



ADVANCING EDUCATION EFFECTIVENESS:

**INTERCONNECTING SCHOOL MENTAL HEALTH
AND SCHOOL-WIDE POSITIVE BEHAVIOR SUPPORT**

**EDITORS: SUSAN BARRETT, LUCILLE EBER
& MARK WEIST**

TABLE OF CONTENTS

2

Contributing Authors	i-iv
Advisory to the ISF Meeting/Monograph	v-vi
Preface	vii-viii
Overview	1-2
Advancing Education Effectiveness: Interconnecting School Mental Health and School-wide Positive Behavior Support Susan Barrett, Lucille Eber, and Mark Weist, Editors	
Chapter 1	3-28
An Introduction to the Interconnected Systems Framework Lucille Eber, Mark Weist, and Susan Barrett	
Chapter 2	29-60
Considerations for a School Mental Health Implementation Framework George Sugai and Sharon Stephan	
Chapter 3	61-85
The Role of School Level Systems in the Interconnecting School Mental health and School-wide Positive Behavior Support Nancy A. Lever and Robert Putnam	
Chapter 4	86-107
School Level Practices Steven W. Evans, Brandi Simonsen, and Ginny Dolan	
Chapter 5	108-135
Interconnecting School and Mental Health Data to Improve Student Outcomes Dan Maggin and Carrie Mills	
Chapter 6	136-154
The District/Community role in Advancing the Interconnected Systems Framework Mark Sander, Kathy Lane, Mark Vinciguerra, Jeanne Davis, Kelly Perales, and Rob Horner	
Chapter 7	155-178
Advancing the ISF in States Carl E. Paternite and Erin Butts	

Chapter 8	179-209
Policy, Practice and People: Building Shared Support for School Behavioral Health Joanne Cashman, Mariola Rosser, and Patrice Linehan, with the Stakeholder Advisory to the ISF	
Chapter 9	210-229
Understanding the Complexity of the Children and Families We Serve Krista Kutash and Al Duchnowski	
<i>Commentary on the ISF</i>	
Ecological Principles for Interconnecting School Mental Health and PBIS: Focusing on What Matters Most Marc Atkins	230-237
<i>Appendices</i>	
Appendix A	238-242
Survey on School Readiness for Interconnecting Positive Behavior Interventions and Supports and School Mental Health Vittoria Anello and Mark Weist	
Appendix B	243-244
Building an Inclusive Community of Practice: Four Simple Questions	
Appendix C	245-246
Implementation Guide: Funding	
Appendix D	247-248
Implementation Guide: Evaluation Tools	
Appendix E	249-250
Implementation Guide: District and Community Leadership Teams	
Appendix F	251-265
Selecting Mental Health Interventions with a PBIS Approach Robert Putnam, Susan Barrett, Lucille Eber, Tim Lewis, and George Sugai	

Appendix G	266-273
Knowledge Development Survey	
Appendix H	274-275
Knowledge Development Survey-Anne Arundel, Maryland	
Appendix I	276-277
Knowledge Development Survey-Creve Coeur, Illinois	
Appendix J	278-279
Knowledge Development Survey-Hanover Township, Elgin, Illinois	
Appendix K	280-281
Knowledge Development Survey-Missoula, Montana	
Appendix L	282-284
Knowledge Development Survey-Scranton, Pennsylvania	
Appendix M	285-288
Knowledge Development Survey-Syracuse, New York	
Appendix N	289-290
Knowledge Development Survey-Urbana, Illinois	

Deanna Aister

Hanover Township Youth & Family Services (IL)

Susan Alborell

Hanover Township Youth & Family Services (IL)

Jeanne Anders

Creve Coeur School District 76 (IL)

Carol Anderson

Utah Department of Education

Trina Anglin

Maternal & Child Health Bureau (MD)

Vittoria Anello

University of South Carolina

Marc Atkins

University of Illinois at Chicago, Institute for Juvenile Research

Susan Barrett

Sheppard Pratt Health System

Teresa Bochula

Illinois PBIS Network

Renee Bradley

US Department of Education

Erin Butts

University of Montana

Michele Capio

Illinois PBIS Network

Joanne Cashman

National Association of State Directors of Special Education (VA)

Jeanne Davis

Creve Coeur School District 76 (IL)

Virginia Dolan

Anne Arundel County Public Schools (MD)

Al Duchnowski

Florida Mental Health Institute, University of South Florida

Lucille Eber

Illinois PBIS Network

Steve Evans

Ohio University

Carol Ewen

Missoula County Public Schools (MT)

Pam Horn

Elgin School District U-46 (IL)

Rob Horner

University of Oregon

Jill Johnson

Illinois PBIS Network

Juli Kartel

Community Elements (IL)

Krista Kutash

Florida Mental Health Institute, University of South Florida

Kathy Lane

Anne Arundel County Public Schools (MD)

Jessica Leitzel

Scranton School District (PA)

Nancy Lever

University of Maryland, Center for School Mental Health

Dan Maggin

University of Illinois at Chicago

Carrie Mills

University of Maryland, Center for School Mental Health

Sylvia Murphy

Creve Coeur School District 76 (IL)

Helen Mae Newcomer

Scranton Counseling Center (PA)

Jim Palmiero

Pennsylvania Training & Technical Assistance Network

Jennifer Parmalee

Onondaga County Department of Mental Health (NY)

Carl Paternite

Miami University College of Arts & Science

Kelly Perales

Community Care Behavioral Health (PA)

Bob Putnam

The May Institute (MA)

Mark Sander

Hennepin County and Minneapolis Public Schools (MN)

Brandi Simonsen

University of Connecticut

Sharon Stephan

University of Maryland, Center for School Mental Health

Bob Stevens

Charleston County School District (SC)

George Sugai

University of Connecticut

Mark Vinciguerra

Syracuse City School District (NY)

Mark Weist

University of South Carolina

ADVISORY TO THE ISF MEETING/MONOGRAPH 7

NAME	ROLE/REPRESENTATION
Stacy Skalski	National Association of School Psychologists
Marybeth Klotz	National Association of School Psychologists
Kelly Vallincourt	National Association of School Psychologists
Judie Shine	American Council for School Social Work
Amanda Fitzgerald	American School Counselors Association
Fredrick Streeck	School Social Work Association of America
Sandy Keenan	National Center for Safe and Supportive Schools
Susan Bayzck	American Occupational Therapy Association
Ron Benner	National Education Association
Rich Barbacane	National Association of Elementary School Principals
John Nori	National Association of Elementary School Principals
Mel Riddle	National Association of Elementary School Principals
Bryan Joffee	American Association of School Administrators - Ready by 21
Gina Scala	Council of Administrators of Special Education
Ellen Di Domenico	Governor's Children's Cabinet, Pennsylvania
Joanne Malloy	Institute for Community Inclusion, University of New Hampshire
Susan Bailey-Anderson	Montana Behavior Initiative, Montana Office of Public Instruction
Glenna Gallo	State Director of Special Education, Utah Department of Education
Joan Dodge	National Center for Children's Mental Health, Georgetown University
Jonathan Cohen	National School Climate Center
Steve York	Assistant State Superintendent, Montana Office of Public Instruction
Art Sousa	Complex Area Superintendent, North Hawaii
Peter Jensen	Reach Center

Mellissa Craft	Department of Mental Health, South Carolina
Claudette Fette	Federation of Families of Children with Mental Health Needs, Texas
Scott Bloom	Director of Mental Health Programs, New York City Schools
Michele Carmichael	Board of Education, Illinois
Pat Guthrie	Council of Administrators of Special Education
Kris Melloy	Council on Behavior Disorders, Council for Exceptional Children
Kelly Perales	Community Care Behavioral Health, Pennsylvania
Jill Cook	American School Counselor Association
Jim Palmiero	Pennsylvania Training and Technical Assistance Network
Sally Baas	National Association of School Psychologists
Lyon Johnson	Special Education Service Agency, Alaska
Nancy Lever	Center for School Mental Health
Sharon Stephan	Center for School Mental Health
Paul Ban	Medical Command Joint Base Lewis McCord, Washington

This monograph is about improving the quality of life and outcomes for children and youth, especially those children who are at risk for or experiencing emotional and behavioral challenges. The editors have wisely chosen a title for the monograph that signals the pivotal role of education in this endeavor. *Advancing Education Effectiveness: Interconnecting School Mental Health and School-wide Positive Behavioral Support* clearly conveys the message that effective education is the primary goal and linking two important processes will be the strategy promoted to achieve this goal. The Interconnected Systems Framework (ISF) is described in the following chapters as the proposed mechanism that can effectively link School Mental Health (SMH) and Positive Behavioral Interventions and Supports (PBIS) in order to leverage the individual strengths of each of these processes and produce enhanced teaching and learning environments through their strategic linkage.

The decision to advance a systems framework such as the ISF and to connect SMH and PBIS has theoretical, practical, and empirical support. This is especially important for any initiative that addresses the complex needs of children and youth at risk for or experiencing emotional and behavioral challenges. For the last few decades researchers, practitioners, administrators, and families have faced a system described as “broken” when investigating or seeking services for children with mental health needs. Services have been described as fragmented, operating in silos, and narrow in focus. These observations led to the development of broad systems approaches such as the System of Care for Children’s Mental Health and Student Learning Supports: Addressing Barriers to Learning as well as others. The developers of the ISF have observed the successes and continued challenges facing the systems initiatives in the field and continue to refine and improve their framework. ISF has

been informed by the need to have an over-arching theoretical framework to guide the development of an infrastructure to implement evidence-based interventions. The concepts that frame implementation science provide a conceptual foundation for the ISF. The challenge to move from theory to practice has been addressed by operationalizing the ISF mechanisms at the state, district, and school level. Exemplars from six different states have been included to give a snapshot of how the ISF is unfolding where it counts, in the field. Finally, the commitment to and use of rigorous evaluation based on objective data is noted in several chapters.

The decision to choose SMH and PBIS as components to link in the ISF framework also has support. From a public health perspective that covers the continuum from prevention to intensive intervention, a focus on SMH is logical and empirically supported. Almost all children attend school for some time in their lives. Consequently, school is the ideal environment for implementing universal interventions aimed at promoting protective factors associated with resilience and positive emotional development. In addition, several epidemiological studies of children’s mental health needs and services have led to the conclusion that in this country school is the de facto mental health system for children. This

conclusion is based on the finding that for children who do receive any type of mental health service, over

70% receives the service from their school. This situation is further elucidated by the finding that 20% of children and youth have a clearly identified need for mental health service but only about one-third of

“20% of children and youth have a clearly identified need for mental health service but only about one-third of these children receive any help at all.”

these children receive any help at all. A mechanism such as ISF that can enhance the effective implementation of mental health services in schools has the potential to make a major contribution to improving outcomes for our children.

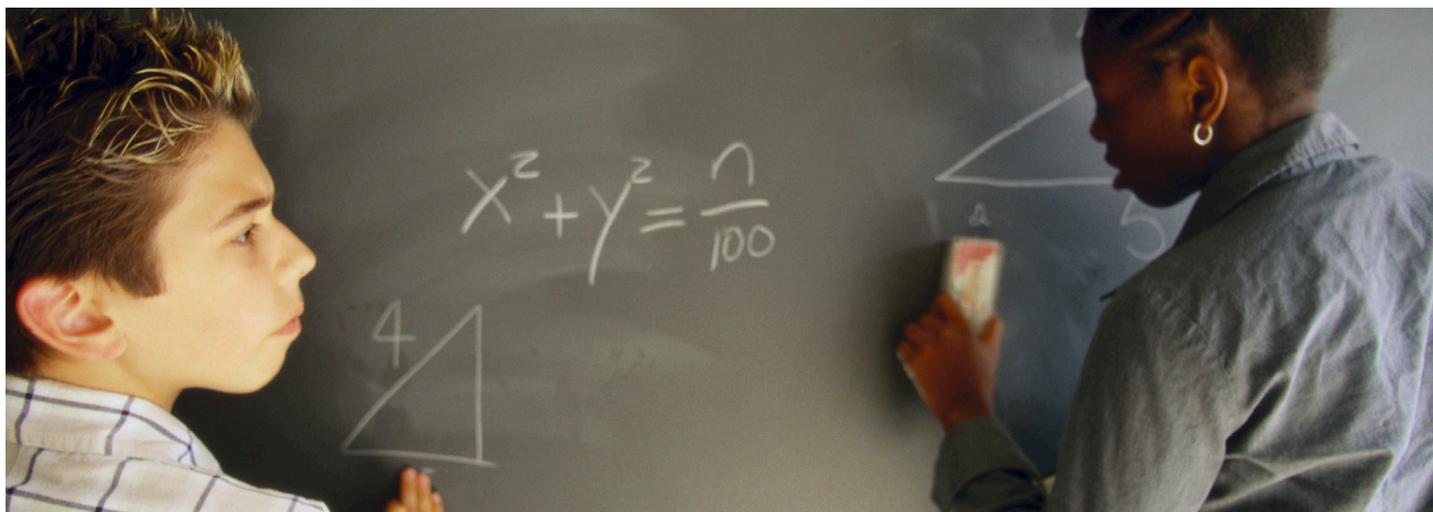
Likewise, PBIS appears to be a good choice for linkage with SMH. From an implementation science perspective, PBIS is demonstrating current capacity and future growth potential to reach a level of scale that will make a difference. Today, almost one-fifth of all the schools in the country have some type of PBIS component. In terms of its focus, PBIS has always had academic functioning as its core outcome, in line with national goals.

It is no secret that for many members of the education community being the de facto mental health system for children is not universally appealing. The task of bringing America's children up to an academic level that will be competitive globally is daunting. Meeting children's mental health needs is often viewed as off task behavior and the mission of some other agency. In the mental health community, professionals do not always accept the criticism that their interventions for children must be more related to the core mission of school, which is learning. The development and implementation of ISF has the potential of changing the attitudes and behavior of the professionals in these two systems by linking them into a complementary process that is broad in scope and utilizes the combined strengths of each.

This monograph presents the journey, thus far, of many individuals and various organizations with the vision and commitment to bring about change that will improve child outcomes. It is a status report, not a final report. In the Introduction, the history of the movement is summarized and illustrates the breadth of the efforts of individuals, centers, partnerships, and

support from federal, state, and local sources. The chapters give details about the efforts to implement ISF, highlighting success and identifying challenges. Addressing these challenges offers an opportunity for readers to join the journey. The children and their families are waiting.

Albert J. Duchnowski



Advancing Education Effectiveness: Interconnecting School Mental Health and School-wide Positive Behavior Support

The Interconnected Systems Framework (ISF) described in this monograph represents a proposed and developing interconnection of Positive Behavioral Interventions and Supports (PBIS) and School Mental Health (SMH) systems to improve educational outcomes for all children and youth, especially those with or at risk of developing mental health challenges. This monograph represents a collective effort to further develop the ISF concept and guide the interconnection of PBIS and SMH toward effective multi-tiered mental health promotion for all students, with guidance for this work at school building, district, and state levels. The development of the monograph and other related processes (e.g., training events, webinars, pilot efforts in some states/communities) has been supported by the Office of Special Education Programs (OSEP) of the United States (U.S.) Department of Education, and the Maternal and Child Health Bureau (MCHB) of the Health Resources and Services Administration of the U.S. Department of Health and Human Services, as

well as three national centers/initiatives. These are the Technical Assistance Center on PBIS (www.pbis.org; supported by OSEP), the IDEA Partnership and the National Community of Practice on Collaborative School Behavioral Health (www.ideapartnership.org; www.sharedwork.org; also supported by OSEP) and the University of Maryland Center for SMH (<http://csmh.umaryland.edu>; supported by MCHB).

The monograph also reflects experiences of state and district leaders from Illinois, Maryland, Montana, New York, Pennsylvania, and South Carolina. Thus, processes used in developing the monograph involve significant collaboration among leaders in training, practice, research and policy realms in PBIS and SMH, and represent school, district, state, national, and federal perspectives. These processes further complement two bodies of work: Implementation Science (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005) and Communities of Practice (Wenger, McDermott, & Snyder, 2002) as both have informed and guided the development of the ISF and its pilot efforts.

Specifically the monograph will: 1) define the Interconnected Systems Framework (ISF) as an

implementation framework that creates and guides the linkage between education and mental health systems and staff; 2) describe current implementation efforts of the ISF across seven participating pilots including state, district and school-level sites; 3) discuss potential school and student benefits of utilizing the ISF framework; and 4) define implementation, research, and policy agendas to further improve and scale up the framework.

The ISF monograph provides information as well as resources for full range of stakeholders. Chapters are organized to increase knowledge through pilot site examples at the state, district and school level. Additionally, chapters describe the application of Implementation Science to the ISF as well as address the collaborative process and the potential for aligning efforts through collaborative efforts at the national level. The monograph also was designed to encourage new sites to use the ISF surveys and implementation guides located in the appendix section. The newly developed tools include a readiness survey, dialogue guides, implementation guides, a knowledge development guide and a consumer survey to guide in the selection of evidence-based practices. Pilot sites have used these tools in an effort to document and organize lessons learned, assess readiness and guide the ISF process. Early experiences from pilot sites are included throughout the monograph as well as documented in Knowledge Development Site Summaries in the Appendix.

An Introduction to the Interconnected Systems Framework

LUCILLE EBER, MARK WEIST, AND SUSAN BARRETT

The Interconnected Systems Framework (ISF) builds from the established and effective platforms of PBIS and Implementation Science to integrate school mental health (SMH) programs and services. ISF blends education and mental health systems and resources toward depth and quality in prevention and intervention within a multi-tiered framework, allowing for greater efficiency and effectiveness. In addition to promoting improved processes for increasing the likelihood of positive outcomes, the ISF addresses critical gaps in current systems. For the PBIS system, the ISF addresses the common concern, of insufficient development of Tier 2 and Tier 3 structures, resulting in unaddressed behavioral and emotional needs for students with more complex mental health needs. Also, PBIS Tier 1 systems, although showing success in social climate and discipline, do not typically address broader community data and mental health prevention. For the SMH system, the ISF addresses the lack of implementation structure, poor use of data, and disconnection from the Tier 2 and 3 services that are provided. Without the implementation structure, SMH efforts are highly variable, and often reflect a “co-located” arrangement of community mental health providers providing some services to some students, with school staff not knowledgeable of (and often suspicious) of these efforts. The ISF addresses limitations of both PBIS and SMH by systematically bringing these systems together, adding depth and quality to the multi-tiered system of prevention, intervention and support, and creating the synergies that increase the probability of achieving valued school and student outcomes.

Core features of the ISF align with concepts of Implementation Science, and PBIS as a Response to Intervention (RtI) application including a strong emphasis on: (1) effective teams that include community mental health providers, (2) data based decision making, (3) formal processes for the selection and

implementation of evidence based practices (EBP), (4) early access through use of comprehensive screening, (5) rigorous progress-monitoring for both fidelity and effectiveness, and (6) ongoing coaching at both the systems and practices level. Specifically, the ISF involves collaborating community mental health providers working closely with school employees within a multi-tiered teaming structure, actively reviewing data and coordinating the implementation, fidelity and progress monitoring of supports delivered at multiple levels of intensity. The ISF concept is based on the premise that a greater array of mental health supports for students and families can become available through school-based intervention systems involving genuine collaboration and mutual support among school and community providers. Reflecting the science of implementation (Fixsen et al., 2005; Graczyk, Domitrovich, & Zins, 2003), PBIS provides a social culture and foundation for more effective implementation of mental health promotion, early intervention and treatment, with greater likelihood of measured impact for more students than separate or “co-located” mental health delivery systems can provide.

This chapter provides an overview of the ISF including background and context, ISF key features, a summary of lessons learned through early development efforts, and a framework for applying key themes from Implementation Science literature to the ongoing efforts to effectively interconnect SMH and PBIS toward depth, quality and positive school and student impact on valued outcomes.

Background and Context

School mental health initiatives seek to address the significant gap between youth who need and youth who receive mental health supports. Significant numbers of school-aged children and youth, as many as 20% (Leaf et al, 1996; President’s New Freedom Commission on Mental Health, 2003), have mental health challenges that warrant intervention. These children and youth require multifaceted academic/behavior and mental health supports which the usual systems within education

and mental health have not routinely provided. Despite the promise of the evidence-base for mental health promotion and intervention in schools (Kutash, Duchnowski, & Lynn, 2006), there is, at best, inconsistent and generally limited implementation of empirically-supported practices within school districts in North America (Evans & Weist, 2004; Fagan & Mihalic, 2003; Kratochwill, 2008). For example, instructionally-based interventions to treat anxiety and the effects of trauma have strong evidence for effectiveness (Stein et al., 2003), but require considerable training, ongoing coaching, fidelity monitoring and implementation support for effective delivery (Graczyk et al., 2003; Weist et al., 2007).

Schools have been increasingly invested in building multi-tiered systems of support to address the academic and social behavioral needs of more students beyond the application of special education for students with identified disabilities. These school-based systems of support create a structure and foundation for providing a range of evidence-based mental health interventions often missing from schools and communities. Consistent with an RtI process, these multi-tiered systems of support increase the likelihood that youth will have access to and benefit from MH interventions. For example, earlier access to less intensive evidence-based academic and behavior interventions promotes better student outcomes across school settings and may reduce the need for more intense supports. Active progress monitoring of these academic and behavioral interventions establishes greater likelihood they are delivered with fidelity, effectiveness and sustainability. Matching the range of academic and social needs within a school involves layering of interventions from a universal curriculum to targeted group instruction and, for some students, adding on highly individualized interventions that are linked to the lower-tiered structures and instruction (Freeman et al., 2006). Systems that support this range of academic and social interventions are ideal for also supporting a range of mental health interventions for universal or individualized implementation.

