cycles based on routine review of data.

Traditionally, service providers have been left on their own to implement the selected program or practice. Various authors (Fixsen et al., 2013; Greenhalgh, Robert, MacFarlane, Bate, & Kyriakidou, 2004; Hall & Hord, 1987) have categorized three approaches to supporting implementation. *Letting it happen* refers to the passive spread of knowledge that leaves administrators, educators, and mental health professionals to make use of research findings on their own. *Helping it happen* refers to the provision of supports such as manuals and web-based information to help implementation occur. *Making it happen* indicates that organized implementation teams take responsibility for actively supporting the implementation of a new program.

Fixsen et al. (2013) have described the *making it happen* strategy as a set of activities whereby active implementation teams take responsibility for supporting service providers and administrators as they guide the process of implementing

evidence-based programs in their organizations. Available evidence suggests that the use of implementation teams can improve rates for successful implementation and reduce the time it takes for a program to move to the full implementation stage (Balas & Boren, 2000; Fixsen, Blase, Timbers, & Wolf, 2001).

In multilevel systems, implementation teams should be established at each level of the system to guide the implementation process. The development of formalized, regularly scheduled, purposeful communication protocols between implementation teams at adjacent levels of the system helps to establish a cohesive system of implementation. While implementation teams may be established in both the education and mental health systems, it is recommended that a cross-agency implementation team be established to ensure that school mental health services are aligned and coordinated. In rural areas, implementation teams may include members from more than one community or district to maximize valuable resources.

Implementation teams focus on a number of key functions, including:

Creating and Assessing Readiness

Readiness is an important consideration in making effective use of a school mental health program. Implementation teams provide staff and community members with the rationales for change, research supporting the proposed program to be implemented, and the commitment of leadership to make the necessary changes in the existing system and development of supportive practices for the program.

Installing and Sustaining Implementation Drivers

Each implementation team is responsible for developing and maintaining the implementation drivers to support the use of school mental health programs with fidelity. Implementation drivers are the functional infrastructure supports that enable a program to be implemented as intended.

Monitoring Fidelity of Implementation

The intentional use of data in making decisions about next steps is vital to the sustained success of any program. Implementation teams routinely monitor data around whether the program is being implemented as defined (fidelity) to identify gaps in implementation and make changes (e.g., modifications to training, targeted coaching) to address those gaps.

Support Level and System Linkages Through Communication Protocols

Frequent, regularly scheduled communication between program implementers and school and mental health administrators is fundamental to the successful implementation of a school mental health program. This ongoing, intentional communication process is what allows successful strategies to be quickly operationalized, and prevents implementation errors from becoming institutionalized in the system. While ongoing communication is something on which all parties generally agree, maintaining that process is more difficult. It is the responsibility of implementation teams to model the use of agreed upon communication protocols at all levels, prompt responses from others, and provide recognition for the use of this important implementation practice.

Solving Problems and Building Sustainability

Implementation teams hold regular meetings to review both outcome and fidelity data, identify and address challenges to implementation through the use of implementation drivers, and communicate both successes and challenges to leadership and other teams across the system. This ongoing model helps to normalize the process of implementation and to build the necessary systemic supports to sustain an effective school mental health program.
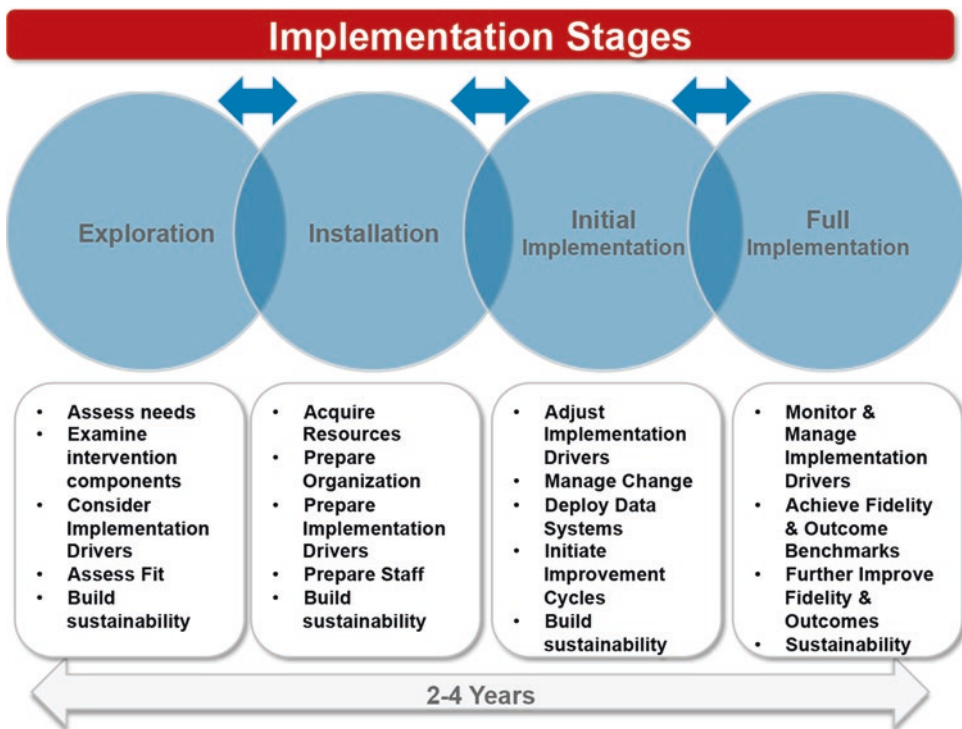
Framework 5: Implementation Stages