School Mental Health

School mental health (SMH) services are gaining momentum in the U.S. (Foster, Rollefson, Doksum, Noonan, Robinson, & Teich, 2005) and in other countries (Rowling & Weist, 2004). The conceptualization of what SMH looks like in application is emerging more fully, as an equitable partnership between schools, communities, and families (Weist & Murray, 2007). Weist and Murray (2007) provide a summary of the “expanded model”: “SMH provides a full continuum of mental health promotion programs and services in schools, including enhancing environments, broadly training and promoting social and emotional learning and life skills, preventing emotional and behavioral problems, identifying and intervening in these problems early on, and providing intervention for established problems. School mental health promotion programs should be available to all students, including those in general and special education, in diverse educational settings, and should reflect a shared agenda – with families and young people, school and community partners actively involved in building, continuously improving, and expanding them” (p. 3).

The expanded conceptualization of SMH, capitalizes on collaborative relationship between school-based and community-based practitioners in schools (Weist, 1997). These relationships are a concerted effort to address the increasing needs and the persistent challenges including too few school-employed staff, and position constraints on them (e.g., psychologists as evaluators, counselors as academic advisors; see Evans, Weist, & Serpell, 2007). Increasingly, community mental health staff are joining with school-employed mental health staff and educators to realize this expanded model of SMH. For example, from a national sample of 1064 school districts, around 50% reported contractual/formal agreements with community based agencies to augment service provision (Foster et al., 2005).

There is emerging evidence of the benefits of SMH services, as an expanded model of care spanning school and community, including: (1) improved access

to care (Burns et al., 1995; Catron, Harris, & Weiss, 1998; Rones & Hoagwood, 2000); (2) enhanced preventive services (Elias, Gager, & Leon, 1997); (3) increased early problem identification (Weist, Myers, Hastings, Ghuman, & Han, 1999); (4) less stigmatizing and more ecological programs (Atkins, Adil, Jackson, McKay, & Bell, 2001; Nabors & Reynolds, 2000); and (5) increased likelihood of generalization of intervention impacts across settings (Evans, Langberg, & Williams, 2003).

The definition of SMH as an expansive model of care has the potential to align cross discipline child and adolescent mental health (see Merrell & Buchanan, 2006; Nastasi & Varjas, 2008; Shapiro, Carlson, Astin, & Freedman, 2006) to address a number of challenges to implementation of mental health services including: (1) lack of clarity and consistency of roles and relationships among school-employed mental health staff and with other providers from community agencies (Flaherty et al., 1998; Hepworth, Rooney, Rooney, Strom-Gottfried, & Larsen, 2010; Zastrow, 2010). 2) differences in training traditions and language, and limited training in mental health issues for educators, 3) lack of interdisciplinary training and collaborative teamwork, and 4) ineffective teaming processes that put fragmented practices in place without systemic ways to progress monitor and measure impact or fidelity (Mellin et al., 2010).

A critical challenge in the child and adolescent and SMH fields is the implementation of evidence-based practices (EBPs). Although EBP's are increasingly emphasized, the reality is that most mental health staff, from both community and school settings, receive minimal if any training in these practices (Calhoun, Moras, Pilkonis, & Rehm, 1998; Evans & Weist, 2004; Graczyk, et al., 2003; Kutash et al., 2006). Even if mental health clinicians have been trained in evidence-based approaches, their training is unlikely to have included information about how to implement these practices in school settings (Evans & Weist, 2004).



Positive Behavior Interventions and Supports (PBIS)

Schools across the country are engaged in implementation of school-wide PBIS, a multi-tiered prevention based framework. PBIS framework emphasizes the establishment of organizational supports or systems that give school personnel capacity to use research-based interventions accurately and successfully. These supports include: (a) team-based leadership, (b) data-based decision-making, (c) continuous monitoring of student behavior, (d) regular universal screening, and (e) and effective on-going professional development and support.

Described as the most scaled up evidence-based practice in the human services industry (Fixsen & Blase, 2008), School-wide PBIS has been implemented in 50 states and over 19,000 schools across the U.S. (Office of Special Education. Programs Technical Assistance Center on Positive Behavioral Interventions and Supports, OSEP TA Center on PBIS, 2013). Students attending schools where PBIS is implemented with fidelity are 33% less likely to receive an office discipline referral (Bradshaw, Koth, Bevans, Ialongo, & Leaf, 2008). Youth with a 'high risk' and 'at-risk' profile at baseline did better in PBIS than control schools with regard to discipline problems and service utilization relative to at-risk youth in comparison schools, at-risk students in PBIS schools were less likely to be sent to the principal's

office, receive counseling for problem behaviors, receive counseling for social skill deficits, or be referred to special education (Bradshaw, Koth, Thornton, & Leaf, 2009)

Thus, the implementation structure and demonstrated impact of PBIS provides a strong foundation and structure for scaling up the implementation of SMH which, in turn, increases the capacity of PBIS efforts to assist students with higher level needs. The logic of the ISF is that together, PBIS and SMH systems are more likely to have the strength to implement a richer continuum of EBPs to achieve positive school and student level outcomes.

Enhancing PBIS and SMH through ISF

ISF builds on the foundations of PBIS and SMH to ensure greater depth and quality of prevention and intervention by building multiple tiers of support. As previously described, the PBIS Framework provides an implementation platform allowing a process for education and mental health systems to be blended toward greater efficiency and effectiveness.

Building from the PBIS framework, ISF focuses on organizational structures in both education and mental health systems. Through the ISF, key stakeholders in education and mental health systems who have the authority to reallocate resources come together to carefully examine roles, functioning and effectiveness of staff. Funding and policy are also examined for efficiency and effectiveness. Cross-system problem solving teams at the state, district/community and school levels work through action plans that build symmetry across the multiple tiers of support in schools. For example, all three tiers emphasize effective teams that include education and mental health leaders and staff informed and guided by key stakeholders, including youth and families. These teams use community and school level data together to choose which evidence based practices to implement, assess them for fidelity and impact, and in turn, implement plans for continuous quality

improvement (Weist et al, 2007). These same processes should occur at state, district and school levels with systems in place to assure effective communication and collaborative action.

Notably, as in the experience of Systems of Care (Pires, 2002), the ISF will achieve a number of economic and social benefits, such as:

1. Children and youth will have earlier access to wider range of evidenced based practices with enhanced preventative services,
2. Children and youth will be more likely to receive higher quality of care when practices are implemented within a tiered framework,
3. Staff will have clearly defined roles and relationships among school-employed mental health staff and community-employed providers,
4. Cross-system leadership and training will promote common language, common approach to addressing community and school system needs,
5. Interventions will have an increased likelihood of generalization with impact across settings,
6. Accessing services within the school setting will become less stigmatizing, and
7. Effective cross-teaming structures will promote communication, coordination of services, and enhanced family engagement with systematic ways to progress monitor and measure impact or fidelity.

Lessons Learned from ISF Sites

Since 2008, leaders from and connected to the University of Maryland Center for School Mental Health and the OSEP National Technical Assistance

Center on Positive Behavioral Interventions and Supports have been working collaboratively to establish a common framework that links SMHPBIS. During this process, a concept paper describing an Interconnected Systems Framework (ISF) was developed to stimulate dialogue at national conferences, meetings and across partners in four states. This collaborative group is actively supporting and learning from schools currently implementing features of ISF in 10 school districts across six states. However in most states and school districts, PBIS and SMH continue to develop independent of one another and often independently of academic and social initiatives.

The 12 foundational principles for ISF implementation presented in Table 1 (Barrett, Eber, & Weist, 2012) and have guided the work in the state, district and community sites highlighted in this monograph. The principles reflect a shift from working with individual students to focusing on the larger learning context and the impact the environment has on social emotional health, behavior and achievement. The principles also reflect an emphasis on prevention and a priority for promotion of social emotional health using the public health approach.

Lessons Learned from ISF Sites (from Barrett, Eber and Weist 2009)

1. Programs and services reflect a “shared agenda” with strong collaborations moving to partnerships among families, schools, and mental health and other community systems.
2. The three-tiered Figure 1 represents systems and progress monitoring features of the multi-tiered Interconnected System Framework.
3. At all three tiers, programs and services are for students (and their families) in special and general education, with close collaboration between these two systems within schools.
4. Tier 1 represents systems that support ALL youth; Tier 2 represents systems that additionally support some students (typically 10–15%) and Tier 3 represents systems that provide an additional level of support to a few youth (typically 1–5%).
5. Tier 2 and Tier 3 interventions are anchored in Tier 1 interventions and are natural extensions or scaled-up versions of Tier 1. For example, students who do not sufficiently respond to SW-PBS Tier 1/universal interventions receive preventive and supportive interventions at Tier 2, and students whose problem behavior persists despite Tier 1 and Tier 2 intervention, receive intervention at Tier 3.
6. The three tiers represent system structures for providing interventions — the tiers do not represent youth.
7. At all three tiers of programs and services, emphasis is on data-based decision making and on the implementation of evidence-based promotion and intervention.
8. There is strong training, coaching and implementation support for all efforts.
9. All aspects of the work are guided by youth, families, school and community stakeholders with an emphasis on ongoing quality assessment and improvement.
10. The functioning of school teams is critical to all efforts, and are emphasized and supported strongly.
11. Prevention is an underlying principle at all 3 tiers with Tier 1 focused on preventing occurrences of problems, Tier 2 preventing risk factors or early-onset problems from progressing, and Tier 3 reducing the intensity and duration of symptoms. Prevention is aligned conceptually and operatopmally to

promotion of health, mental health and wellness. For example, a Tier 3 (individualized) intervention to reduce anxiety, promotes health and wellness and increases that student's participation in programs and activities in Tiers 1 and 2.

12. Interventions across the 3-tiered model are not "disorder" or "diagnosis" specific but rather are related to severity of emotional and behavioral challenges that may be present (with or without mental health diagnosis or special education identification). As part of ongoing quality assessment and improvement efforts, there is appropriate caution about labeling students, and training and increased understanding of the impacts of such labeling.

Over the past three years, ISF sites have developed the model further by testing newly developed ISF surveys and structured implementation guides allowing the ISF development team to document common features that have served as the catalyst for an integrated model. The following summarizes some of the preliminary experiences with ISF in several sites, which are further described in the chapters and appendices of this monograph:

1. The start-up in most sites generally included events such as a new funding source, new legislation or policy change, changing demographics, identified cost savings, or frustration with current outcomes.
2. One common pathway to an integrated approach with mental health was building on the success of the PBIS framework. School teams reviewing data were able to identify gaps in services and quickly invested in building collaborations with community partners. As a result of the established structures for training, coaching and evaluation, collaborative activities occurred rapidly.
3. A memorandum of understanding (MOU) was typically developed for education and mental health systems to more clearly define their collaborative effort. Cross-system problem solving teams were developed and the roles and function of school and community staff were clearly defined. Typical commitments from school systems included allocation of time from current staff, funding, administrative support, accountability, and input from key staff. Commitments from community providers included allocating staff time to serve on teams, prioritizing school functionality in treatment plan, strategizing family interface, and using community data for determining priorities and monitoring progress toward outcomes. Using ongoing communication and feedback loops, stakeholders guided all aspects of the work. The initial investment toward this approach was directly linked to outcomes for student and youth in a specific and measurable way when developing the MOU.
4. The cross systems problem solving teams included family and community as highly valued, active participants. Teams engaged in regularly scheduled meetings with action/solution-focused agendas.
5. A dedicated funding source was identified in many of the current sites. Sources of funding included federal and local grants including Safe and Supportive Schools and Systems of Care. Other state and local funding sources included managed care, United Way and Medical Assistance funds. Reallocation of existing school and mental health personnel also occurred.
6. The cross-systems teams developed formal processes for selecting evidenced based practices. Interventions, many which focused on teaching students new skills, were selected after initial system wide self-assessment and resource mapping process. This allowed sites to take

inventory of current practices, examine resource allocation, and assess impact of current practices including inefficiencies across both education and mental health systems. Next, sites identified possible overlap and determined current areas of need. Once a need was identified, a formal selection process ensured that there was a match for the presenting problem but also a check to see if a research base existed. Teams reviewed vetted evidence-based programs, such as those found in the National Registry of Effective Programs and Practices (NREPP) of the Substance Abuse and Mental Health Services Administration (SAMHSA). Ongoing evaluation procedures were also put in place to ensure fidelity and progress toward goal of the intervention. Check in Check out data (Crone, Hawken, & Horner, Office of 2010) daily behavior rating data, surveys, team observations, and caregiver focus groups were some of the ways sites tracked progress.

7. Outcomes for student and youth in a specific and measurable way when developing the MOU.
8. Cross training (co-led by educators and MH providers) was developed with a focus on a range of content including:
 - a. Student social and emotional development,
 - b. Student behavior,
 - c. Behavior change principles,
 - d. Mental health literacy and everyday strategies for promoting mental health,
 - e. Early symptoms of mental health challenges and how to respond.
9. Leadership was actively involved in supporting the ISF. Leadership in both education and mental health systems demonstrated their investment in multi-tiered prevention and

intervention for improving student emotional/behavioral functioning. Leaders expressed support publically, securing resources, and participating in trainings and meetings. School district and community stakeholders dedicated time to examine current conditions, participate in resource mapping and considering reallocation of resources, and policy changes to support more effective integration of mental health in schools.

10. Each site developed or improved their data decision making system. A locally controlled data system that is able to track, monitor and generate reports on student behavior and interventions was considered high priority. Evaluation procedures were also established with the following features:
 - a. Universal Screening process,
 - b. Measures identified and used to track fidelity,
 - c. Staff trained on how to collect and use data for school-wide student decision-making purposes,
 - d. Student, staff and family perception data used to determine areas of improvement,
 - e. Data used to assess progress toward outcomes (student, staff, families, district, community all have knowledge of impact),
 - f. Results indicate positive effects (student well-being, organizational health, student development and academic achievement) and are shared with community on a regular basis,
 - g. Wide range of staff are actively involved in decision making and implementation of ISF,
 - h. Staff relies on data to make decisions.

Using Phases of Implementation to Develop ISF

The development of an interconnected SMH-PBIS framework requires systemic change that ensures sustainable use of evidence-based practices. Therefore, development and refinement of the ISF draws from the work of Fixsen et al. (2005) and their stages of implementation for organizational change, which defines how implementation of evidence-based interventions unfolds as a process rather than a single event. Each stage builds on the foundation of the last, logically yielding more effective implementation. Fixsen et al. (2005) describe these phases as Exploration, Installation, Initial Implementation, Full Implementation, Innovation and Sustainability. These stages can be applied at or across any

organizational level and allow the scaling-up process to be much more manageable by breaking tasks into smaller parts (Barrett, 2013).

Table 1 organizes the systems, data and practice components of the pilot sites working to implement the ISF. These components are organized using the stages of implementation (Fixsen et al 2005) combined with the tiered approach and problem-solving logic of PBIS. Although not all sites have developed/implemented all of the components, cross-site sharing and networking through the development of this monograph has increased the number of sites implementing these components.

Table 1. Implementation of the ISF by Stages

TIER 1: UNIVERSAL	
<i>Exploration</i>	
Need for change identified, possible solutions are explored, learning about what it takes to implement the innovation effectively, stakeholders are identified and developed, and decision is made to move forward.	
SYSTEMS	<p>Common Implementation Framework: PBIS framework is in place and expansion effort is embraced by educators and community mental health providers.</p> <p>Authority: Key Opinion Leaders with decision making authority have political will to examine current condition and make change organizational structures that promote efficiency and effectiveness (job descriptions, use of staff, teaming structure, data systems).</p> <p>Equal Priority: Key Opinion Leaders promote social emotional behavioral health alongside academic achievement to achieve socially important outcomes.</p> <p>Flexible Funding: Fee for service includes opportunity for service providers to be paid for direct care and to serve on cross systems planning teams.</p> <p>Structured Processes: Innovative tools such as Self-Assessment, Resource Mapping, and Dialogue Guides used to broaden knowledge and create common vision and generate solutions across range of stakeholders, educators and service providers.</p> <p>Local Demonstration Sites: Knowledge development sites established to learn about innovation and professional learning communities established to support staff.</p> <p>Overwhelming Sense of Common Purpose: All members rally around a common purpose and common data point with a commitment for improving the lives of children and youth.</p>

DATA	<p>Student Outcomes Determined: Measurable Student outcome measures (grades, special ed referral attendance, ODR, suspension, truancy, expulsion) linked to effort.</p> <p>Fidelity Measures: ISF team examines current use of fidelity tools (Team Implementation Checklist, School-wide evaluation tool, Benchmarks of Quality, Benchmarks for Advanced Tiers).</p> <p>Social Validity: Focus groups, satisfaction surveys and other perception data used to assess need, progress monitor effort and demonstrate impact.</p> <p>Mental Health Data: Overall review of current condition included State and District level academic and behavior data as well as community demographic information, psychiatric hospital emergency room visits, and outpatient clinic information.</p> <p>Cost Benefit Analysis: Economist provide health and economic benefit on investment.</p> <p>Community Data: Additional data provided to provide team with 360 view of student and youth need (demographic, #of students receiving MH services, in jj instructional time for access to services, calls to crisis center).</p> <p>Workforce Data (ratio of service providers/support staff to student, skill/competency assessment): Team reviews extent to which staff have skills and support required to implement with fidelity.</p>
PRACTICES	<p>Resource Mapping: ISF Team takes inventory of current initiatives to examine effectiveness, redundancies, gaps and eliminate ineffective practices/programs.</p>

Table 1 continued on next page

Installation

Resources needed to implement innovation with fidelity and desired outcomes are in place.

SYSTEMS

Memorandum of Agreement: Team develops clear role and function for all implementers (leaders willing to shift in role/allocation of time) agreements around resources and financial obligations established.

Co-coordination: Community MH providers and Educators co-lead and serve on teams across the tiers.

Multi-year Action Plan: Measurable goals/outcomes established with clearly defined implementation strategies and process for tracking progress.

Single Point of Access: Structure and process streamlined and formalized to ensure common strength based approach and availability of services across all child serving agencies.

Decision Rules: For accessing supports installed across district and community.

Request For Assistance: Common process created and used by educators and community providers.

Expand: Additional sites added to original demo sites and knowledge gathering and transfer continues.

Workforce Development: Cross training and training capacity led, developed and taught by school and community based providers.

Systems Coaching: Co-led by school and community providers with implementation science experience.

DATA

Evaluation Plan: Structure in place to monitor implementation fidelity, track outcomes and impact, gather feedback from stakeholders and implementers as well as influence political support, and policy.

PRACTICES

Consumer Guide: Formal selection process for adding effective practices in place and anchored to implementation framework. Schools select based on need and district ensures staff are trained supported to implement with fidelity.

<i>Initial Implementation</i>	
Innovation is in place in schools, implementation largely guided by external TA providers.	
SYSTEMS	Continuous Regeneration: Problem solving team uses iterative cycle to influence organizational structures/processes, policy, budget, and marketing for improving and sustaining effort.
DATA	<p>Regular review:</p> <ul style="list-style-type: none"> • Discipline referral rates • Academic performance • Attendance • Community agency data • Climate survey • MAP (Measure of Academic Progress) • Fidelity data • Social validity
PRACTICES	<p>Practices selected and implemented by current demo sites:</p> <ul style="list-style-type: none"> • SPARCS (Structured Psychotherapy for Adolescents Responding to Chronic Stress) • Check and Connect Mentoring • Mental Health First Aid • Good Behavior Game • Student Target Aggression Replacement Therapy • Check In Check Out (CICO) • Trauma-focused Cognitive Behavioral Therapy • Multi- Systemic therapy • Functional Family Therapy

Summary

The ISF multi-tiered approach is being developed within the context of school/community partnerships. This forum for development not only serves to coordinate services for students and their families, but to also promote positive emotional and behavioral outcomes for all students, and thus improving academic and social outcomes at the school level. Importantly, the ISF framework not only will integrate key components of both SMH and PBIS systems, but also will facilitate improved quality of services through development of a system of professional skill development of staff that involves formal peer coaching, small learning

communities, and data tracking systems monitoring adult performance. These actions will contribute to improving depth and quality of programs and services at all tiers, enhance data-based decision making, and implementation support. It is our hope that ISF implementation and refinement guided by the information shared in this monograph will help to develop a needed research avenue on strategies for most effective interconnection, and help to explore policy and resource enhancements needed for high quality multi-tiered prevention and intervention.

References

- Atkins, M. S., Adil, J. A., Jackson, M., McKay, M. M., & Bell, C. C. (2001). An ecological model for school-based mental health services. In C. Newman, C. Liberton, K. Kutash, & R. Friedman (Eds.), *The 13th annual research conference proceedings, a system of care for children's mental health: Expanding the research base* (pp. 119-122). Tampa, FL: University of South Florida.
- Barrett, S. (2013). School-wide positive behavior support, Scaling-Up. In C. R. Reynolds, K. J. Vannest, & E. Fletcher-Janzen (Eds.), *Encyclopedia of special education: A reference for the education of children, adolescents, and adults with disabilities and other exceptional individuals* (4th ed.). Hoboken, NJ: Wiley.
- Barrett, S., Eber L., & Weist, M. D. (2012). *Development of an Interconnected Systems Framework for School Mental Health*. Unpublished manuscript.
- Barrett, S., Eber L., & Weist M. D. (2009). *Development of an Interconnected Systems Framework for School Mental Health*. Unpublished manuscript.
- Bradshaw, C. P., Koth, C. W., Bevans, K. B., Ialongo, N., & Leaf, P. J. (2008). The impact of School-Wide Positive Behavioral Interventions and Supports (PBIS) on the organizational health of elementary schools. *School Psychology Quarterly*, *23*, 462-473. doi: <http://dx.doi.org/10.1037/a0012883>
- Bradshaw, C. P., Koth, C. W., Thornton, L. A. & Leaf, P. J. (2009). Altering school climate through School-Wide Positive Behavioral Interventions and Supports: Findings from a group randomized effectiveness trial. *Prevention Science*, *10*, 100-114. doi: <http://dx.doi.org/10.1007/s1121-008-0114-9>
- Burns, B. J., Costello, E. J., Angold, A., Tweed, D. L., Stangl, D. K., Farmer, E. M. Z., & Erkanli, A. (1995). Children's mental health service use across service sectors. *Health Affairs*, *14*, 147-159. doi: <http://dx.doi.org/10.1377/hlthaff.14.3.147>

-
- Calhoun K. S., Moras K., Pilkonis P. A., & Rehm L. P. (1998). Empirically supported treatments: implications for training. *Journal of Consulting and Clinical Psychology, 66*, 151-162.
doi: <http://dx.doi.org/10.1037//0022-006X.66.1.151>
- Catron, T., Harris, V. S., & Weiss, B. (1998). Post treatment results after 2 years of services in the Vanderbilt School-Based Counseling project. In M. H. Epstein, K. Kutash, & A. Duchnowski (Eds.), *Outcomes for children and youth with emotional and behavioral disorders and their families: Programs and evaluation best practices* (pp. 653-656). Austin, TX: PRO-ED, Inc.
- Crone, D. A., Hawken, L. S., & Horner, R. H. (2010). *Responding to problem behavior in schools: The Behavior Education Program* (2nd ed.). New York, NY: Guilford Press.
- Elias, M. J., Gager, P., & Leon, S. (1997). Spreading a warm blanket of prevention over all children: Guidelines for selecting substance abuse and related prevention curricula for use in the schools. *The Journal of Primary Prevention, 18*, 41-69.
- Evans, S. W., Langberg, J. M., & Williams, J. (2003). Achieving generalization in school-based mental health. In M. Weist, S. Evans, & N. Lever (Eds.), *Handbook of school mental health*. New York, NY: Kluwer/Plenum.
doi: http://dx.doi.org/10.1007/978-0-387-73313-5_23
- Evans, S. W., & Weist, M. D. (2004). Implementing empirically supported treatments in the schools: What are we asking? *Clinical Child and Family Psychology Review, 7*, 263-267.
doi: <http://dx.doi.org/10.1007/s10567-004-6090-0>
- Evans, S. W., Weist, M. D., & Serpell, Z. N. (Eds.) (2007). *Advances in school-based mental health interventions: Best practices and program models* (Vol. 2). New York, NY: Civic Research Institute.
- Fagan, A., & Mihalic, S. (2003). Strategies for enhancing the adoption of school-based prevention programs: Lessons learned from the Blueprints for Violence Prevention replications of the Life Skills Training Program. *Journal of Community Psychology, 31*, 235-253. doi: <http://dx.doi.org/10.1002/jcop.10045>
- Fixsen, D. L., & Blase, K. A. (2008). *Implementation: The Secret to Using Science in Human Service Settings*. Tampa, FL: University of South Florida. 5th International Conference on Positive Behavior Support, Chicago, Illinois, March 28, 2008.
- Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M., & Wallace, F. (2005). *Implementation Research: A Synthesis of the Literature*. (FMHI Publication #231). Tampa, FL: University of South Florida, National Implementation Research Network.
- Flaherty, L. T., Garrison, E. G., Waxman, R., Uris, P. F., Keys, S. G., Glass-Siegel, M., & Weist, M. D. (1998). Optimizing the roles of school mental health professionals. *Journal of School Health, 68*, 420-424.
doi: <http://dx.doi.org/10.1111/j.1746-1561.1998.tb06321.x>
-

-
- Foster, S., Rollefson, M., Doksum, T., Noonan, D., Robinson, G., & Teich, J. (2005). School mental health services in the United States 2002-2003. DHHS Pub. No. (SMA) 05-4068. Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.
Retrieved from <http://www.samhsa.gov/publications/allpubs/sma05-4068>
- Freeman, R., Eber, L., Anderson, C. Irvin, L., Horner, R., Bounds, M., & Dunlap, G. (2006). Building inclusive school cultures using school-wide positive behavior support: Designing effective individual support systems for students with significant disabilities. *Research & Practice for Persons with Severe Disabilities*, 31, 4-17.
- Graczyk, P.A., Domitrovich, C. E., & Zins, J. E. (2003). Facilitating the implementation of evidence-based prevention and mental health promotion efforts in schools. In M.D. Weist, S.W. Evans, & N.A. Lever (Eds.), *Handbook of school mental health: Advancing practice and research* (pp. 301-318). New York, NY: Springer.
doi: http://dx.doi.org/10.1007/978-0-387-73313-5_21
- Hepworth, D. H., Rooney, R. H., Rooney, G. D., Strom-Gottfried, K., & Larsen, J. (2010). *Direct social work practice: Theory and skills* (8th ed.). Belmont, CA: Brooks/Cole.
- Kratochwill, T. R. (2008). A report card on evidence-based practices in the schools: The good, the bad, the ugly. *Communique*.
- Kutash, K., Duchnowski, A. J., & Lynn, N. (2006). *School-based mental health: An empirical guide for decision-makers*. Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, Department of Child and Family Studies.
- Leaf, R. J., Alegria, M., Cohen, R., Goodman, S. H, Horowitz, S, M., Hoven, C. W.,...Regier, D. A. (1996). Mental health service use in the community and schools: Results from the four-community MECA study. *Journal of the American Academy of Child and Adolescent Psychiatry*, 35, 889-897.
doi: <http://dx.doi.org/10.1097/00004583-199607000-00014>
- Mellin, E. A., Bronstein, L. R., Anderson-Butcher, D., Amorose, A., Ball, A., & Green, J. H. (2010). Measuring interprofessional collaboration in expanded school mental health: Model refinement and scale development. *Journal of Interprofessional Care*, 24, 1-10. doi: <http://dx.doi.org/10.3109/13561821003624622>
- Merrell, K. W., & Buchanan, R. (2006). Intervention selection in school-based practice: Using public health models to enhance systems capacity of schools. *School Psychology Review*, 35, 167-180.
- Nabors, L.A., & Reynolds, M.W. (2000). Program evaluation activities: Outcomes related to treatment for adolescents receiving school-based mental health services. *Children's Services: Social Policy, Research, and Practice*, 3, 175-189. doi: http://dx.doi.org/10.1207/S15326918CS0303_4
- Nastasi, B. K., & Varjas, K. (2008). Best practices in developing exemplary mental health programs in schools. In A. Thomas & J. Grimes (Eds.), *Best Practices in School Psychology V. Vol. 4. Section V. Enhancing the development of wellness, social skills, and life competencies* (pp.1349-1360). Bethesda, MD: NASP.
-

-
- Office of Special Education Programs. (2013). *Technical Assistance Center on Positive Behavioral Interventions and Supports*. Retrieved from www.pbis.org
- Pires, S. A. (2002). *Building systems of care: A primer*. Washington DC: National Technical Assistance Center for Children's Mental Health.
- President's New Freedom Commission on Mental Health. (2003). *Achieving the Promise: Transforming Mental Health Care in America. Final Report for the President's New Freedom Commission on Mental Health* (SMA Publication No. 03-3832). Rockville, MD.
- Rones, M., & Hoagwood, K. (2000). School-based mental health services: A research review. *Clinical Child and Family Psychology Review*, 3, 223-240.
- Rowling, L., & Weist, M. D. (2004). Promoting the growth, improvement and sustainability of school mental health programs worldwide. *International Journal of Mental Health Promotion*, 6, 3-11.
doi: <http://dx.doi.org/10.1080/14623730.2004.9721925>
- Shapiro, S. L., Carlson, L. E., Astin, J. A., & Freedman, B. (2006). Mechanisms of mindfulness. *Journal of Clinical Psychology*, 62, 373-386. doi: <http://dx.doi.org/10.1002/jclp.20237>
- Stein, B. D., Jaycox, L. H., Kataoka, S. H., Wong, M., Tu, W., Elliott, M. N., & Fink, A. (2003). A mental health intervention for school children exposed to violence. *Journal of the American Medical Association*, 290, 603-611. doi: <http://dx.doi.org/10.1001/jama.290.5.603>
- Weist, M. D. (1997) Expanded school mental health services: A national movement in progress. In T. Ollendick & R. J. Prinz (Eds.), *Advances in Clinical Child Psychology*, 19, 319-352.
- Weist, M. D., & Murray, M. (2007). Advancing school mental health promotion globally. *Advances in School Mental Health Promotion, Inaugural Issue*, 2-12. doi: <http://dx.doi.org/10.1080/1754730X.2008.9715740>
- Weist, M. D., Myers, C. P., Hastings, E., Ghuman, H., & Han, Y. (1999). Psychosocial functioning of youth receiving mental health services in the schools vs. community mental health centers. *Community Mental Health Journal*, 35, 69-81.
- Weist, M. D., Stephan, S., Lever, N., Moore, E., Flaspohler, P., Maras, M., Paternite, C., & Cosgrove, T. J. (2007). Quality and school mental health. In S. Evans, M. Weist, & Z. Serpell (Eds.), *Advances in school-based mental health interventions* (pp. 4:1 - 4:14). New York, NY: Civic Research Institute.
- Wenger, E., McDermott, R., & Snyder, W. M. (2002). *Cultivating communities of practice: A guide to managing knowledge*. Boston, MA: Harvard Business School Press.
- Zastrow, C. (2010) *The practice of social work: A comprehensive worktext* (9th ed.). George Williams College.
-

Considerations for a School Mental Health Implementation Framework

GEORGE SUGAI AND SHARON STEPHAN

All students benefit academically and socially when their classroom and school environments are positive, preventive, and responsive (Guerra & Williams, 2003; Horner, Sugai, & Anderson, 2010; Zins, Weissberg, Wang, & Walberg, 2004). Efforts to interconnect school-wide behavior support practices and systems with mental health interventions and supports have the potential to contribute to these teaching and learning environments for all students, especially students who display significant risk for behavioral mental health difficulties. This potential is associated with sound theory, evidence-based practices, efficient support systems, and informative data systems.

The challenge, however, is that good ideas, enthusiasm, and a list of evidence-based practices have proven to be insufficient to deliver on the promise and potential. Efforts to implement are often incomplete, short in sustainability, limited in outcome durability, and narrow in spread (Domitrovich & Greenberg, 2000; Durlak & DuPre, 2008). Explanations for these shortfalls include limited funding, too many competing initiatives, inadequate training and professional development, low priority, lack of leadership, etc. (Aarons, Sommerfeld, & Walrath-Greene, 2009; Forman, Fagley, Chu, & Walkup, 2012; Sugai, O’Keeffe, Horner, & Lewis, in press).

The solution may reside in operationalizing the school-to-mental health integration of evidence-based practices and grounding implementation within an interconnected system perspective. Thus, the purpose of this chapter is to consider the features and operations of an implementation framework for establishing effective school-based mental health practices and interventions. By improving the capacity of schools to implement evidence-based mental health practices, improvements in student academic achievement and social and behavioral competence, and implementer efficacy, efficiency, and sustainability may be realized (Dix, Slee, Lawson, & Keeves, 2012; Domitrovich & Greenberg,

2000; Elias, Zins, Graczyk, & Weissberg, 2003).

To address this purpose, we describe what is known about the implementation science of evidence-based practices and how this information could be applied to a multi-tiered framework that integrates school mental health and positive behavioral interventions and supports. We conclude with a suggested action planning self-assessment that is based on the critical features of this framework.

We believe this approach would benefit the collaborative efforts of educators (i.e., general and special education teachers, paraprofessionals, principals, etc.), school and community mental health professionals (psychologists, counselors, and social workers), policy makers and implementers (i.e., legislators, school board members, district and state educational administrators), researchers, professional associations, and personnel preparation institutions.

What Is Known about the Implementation Science of Evidence-based Practices

Scientists at the National Implementation Research Network have asserted that the promised outcomes of an empirically-proven practice are associated with the accuracy and fluency with which the practice can be implemented in applied settings by existing implementers (Blase & Fixsen, 2013; Blasé, Naoom, Wallace, & Fixsen, 2004; Fixsen, Naoom, Blase, Friedman, & Wallace, 2005). That is, proven interventions will fail if implemented with poor fidelity. So, implementation practices and systems have become equally as important as the specification of an evidence-based practice.

A variety of factors have been linked to failed implementation, for example, insufficient funding, initiative overload and overlap, poorly trained implementers, ineffective data-based decisions making systems, and misalignment with intended and actual outcomes (Harn, Parisi, & Stoolmiller, 2013; Forman, Olin, Hoagwood, Crowe, & Saka, 2009). These factors have been noted across education, mental health, juvenile

justice, public health, and child and family welfare (Harn et al., 2013; Domitrovich et al. 2008; Greenhalgh, Robert, McFarlane, Bate, & Kyriankidou, 2004; Rogers, 2003). In education and mental health, specifically, poor or failed implementation and outcomes foster increased use of reactive and exclusionary practices, frequent shifts to alternative interventions, inequitable outcomes for disadvantaged groups, negative school and classroom environments, and consumer dissatisfaction and lack of confidence (c.f., Dix et al., 2011; Marty, Rapp, McHugo, & Whitley, 2008).

Given these factors, the implementation science may improve our efforts to operationalize and implement effectively an interconnected system framework for expanding the continuum of school-based interventions. Key questions of this implementation science include **(a) Are need and intended outcome specified? (b) Is the most appropriate evidence-based practice selected? (c) Is practice adaptable to local context and culture? (d) Is support for local implementation developed? and (e) Is system level continuous progress monitoring and planning in place?** We consider each of these questions as they relate to the Interconnected System Framework described in Chapter 1, with a school example threaded throughout for context.

A. Are Need and Intended Outcome Specified?

Educators and school-based mental health providers can be motivated to adopt a new innovation because of a promise for change, improved outcomes, or a general sense of need. Given conditions that limit resources, increase mandates, and prioritize accountability, schools must be strategic in their adoption and investment decisions. Three important decisions relate to answer two important questions: (a) what is the need? (b) how important is addressing this need? and (c) what would the intended outcomes look like to have successfully addressed this need?

Is need specified? Rather than selecting a new or different practice because it is new, promises important

outcomes, or is cleverly packaged, schools must define what problem, issue, challenge, or roadblock needs to be addressed. This specification starts with an examination of the priorities for the school (e.g., literacy, science and mathematics, graduation, attendance, violence prevention, bullying behavior), specifying the priority or need in measurable terms, and evaluating the information and data about level of need and satisfactory progress. If the data indicate that the need is high and progress inadequate, consideration of practice change may be indicated.

For example, a concern is expressed during a faculty meeting that major problem behaviors are “out of control.” An examination of the office discipline referral data revealed that 75% of the students have received no out of school suspensions (OSS) since the beginning of the school year; however, 18% of the students had 2 or more days of OSS, and 7% of the students had 5 or more OSS. Given that improvement of behavior support has been one of the top five priorities for the school, further review indicated that most of the OSS were associated with classroom disruptions and noncompliance and task-refusal to teacher requests.

Is the need a high priority? If the need is high, the question shifts to determining how this particular need relates to other needs within the school and the larger goals of the schools. Consideration is given to how, for example, the need affects academic achievement and progress, student well being, teacher ability to teach, and overall classroom or school-wide climate. In addition, attention is given to how addressing this need relates to other active and high priority initiatives.

In the previous example, the high use of OSS was decreasing student time in class, increasing risk for students when not at school, and reducing student access to mental health and behavior supports within the school. In addition, the focus on students whose behaviors were not responsive to the universal interventions available to all students aligned with the school’s priority to improve school-based mental health supports for small group and individual students.

Is intended outcome described in measurable terms? An important aspect of examining the need is considering what would need to change for the need to be successfully addressed. That is, what would the outcome look like, and what level of improvement would be needed to suggest a successful effort? Answering these questions would be equivalent to establishing a long-term objective in which the target outcomes, required conditions, and criterion for success are specified.

In our example, the school agreed that success would be related to increases in attendance, academic engagement, student compliance to academic-task requests by teachers, and quarterly grades. The criteria for success was specified as 90% of students would experience no OSS and 10% or fewer students would receive 2 or more OSS. Given that the need was clearly defined, the need for improvement was high, and the outcome important and achievable, the school began looking for possible solutions.

B. Is Most Appropriate Evidence-based Practice Selected?

After the need and intended outcome are specified, a practice must be selected that considers the following questions: (a) Does evidence exist to support effectiveness of practice? (b) Does outcome associated with practice align with stated need and intended outcome? and (c) Is this practice consistent with other practices and initiatives currently in place?

Does evidence exist to support effectiveness of practice? In the best of all conditions, priority is given to practices for which highly controlled, experimental studies (e.g., randomized control trials, quasi-experimental designs, single subject designs) have been conducted to document the strength of the relationship between the practice and its effects. Not only must these studies be convincing with respect to the causal or functional relationship between the practice and the effect, replications of the relationship in similar and different conditions must be documented.

If experimental support is not available to guide practice selection, other forms of evidence can be considered, for example, systematic program evaluations and data-based implementations. Caution should be exercised if the only evidence is descriptive testimonials or case studies, non-data-based evaluations, and individual recommendations. This consideration is not to suggest intended outcomes would not result if non-experimentally tested practices were selected; however, the decision should consider whether the (a) practice is theoretically grounded, (b) replications of outcomes have been documented, (c) no harm or negative side-effects would be predicted, and (d) practice would be an improvement of current practice.

In our example, the school determined that their universal classroom and school-wide practices were sufficiently evidence-based, but implementation was not accurate. Thus, enhancing use of those practices was targeted. Because the use of OSS was not associated with improvement in student behavior, the school identified a practice called “Check-In Check-Out” (CICO). Although no randomized control studies had been conducted, the evidence from quasi-experimental and single subject research designs and methodologies was sufficient to consider adoption.

Does outcome associated with practice align with stated need and intended outcome? The number and kinds of evidence-based practices are increasing as research efforts continue (Chorpita & Daleiden, 2009; Domitrovich & Greenberg, 2000; Horner et al., 2010). However, being evidence-based is necessary but insufficient for practice adoption. An important consideration is whether the results or outcomes of a practice are functionally related to the specific need and outcomes. A number of questions might be asked about the outcomes of the practice in relation to the specific need and outcomes, for example, (a) how similar or different are outcomes? (b) Are outcomes from a collection of general or specific outcomes? and (c) Are outcomes related to similar populations, settings, or conditions?

The school examined the available research on CICO and learned that outcomes were similar to their context. CICO used the general behavior expectations established for the universal practices, which could be related to attendance, academic engagement, and student compliance, and was intended to increase in-school time by reducing OSS. The students who were involved in the research and evaluation studies had similar characteristics as students who would be involved in the school implementation.

Is practice consistent with other practices and initiatives currently in place? Early implementation fidelity and durability of a practice can be affected by the extent to which other practices and initiatives compete for time, personnel, resources, and the like. Selection of an evidence-based practice in the context of existing practices should consider the following questions: (a) what other initiatives are being implemented to address the same or similar need and intended outcomes for the same student population? (b) how accurately and fluently are these other initiatives being implemented? (c) how effective have these initiatives been in achieving or progressing toward the need and intended outcomes? and (d) would combining or integrating practices and initiatives add value (effectiveness, efficiency, relevance)?

The school acknowledged that a targeted social skills effort was being implemented by the school counselor; however, the counselor reported that implementation was difficult because it was occurring outside the universal school-wide system, students were missing academic time when they were participating in the social skills group, and the skills being taught were not targeted on the behaviors related to the need and intended outcome.

A decision was made to continue the social skills effort, but utilize the systems features already installed within the CICO implementation. The implementation features designed for students in CICO also helped staff and students in the targeted social skills group. A CICO daily progress report that aligned with school-wide expectations was adapted and used to track skill

acquisition across settings.

c. Is Practice Adaptable to Local Context or Culture?

An evidence-based practice is tested under controlled conditions to document which factors contribute to the observed effect. If a strong functional relationship is demonstrated, replications are attempted to increase confidence in the strength of the effect. Finally, replications are conducted under systematically varying conditions to demonstrate the range of conditions under which a functional relationship between practice and effect can be reliably predicted. In educational research, this three step sequence has been demonstrated for a limited number of practices (e.g., Good Behavior Game, Classwide Peer Tutoring, Check and Connect (Barrish, Saunders, & Wold, 1969; Delquadri, Greenwood, Whorton, Carta, & Hall, 1986; Sinclair, Christenson, EVELO, & Hurley, 1998). The children's mental health research literature contains more examples of this methodological sequence, though most studies have not been conducted in the school setting, limiting our understanding about the generalizability of impact to schools (Weisz & Kazdin, 2010). Evidence exists to suggest that the impact of interventions deteriorates when moving from more controlled research settings to "real world" environments, such as schools (Hulleman & Cordray, 2009)

Schools are complex, unique, and variable settings that are reflective of their local context and culture. As such, implementation of most evidence-based practices requires careful consideration of the local factors that would increase access to the practice and maximize documented effects (Burke & Stephan, 2008; Sugai, O'Keeffe, & Fallon, 2012). These contextual and cultural factors include language, social behavior variations in meaning, normative behaviors and expectations, individual or group cultural learning histories, etc. Systemic efforts involve four main questions: (a) are data for decision making culturally valid? (b) are practices culturally relevant? (c) are intended outcomes culturally equitable and representative? and (d) are implementer systems culturally knowledgeable? (Vincent, Randall,

Cartledge, Tobin, & Swain-Bradway, 2011).