Implementation teams are responsible for selecting and defining Usable Innovations, installing and maintaining Implementation Drivers and intentionally using data and making use of ongoing Improvement Cycles. These activities occur over time in stages that overlap and that are revisited as necessary.

Frequently, funders, policy-makers, and organizations demand that newly implemented programs produce improved student outcomes in unreasonably short periods of time. Despite these shared desires for rapid results, research has shown that it can be expected to take 2–4 years for a clearly defined, well researched and operationalized program to reach full implementation

(Blase, Fixsen, & Phillips, 1984; Fixsen et al., 2001; Saldana, Chamberlain, Wang, & Brown, 2012).

Implementation is a process involving multiple decisions, actions, and corrections to change the structures and conditions necessary to successfully implement and sustain new programs and innovations (Metz et al., 2013). A review of the literature suggests that implementation occurs in four distinct stages: exploration, installation, initial implementation, and full implementation (Chamberlain, Brown, & Saldana, 2011; Fixsen et al., 2005; Romney, Israel, & Zlatevski, 2014). Conducting stage-appropriate implementation activities is necessary for successful new practices to be used and for organizations and systems to change in support of the new ways of work.

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Exploration Stage

The Exploration Stage is a critical starting place when considering change. Taking the time to explore what to do, how to do it, and who will do it saves time and money and improves the chances for success. This stage also is the time to assess potential barriers to implementation related to funding, staffing, referrals, and system changes. The result of the Exploration Stage is a clear implementation plan with tasks and time lines to facilitate the installation and initial implementation of the program.

During this stage, implementation teams are formed and begin the process of defining the work to be done. Data is collected and analyzed to determine the needs of the students and potential program models to meet those needs. Using that data and a careful review process to determine fit and feasibility, the appropriate school mental health program is selected for implementation. If critical components of the selected program are not clearly identified and defined, the implementation team leads that work to ensure the development of a Usable Innovation. Desired outcomes are determined and data needed to demonstrate those outcomes are identified for the development of fidelity assessment and the use of improvement cycles. Planning for the installation of competency drivers begins, to develop the training, coaching, and fidelity assessment systems. At the same time, planning begins around key organizational systems to ensure that data can be collected and analyzed, and the necessary policies and procedures are revised or developed.

Finally, it is in this stage that the implementation team develops communication protocols to link teams across the educational and mental health systems. That communication is supported by frequent meetings and sharing of information across teams at this early stage of implementation.

Installation Stage

After making a decision to begin implementing a new school mental health program, there are tasks that need to be accomplished before the program actually begins. This stage of implementation is often overlooked, but careful attention to the purposeful building of staff and organizational supports can help to ensure the successful implementation of the new program. The Installation Stage of implementation is characterized by activities that create the implementation infrastructure and make the necessary changes in practice.

Implementation team members develop a training plan to build staff competency and partner with program developers or external consultants or organizations to ensure effective training of the first cohort of staff in the new program. A coaching plan is developed and employed to ensure the ongoing support of staff competence and confidence in their use of new skills after training. Data from the initial training and coaching sessions is reviewed to determine if adjustments need to be made. The implementation team looks at organization drivers to ensure that the necessary financial and human resources are in place to support the new program. The implementation teams needs to continue to prompt the need for frequent meetings and intentional use of communication protocols to ensure that this practice policy feedback structure becomes an integral part of the school mental health program.

Initial Implementation Stage

The Initial Implementation Stage begins when the school mental health program is first being put to use. During this stage, educators and mental health professionals are attempting to use newly learned skills and practices in the context of a school, district or mental health system that is itself just learning how to change to accommodate and support the new ways of work. This is the most fragile stage where the awkwardness associated with trying new things and the difficulties associated with changing old ways of work are strong motivations for giving up and going back to comfortable routines. During this stage, usability testing is begun, and implementation teams need to focus on frequent use of data

to review initial implementation, identify successes and challenges or gaps in the process, and quickly make adjustments in response to that data analysis. Continued attendance to communication protocols helps to facilitate this.

Full Implementation Stage

Full Implementation is reached when 50% or more of the intended educators and mental health professionals are using the school mental health program with fidelity and good outcomes. Implementation teams review systemic supports such as data systems, funding, training and coaching practices, to inform decisions around scaling to additional buildings or grade levels and sustaining the school mental health program. In the Full Implementation Stage the new ways of providing services are now the standard ways of work where educators and mental health professionals routinely provide high quality services and the implementation supports are part of the way the systems carry out their work.

Summary

The success of a school mental health program depends not only on the selection of an evidence-based school mental health program, but also on the effective implementation of that program. A formula for the successful use of evidence-based programs may be characterized as:

$$\text{Effective innovation} \times \text{Effective implementation}$$
$$\times \text{Enabling context}$$
$$= \text{Educationally significant outcomes.}$$

Fixsen et al. (2013) note that this formula involves multiplication. If effective innovations are not selected, then improved outcomes will not be achieved. Similarly, if effective implementation supports or enabling contexts are not provided, then improved outcomes will not be achieved.

The National Implementation Research Network developed five overarching frameworks referred to as the Active Implementation Frameworks that can provide guidance in navigating the complex business of implementing a school mental health program. The five Active Implementation Frameworks are as follows: Usable Innovations, Implementation Drivers, Improvement Cycles, Implementation Teams and Implementation Stages. Establishing these implementation structures within the mental health and education systems can help to ensure successful and sustainable implementation of a school mental health program.

Appendix 1

The Hexagon Tool: Exploring Context

Adapted with permission by
The State Implementation & Scaling-up of Evidence-based Practices Center (SISEP)

Based on the work of
Kiser, Zabel, Zachik, & Smith (2007) and
The National Implementation Research Network (NIRN)

Frank Porter Graham Child Development Institute

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State Implementation &Scaling-up of Evidence-based Practices
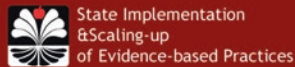
The Hexagon Tool: Exploring Context

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About

The mission of the National Implementation Research Network (NIRN) is to contribute to the best practices and science of implementation, organization change, and system reinvention to improve outcomes across the spectrum of human services.

email: nirn@unc.edu
web: http://nirn.fpg.unc.edu

Effective implementation capacity is essential to improving education. The State Implementation & Scaling-up of Evidence-based Practices Center supports education systems in creating implementation capacity for evidence-based practices benefitting students, especially those with disabilities.

email: sisep@unc.edu
web: http://www.scalingup.org

The Hexagon Tool: Exploring Context

The Hexagon Tool helps states, districts, and schools systematically evaluate new and existing interventions via six broad factors: needs, fit, resource availability, evidence, readiness for replication and capacity to implement.

Broad factors to consider when doing early stage exploration of Evidence-Based Practices (EBP)/Evidence Informed Innovations (EII) include:

- **Needs** of students; how well the program or practice might meet identified needs.
- **Fit** with current initiatives, priorities, structures and supports, and parent/community values.
- **Resource Availability** for training, staffing, technology supports, curricula, data systems and administration.
- **Evidence** indicating the outcomes that might be expected if the program or practices are implemented well.
- **Readiness for Replication** of the program, including expert assistance available, number of replications accomplished, exemplars available for observation, and how well the program is operationalized
- **Capacity to Implement** as intended and to sustain and improve implementation over time.

A thorough exploration process focused on the proposed program or practice will help your Implementation Team(s) have a productive discussion related to the six areas listed above, and to arrive at a decision to move forward (or not) grounded in solid information from multiple sources. That information will assist you in communicating with stakeholders and in developing an Implementation Plan.

There are a number of discussion prompts listed under each area of the hexagon. These prompts are not exhaustive, and you may decide that additional prompts need to be added. The prompts direct you to relevant dimensions that your team may want to discuss before rating the factor.