In our school example, the CICO system was adapted to include the three school-wide behavior expectations (i.e., respect self, others, and environment). Lessons to strengthen these behavior expectations within the daily monitoring process were translated into Spanish for some of the students, and review and celebration of individual progress and accomplishments were conducted publically for some and privately for others to improve the value of that feedback. Finally, parent involvement was varied based on their capacities and opportunities to participate actively (e.g., transportation, childcare, home technology, work schedules).

D. Is Support for Local Implementation Developed?

Accurate and durable implementation of any practices is dependent upon the capacity of and support for the local implementers (Rogers, 2003). Traditional professional development approaches (e.g., 1-time in-services, passive video-training and webinars, discussion-oriented communities of practices) alone have been insufficient in producing accurate, system-wide, and sustained implementation of an evidence-based practice, especially if the practice is addressing academic and/or behavior challenges that have been documented previously as being persistent, high intensity and/or unresponsive (Beidas & Kendall, 2010; Herschell, Kolko, Baumann, & Davis, 2010).

Based on a developing research base, the implementation science provides some sound guidance on how to structure and operate professional development and implementation resources to maximize intended outcomes and implementer practice fidelity and sustainability (Aarons, Hurlburt & Horwitz, 2011; Fixsen et al., 2005; Glasgow, Klesges, Dzewaltowski, Estabrooks, & Vogt, 2006). Key implementation features included (a) multi-leveled distributed leadership, (b) institutional or organizational support, (c) driver-based implementation, (d) phase-guided implementation action planning, (e) documented implementation

exemplars, and (f) continuous progress monitoring for implementation enhancements.

Is leadership multi-leveled and distributed?

Fundamental to any practice implementation is leadership that can provide meaningful guidance to the overall effort (Glennan, Bodilly, Gallagher & Kerr, 2004; Payne, Gottfredson, & Gottfredson, 2006; Sugai et al., in press). In an Interconnected System Framework, leadership is team-based, multi-leveled, and distributed. Team-based refers to a collaborative and focused effort that takes advantage of membership that has been selected because of their motivation, collective practice expertise, ability to use implementation authority, and collaborative approach. Multi-leveled refers to coordinated and uniform knowledge, practice, and priority across the decision-making continuum: grade or department level, principal, district or regional superintendent, state commissioners and superintendents. Without agreement, communication, and implementation engagement and participation that is integrated, consistent, and efficient across all leadership levels, meaningful implementation of a given practice is likely to be affected.

In our school example, the school counselor was the chairperson of the special behavior support team that also included the special educator, school psychologist, and the school-based community mental health clinician, and was given authority to lead the development, adaptation, implementation, and evaluation of the CICO practice. The school principal similarly fully supported the CICO effort by attending team meetings, scheduling and protecting meeting times, supporting behavior policy recommendations, and communicating CICO support at school faculty meetings. The district superintendent acknowledged the school's CICO implementation efforts by reducing emphasis on district mandates that were not directly relevant to the school's improvement plan and permitting use of professional development days for preparing staff for the CICO implementation. The district student special support unit was made available to the school team.

Distributed refers to decision making authority and policy implementation occurring and supported broadly at and across each level. Traditionally, leadership is associated with individual positions (e.g., principal, superintendent, supervisor); however, effective leaders distribute decision-making and policy implementation across their authority of responsibility (Leithwood, Louis, Anderson, & Wahlstrom, 2004). For example, principals, support decision making within grade level teams, departments, and other administrative organizations in the school (e.g., curriculum committee, school-wide climate team). Similarly, district and state superintendents distribute policy and initiative decision making authority to their organizational departments and bureaus (e.g., accountability and evaluation, teaching and learning, special supports, financial management).

The CICO team in our example school was given authority by its principal to make scheduling adjustments and resource reallocations to enable professional development activities, material development, and data analyses. The principal was given permission by the district superintendent to make fiscal decisions at the school level that would support the CICO implementation and the purchase of a more efficient data entry and storage. In addition, the school-based community mental health program offered fiscal and administrative support to develop and implement a data summarization program. Finally, the district school board gave the superintendent discretionary authority to allocate specialized district personnel to support the school's implementation efforts.

Is institutional and organizational support available? In addition to multi-leveled and distributed leadership authority, implementation of evidence-based practices must have institutional and organizational support, which is represented in several ways: (a) fiscal, (b) policy, (c) political visibility, and (d) practice expertise. Budgets at the grade level or department, school, district, and regional levels must have line items that provide direct support for the practice implementation effort. Budgets may reflect braided funding streams from beyond the education sector,

for example from partnering community health, mental health and substance abuse state, local and organizational funds. Because implementation to levels of high sustainability and scalability can take 3–5 years (Fixsen et al., 2005; Sugai et al., 2010), fiscal support must be adequate and predictable for 3–5 years beyond the initial implementation.

Policy support refers to the agreed upon and documented procedural requirements and processes that support student learning and systems implementation. These institutionalized statements have policy status because they have been approved by school governance entities, district boards, and/or state administrative units, and reflect high priority and accountability concerns. Establishment of policy related to a given practice adoption provides a buffer when leadership shifts, priorities change, resources are redirected, and/or personnel change.

Political visibility refers to the extent that implementation efforts are shared, discussed, showcased, and celebrated. If implementer efforts are not recognized, if principal participation and support are not known, if parent and student benefits are not acknowledged, or if program impact is not documented and displayed, practice implementation is vulnerable to reduced implementation fidelity, poor durability, and reduced dissemination and scaling up.

Dependence on outside specialized practice expertise, technical assistance, professional development opportunities, and practice evaluation and adaptation is likely to limit the school's capacity to sustain and scale-up accurate, fluent, durable, and scaled practice implementation (Cappella, Frazier, Atkins, Schoenwald, & Glisson, 2008; Kutash, Duchnowski, & Lynn, 2006). Local practice expertise must be established to enable meaningful responses to personnel turnover, reduced external expertise and resources, and/or changes in organizational structure.

In our example, the school understood that sustained and meaningful support for their CICO

implementation was directly linked to institutional supports, and engaged in a variety of activities to bolster support. The CICO team provided weekly progress updates to faculty, parents, and district support units, and the principal included CICO progress reports in his monthly school board status presentations. The school-based community mental health clinician provided monthly updates to the community program's Clinical Director in order to ensure organizational support for continued involvement in the CICO efforts. The school governance committee revised their student behavior and school climate handbook to include procedural descriptions of the CICO system and the intersect of CICO with the universal school discipline procedures. In addition, implementation responsibilities were shared by all four student support specialists: special educator,

school counselor, school psychologist and school-based community mental health clinician. Finally, two members of the district behavior specialist team were invited to attend the school CICO team meetings to firm up the school to district behavior support continuum.

Is implementation driver-based? Drivers represent the organizational structures or enablers of the implementation process and serve as the means for building expert implementation capacity (Fixsen et al., 2005; Sugai, et al., 2010). In the context of the Interconnected System Framework, five implementation drivers are summarized in the following table: (a) professional development, (b) coaching, (c) evaluation, (d) leadership, and (e) practice expertise.

Table 1. Description and Implementation Feature by Implementation Driver

DRIVER	DESCRIPTION	IMPLEMENTATION FEATURES
Professional Development	Training structures and activities that implementers experience to develop and support their practice implementation capacity.	<ul style="list-style-type: none"> • Team based • Continuous and linked to implementation phase (see below) • Practice and systems capacity building • Development of team and school specific action plans • Contextually and culturally oriented
Coaching	Specific assistance provided by local implementers to support transfer of practices and actions acquired and developed during team training to school staff implementation.	<ul style="list-style-type: none"> • Preparation activities before team training • On-task support during team training • Follow-up activities after team training • Action plan-based consultation (i.e., tasks, products, timelines, and responsible persons)
Evaluation	Utilization of implementation information to guide professional development, coaching, and technical assistance.	<ul style="list-style-type: none"> • Formative progress screening • Continuous action plan-based progress monitoring • Regular assessment of implementation fidelity • Regular assessment of student progress

Leadership	Participatory authority to direct and coordinate implementation effort.	<ul style="list-style-type: none"> • Active team participation • Distributed decision making authority • Action plan-based coordination • Fiscal and resource management • Policy development and implementation
Practice Expertise	Accurate and fluent knowledge about a practice and its implementation.	<ul style="list-style-type: none"> • Shared across individuals • Evidence-based knowledge • Generalized implementation capacity • Data-based decision making

In our example school, the CICO team met 3 hours every other week in the first year with the district behavior support specialist who had expertise in the CICO practices and systems to develop an action plan for development and implementation of CICO. The team leader assumed coaching responsibilities and worked closely with the district behavior support specialist to increase adherence commitments and agreements included in the action plan. The school-based community mental health clinician was actively involved with the development of the CICO team and helped administer a quarterly CICO self-assessment to evaluate establishment and operation of the CICO practices and systems. In year two, the team's professional development schedule was reduced to 2 hour monthly meetings, coaching and evaluation functions continued. The community mental health clinician role also shifted during the second year, to include co-leading training and coaching activities and conducting skill based sessions for students who needed additional cognitive behavior techniques such as coping skills and trauma-informed problem solving techniques. The assistant principal and team leader were given decision-making authority by the principal for the establishment and operation of the CICO practices and systems, and provided monthly progress updates to the school faculty and semi-annually progress reports to the district behavior support team and school board.

Is implementation action planning phase-based?

Practice implementation is a multi-dimensional effort in which careful consideration is given to implementation fidelity, capacity, and progress. Adjustments in leadership actions, institutional supports, and driver functioning are made based on a general continuum of implementation phases (adapted from Fixsen et al., 2005; Goodman, 2000) and are summarized in the following table: (a) exploration and adoption, (b) installation, (c) initial implementation, (d) full implementation, and (e) sustainability and scaling.

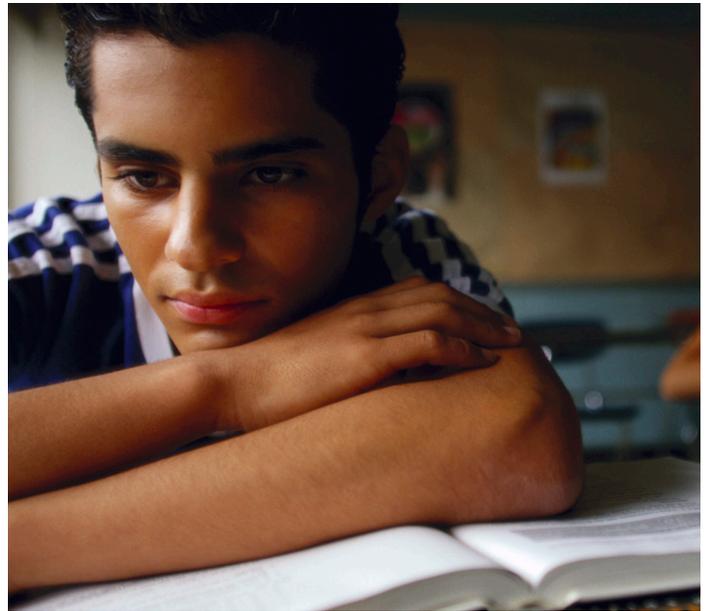


Table 2. Description and Consideration Features by Implementation Phase

IMPLEMENTATION PHASE	DESCRIPTION	CONSIDERATION FEATURES
Exploration and Adoption	Defining the need or problem and selecting a practice.	<ul style="list-style-type: none"> • Need or problem described in observable terms • Data provided to support the need and priority • Practice evidence base evaluated • Practice outcomes aligned with need or problem • Practice features evaluated against context and culture of implementation setting • Consideration given to related practices and initiatives • Practice selected
Installation	Establishing capacity infrastructure to implement practice.	<ul style="list-style-type: none"> • Implementation team established • Practice expertise, professional development and coaching supports identified and established • School and leadership implementation agreement secured • Audit of resources and competing initiatives conducted • Evaluation tools and procedures specified
Initial Implementation	Testing and demonstrating implementation of the practice and required implementation infrastructure with professional development and coaching supports.	<ul style="list-style-type: none"> • Implementation fidelity evaluated • Student responsive to practice considered • Resource utilization assessed
Full Implementation	Implementing the practice broadly across the organization or institution.	<ul style="list-style-type: none"> • Reliance on local resources and supports • Implementation fidelity and capacity building evaluated • Student responsiveness to practice considered • Resource utilization assessed

Sustainability and Scaling	Implementing the practice with fidelity across the organization and to new organizations for 3 or more years.	<ul style="list-style-type: none"> • Reliance on local resources and supports • Implementation fidelity and capacity building evaluated • Student responsiveness to practice considered • Resource utilization assessed • Implementation resources and support extended to other places and/or initiatives
----------------------------	---	---

Full implementation of CICO in our example school was achieved in 3 years. After a brief 2-month period of reviewing their data to delineate their need and considering the research and implementation support for CICO, the team recommended “pilot” implementation with six students to evaluate the fit of the CICO practice to their school. The team learned that some adjustments were needed to accommodate the cultural learning histories of the student and the unique organizational and operational characteristics of the school, and full implementation was initiated in year 2. Halfway through year 2, implementation fidelity was high and student responsiveness was generally good, so a decision was made to extend implementation to the full 10% of students whose behaviors were not responsive to the universal practices and systems. Building from the CICO structure, targeted group instruction for specific skills (e.g., problem solving) were also incorporated into the Tier 2 system. In year 3, full implementation was continued with less support from the district professional development team. Also during this time, other schools in the region became interested, and materials, data reports, and training supports were described for their early exploration and adoption.

Are implementation exemplars documented?

Successful implementation examples are needed to (a) justify the resources for sustained and scaled implementation; (b) defend the priority for one practice or initiative versus another; (c) enable other possible adopters to see implementation practices, systems,

and outcomes; (d) enable implementation visibility in support of policy decision making; (e) represent a professional development resource; and (f) serve as a testing place for adaptations and modifications to the practice implementation (Sugai, et al., 2010; Stephan, Hurwitz, Paternite, & Weist, 2010; Stephan, Mulloy & Brey, 2011).

Exemplar sites document their implementation in three important areas. The first is implementation success with local resources and expertise, especially when new initiatives or needs require attention without the addition of new resources or supports. The second is the regular documentation of sustained capacity to implement with fidelity. The final area is documentation of meaningful improvements and progress in student outcomes.

After 5 years of successful and well-documented implementation, the CICO program at the example school became a professional development site for other schools that were in the early implementation phases. The CICO team developed a procedural manual for implementation; orientation handbooks for students, family members, and new staff members; and a website for display of their outcome data, student successes, and material samples. The school principal developed a presentation to stress the importance of participatory and distributed leadership for other administrators and new implementation teams.

Is system for continuous progress monitoring in place for implementation enhancements? The final element in the development of support for local implementation of a practice is the continuous collection of data or information to guide enhancements and modifications that would improve implementation

outcomes (Aarons et al., 2011; Fixsen et al., 2005; Glasgow et al., 2006). These data would answer two main questions concurrently: (a) is the practice being implemented with fidelity? and (b) are students benefiting from the implementation? The interrelatedness of these two questions is delineated in the following table:

Table 3. Implementation Actions based on Implementation Fidelity and Student Progress/Benefit

		STUDENT PROGRESS/BENEFIT	
		ADEQUATE	INADEQUATE
IMPLEMENTATION FIDELITY	ADEQUATE	<ul style="list-style-type: none"> Adjust for efficient use of implementation resources and supports Adjust for sustainable implementation and durable outcomes If expected outcome achieved, consider next phase of implementation and/or address another need or problem 	<ul style="list-style-type: none"> Adjust practice to improve contextual fit Consider different practice Adjust criterion for adequacy of progress/benefit
	INADEQUATE	<ul style="list-style-type: none"> Identify what practice features are associated with student progress/benefit and adjust implementation to emphasize effective practice features Consider if improvement in implementation fidelity would improve student progress further 	<ul style="list-style-type: none"> Consider whether practice has support for implementation If no, consider another practice with better contextual fit If yes, provide support to improve implementation fidelity

In our example school, the CICO team completed a procedural self-assessment to examine the extent to which all CICO steps were being completed accurately and on schedule. The team also examined the progress being made by the CICO group as a whole and by individual students. If implementation inadequacies were noted, the CICO coach and team leader would provide a booster to improve accuracy of implementation. At weekly team meetings, individual student progress was reviewed. If progress was on track, discussions focused on enhancing outcomes further, changing outcome criterion, and/or modifying target behavior outcomes. If progress was not on track, the team discussed implementation fidelity, intervention adjustments or replacement, setting of new outcome target behaviors and/or criterion.

E. Continuous Progress Monitoring and Planning for Effectiveness, Efficiency, and Relevance

At the broader implementation level and like implementation at the local level, continuous progress monitoring and planning occurs to maximize institutional effectiveness, efficiency, and relevance. The implementation actions are similar in nature with respect to concurrent examination of implementation fidelity and outcomes (see Table 3); however, the scope is extended to look across schools, district, and regions with respect to specification of need and intended outcome, selection of evidence-based practices, contextual and cultural adaptations, support for local implementation, and continuous progress monitoring. In addition, attention is focused on action planning that

considers leadership functioning, institutional support, driver-based implementation, phase-guided action planning, exemplar development, and local progress monitoring.

Conclusion: Guiding Principles and Self-Assessment for Action Planning

The purpose of this chapter was to consider the features and operations of an Interconnected System Framework. This purpose is premised on the belief that by improving the capacity of schools to implement evidence-based mental health practices, improvements in student academic achievement and social and behavioral competence, and implementer efficacy, efficiency, and sustainability may be realized. To address this purpose, we described what is known about the implementation science of evidence-based practices and how this information could be applied to the implementation of Tier 2 interventions (i.e. CICO, group-based skill instruction) that expand the continuum of mental health support of students.

The description of this framework is grounded in a number of important guiding principles:

1. Models interventions, and practices are important, but successful implementation must occur within an interconnected implementation framework.
2. Selection of an intervention or practice must be preceded by a careful specification and prioritization of the need and intended outcome.

3. Priority must be given to the practice having the most convincing research or evidence to document effectiveness, efficacy, and relevance.
4. Student progress and benefit are most important for evaluating implementation fidelity and appropriateness.
5. Student progress and benefit must always be examined in the context of implementation fidelity.
6. Practice implementation and decision-making are affected by local implementation capacity and expertise, sustainability and adequacy of resources, adaptations to local context or culture, and development and use of implementation drivers and phases.

Considering the implementation of school-based mental health within a clearly articulated implementation framework has important implications for policy development and decision making, administrative leadership functioning, school and mental health provider practice, future research priorities, and the preparation of personnel involved in school-based mental health endeavors. Key features of this implementation logic and framework are organized and summarized in a self-assessment format for examining current and new implementation practice and developing enhancement action plans in table below:

Table 4. Implementation Framework Self-Assessment

1. MAIN QUESTION	SUB-QUESTIONS	DECISION
1. Are need and intended outcomes specified?	<ul style="list-style-type: none"> • Is need described in measurable terms? • Is importance for addressing need high? • Is intended outcome described in measurable terms? 	Yes No ?

2. Is most appropriate evidenced-based practice selected?	<ul style="list-style-type: none"> • Does evidence exist to support effectiveness of practice? • Does outcome associated with practice align with stated need and intended outcome? • Is practice consistent with other practices and initiatives currently in place? 	Yes No ?
3. Is practice adaptable to local context or culture?	<ul style="list-style-type: none"> • Are data for decision making culturally valid? • Is practice culturally relevant? • Is intended outcome culturally equitable and representative? • Is implementer system culturally knowledgeable? 	Yes No ?
4. Is support for local implementation developed?	<ul style="list-style-type: none"> • Is leadership support multi-leveled and distributed? • Is institutional or organizational support available? • Is implementation driver-based? • Is implementation action planning phase-based? • Are implementation exemplars documented? • Is continuous progress monitoring system available? 	Yes No ?
5. Is system level continuous progress monitoring in place for implementation enhancements?	<ul style="list-style-type: none"> • Is practice being implemented with fidelity? • Are students benefiting from implementation? • Is interrelatedness of implementation fidelity and student progress/benefit examined concurrently? 	Yes No ?