For example, under the area labeled *Fit,* you are reminded to consider:

- How the proposed intervention or framework 'fits' with other existing initiatives and whether implementation and outcomes are likely to be enhanced or diminished as a result of interactions with other relevant interventions
- How does it fit with the priorities of your state, district, or school?
- How does it fit with current state, district, or regional organizational structures?

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The Hexagon Tool: Exploring Context

- How does it fit with community values, including the values of diverse cultural groups?

Recommendations for Using the Hexagon Tool

The following are SISEP recommendations for using the tool:

1. Assign team members to gather information related to the six factors and to present the information to the decision-making group or relevant Implementation Team. Following report-outs related to each area and/or review of written documents, team members can individually rate each area on a 1 to 5 scale, where 1 indicates a low level of acceptability or feasibility, 3 a moderate level and 5 indicates a high level for the factor. Midpoints can be used and scored as 2 or 4.
2. You can average scores for each area across individuals and arrive at an overall average score, with a higher score indicating more favorable conditions for implementation and impact. However, cut-off scores should not be used to make the decision.
3. The scoring process is primarily designed to generate discussion and to help arrive at consensus for each factor as well as overall consensus related to moving forward or not. The numbers do not make the decision, the team does. Team discussions and consensus decision-making are required because different factors may be more or less important for a given program or practice and the context in which it is to be implemented. There also will be trade-offs among the factors. For example, a program or practice may have a high level of evidence with rigorous research and strong effect size (Evidence), but may not yet have been implemented widely outside of the research trials[1]. This should lead to a team discussion of how ready you are to be the "first" to implement in typical educational settings in your area. Or the team may discover that excellent help is available from a developer, purveyor, or expert Training or Technical Assistance, but that ongoing costs (Resource Availability) may be a concern.
4. We recommend that after reviewing information related to each factor, individually scoring each factor, summarizing ratings, and discussing the strengths and challenges related to each factor of the proposed intervention, that the team members decide on a process for arriving at consensus (for instance, private voting or round-robin opinions followed by public voting

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[1] Usable Interventions - To be usable, it's necessary to have sufficient detail about an intervention. With detail, you can train educators to implement it with fidelity, replicate it across multiple settings and measure the use of the intervention. So, an intervention needs to be teachable, learnable, doable, and be readily assessed in practice.
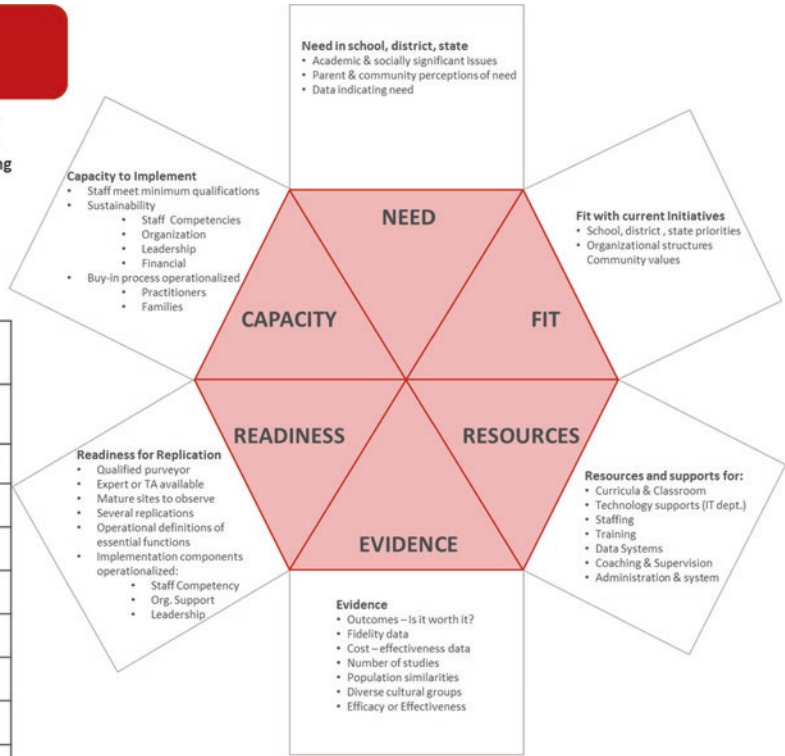
The Hexagon Tool
Exploring Context

The Hexagon Tool can be used as a planning tool to evaluate evidence-based programs and practices during the Exploration Stage of Implementation.