References

- Aarons, G. A., Sommerfeld, D. H., & Walrath-Greene, C. M. (2009). Evidence-based practice implementation: the impact of public versus private sector organization type on organizational support, provider attitudes, and adoption of evidence-based practice. *Implementation Science, 4*, 83.
doi: <http://dx.doi.org/10.1186/1748-5908-4-83>
- Aarons, G. A., Hurlburt, M., & Horwitz, S. M. (2011). Advancing a conceptual model of evidence-based practice implementation in public service sectors. *Administration and Policy in Mental Health and Mental Health Services Research, 38*, 4-23. doi: <http://dx.doi.org/10.1007/s10488-010-0327-7>
- Barrish, H., Saunders, M., & Wold, M. (1969). Good behavior game: Effects of individual contingencies for group consequences on disruptive behavior in a classroom. *Journal of Applied Behavior Analysis, 2*, 119-124.
doi: <http://dx.doi.org/10.1901/jaba.1969.2-119>
- Beidas, R. S., & Kendall, P. C. (2010). Training Therapists in Evidence Based Practice: A Critical Review of Studies from a Systems Contextual Perspective. *Clinical Psychology: Science and Practice, 17*, 1-30.
doi: <http://dx.doi.org/10.1111/j.1468-2850.2009.01187.x>

-
- Blase, K., & Fixsen, D. (2013). Core Intervention Components: Identifying and Operationalizing What Makes Programs Work. ASPE Research Brief. *US Department of Health and Human Services*.
- Blase, K., Naoom, S., Wallace, F., & Fixsen, D. (2004). Understanding Purveyor and Implementer Perceptions of Implementing Evidence-Based Programs. *National Implementation Research Network*.
- Burke, R. W., & Stephan, S. H. (2008). Contextual features of public schools in the United States as settings for mental health promotion. *Advances in School Mental Health Promotion, 1*, 52-60.
doi: <http://dx.doi.org/10.1080/1754730X.2008.9715722>
- Cappella, E., Frazier, S. L., Atkins, M. S., Schoenwald, S. K., & Glisson, C. (2008). Enhancing schools' capacity to support children in poverty: An ecological model of school-based mental health services. *Administration and Policy In Mental Health, 35*, 395-409. doi: <http://dx.doi.org/10.1007/s10488-008-0182-y>
- Chorpita, B. F., & Daleiden, E. L. (2009). Mapping evidence-based treatments for children and adolescents: application of the distillation and matching model to 615 treatments from 322 randomized trials. *Journal of Consulting and Clinical Psychology, 77*, 566-579. doi: <http://dx.doi.org/10.1037/a0014565>
- Delquadri, J., Greenwood, C., Whorton, D., Carta, J., & Hall, R. (1986). Class wide peer tutoring. *Exceptional Children, 52*, 535-542.
- Dix, K. L., Slee, P.T., Lawson, M. J., & Keeves, J. P. (2012). Implementation quality of whole school mental health promotion and students' academic performance. *Child and adolescent mental health, 17*, 45-51.
doi: <http://dx.doi.org/10.1111/j.1475-3588.2011.00608.x>
- Domitrovich, C. E., Bradshaw, C. P., Poduska, J. M., Hoagwood, K., Buckley, J. A. Olin, S., . . . & Jalongo, N. S. (2008). Maximizing the implementation quality of evidence-based preventive interventions in schools: A conceptual framework. *Advances in School Based Mental Health Promotion, 1*, 6-28.
doi: <http://dx.doi.org/10.1080/1754730X.2008.9715730>
- Domitrovich, C. E., & Greenberg, M. T. (2000). The study of implementation: Current findings from effective programs that prevent mental disorders in school-aged children. *Journal of Educational and Psychological Consultation, 11*, 193-221. doi: http://dx.doi.org/10.1207/S1532768XJEPC1102_04
- Durlak, J. A., & DuPre, E. P. (2008). Implementation matters: A review of research on the influence of implementation on program outcomes and the factors affecting implementation. *American Journal of Community Psychology, 41*, 327-350. doi: <http://dx.doi.org/10.1007/s10464-008-9165-0>
- Elias, M., Zins, J., Graczyk, P., & Weissberg, R. (2003). Implementation, sustainability, and scaling up of social-emotional and academic innovations in public schools. *School Psychology Review, 32*, 303-319.
- Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M., & Wallace, F. (2005). *Implementation research: A synthesis of the literature*. Tampa, FL: Florida Mental Health Institute, The National Implementation Research Network (FMHI Publication #231).
-

-
- Forman, S., Fagley, N., Chu, B., & Walkup, J. (2012). Factors influencing school psychologists' 'willingness to implement' evidence-based interventions. *School Mental Health, 4*, 207.
doi: <http://dx.doi.org/10.1007/s12310-012-9083-z>
- Forman, S. G., Olin, S. S., Hoagwood, K. E., Crowe, M., & Saka, N. (2009). Evidence-based interventions in schools: Developer's views of implementation barriers and facilitators. *School Mental Health, 1*, 26-36.
- Glasgow, R. E., Klesges, L. M., Dzewaltowski, D. A., Estabrooks, P. A., & Vogt, T. M. (2006). Evaluating the impact of health promotion programs: using the RE-AIM framework to form summary measures for decision making involving complex issues. *Health Education Research, 21*, 688-694.
doi: <http://dx.doi.org/10.1093/her/cyl081>
- Glennan, T. K., Bodilly, S. J., Gallagher, J. R., & Kerr, K. A. (2004). *Expanding the reach of educational reform*. Santa Monica, CA: RAND Corporation.
- Goodman, R. M. (2000). Bridging the gap in effective program implementation: From concept to application. *Journal of Community Psychology, 28*, 309-321.
doi: [http://dx.doi.org/10.1002/\(SICI\)1520-6629\(200005\)28:3<309::AID-JCOP6>3.0.CO;2-O](http://dx.doi.org/10.1002/(SICI)1520-6629(200005)28:3<309::AID-JCOP6>3.0.CO;2-O)
- Greenhalgh, T., Robert, G., Macfarlane, F., Bate, P., & Kyriakidou, O. (2004). Diffusion of innovations in service organizations: systematic review and recommendations. *Milbank Quarterly, 82*, 581-629.
- Guerra, N. G., & Williams, K. R. (2003). Implementation of school based wellness centers. *Psychology in the Schools, 40*, 473-487. doi: <http://dx.doi.org/10.1002/pits.10104>
- Harn, B., Parisi, D., & Stoolmiller, M. (2013). Balancing Fidelity With Flexibility and Fit: What Do We Really Know About Fidelity of Implementation in Schools? *Exceptional Children, 79*, 181-193.
- Herschell, A. D., Kolko, D. J., Baumann, B. L., & Davis, A. C. (2010). The role of therapist training in the implementation of psychosocial treatments: A review and critique with recommendations. *Clinical Psychology Review, 30*, 448-466. doi: <http://dx.doi.org/10.1016/j.cpr.2010.02.005>
- Horner, R. H., Sugai, G., & Anderson, C. M. (2010). Examining the evidence base for school-wide positive behavior support. *Focus on Exceptionality, 42*, 1-14.
- Hulleman, C. S., & Cordray, D. S. (2009). Moving from the lab to the field: The role of fidelity and achieved relative intervention strength. *Journal of Research on Educational Effectiveness, 2*, 88-110.
doi: <http://dx.doi.org/10.1080/19345740802539325>
- Kutash, K., Duchnowski, A. J., & Lynn, N. (2006). *School-based mental health: An empirical guide for decision-makers*. Tampa, FL: Research & Training Center for Children's Mental Health, Louis de la Parte Florida Mental Health Institute, University of Florida.
-

-
- Leithwood, K., Louis, K. S., Anderson, S., & Wahlstrom, K. (2004). *How leadership influences student learning: A review of research for the Learning for Leadership Project*. Minneapolis, MN: University of Minnesota Press.
- Marty, D., Rapp, C., McHugo, G., & Whitley, R. (2008). Factors influencing consumer outcome monitoring in implementation of evidence-based practices: results from the National EBP Implementation Project. *Administration and Policy in Mental Health and Mental Health Services Research*, *35*, 204-211.
doi: <http://dx.doi.org/10.1007/s10488-007-0157-4>
- Payne, A. A., Gottfredson, D. C., & Gottfredson, G. D. (2006). School predictors of the intensity of implementation of school-based prevention programs: Results from a national study. *Prevention Science*, *7*, 225-237.
doi: <http://dx.doi.org/10.1007/s11121-006-0029-2>
- Rogers, E. M. (2003). *Diffusion of Innovations* (5th ed.) New York, NY: The Free Press.
- Sinclair, M., Christenson, S., Evelo, D., & Hurley, C. (1998). Dropout prevention for high-risk youth with disabilities: Efficacy of a sustained school engagement procedure. *Exceptional Children*, *65*, 7 – 21.
- Stephan, S., Hurwitz, L., Paternite, C., & Weist, M.D. (2010). Critical factors and strategies for advancing statewide school mental health policy and practice. *Advances in School Mental Health Promotion*, *3*, 48-58.
doi: <http://dx.doi.org/10.1080/1754730X.2010.9715686>
- Stephan, S., Mulloy, M. & Brey, L. (2011). Improving collaborative mental health care by school-based primary care and mental health providers. *School Mental Health*, *3*, 70-80.
doi: <http://dx.doi.org/10.1007/s12310-010-9047-0>
- Sugai, G., Horner, R. H., Algozzine, R., Barrett, S., Lewis, T., Anderson, C.,...Simonsen, B. (2010). *School-wide positive behavior support: Implementers' blueprint and self-assessment*. Eugene, OR: University of Oregon.
- Sugai, G., O'Keeffe, B.V., & Fallon, L. M. (2012). A contextual consideration of culture and school-wide positive behavior support. *Journal of Positive Behavior Interventions*, *14*, 197-208.
doi: <http://dx.doi.org/10.1177/1098300711426334>
- Sugai, G., O'Keeffe, B.V., Horner, R. H., & Lewis, T. (in press). Leadership and school-wide positive behavior support. In J. B. Crockett, B. S. Billingsley, & M. L. Boscardin (Eds.), *Handbook of leadership in special education*. New York, NY: Taylor & Francis/Routledge.
- Vincent, C. G., Randall, C., Cartledge, G., Tobin, T. J. & Swain-Bradway, J. (2011). Toward a conceptual integration of cultural responsiveness and school-wide positive behavior support. *Journal of Positive Behavior Interventions*, *13*, 219-229.
- Weisz, J., & Kazdin, A. E. (Eds.) (2010). *Evidence-based psychotherapies for children and adolescents*. New York, NY: Guilford Press.
- Zins, J., Weissberg, R., Wang, M., & Wallberg, H. (2004). *Building academic success on social and emotional learning: What does research say?* New York, NY: Teachers College Press.
-

The Role of School Level Systems in Interconnecting School Mental Health and School-wide Positive Behavior Support

NANCY A. LEVER, PH.D., AND ROBERT PUTNAM, PH.D., BCBA-D

Within this School Level Systems chapter, the organizational structures and features that are needed among the students, families, providers, educators, and administrators at the school level in order to effectively implement a multi-tiered framework that promotes productive and healthy students, both in and outside of the school-house door will be considered. After reviewing and describing components of each of the identified structures and features, specific examples of the successful integration of these features at the district and school level by case study sites and programs will be highlighted. There are several components that are needed to effectively implement an interconnected systems framework (ISF): a) a focus on valued outcomes for all students in all settings; b) systems to ensure the selection and implementation of practices with treatment integrity with data based decision making by all school and community staff; c) the most effective, efficient, developmentally and culturally appropriate practices to address important outcomes at school, home and in the community, and; d) data collection methodologies to evaluate both treatment integrity and outcomes (Barrett, Eber & Weist, 2009). One critical component for the success for an interconnected systems framework is the development of systems that can be shared by all school staff and mental health practitioners whether employed by the school or community organizations (Sugai & Horner, 2009). Without effective systems the ISF model will not be successful. This chapter will attempt to elucidate the organizational structures and features needed to successfully implement this model.

Organizational Structures and Features

There are critical organizational structures and features at the school level that need to be in place in order to advance an interconnected school mental

health and school-wide positive behavior support framework. These features are described below:

Readiness

One of the first steps in building an interconnected systems framework at the school level is to assess the readiness of stakeholders to participate in the partnership. Included in this step is a qualitative shift in the culture of practice between educators and mental health practitioners to not compartmentalize mental health from education. Schools and community partners must be committed to working together to build or enhance a multi-tiered, systemic approach that addresses the interconnected academic, social, emotional, and behavioral needs of all students (Sugai & Horner, 2002). It is critical to integrate mental health and education teams into unified teams that consider the whole child addressing academic as well as social-emotional-behavioral considerations. To be successful, this integration requires that school partners are open to having community partners and families engage in all aspects of the interconnected system. Readiness requires a willingness to move beyond a “walled” model in which only school-based staff is part of a child’s support team to one that embraces cross stakeholder and cross system partnership. In forming such partnerships, it is necessary for school, family, and community partners to be willing to have a discussion about overlapping priorities and needs and to consider how a partnership could be beneficial to meeting the goals of each partner group.

Stakeholders who need to be involved in the ISF partnership extend beyond the school building staff to include caregivers, community mental health providers, child serving agency workers, advocates, and health care providers. The integrated systems framework accepts the tenet that supports for students should be available in the school as well as in the home and community and that these supports should be integrated to avoid duplication of services and to support coordinated treatment activities in an effort to support the student’s wellbeing. Student supports should

be strategically coordinated at the building level to reduce duplication and inefficiency, while maximizing quality, breadth and depth of resources and support, with opportunities to reinforce training across service providers, education staff, and families. Agreements among partners should be formally written with clearly defined roles, actions, and timelines delineated in a Memorandum of Understanding (MOU). MOUs should be used to document all agreements across partners within the ISF team, whether money is exchanged or not.

Readiness is more complicated than just having a team complete a readiness questionnaire. While a questionnaire can contribute to understanding the readiness of a team, with this being a fundamental shift for many, the ideas behind this framework need to be presented and teams need to form and process together how to best integrate the framework into the school. Readiness to implement an ISF framework requires strong representation from both school and community partners, with more than one champion leading the efforts. Part of readiness within the ISF framework involves the willingness to come together to consider whether there are common goals and an agenda and if there are ways the team can work together to address them. In addition, teams must be open to the use of evidence-based practices and programs, data sharing, and data-based decision making.

As part of the readiness within the ISF framework, Positive Behavioral Interventions and Supports must be in place and functioning well at the universal level before attempting to advance work at the 2nd and 3rd tiers (selective and indicated interventions). If there is not a strong universal PBIS system in place, that should be made a priority before attempting to move a three tiered model forward. The top two tiers depend on the stability of the data based system and programming at the universal level to be effective. Examples from the case studies that highlight strategies for assessing and advancing readiness are described below:

Case Study Examples. There are numerous ways that a school and/or district can begin to implement an ISF model. The Elgin- Hanover School District's Superintendent had the vision for a school community alliance, including all community agencies. He invited the community agencies to embed their services in the PBIS initiative. In the first year collaborative work groups were formed to address: a) operations, where agreements were drafted for both agencies and schools; b) alternative to suspensions, and; c) tier 2/3 services. Out of these working groups Hanover Township Youth and Family Services (HTYFS) joined the alliance and became part of the tier 2/3 workgroup.

Another example was the Creve Coeur School District in Illinois which introduced the PBIS program into the Middle School with good student satisfaction and improved discipline outcomes. They received a three year mental health grant through which they provided mental screenings and some counseling. They developed a partnership between the Illinois Valley Mental Health Association, the State Mental Health Division and the Center for Prevention of Abuse which allowed them to add their own staff social worker and design a student support team.

Another example is the Syracuse City School District who received one of three "Promise Zones" grants in 2010 from the New York State Office of Mental Health. The Onondaga County Department of Mental Health, Syracuse City School District (SCSD), and Say Yes to Education, Inc., a community organization, are partnering to achieve the goals associated with the New York State Office of Mental Health Promise Zone Initiative. Onondaga County was awarded a System of Care (Federal Children's Mental Health Improvement Initiative) grant in 2008 to transform the mental health system from a provider driven to a family driven system. The SCSD, in collaboration with Say Yes to Education, began implementing Positive Behavior Interventions and Supports district-wide in 2008. In addition, the district's elementary and K-8 schools have implemented highly effective School Based Intervention Teams (SBIT) based on a

4-Tier Response to Intervention framework for over 10 years. All of these initiatives provided impetus and demonstrate readiness for ISF implementation.



Teaming Structure

The ISF framework can best be supported using a teaming structure. At the school level, Teams should include youth, family, school and community members. A multi-tiered system of support at the school level, often has three teams with one team focusing on the planning, implementation, and evaluation of universal interventions and the other teams focusing on 2nd and 3rd tier interventions (some schools depending on size and number of team members prefer to have a only a universal team and a combined tier 2 and tier 3 team).

A challenge for some schools is to figure out how to best partner with youth and families. This partnership should not just involve tokenism. Teams should strive to establish and promote youth and family voice, leadership and partnership. Youth and families need to be viewed by all team members as full partners on the team and engaged in all aspects of the team including brainstorming, data-based decision making, and problem-solving. Often having at least two youth and two family representatives present can create an

environment that is more comfortable for them to have a voice in the process. The team should strive to be strongly guided in its efforts by youth and families as is outlined by the System of Care model to support cross system work for improving access to an array of high quality services and programs for children and adolescents with behavioral health needs (Stroul, Blau, & Friedman, 2010). Teams should address as a larger team or smaller subcommittees, key topic areas such as needs assessment, service delivery, and continuous quality improvement that is informed by data. Teams are more likely to be successful if they have support from and involvement of building level leadership such as the school principal or assistant principal. In addition buy-in from the school district is also important to allow the time and resource investment to the team's efforts. Beyond just having an assembled team, successful ISF teams have established clear roles and responsibilities for each of the team members that are well defined and easy to understand. In addition, it is helpful to have a regularly scheduled time and frequency for meeting and a process for holding meetings that includes clear rules, expectations, and action planning that is informed by and uses data throughout to track progress towards action items and to monitor success of interventions that are implemented.

Case Study Examples. The Scranton School District (SSD) in Pennsylvania was approached by Community Care, a community based mental health organization, to have School Based Behavior Health (SBBH) Teams installed in their buildings and asked to convene a district and community leadership team (DCLT). The team consists of the superintendent, assistant superintendents, special education director, Title One coordinator, and building principals. Other community members currently participating on the team include program directors from the community mental health agencies, and technical assistance coordinators from the local intermediate unit and PaTTAN (PA Training and Technical Assistance Network).

The DCLT was committed to install SWPBIS and started in those buildings where SBBH Teams would be in place. Community Care was willing to provide training, technical assistance, and facilitation for SWPBIS and SBBH. A process of resource mapping was conducted and there continues to be an ongoing dialogue with other community stakeholders in order to further embed other prevention, interventions and supports.

In the Syracuse City School District (SCSD) a cross systems workgroup was established to determine the mission, vision and funding priorities for the Promise Zone, a grant from state department of mental health. The work group (Steering Committee) included leadership (Commissioner/Superintendent/Executive Director or their designee) from the Syracuse City School District, Department of Mental Health, and other community agencies. In the exploration stage, the Steering Committee contracted with an objective third party to perform an assessment of the community and district's ability to identify and support children with emotional and behavioral challenges. The purpose of this extensive assessment was to clearly define the needs and strengths of both the school district and community supports; and the capacity to effectively and efficiently meet the needs of the students and families served. The assessment included focus groups with a wide variety of district, community and child serving county government representatives. The assessment also explored aspects of the various public systems that interact with children living in poverty in Syracuse, including developing a familiarity with the context of policies, budgets and priorities that affect the delivery of services to students.

Using information obtained from the assessment, the Steering Committee established an action plan with the overall goal to improve district-wide clarity, functional definition, and efficacy of in-school and community based systems to identify and support students with serious emotional disorders to increase student engagement, academic achievement, dropout prevention, social and emotional competence,

positive school culture and school safety.

In Urbana, Illinois a Secondary Systems Team to examine the systems pieces of tier two interventions was developed at the building level. Gaps were identified and with assistance of the PBIS Technical Assistance Coordinator (PBIS TAC) they identified Community Elements, a community mental health program, as a potential partner to assist in meeting additional needs. School administrators, the Community Elements' Director for Youth Services and the PBIS TAC meet together every 6-8 weeks. School social workers and counselors had their roles and responsibilities shifted to allow room for leading tier two interventions and participating with mental health staff in their groups. The community mental health agency requested additional funding from the local United Way to help support the implementation of the evidence-based practices in the schools so as to relieve any financial burden on the school during the implementation stages. The key component was having liaisons between the two systems. In this case the plan included both a PBIS TAC staff person and a mental health leader who believed in the process and the long term outcomes and were willing to tackle the expected and unexpected barriers that accompany any initiative of this type.

Funding and Sustainability

In advancing an ISF framework at the school level, funding and sustainability needs to be taken into consideration from the inception of the work. Funding does not necessarily have to involve the exchange of dollars between school and community partners. In many cases, in-kind funding involving goods, services, training, and resources are exchanged. For example, a school could allow an outpatient mental health program use of its office space, telephone, and copier at no cost, while the provider could provide 16 hours of on-site services including participating on the ISF team on a biweekly basis and quarterly training for teachers on the identification of mental health concerns in students. Regardless of how a partnership is created and funded, it

is important to consider how the resources, services, and programming can be sustained in the short and long run. In addition, whenever possible, funding for ISF should intentionally seek diversified funding, which does not place too much weight on any one source of funding which could jeopardize the program if that one funding stream is lost. Funding mechanisms should align with the resources and services provided at each of the three tiers. Thus, fee-for-service mechanisms for outpatient mental health services may be most relevant to tier three interventions, while private foundation and other contract supports from local and state agencies may be more relevant to cover tier one and two interventions. Funding should also take into consideration the ability of non-school staff to be able to attend the ISF meetings. Finding a way to cover some of this non-billable time may be essential for partnerships to move forward.

Consideration should also be given to exploring opportunities for cross agency/program applications for funding. Participating in cross agency efforts is often viewed favorably by the funding community and could offer financial gains that could not have been achieved by any of the groups individually. Trusting team members and a willingness to leverage dollars and/or efforts towards a common goal are critical components that are needed to fully maximize services and programming across the three tiers. Sustainability efforts can also include using data from the ISF efforts to inform policy maker about educational and behavioral gains of students in an effort to advocate for other funding streams such as private foundations and local funds.

Case Study Examples. The SCSD developed a Steering Committee with representation from the local mental health clinics. Resource mapping was conducted to identify existing resources and how best to utilize them. As part of this process it was determined that licensed mental health clinics with clinicians practicing in the schools would commit to donate 1.5 hours a week per school. Within this time, clinicians would participate in tier 3 problem solving teams, prioritize school functionality in treatment, deliver evidence-based practice, and serve in a consultative role

on teams. Overall, the Steering Committee aimed to a) support decision making for treatment and referral to community mental health supports, and; b) clinicians to participate in PBIS training to ensure an understanding of the school culture, climate and strategic planning.

The SCSD, in an effort to ensure practices are implemented to fidelity and can be sustained, committed to active participation and support from a variety of stakeholders (district personnel, external PBIS coaches, CBO's, parents, mental health clinicians, students, etc...). They developed a plan to support sustainability by braiding existing funding, and attempting to secure ongoing sources of funding to replace grant funds when they ended. In the development of this plan they gathered input and planning expertise from PBIS Coordinators, consultants, professional affiliations and shared training to develop competencies in EBP and in the Tier 2 and 3 processes, as well as, in the Check in Check out process (a Tier 2 intervention) with all stakeholders.

In other cases grants were obtained to begin the process and were focused on training all stakeholders and participants in EBP and PBIS. For example in Missoula, Montana, a collaborative team with members from multiple agencies agreed to develop administrative rules for school mental health that were based on research and data based decision making. This state mental health team developed common training for wraparound services in schools and the community. The community mental health agency secured funding through grants for additional funding (e.g.; local United Way, SAMSHA) to help support the implementation of evidence-based practices in the schools so as to relieve any financial burden on the school during the implementation stage.

Data System

At the school level, in order to effectively implement an ISF framework, it is critical to have a data based web or computer application that allows the ISF team access to both academic and behavioral data that

can be used to inform stakeholders about the impact of the ISF interventions. Data needs to be collected both by school staff and community providers and should be shared with the team to inform decision making. Having a data system that is easy to access, and able to generate user friendly reports can help to advance the ISF team process and action planning. With funding being a challenge for many schools, identifying a low cost data system can be essential. Data can be used at all levels of the system process including a) needs assessment; b) identification of students in need of services; c) mental health promotion, prevention, and intervention, and; d) to continuous quality improvement. Examples of data that can be tracked include: suspension, office referrals, behavioral system points, grades, participation in interventions, etc. An example of a high quality web-based data information system designed to help school personnel to use office referral data to inform school-wide and individual student interventions is the School-Wide Information System (SWIS: May et al., 2002). The system allows teams to consider patterns in office referrals such as location and time to inform decision making and planning. Data can be used in many different ways including helping to identify students who could most benefit from services and/or interventions. Some schools are using measures such as the Child and Adolescent Needs and Strengths Screening (Anderson, Lyons, Giles, Price, & Estle, 2003), and the Global Appraisal of Individual Needs (Dennis, 1998) scale to screen for or identify children who may be in need of mental health supports. Data is also used to track progress of students who have received services to determine if the services are impacting outcomes important to the ISF team (e.g., academic, social, emotional, and behavioral indicators). A challenge for coordination of efforts can result when there is not data sharing across school and community providers. Identifying issues related to data sharing (HIPAA, FERPA) should be done up front and consideration should be given to securing consents and release of information to allow sharing of data across system partners in an effort to have a more comprehensive picture of student progress across educational and social-emotional-behavioral

domains. Consideration should also be given to how data will best be collected, analyzed, and shared from the inception of the partnership and should be clearly outlined in any Memorandums of Understanding.

Case Study Examples. The SSD utilized data to help in exploration of the ISF model from both the school and mental health service perspective. During the exploration phase, on the community side, utilization data was reviewed concerning the current delivery of mental health services. The city of Scranton was identified as a community with high utilization of a mental health services, but with limited data demonstrating the effectiveness of these services. On the school side, SCD had high rates of students being referred to special education, being placed in self-contained emotional support classrooms or other restrictive educational settings, with increasing numbers of students who were experiencing problems with truancy, office discipline referrals, suspension, and expulsion. Data was shared by the community agency on the family's perspective of their child's functioning as well as teachers' perception of student's functioning and progress. In addition SWIS was used to document progress related to student discipline issues.

The SCSD and their community partners conducted an intensive assessment to better understand their current status. In the exploration stage the assessment team performed 54 interviews including 10 focus groups and 6 school visits, consisting of 268 participants. These interviews involved participants from the Onondaga County Department of Mental Health, SCSD, Say Yes, other community based organizations, faculty at Syracuse University and SUNY Upstate Medical University, and other child-serving systems staff. The Steering Committee reviewed volume and demographic data from the local psychiatric emergency room at St. Joseph's Hospital as well as volume, staffing and needs data from the outpatient mental health clinics in the county. The team also reviewed data from the SCSD and mental health clinic partners which included school suspensions, office discipline referrals, days of lost instruction, PBIS

fidelity, academic performance, surveys of community supports the school and families had access to, and parent focus group reports.

Social Marketing

The ISF process should be openly marketed to and regularly shared with families, school based staff, school administration and board and communities in an effort to help to make sure that all are aware of the multi-tiered framework, know how to access the services and resources, and can help to identify needs and can plan for the expansion and improvement of the framework and its services, programs, and resources. The marketing needs to make it clear that it is a family-school-community partnership and not solely a school agenda. Marketing and information sharing can occur throughout the year at an array of events, including back to school nights, parent-teacher conferences, Parent-Teacher Association meetings, and family nights and can also include outreach to community partners about the school-based resources and the importance and effective ways to collaborate with school teams around student success. Student feedback can be obtained through a variety of mechanisms, including connecting with students in classrooms, talking with student leadership teams, and asking students directly about their thoughts about the services and programs they have participated in.

Case Study Examples: In the Elgin school district the staff presented the concept at “Go to School” startup meetings in August as well as at registration and parent teacher conferences. There were presentations to the staff, and the school board for visibility as well as information in community forums and monthly newsletters monthly. The SCSD social marketing had a strong focus at the district level with presentations to the school board, school administrators and to stakeholders at meetings across the district.

Training

With the many academic, social, emotional, and

behavioral needs that students are bringing with them into the school setting, there is a tremendous need for the adult workforce to be trained to effectively address the concerns. Many educators have not been trained to address mental health needs just as many mental health providers are not aware of the nuances and best practices related to the education system and the delivery of services in school settings. At the school level, it is important to assess the training needs for families, school staff, and the community partners working within the school. Often pre-service education and professional development programs do not adequately address evidence-based practices and programming related to an integrated academic and behavioral health system of care. The cost of professional training can be quite costly for schools and community programs. Identifying training strengths and gaps, including specific skills and resources within each of the ISF team partners and planning for cross training, including when an expert trainer needs to be brought in, can be an efficient and cost-effective way to provide training. Key aspects that can be included in education and training for youth, families, and school staff can include mental health identification and referral, consideration of how to best address concurrent mental health and academic issues, and an intentional de-stigmatizing of mental illness. In addition, the focus can move away from mental illness to mental health promotion and wellness when working in a three tiered framework that addressed the needs of all students. In addition, specialized training on evidence-based programs and modularized practices for treating mental health disorders can be helpful for the clinical team (school and community providers) who may not have received formalized training. Potential evidence-based training could include among others, Coping Power (Lochman, Powell, Boxmeyer, & Jimenez-Camargo, 2011), the Incredible Years (Webster-Stratton, 2005), Trauma Focused Cognitive Behavioral Therapy (Cohen, Mannarino, & Deblinger, 2006), Cognitive Behavioral Interventions for Trauma in Schools (Jaycox, 2004), Botvin’s Life Skills (Botvin & Griffin, 2002), and the Common Elements Approach (Chorpita, Daleiden, & Weisz, 2005).

Case Study Examples. Several school districts (SSD, SCSD and Urbana) provided joint trainings for school staff and mental health clinicians on evidence-based practices and programs and the PBIS framework as well as other relevant topics. Specifically, SSD's school mental health teams were trained on family systems, trauma informed care, resiliency, co-occurring disorders and positive behavior supports. After completing five days of orientation training, the teams began working with a cohort of youth and families across home, school, and community. They were responsible for clinical interventions including individual therapy, family therapy, and group therapy; case management; crisis intervention 24/7; and consultation to school staff.

All school based staff at the SSD's building level received in-service training on the school mental health team services. The faculty and staff of the school received information on the scope of the services and the interventions that would be offered to the students during the school day. Referral forms and criteria were presented. Staff from the school mental health team participated in building level system teams at all three tiers. When the building level teams participate in PBIS training, they are blended teams with school mental health team representation.

Coaching/Liaison

At the school building level, it is important to identify key individuals who can coach and liaison with the ISF team and provide training and technical support as well as help to make sure the coordination of activities and resources is facilitated within the building. Without the school building ISF coaching efforts, awareness of, access to, and utilization of services are not as effective, lacking a coordinated framework and clear structures and procedures for regular meetings and accountability for any action planning. The team needs to identify and assess who on the team is most likely to be able to connect with and provide needed services and resources to a student or family. While it is important to have the building level support, the school coach and ISF team must have district level support to insure the necessary staffing and resources for optimal implementation and

sustainability of the multi-tiered framework.

Case Study Examples. In SSD, with coaching for both the PBIS and the School-based behavioral health team, the systems were better able to blend supports and work collaboratively together. It was important that both the administration from the SSD and the mental health systems understood the importance and appreciated the goals and process of the ISF. This has allowed for the work to continue without fear of losing funding, staff, or the implementation model.

In the Hanover school district secondary systems teams became much more inclusive. For example, the secondary systems team at Elgin High School included: the School Social Worker, PBIS Building Coordinator, an outside PBIS Coach, several community providers, and, other staff from the district's the partnerships (with the community alliance) were made through the external PBIS Coach matching sites with agencies. Location for delivery of services as well as the demographic and needs of the intervention were considerations for the match.

Screening and Referral Mechanisms/Resource Mapping

At the school level, the ISF teams need to develop clear screening mechanisms to identify students. This screening can include grade, school, or clinic risk assessment questionnaires to identify students at high risk of harm to self or others or reporting high levels of symptomatology that are associated with more serious mental health concerns. Data that already exists for students can also be used to identify students who are at greater risk for mental health concern including youth who have high frequency of absences and/or suspensions, youth who have been expelled, youth who have been retained, and youth who are not making adequately yearly progress on state assessment tests. Other mechanisms for identifying students in need of services at the school level may include training school staff to identify signs and symptoms associated with mental health concerns and then referring students to a school provider for more intensive screening and

intervention if needed. Regardless of what system is used, there needs to be a clearly defined process for identification of mental health concerns in students as well as a coordinated system for making referrals to prevention and treatment resources. Related to the need for a comprehensive referral system once mental health needs are identified, it is important to have a complete understanding of available school and community resources. Mapping services and resources that are available in the school and in the surrounding community to address the mental health needs across the three tiers is an important step for an ISF team. Included in this process is not just listing the services and resources, but having an understanding of who is eligible to access the services and how they can be accessed. Having a system and a protocol that is well developed to monitor and promote follow through with services and resources is also encouraged at the school level.

Case Study Examples. In SSD all staff at the building level received in-service training on SBBH services and how these services could impact their youth and their families. The faculty and staff of the school received information on the scope of the services and the interventions that would be offered to the students during the school day. Referral forms and criteria were presented. Data decision rules have been developed as the continuum of interventions has been developed. Other mental health data such as referrals to higher levels of mental health care, referrals to emergency evaluations, and quality of interventions provided were tracked. A process of resource mapping was conducted and there is ongoing dialogue with other community stakeholders in order to further embed other prevention, interventions and supports along the continuum of the public health model triangle. Resource mapping was completed at both the building and district levels. In addition, community mental health providers were asked to look at the levels of care they provide and how they can convert other services to SBBH. Essentially, all parties were asked to work more effectively and efficiently together.

In Urbana community mental health staff (Director and Program Coordinator) with the assistance of the PBIS TAC set up meetings with key school administrators (Principal, AP's) to introduce ISF to them, as well as have follow-up meetings periodically to deal with larger system issues. PowerPoint presentations of key program features were presented to administrators, school social workers, school psychologist and counselors. There was a discussion of potential target population and how data would be used to identify students in need of services. There was a discussion on how referral process to community provider would happen and who would communicate this information to student's parents. A referral form and program flyers developed for school staff to share with parents. One school contact person was identified for on-going communication (mostly by email) and problem solving as issues arose. This person was a key staff member and was selected for her responsiveness and reliability. One school contact person was identified for on-going communication (mostly by email) and problem solving as issues arose. This was critical in figuring out how to manage the needed paperwork in as streamlined a fashion as possible. Outside community mental staff were added to secondary systems team.

Effective Communication

Another critical component of the ISF framework at the school level is to create a system of communication across school, family, and community partners. The communication system should allow for easy sharing of information across the team and ready access to data to be used for decision-making. As part of the ISF teams there should be documentation of meetings and all action planning with clear mechanisms for distribution through email and other communication mechanisms. When students are receiving services, there needs to be communication across all partners involved in the students' wellbeing to promote coordination of treatment efforts and reduce the likelihood of duplication of efforts. Successes and challenges both need to be shared with the team to promote informed decision-making.

Case Study Examples. The SCSD cross systems workgroup was established to determine the mission, vision and funding priorities for the Promise Zone. The work group (Steering Committee) included leadership (Commissioner/Superintendent/Executive Director or their designee) from the SCDS, the Department of Mental Health, Say Yes to Education Syracuse, OnCare, and other community agencies. Some members of the Steering Committee were also active in OnCare Coordinating Council and Say Yes to Education, allowing for coordination and communication across initiatives.

A multidisciplinary district wide work group (District Leadership Team) was established to develop and enhance tier 2 and 3 systems; merge the work of the PBIS and Response to Intervention workgroups; and braid supports within the PBIS framework. The team included Directors of Elementary Education, Director of Special Education, Director of Pupil Services, Director of the Syracuse Teacher Training Center, Parent Partnership Network, School Social Workers, Community Executive Director of Say Yes to Education, Outpatient Mental Health clinical directors from local community based agencies and other school personnel. The first goal of the District Leadership team was to ensure that the names, composition and functions of Tier 2 and 3 problem solving teams were uniform across school buildings to enhance effectiveness, access to appropriate services for identified children, communication with community based organizations and family engagement.

The development of these system established a support structure and processes to ensure the successful matching of student/family needs with available supports and monitor progress. They help ensure communication, cooperation and collaboration of interconnected supports at the community, district, school and student levels. These systems provide a structured framework to individualize planning with flexible components based on needs and strengths of the student/family. Finally, a process for obtaining stakeholder feedback was established via process monitoring, reports, surveys,

caregiver focus groups and direct communication. In SSD it was clear from the beginning that the ISF framework addressed the school district's concerns and frustrations regarding traditional mental health services that were available to families. Building principals were very frustrated due to the lack of communication and outcomes for children being served through existing mental health services. Housing the program in the school and providing students and families ongoing access made all the difference.

In Urbana having both school and mental health staff at the Secondary Systems Team meetings, meeting twice a month, to talk through systems response and system implementation issues is critical to developing rapport and building relationships with communication and implementation with fidelity. It was critical to have liaisons that understand and can build relationships between the two systems has been key.

In the Creve Coeur school district, the Student Support Team committed to meeting on the 1st Wednesday of every month to ensure regular and consistent communication between team members. This eliminated redundant activities and served as a way to identify any students who might need additional interventions, as well as, discuss progress made with students already receiving interventions. In addition regular communication (once per month at minimum) ensured that team members are aligned and informed about which students are receiving interventions, students' progress during interventions, and which students are beginning to struggle academically or emotionally, and might need additional services beyond the Tier I level. Secondly, this regular communication ensures sustainability, progress measurement and continuity of services for students and their families. Because there is group discussion of emerging issues, there is much more creativity when trying to identify potential solutions. Since each team member serves different functions while supporting students, there is much more information available to assess progress and needs of students and their families.

Summary

This chapter has reviewed the organizational structures and features that are needed at the school level to effectively implement a multi-tiered framework and has provided practical, hands-on examples of each of the features through the integration of case studies. Without the necessary supports and structures to build the foundation for ISF implementation at the school-level, an integrated mental health and PBIS system would not be feasible. A summary of our recommendations at the school level are highlighted below:

Recommended School-level ISF Organizational Structures and Features

1. ISF Teams should include youth, family, and in-school and out of school partners
2. School employed and school community based providers should be involved in all tiers of the ISF system
3. ISF teams should have established clear roles and responsibilities for each of the team members that are well defined and easy to understand
4. Data needs to be shared with the team across all aspects of the ISF process
5. The ISF process requires teaming, a liaison, and a process for requesting assistance
6. The ISF process should reflect the culture and needs of a school and the team should strive to develop a mutual agenda across all partners
7. The ISF process requires a shared family school community partner vision and partnerships across all levels of the ISF process
8. ISF is a framework not a model. It needs to be adaptive to meet the needs of the individual school and community
9. The ISF process requires the building of trust over time across partners and the wiliness to help each other common mission and each partner's goals functioning.
10. The ISF process is about the relationship with information and data and using that information to inform action planning and decision-making.

References

- Anderson, R. L., Lyons, J. S., Giles, D. M., Price, J. A., & Estle, G. (2003). Reliability of the Child and Adolescent Needs and Strengths-Mental Health (CANS-MH) Scale. *Journal of Child and Family Studies, 12*, 279-289.
- Barrett, S., Eber, L., & Weist, M. (2009). Development of interconnected systems framework for school mental health. Concept paper. Columbia, MO: Center for School Mental Health.
- Botvin, G. J., & Griffin, K. W. (2002). Life skills training as a primary prevention approach for adolescent drug abuse and other problem behaviors. *International Journal of Emergency Mental Health, 4*, 41-7.
- Chorpita, B. F., Daleiden, E. L., & Weisz, J. R. (2005). Identifying and selecting the common elements of evidence based interventions: A distillation and matching model. *Mental Health Services Research, 7*, 5-20.
doi: <http://dx.doi.org/10.1007/s11020-005-1962-6>

-
- Cohen, J. A., Mannarino, A. P., & Deblinger, E. (2006). *Treating trauma and traumatic grief in children and adolescents*. New York, NY: Guilford Press.
- Dennis, M. L. (1998). *Global Appraisal of Individual Needs (GAIN) manual: Administration, scoring and interpretation*. Bloomington, IL: Lighthouse Publications.
Retrieved April 25, 2013, from <http://www.chestnut.org/LI/gain/index.html>
- Jaycox, L. H. (2004). *Cognitive Behavioral Intervention for Trauma in Schools*. Longmont, CO: Sopris West Educational Services
- Lochman, J. E., Powell, N. P., Boxmeyer, C. L., & Jimenez-Camargo, L. (2011). Cognitive-behavioral therapy for externalizing disorders in children and adolescents. *Child and Adolescent Psychiatric Clinics of North America*, 20, 305-318.
- May, S., Ard, W. I., Todd, A. W., Horner, R. H., Glasgow, A., Sugai, G., & Sprague, J. (2002). *School-wide Information System*. Eugene, OR: University of Oregon, Educational and Community Supports.
- Stroul, B., Blau, G., & Friedman, R. (2010). *Updating the system of care concept and philosophy*. Washington, DC: Georgetown University Center for Child and Human Development, National Technical Assistance Center for Children's Mental Health.
- Sugai, G., & Horner, R. H. (2002). The evolution of discipline practices: School-wide positive behavior supports. *Child and Family Behavior Therapy*, 24, 23-50.
doi: http://dx.doi.org/10.1300/J019v24n01_03
- Sugai, G., & Horner, R. H. (2009). Defining and describing schoolwide positive behavior support. In W. Sailor, D. Dunlap, G. Sugai, & R. Horner (Eds.), *Handbook of Positive Behavior Support* (pp. 307-327). New York, NY: Springer. doi: http://dx.doi.org/10.1007/978-0-387-09632-2_13
- Webster-Stratton, C. S. (2005). The Incredible Years: A training series for the prevention and treatment of conduct problems in young children. In P. S. Jensen & E. D. Hibbs (Eds.), *Psychosocial treatments for child and adolescent disorders: Empirically based strategies for clinical practice* (2nd ed., pp. 507-555). Washington, DC: American Psychological Association.
-

School-level Practices

STEVEN W. EVANS, BRANDI SIMONSEN, AND GINNY DOLAN

Schools are the de facto mental health support for many students: approximately 20% of students have a mental health disorder and 80% of those students will not receive services (Bazelon Center for Mental Health Law, nd). Therefore, it is critical that school staff members implement evidence-based practices that address the academic, behavioral, and mental health needs of all students. The purpose of this chapter is to provide school teams with a process for identifying, selecting, implementing, monitoring, evaluating, and adapting evidence-based behavioral and mental health practices within a multi-tiered interconnected systems framework (ISF). After describing the process we share a brief story of a school where the staff implemented such a framework that has led to important improvements in student behavior and learning.