See the Active Implementation Hub Resource Library
http://implementation.fpg.unc.edu

EBP:	

5 Point Rating Scale:
High = 5; Medium = 3; Low = 1.
Midpoints can be used and scored as a 2 or 4.

	High	Med	Low
Need			
Fit			
Resource Availability			
Evidence			
Readiness for Replication			
Capacity to Implement			
Total Score			

Need in school, district, state
- Academic & socially significant issues
- Parent & community perceptions of need
- Data indicating need

Capacity to Implement
- Staff meet minimum qualifications
- Sustainability
  - Staff Competencies
  - Organization
  - Leadership
  - Financial
- Buy-in process operationalized
  - Practitioners
  - Families

Fit with current Initiatives
- School, district , state priorities
- Organizational structures
  Community values

NEED

CAPACITY

FIT

READINESS

RESOURCES

EVIDENCE

Readiness for Replication
- Qualified purveyor
- Expert or TA available
- Mature sites to observe
- Several replications
- Operational definitions of essential functions
- Implementation components operationalized:
  - Staff Competency
  - Org. Support
  - Leadership

Resources and supports for:
- Curricula & Classroom
- Technology supports (IT dept.)
- Staffing
- Training
- Data Systems
- Coaching & Supervision
- Administration & system

Evidence
- Outcomes – Is it worth it?
- Fidelity data
- Cost – effectiveness data
- Number of studies
- Population similarities
- Diverse cultural groups
- Efficacy or Effectiveness

Appendix 2

<table>
<tr>
<td style="background:#C1121F; color:white; font-size:1.5em; padding:1em;">Practice Profile Planning Tool</td>
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Implementation
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Clearly defined components and practices are a pre-requisite for sound implementation. This process will help you identify the core components or essential functions of your evidence based program.

Operationally define what the program would "look like" if you were to observe the instructional or behavioral practices being used as intended in the school or classroom. Identify each core component of the program, with some developmental variations of this core component, and finally identify any unacceptable variations of this component. Use a separate form for each core component.

Core Component	Contribution to the Outcome	Expected Use in Practice	Developmental Use in Practice	Unacceptable Use in Practice
Description of this component	Describe why this core component is important to achieving the outcome	Description of practitioner behavior	Description of practitioner behavior	Description of practitioner behavior

Appendix 3

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Handout 8
Communication Protocol Worksheet

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Implementation
Hub

Communication is important for any program or innovation. Intentionally developing and using *linking* communication protocols for *new* or existing programs and innovations establishes a transparent feedback process and furthers the development of a hospitable policy, funding, and operational environment.

The specific purposes of linking communication protocols are to:

- Communicate progress and celebrate success throughout the system

- Report systemic barriers that are preventing or hindering implementation and

  o Should be resolved by one of the groups

  o Need to be moved 'up the line' to the group that can best address the barrier

- Report on actions taken related to resolve or address past issues

- Revisit past decisions and agreements periodically to ensure that solutions are still functional

In promoting system alignment, you may be developing a 'chain' of protocols from the practice level to the state level or you may be developing protocols between and among partners in a collaborative group. Depending on a number of factors (e.g. how new the relationships are, how cohesive the groups are, how much a common purpose is shared), it may take one or several meetings to work out the first draft of the protocols. After the protocols have been tried out a couple of times, the process should be evaluated for satisfaction and functionality and then adjusted.

LEARN MORE: implementation.fpg.unc.edu

Communication Protocol Worksheet

**State Implementation
& Scaling-up
of Evidence-based Practices**

From: _____

To: _____

Rationale	
Issues to Communicate	
Responsible Individual(s)	
Schedule, Time Allotted	
Format	
Response Timeline	
Response Format	

LEARN MORE: implementation.fpg.unc.edu

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administrator, and consultant. She has worked in private, public, and State Education Agency settings. Barbara's current focus is the application of implementation science to the education field.

Brenda W. Melcher spent her 35-year career in Illinois public schools as a teacher and department director, and later as the district administrator for staff development and community services. Retiring from the district in 2003, she continued to provide professional development at the district, regional, and state levels in Illinois in stan-dards-aligned classrooms and assessment, positive behavior supports, response to intervention, and social and emotional learning. In 2009 project leaders for the State Implementation and Scaling-up of Evidence-based Practices (SISEP) grant selected Illinois as one of the first group of state participants in its implementation science research. After serving as a State Transformation Specialist on the Illinois Implementation Team, in 2013 Brenda joined the National Implementation Research Network (NIRN) at UNC at Chapel Hill as an Implementation Specialist for its SISEP II project.