In addition to describing the critical features of practices included in an ISF, we also describe strategies school teams can use to identify, select, implement, monitor, evaluate, and adapt practices within the integrated continuum. The ISF process provides an overall strategy for identifying and meeting student needs. The intervention selection process is to be applied when specific school needs are identified and staff are looking for ways to address them. We propose that the consistent implementation of these two sets of procedures over time is far more important than any intervention or program that is adopted towards improving student outcomes.

Critical Features of Practices within an ISF

Practices implemented within an ISF are (a) evidence-based; (b) organized within a multi-tiered continuum of support; (c) available across all school contexts; (d) implemented in collaboration with academic, behavioral, and mental health experts; (e) student- and family-centered; (f) culturally relevant; and (g) data-driven. In the following sections, we

provide descriptions of each critical feature and examples from exemplar schools across Illinois, Maryland, Montana, and Pennsylvania.

1. Employ Evidence-based Practices

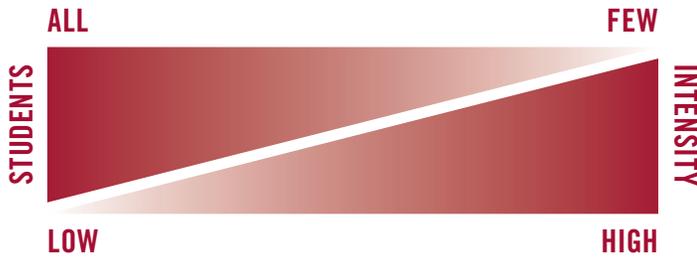
Weisz and colleagues have examined the differences in child outcomes between evidenced-based treatments and typical care in a series of studies (e.g., Weisz, Jensen-Doss & Hawley, 2006). He has consistently reported benefits in treatment response for children and adolescents receiving evidence-based treatments compared to typical care that range from small to medium effects ($ES = 0.30$; Weisz et al., 2006). This evidence, along with others, has led many to call for improvements in our graduate training programs so those entering the field are prepared to implement evidence-based practices. Furthermore, many are studying methods for disseminating evidence-based practices in schools, hospitals and clinics and developing tools to improve integrity. Although it may seem odd that schools and health care providers do not simply require that their employees provide evidence-based practices, there are many obstacles to holding professionals accountable to this standard and research indicates that the use of evidence-based practices is very limited in schools and clinics (Evans, Koch, Brady, Meszaros, & Sadler, 2013; Kelly, Berzin, Frey, Alvarez, Shaffer & O'Brien, 2010). Furthermore, many training directors of graduate programs preparing school mental health (SMH) professionals are also unaware of evidence-based practices (Shernoff, Kratochwill & Stoiber, 2003). The gap between the potential use of evidence-based practices and their actual use make improvement in this area a change that may have the greatest potential to improve the outcomes for youth across the country.

2. Organize Practices within a Multi-tiered Continuum of Support

Practices within an ISF are organized across a continuum that (a) ranges in scope from what all students to a few students need to be successful and (b) varies in intensity from low (supports for all students) to

high (supports for students with chronic or significant academic, behavioral, and/or mental health needs) intensity supports. Figure 1 illustrates the inverse relationship between the scope (i.e., percentage of students supported) and intensity of interventions along the continuum.

Figure 1. Illustration of Scope and Intensity of Intervention Continuum



To address the behavioral and mental health needs of all students, professionals at the Bazelon Center (2006) recommended that schools implement a continuum of positive behavior interventions and supports (PBIS) and school-based mental health supports, which are organized within a system of care framework and developed with individual students and families using a wraparound process. Using this approach, a Pennsylvania school district implemented school mental health (SMH) supports in concert with a full continuum of PBIS practices. School-based PBIS teams received training in PBIS, and SMH teams received training in a variety of intensive clinical practices (e.g., trauma informed care, family systems, positive behavior support). School staff implemented Tier 1 PBIS practices for all students across all settings and delivered intensified practices based on student need (indicated by data), and SMH staff implemented SMH practices based on student need within and across the three tiers.

3. Consider Practices across All School Contexts

Although all school staff members should implement Tier 1 practices with all students across all school settings (e.g., classroom, hallway, cafeteria, transportation), classroom practices are often left to individual teachers to design and implement.

Unfortunately, teachers often (a) receive minimal pre- and in-service support in classroom management and behavior support and (b) report challenges with managing student behavior that are associated with many teachers leaving the profession within their first 5 years (Begeny & Martens, 2006; Dutton Tillery, Varjas, Meyers, & Collins, 2010; Martin, Shoho, Yin, Kaufman, & McLean, 2003; Rollin, Subotnik, & Bassford, & Smulson, 2008). Further, without training in positive and proactive supports, teachers may rely on reactive management techniques that lead to negative outcomes for students, especially students with emotional and behavioral needs (Carr, Taylor & Robinson, 1991; Kauffman & Brigham, 2009). Therefore, it is critical that school leaders (e.g., administrators, mentor teachers, school psychologists, counselors, social workers) provide professional development supports that enable teachers to positively, proactively, and effectively engage students in instruction and support students' behavioral needs.

Further, it is critical to develop teachers' and other staff members' capacity to support students who require additional tiers of support by (a) providing training in PBIS Tier 2 and 3 practices and (b) forming collaborative relationships among teachers and mental health professionals to support the mental health needs of all students. Through both professional development supports and collaborative partnerships, it becomes possible to support students' academic, behavioral, and mental health needs across all school contexts.

4. Form Partnerships among Academic, Behavioral, and Mental Health Providers

Practices should be identified, selected, monitored, evaluated, and adapted by a multi-disciplinary leadership team that is representative of (a) the school community (e.g., grade levels, content areas); (b) various areas of expertise, including academic, behavioral, and mental health; and (c) stakeholders (i.e., professionals, family members, students, community members). For example, staff members from one Illinois high school invited service providers from community agencies to participate in their school-wide Tier 2

team. This collaboration allowed the school to develop targeted-group interventions, facilitated by in-school and community-based providers, for students. Similarly, staff members from another Illinois school included parents, community providers, and youth in a work group charged with identifying a targeted intervention to support youth with a history of trauma. Once the workgroup selected an intervention a team comprising administration, PBIS technical assistance coordinators, and community mental health providers coordinated implementation of the selected intervention. Through active collaboration, team members maximize the likelihood that the academic, behavioral, and mental health needs of all students are addressed.

5. Engage Families

In addition to ensuring family members are represented on school-wide leadership teams, school staff should ensure that practices implemented within an ISF engage families. Like practices implemented to support students, practices implemented to support and engage families may be organized along a continuum, ranging from what all families need to what a few families need. We suggest that all families benefit from positive communication (written, verbal) and invitations to school-based educational and social activities. Some families may need additional support (e.g., transportation, child care) to access these Tier 1 engagement activities. In addition, some families may need additional supports (e.g., training related to supporting challenging behavior at home, access to community mental health services) that can be referred or facilitated by school-based mental health providers. Furthermore, the parents of students receiving services at tiers two or three warrant some extra attention to establish a trusted relationship with at least one educator or SMH professional.

6. Consider Culture

Culture should be considered across each element of an ISF framework (e.g., Vincent, Randall, Cartledge,

Tobin, & Swain-Bradway, 2011). Practices selected for implementation within an ISF should be relevant to the local context and culture of students. Data used to guide the selection of practices should be culturally valid. Further, cultural knowledge and self-awareness on the part of staff is necessary to ensure that implementation is appropriate for the local school context. Finally, outcomes should be disaggregated and examined to ensure optimal results are achieved for all populations and sub-populations of students. For example, a school in Maryland experienced positive outcomes when they supported teachers' cultural awareness and relevant implementation of classroom strategies (e.g., building relationships, connecting to the curriculum, communicating) through implementation of Double Check (Hershfeldt et al., 2009) in classrooms—a promising intervention to support the cultural competence of teachers and cultural relevance of academic and behavior practices in the classroom.

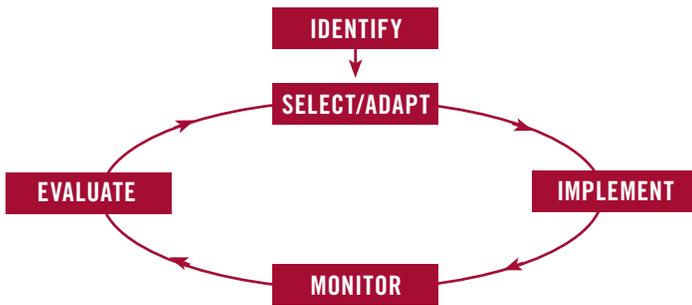
7. Use Data

School teams should use data to drive selection of prevention and intervention strategies, implementation integrity, and staff training. Assessment should guide services. For example, if there is a high rate of substance use in the student population, then staff should receive training on evidence-based school-based substance use prevention programs and implementation of these programs should be a high priority. Similarly, if a large portion of the reports of bullying and aggression are occurring in the bathrooms, then increasing monitoring in the bathrooms may be an easier and more effective solution than implementing a large school-wide bullying prevention program. Once strategies and services are selected, then administrators and school leaders should cultivate professional learning communities with coaching support to enable teachers to develop competencies required for implementation. Administrators and school leaders should also closely monitor the implementation fidelity and outcomes, as highlighted in the next section and described in Chapter 5.

Process for Installing Practices within an ISF

Figure 2 illustrates the procedural steps involved with installing practices. As illustrated, once practices are identified, schools engage in a cycle of using data (represented by blue arrows) to select, implement, monitor, evaluate, and adapt individual practices across time.

Figure 2. Process for Installing Practices within an ISF



1. Identify Practices

School administrators should examine their school data (as described in Chapter 5) to identify

Table 1. Considerations for practices across implementation tiers and contexts

	SCHOOL	CLASSROOM	INDIVIDUAL	HOME/COMMUNITY
TIER 1 (ALL)	<ul style="list-style-type: none"> School and mental health professionals work together for indicated prevention programming (e.g., bullying, substance use, pregnancy) Explicit instruction of positive expectations within all school settings, based on a school-wide matrix 	<ul style="list-style-type: none"> Effective instructional and classroom management practices for all Positive and high expectations for all students Explicit instruction of positive expectations within all classroom routines, based on classroom matrix 	<ul style="list-style-type: none"> All students, including students receiving Tier 2 and 3 interventions, access supports included in Tier 1 Students’ Tier 2 and 3 plans should be developed to align with Tier 1 or school-wide supports 	<ul style="list-style-type: none"> Implement strategies to engage all parents and families. Consider the following examples: Parent workshops, where parents–trainers work with other parents, electronic or web-based resources available for all families, “mental health first-aid training” Increase opportunities for positive communications with families

areas of need, and select potentially effective practices to support identified students in the areas of indicated need (e.g., academic, behavioral, mental health) across all school contexts (i.e., school-wide, classroom settings, individual student supports, and family). To support implementation of evidence-based practices, school teams may access resources available at the national PBIS Center (<http://www.pbis.org/school/default.aspx>) related to implementing tier 1 practices in non-classroom and classroom settings, tier 2 practices, and tier 3 practices. To identify empirically-supported school-based mental health practices, schools may also consult the SAMSHA’s National Registry of Evidence-Based Programs and Practices (<http://www.nrepp.samhsa.gov/Search.aspx>) which provides information about evidence-based practices.

One helpful exercise may be a map of available resources across each tier and school setting. Table 1 presents examples and considerations for practices across implementation tiers (rows) and contexts (columns), which may be helpful as schools map their own resources.

Table 1. Considerations for practices across implementation tiers and contexts (continued)

	SCHOOL	CLASSROOM	INDIVIDUAL	HOME/COMMUNITY
TIER 2 (SOME)	<ul style="list-style-type: none"> • A school-wide team meets regularly, reviews data to identify students who require additional support, selects among evidence-based Tier 2 interventions, and monitors staff members' implementation 	<ul style="list-style-type: none"> • Mental health supports push-in to classroom setting to assist students who are at-risk • Teachers implement classroom components of Check-in/Check-out (CICO) or other Tier 2 practices with fidelity 	<ul style="list-style-type: none"> • Targeted-group interventions (e.g., CICO) implemented by in-school and community-based providers • Teachers provide indicated behavioral interventions for students identified as needing them (e.g., daily report cards, organization interventions) 	<ul style="list-style-type: none"> • Invest in interventions that build and strengthen the link between home and school (e.g., CICO) • Increase the frequency of family contacts, and provide supports required for families to effectively engage with school and vice versa • Staff develop enhanced relationships with parents of those students exhibiting problems
TIER 3 (FEW)	<ul style="list-style-type: none"> • A school-wide team meets regularly, reviews data to identify students who require additional support, selects among evidence-based Tier 3 interventions, and monitors staff members' implementation 	<ul style="list-style-type: none"> • Teachers implement classroom components of function-based behavior support plan or other plan components developed through a wraparound process 	<ul style="list-style-type: none"> • Intensive, individualized, function-based behavioral interventions that include antecedent, instructional, and consequence strategies • School mental health professionals provide evidence-based treatment services to indicated students (e.g., cognitive behavioral therapy) • Additional student and family supports developed through a wraparound process 	<ul style="list-style-type: none"> • Actively engage families in positive activities (e.g., cookouts) • Engage families in developing function-based or other supports through person-centered planning and/or wraparound processes • Staff member with established relationship with parents of identified students, work closely and communicate regularly about services and progress

Although the practices identified in Table 1 may apply to many schools, they may not be necessary, feasible, or contextually relevant for all schools. Thus, administrators, educators and school mental health professionals should engage in a data-driven process to select appropriate practices for their schools.

2. Select Practices

When selecting practices it is important to first determine the goal of the service. For example, there has been a dramatic increase in the number of adolescents diagnosed with ADHD in the last twenty years. Due to this increase and the determination that students diagnosed with ADHD may receive services through special education under the Other Health Impaired category (Davilla, Williams & MacDonald, 1991), services for these students have expanded steadily in the last two decades. Many school professionals have selected practices such as providing extended time on tests and with assignments, providing students with copies of teachers' notes, and reducing or eliminating assignments (Spiel, Evans, LeBuhn, & Langberg, 2012; Wagner et al., 2006). The goal of these practices is to help students succeed in classes in spite of the impairment experienced as a result of their disorder. These services essentially reduce the expectations for the student (i.e., do not have to work efficiently, or take notes, or complete work independently). Although, they may help the student succeed in classes, these services do not enhance the competencies of the students receiving them. In other words, a student may receive extended time on tests and assignments for years and this will not lead to any improvements in the efficiency with which the student works. As a result, these services are not considered interventions and are not evidence-based (Harrison, Bunford, Evans & Owens, in press). Interventions are services that help students improve their skills to allow them to progress towards being able to meet age-appropriate expectations for functioning independently. When selecting services it is important to know the goal of the educators, administrators and SMH professionals in the school.

Some have argued that interventions that are designed to improve the functioning of the students should be a higher priority than frequently used services that reduce expectations, but allow a student to succeed in classes (e.g., extended time, providing notes). A recently published model of care provision for youth with emotional and behavioral problems listed "accommodations" as a last priority, behind medications and interventions, for helping students (Evans, Owens, Mautone, DuPaul & Power, in press). They argue that the role of the education system is consistent with a life course perspective focused on preparing youth to function independently outside of school instead of making their success dependent on a reduction in expectations. When selecting services, it will be important to determine the goal for the services and then select those services that will help school professionals achieve that goal.

After identifying the goal for the services, it is important to match the service to the need. For example, if there are many students in a school who have experienced trauma due to severe weather (e.g., hurricane), community violence, suicide or other factors, then one service that may be considered is Cognitive Behavioral Intervention for Trauma in Schools (CBITS: Jaycox, 2004). Because many of the causes of trauma cannot be prevented, a priority for intervention is indicated in this situation. Typical "counseling" or "process groups" are not indicated here as there is a potential for making problems worse when students who have experienced trauma participate in these eclectic services. A key to providing CBITS is to obtain training for school mental health professionals and their supervisors. Obtaining the materials and training is available online at (<http://cbitsprogram.org>) as well as at some professional conferences. In order to implement the program with integrity, a system for monitoring implementation and supervising cases should be established between the school mental health professionals providing CBITS and their supervisor. Sustaining the implementation over time is often dependent on the presence of a consistent supervision process that includes attention to integrity.

One of the common obstacles to selecting a service is identifying who is going to implement it and who is going to provide supervision. In many schools, the problem is not so much whether they have school mental health professionals employed (e.g., school counselors, school social workers); the problem is often the tasks that are prioritized for these individuals. For example, many school counselors and social workers complete tasks such as scheduling, tracking attendance, distributing information about colleges and careers in the military, proctoring examinations, and other administrative tasks. Many of these jobs could be completed by a high school graduate and certainly do not require someone with a graduate degree in counseling, social work, or psychology. If administrators and school mental health professionals prioritize the need to address the emotional and behavioral needs of students for these staff, then the problem of identifying who can implement services may be resolved and allow for the selection of services based on the needs of the students.

3. Implement Practices

After selecting the service to provide it is time to plan for implementation and assessment and begin training. Planning involves many logistical aspects of implementation including finding the time for it to be provided and the people who will provide the service and the supervision. In addition, space can be a problem in some schools as services may require a room that facilitates confidential discussions (e.g., Check & Connect; <http://checkandconnect.umn.edu>).

In addition to addressing many of the logistical issues of implementing the service, procedures for conducting assessment must be established. As with selecting a service, the purpose of the service should also guide the selection of assessment. Because the selection of the service was probably partly based on need identified through assessment (see Figure 2), the assessment procedures that informed the educators that the service was needed should probably be continued. This should help one know whether the selected services meet the identified need. For example, a school team

assigned to assess and measure needs may have gathered data that indicated that many students in their elementary school were being sent to the office for disciplinary reasons every day. This is taking a lot of time for the administrators to manage and suggests that classroom behavior management procedures may be inadequate. As a result, the team selected a training program for classroom teachers in managing disruptive behavior. Basic procedures such as establishing routines, clear classroom rules, and effective techniques for managing students who break the rules are a major part of the training and the follow-up consultation being provided. In addition, the teachers also learn how to provide a daily report card (DRC) for students who continue to be disruptive after basic classroom management procedures are in place (Volpe & Fabiano, 2013). One of the primary measures of the effects of this training is the continued tracking of daily office referrals for discipline.

In addition to assessing office referrals, the staff also establish a plan to monitor integrity. Key elements of the DRC are identified and the school psychologist consulting and supervising the implementation process learns how to observe and track these teacher behaviors. Regular performance feedback is provided to teachers over time that includes consideration of their implementation integrity data as well as the behavior of the student targeted with the DRC. Furthermore, the school psychologist works with teachers to shape their expectations about the intervention, informing them that response to the DRC may take many weeks of consistent implementation before it is effective and substantial modifications should probably not be implemented until at least one month after starting the DRC (Owens et al., 2012). This consultation and support including performance-feedback is a key feature of the training that contributes to obtaining optimal outcomes from the students.

When training and services are provided it can help to sustain the practices when there is a level of accountability included in the process. In the example noted above, teachers who make multiple office referrals for discipline problems may be required to participate in

the classroom management training and the consultation that follows. The school psychologist serving as the consultant may be required to submit monthly reports of implementation integrity and student response to intervention data to the principal. Included in this report may be the number of student discipline office referrals and this number may also be regularly updated at staff meetings as an index of the degree with which the adopted services have met the identified need. These accountability tools can help sustain a service over time and inform staff if the selection of services and subsequent implementation is actually improving the identified problem.

4. Monitor, Evaluate, and Adapt Practices

If the data collected during the process described above indicate that student behavior is improving and the identified need is being met, then the process has served its purpose and the services and assessment should continue. Sometimes the selected service or implementation does not adequately address the need and changes are required. If data suggest that this may be the case, there are a couple steps to follow. First, the assessment procedures, selection of the service, and implementation plan should be checked against the need and goals for the service. Second, modifications to the plan should be considered and implemented if warranted. Although these are listed here as specific steps, the process is cyclical and data from assessments should continuously guide educators through the process portrayed in Figure 2.

Data from the assessments guide the process so it is worth checking to see if the measures are valid indices of the need and are being interpreted correctly. For example, we can consider the situation described above where students are frequently sent to the office for discipline reasons. There may be data indicating that teachers are making large improvements in their management of classroom behavior following the training; however, discipline referrals to the office may have only minimally declined. Upon further investigation it may be discovered that detentions

assigned by teachers are rarely enforced and those provided by administrators are almost always enforced. As a result, teachers refer students to the office for detentions because teachers and students know that when a teacher assigns a detention, the student does not really need to attend and the negative punishment effect of detention is not salient. Thus, in this situation, the reasons for the problem identified through the assessment were not correctly identified which led to a generally useful service, but not one that adequately addressed the problem.

When services are not meeting the identified need it is also worth assessing the integrity with which the interventions are being provided. For example, a team of educators, administrators and SMH professionals at one high school reviewed the truancy data and noticed that there was a group of six to ten students who accounted for almost one-third of the truancy in their school. Follow-up investigation with the schoolwide database system revealed that these students were receiving poor grades and not completing work in their classes. School counselors asked their teachers about the students and individually met with the students. They concluded that one of the problems contributing to the truancy and poor school performance was that all of these students were exhibiting signs of depression. The counselor recommended that she provide a weekly group for the students using the evidence-based intervention of cognitive-behavioral therapy (CBT). After a few weeks of CBT and other services there was little to no progress and the school psychologist was asked to consult. After observing one of the CBT groups and talking to the counselor the school psychologist concluded that the counselor was not providing CBT. Instead of providing a service that included the key elements of behavioral activation and cognitive restructuring (typically using three and five column sheets), the counselor had been trained that any intervention involving talking about their thoughts, behaviors and feelings is considered CBT. Thus, the group was not really the evidence-based intervention that was intended. Had there not been a check on the integrity of the intervention, it is unlikely that any improvement in mood, school engagement,

and attendance would have occurred for these students that would have been attributable to the group sessions. Similarly, checks on the integrity of other interventions such as classroom management, DRCs, organization interventions, and evidence-based group or individual interventions, conducted by professionals competent in their implementation are a critically important part of the “evaluate” process in Figure 2.

School Example

Staff and administrators at many schools are looking for a way to address problems that they face due to poverty, emotional and behavioral problems and academic underperformance. One such school was Lindale Middle School (LMS) and staff at this school implemented an ISF with PBIS and SMH to improve the outcomes of their students. More than ten years ago, LMS was a school in crisis. LMS, a school of nearly eight hundred students with 45% minority population, sits on the outskirts of Baltimore City. There was a 30% increase in poverty rates among the student population over the last six years. Student disruptions involving police action were increasing steadily. Central office staff were required to walk the halls to provide an adult presence and monitor student behavior. The school was in School Improvement, two years in a row, a state designation for poor performing schools. Since that time, LMS is a turnaround school.

Staff at the school implemented an ISF problem solving process as described above to identify their needs and implement new approaches. Using data, they established procedures and teams of teachers to address specific problems. For example, they adopted a problem-solving model called “Collaborative Decision Making” to guide the work of their multidisciplinary team who addressed the needs of students needing targeted interventions. This involved training and leadership in the school so staff came to be able to identify problems in objective, observable, and measurable terms. Goals were established and progress monitored. As a result of this process, they came to identify specific needs for

interventions and using a process similar to the one described above; they selected Check-in/Check-out (CICO) as an evidence based intervention to be used as part of their Tier 2 services. This intervention is similar to Daily Report Cards (see Volpe & Fabiano, 2013) and involves frequent recording of rule adherence and the use of school and home contingencies based on daily success (see case study example Todd, Campbell, Meyer & Horner, 2008). To assure consistent implementation and facilitate student success, they trained paraprofessionals to support CICO in the classroom setting through frequent classroom monitoring and encouragement. In addition, staff at LMS chose to supplement their school mental health staff by bringing community mental health professionals to the school. These Tier 3 services were provided to students needing services at this level and who qualified for Medicaid.

As a result of this process, LMS implemented a multi-tiered system of support, including schools-wide PBIS and school mental health services. The results of implementing this process over time have been impressive. The school had a 54% reduction in referrals and their rate of identification for Special Education Services is relatively low. Although state measurements of academic gains have changed in the past two years, the School Performance Index (an index used for all Maryland schools based on state assessments for all student groups) was at or above schools of similar demographic and enrollment metrics.

The ISF process does not end. LMS continues to follow the procedures to continue to improve how they integrate PBIS and school mental health services to meet the needs of students. The most important step for continuous improvement is not the implementation of any individual intervention, but it is the development and maintenance of the teams who manage the process.

References

- Bazelon Center for Mental Health Law. (2006). *Way to go: School Success for Children with Mental Health Care Needs*. Washington, DC: Author. Retrieved from http://www.bazelon.org/LinkClick.aspx?fileticket=j2MGBkHXv_8%3d&tabid=104
- Bazelon Center for Mental Health Law. (nd). *Facts on Children's Mental Health*. Washington, DC: Author. Retrieved from <http://www.bazelon.org/LinkClick.aspx?fileticket=Nc7DS9D8EQE%3d&tabid=378>
- Begeny, J. C., & Martens, B. K. (2006). Assessing pre-service teachers' training in empirically-validated behavioral instruction practices. *School Psychology Quarterly, 21*, 262-285.
doi: <http://dx.doi.org/10.1521/scpq.2006.21.3.262>
- Carr, E. G., Taylor, J. C., & Robinson, S. (1991). The effects of severe behavior problems in children on the teaching behavior of adults. *Journal of Applied Behavior Analysis, 24*, 523-535.
doi: <http://dx.doi.org/10.1901/jaba.1991.24-523>
- Davilla, R. R., Williams, M. L., & MacDonald, J. T. (1991). *Clarification of policy to address the needs of children with attention deficit disorders within general and/or special education*. Memo from the United States Department of Education. Washington, DC.
- Dutton Tillery, A., Varjas, K., Meyers, J., & Collins, A. S. (2010). General education teachers' perceptions of behavior management and intervention strategies. *Journal of Positive Behavior Interventions, 12*, 86-102.
doi: <http://dx.doi.org/10.1177/1098300708330879>
- Evans, S. W., Koch, J. R., Brady, C., Meszaros, P., & Sadler, J. (2013). Community and school mental health professionals' knowledge and use of evidence based substance use prevention programs. *Administration and Policy in Mental Health and Mental Health Services Research, 40*, 19-330.
doi: <http://dx.doi.org/10.1007/s10488-012-0422-z>
- Evans, S.W., Owens, J. S., Mautone, J.A., DuPaul, G.J., & Power T.J. (in press). Toward a comprehensive, Life Course Model of care for youth with ADHD. In M. Weist, N. Lever, C. Bradshaw, & J. Owens (Eds.), *Handbook of School Mental Health* (2nd ed.). New York, NY: Springer.
- Harrison, J., Bunford, N., Evans, S. W., & Owens, J. S. (in press). Educational accommodations for students with behavioral challenges: A systematic review of the literature. *Review of Educational Research*.
- Hershfeldt, P. A., Sechrest, R., Pell, K. L., Rosenberg, M. S., Bradshaw, C. P., & Leaf, P. J. (2009). Double-Check: A framework of cultural responsiveness applied to classroom behavior. *TEACHING Exceptional Children Plus, 6*, Article 5.
- Jaycox, L. (2004). *Cognitive Behavioral Intervention for Trauma in Schools*. Longmont, CO: Sopris Wes Educational Services.

-
- Kauffman, J. M., & Brigham, F. J. (2009). *Working with Troubled Children*. Verona, WI: Full Court Press.
- Kelly, M. S., Berzin, S. C., Frey, A., Alvarez, M., Shaffer, G., & O'Brien, K. (2010). The state of school social work: Findings from the national school social work survey. *School Mental Health, 2*, 132-141.
doi: <http://dx.doi.org/10.1007/s12310-010-9034-5>
- Martin, N. K., Shoho, A. R., Yin, Z., Kaufman, A. S., & McLean, J. E. (2003). Attitudes and beliefs regarding classroom management styles: The impact of teacher preparation vs. experience. *Research in the Schools, 10*, 29-34.
- Owens, J. S., Holdaway, A. S., Zoromski, A. K., Evans, S. W., Himawan, L. K., Girio-Herrera, E., & Murphy, C. (2012). Incremental benefits of a daily report card intervention over time for youth with disruptive behavior. *Behavior Therapy, 43*, 848-861.
doi: <http://dx.doi.org/10.1016/j.beth.2012.02.002>
- Rollin, S. A., Subotnik, R. F., Bassford, M., & Smulson, J. (2008). Bringing psychological science to the forefront of educational policy: Collaborative efforts of the American Psychological Association's coalition for psychology in the schools and education. *Psychology in the Schools, 45*, 194-205.
doi: <http://dx.doi.org/10.1002/pits.20290>
- Shernoff, E. S., Kratochwill, T. R., & Stoiber, K. C. (2003). Training in evidence-based interventions (EBIs): What are school psychology programs teaching? *Journal of School Psychology, 41*, 467-483.
doi: <http://dx.doi.org/10.1016/j.jsp.2003.07.002>
- Spiel, C. F., Evans, S. W., LeBuhn, K., & Langberg, J. M. (2012, November). *Special education services for adolescents with ADHD: What is given and to whom?* Poster presented at the annual meeting of the Association for Behavioral and Cognitive Therapies, National Harbor, MD.
- Todd, A. W., Campbell, A. L., Meyer, G. G., & Horner, R. H. (2008). The effects of a targeted intervention to reduce problem behaviors: Elementary school implementation of Check-In-Check Out. *Journal of Positive Behavior Interventions, 10*, 46-55.
doi: <http://dx.doi.org/10.1177/1098300707311369>
- Vincent, C. G., Randall, C., Cartledge, G., Tobin, T. J., & Swain-Bradway, J. (2011). Toward a conceptual integration of cultural responsiveness and schoolwide positive behavior support. *Journal of Positive Behavior Interventions, 13*, 219-229.
doi: <http://dx.doi.org/10.1177/1098300711399765>
- Volpe, R. J. & Fabiano, G. A. (2013). *Daily Behavior Report Cards: An Evidence-Based System of Assessment and Intervention*. New York, NY: The Guilford Press.
- Wagner, M., Friend, M., Bursuck, W. D., Kutash, K., Duchnowski, A. J., Sumi, & W. C., Epstein, M. H. (2006). Educating students with emotional disturbances: A national perspective on school programs and services.
-

Journal of Emotional and Behavioral Disorders, 14, 12-30.

doi: <http://dx.doi.org/10.1177/10634266060140010201>

Weisz, J. R., Jensen-Doss, A., & Hawley, K. M. (2006). Evidence-based youth psychotherapies versus usual clinical care. *American Psychologist*, 61, 671-689.

doi: <http://dx.doi.org/10.1037/0003-066X.61.7.671>

Interconnecting School and Mental Health Data to Improve Student Outcomes

DAN MAGGIN and CARRIE MILLS

The collection and interpretation of data has become an essential component of effective practice across educational and healthcare settings (Dowdy, Ritchey, & Kamphaus, 2010; Sugai & Horner, 2009). Data refers to the information obtained from a set of planned and deliberately enacted activities designed to better understand an identified issue or problem. As such, data constitutes the foundation for successful implementation and evaluation of the practices and systems described throughout this monograph. An integrated school and mental health data system is needed to ensure that a comprehensive, efficient system of care is available for students in need. Much of the data used to address the range of programming questions confronted by school personnel and mental health providers overlaps, making the integration of these systems an intuitive move towards intentional, efficient collaboration, and ultimately, improved student outcomes. The purpose of this chapter is to describe the underlying logic and implementation features of an Interconnected Systems Framework (ISF) for collecting, analyzing, and interpreting data to inform decisions related to achieving valued behavioral and mental health outcomes for students across the continuum of need. The data framework described in the following sections will provide a blueprint, supported by the activities of an exemplar site, to guide the integration of school and mental health data. Emphasis has been placed on the following three core activities: (a) the development of clearly stated questions for the successful evaluation of locally important issues and problems, (b) the selection of appropriate measures and data collection techniques that can be feasibly implemented to address the identified concerns, and (c) the implementation of procedures to utilize this information to inform decision-making at the school, classroom, and student levels. Additional chapters in this monograph will address similar efforts at the district, state and federal levels, complementing

the information presented here.

Challenges for Integrating School and Mental Health Data Systems

School and mental health professionals utilize data to inform programming decisions for individual students. Not surprisingly, there is often a great deal of overlapping, yet useful information to be shared across school personnel and mental health providers working with the same students. Unfortunately, collaboration among these professionals often remains disassociated, limiting the potential reach of both groups to impact the lives of students with behavioral and mental health needs and their families. The tendency for members of these professional groups to remain isolated is related, in part, to the absence of clearly defined roles and the lack of a model for initiating collaboration (Widmark, Sandahl, Piuva, & Bergman, 2011).

Further complicating the integration of data associated with SMH and PBIS activities are the general challenges of developing a methodical approach to organizing data collection activities and the resulting information to answer questions of local import. Considering that effective data collection systems are driven by clearly stated evaluation questions, ill-defined questions often result in the collection of superfluous, fragmented, or unnecessary information that can overwhelm staff and undermine data gathering and interpretation efforts. Despite the utility of developing evaluation questions, school and mental health data collection activities are often developed without such purposeful focus. As a result, the information needed to make meaningful decisions is often unavailable. Even when the appropriate information has been obtained, school personnel and mental health providers often lack decision making routines that are accountable, transparent, and result in readily distributable information and action plans. As such, the successful integration of school and mental health data will require individuals from both professions to work together to develop meaningful evaluation questions, feasible data collection

strategies, and effective data analysis and dissemination procedures.

Advantages of an Interconnected Data Framework

Data is essential for evaluating the effectiveness of school and mental health practices. The purposive collection of targeted information reflects a corresponding shift in mental health and education toward the adoption and successful implementation of evidence-based interventions. Data-based evaluation allows individuals charged with making programming decisions to consider objective information to determine whether a given practice, strategy, or policy results in the intended outcome and based on that information, consider whether a particular school or mental health initiative should be retained, removed, or revised. Accurate data is crucial for making objective, transparent and effective programming decisions, regardless of whether the data is focused on enhanced monitoring of individual student progress, or broader in scope, such as evaluation of school-level policy and procedures.

Although these programming decisions typically relate to student functioning, an important but often overlooked aspect of comprehensive evaluation is the need to evaluate practitioner and system competence. That is, data is needed to provide assurance that the selected practices and core systems features are being implemented with fidelity, or as intended. Without appropriate procedures to monitor the fidelity of program and policy implementation, school personnel and mental health providers are not able to clearly demonstrate that student responses are due to the selected intervention, program, or policy. Measuring the extent and consistency of implementation is therefore critical to determining if the intervention is in fact, related to the observed student outcomes. Therefore, advantages of an interconnected data framework include enhanced capacity to monitor fidelity and intervention effectiveness, as well as increased objectivity and transparency through data-driven decision making.

Additional advantages arise from an intentional focus on and commitment to developing an interconnected data framework characterized by clarity, comprehensiveness, and flexibility. Clarity refers to the creation of a coherent and comprehensible evaluation plan that supports the interpretation of data to address local needs in an accountable fashion. As mentioned above, the development of clear questions are needed to ensure that the data collection methods match the problem being addressed. Comprehensiveness refers to the ability of school personnel to address a broad range of questions relating to students and practices at various tiers. A comprehensive data system allows for and supports access to different kinds of data for different purposes at different levels of the system. In other words, a comprehensive approach considers the interrelatedness of domains (e.g., student academic, behavioral, and mental health functioning) and addresses the preventative, secondary, and tertiary needs of the student population. Finally, the flexibility of an interconnected data framework allows school and mental health decision makers to modify the system as needs change, and to select appropriate indicators to evaluate student functioning from a developmental perspective. Put another way, questions and data points may change depending on the age, or other characteristics, of the identified students and the flexibility of the data system allows school personnel to adjust their methods



A Framework for Interconnecting School Behavior and Mental Health Data

Below, we present a few features for teams to consider when developing an interconnected data framework. Movement toward a systemic strategy for selecting and implementing evidence-based practice requires the development of an analogous approach to assessment and evaluation across each level of a tiered model. An interconnected framework allows school-employed and community mental health providers to program effectively across the tiers of intervention to address these identified needs. This framework also equips key stakeholders with a shared language to facilitate communication, highlights common interests across key indicators, offers timely access to relevant, meaningful data, and provides a basis for shared decision-making and accountability.

Assumptions for the Development of an Interconnected Data Framework

The adoption of an interconnected data framework requires school personnel to begin with some underlying assumptions. These assumptions are important because they lay the foundation for the development of a clear, comprehensive, and flexible system to be articulated. Specifically, school and community partners should (a) consider data that relates to the “whole” child, (b) implement a data system that supports interventions at each tier, (c) identify appropriate data collection methods and tools to address the diverse range of questions to be addressed, and (d) contemplate the feasibility of the data collection procedures.

Consider the whole child. Given the increasing recognition of the interrelated nature of critical outcomes across academic and mental health disciplines, historic distinctions separating these fields have become unclear. That is, the connectedness of mental health and academic achievements has been well established despite continued debate on the direction (Durlak, Weissberg,

Dymnicki, Taylor, & Schellinger, 2011; Roeser, Eccles, & Freedman-Doan, 1999; Zins, Bloodworth, Weissberg, & Walberg, 2004). Therefore, the questions developed by school teams are likely to involve data at the intersection of learning and emotional and behavioral domains. A “whole child” approach allows teams to consider comprehensive assessment of student needs across domains and supports the efficient selection and application of appropriate interventions. Further, data focused on the whole child will not only include traditional, outcome indicators tied to individual student performance or functioning, such as grades or mental health symptoms, but may also incorporate measures assessing broader contextual factors (e.g., school climate). To further illustrate this diversity, measures may focus on process, such as implementation fidelity, or may include more subjective, repeated measures over time to assess educational or treatment gains, such as perceptions of change by parents and teachers. Finally, there is also movement towards integrating educational and mental health data across systems and environments. For example, educational and mental health indicators can also be connected to salient indicators in the broader community context, such as juvenile crime statistics or public health data (e.g., substance use).

Consider data within a tiered model. Positive Behavioral Interventions and Supports (PBIS) and Expanded School Mental Health (ESMH) both espouse a tiered approach to intervention (Weist et al., 2005; Sugai & Horner, 2009). Despite this shared structure, significant variability exists between these two approaches with respect to their relative focus across the tiers, as well as the quality of interventions and implementation within each tier. Arguably, the preponderance of SMH, in practice, has largely focused on the higher, more intensive tier of a three-tiered model, while PBIS, in practice, appears to have more developed structures and systems at the lower tiers. In order to integrate these two approaches, data systems will need to be developed to equip school personnel to collect relevant, high-quality data that will inform intervention and evaluation efforts within and across

each tier. Specifically, the data, or indicators, at each tier will be specific to the unit of analysis (e. g., student, classroom, or school-wide), but can also be aggregated or disaggregated, when appropriate, to address questions of local interest. For example, when addressing student safety, a school team may examine critical incident data for individual students, yet aggregate this information to examine school-level data to identify high risk situations (e.g., locations or times of day). According to Kelly (2011), despite an increased emphasis and innovation to develop data systems and integrate them into schools, “a large disparity exists between schools that have successfully integrated three-tier concepts and DDDM [data-driven decision-making] into their schools and those that are still struggling” (p.3).

Consider appropriate types and sources of data.

Consistent with best practices in assessment and evaluation, effective problem solving and decision-making depends upon accurate information or data. Whether this data is used to identify problem areas, generate hypotheses, or inform decisions around intervention, the most reliable and valid assessments arise from consideration of multiple types and sources of data. Examples of the types and sources of data that may be considered as part of an integrated data system include, but are not limited to, reviews of permanent products, rating scales, surveys, or interviews completed by students, caregivers, school staff and/or mental health providers, as well as direct observations of students and/or adult behavior. In addition, data collection may be relatively standardized across students (e.g., such as statewide assessments) or more individualized (e.g., progress monitoring via curriculum based assessment), assess characteristics internal or external to the person, reflect ipsative or normative comparisons, and may be exploratory or confirmatory. Whereas school administrators are likely to examine gross patterns of student behavior typically captured through global measures, such as office discipline referrals (ODRs) and universal screening data, teachers might seek more refined measures of student behavior such as those provided through ongoing, targeted progress monitoring techniques. While detailing all possible types and sources

of data that could be utilized in an ISF is beyond the scope of this chapter, it is sufficient to highlight the breadth and scope of the types of questions that school and mental health personnel will need to consider.

Consider the feasibility of the data being collected.

A common refrain from school personnel and mental health professionals is that despite the importance of using data to guide practice, it can often seem overwhelming. It is true that data collection requires concerted effort across several domains and people. The development of a comprehensive and flexible interconnected framework, therefore, necessitates candid discussions regarding feasibility from the outset. These discussions are likely to differ from school to school and district to district depending on the targeted issues, available resources, and institutional preparedness for collecting data. Regardless, the development and installation of a successful approach to systemic data collection requires stakeholders to weigh the expenditure of time and resources against perceived benefits. A clear blueprint detailing the data types, sources, and dissemination plan would assist school personnel and mental health professionals contemplate issues of feasibility and develop appropriate strategies for integrating these data procedures into routine practice.

Development of an Interconnected Data Framework

To develop an Interconnected Data Framework, school teams must address the following activities: (a) the development of clearly stated questions for the successful evaluation of locally important issues and problems, (b) the selection of appropriate measures and implementation of feasible data collection techniques to address the identified concerns, and (c) the establishment of procedures for using the information drawn from these methods to inform decision-making at the school, classroom, and student levels.

The first step in developing an interconnected data framework is the identification and development of focused questions. This task is critical as it sets the stage

for subsequent activities, yet often poses a challenge for teams given the diversity and complexity of questions that arise. Nevertheless, the development of clear and specific questions is needed to guide the selection of the types and sources of data examined, as well as identification of the tools or measures that will be used to gather this information. To assist in this process, teams may find it useful to align decisions related to data to the particular stage of implementation in which they are engaged (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005). This process is characterized by six, recursive phases including the identification, adoption, installation, implementation, and evaluation of the program. Depending on the stage of implementation, school teams may ask different types of questions. For example, in the exploration phase, schools may collect data to inform a needs assessment (e.g., school climate survey), while later in the implementation process, there may be greater focus on monitoring the quality of implementation (e.g., fidelity measures). Considering the intense focus on achieving desired outcomes, school teams are likely to pose questions related to outcome evaluation (e.g., performance indicators, satisfaction surveys) as well as questions related to sustainability and dissemination. Understanding the stages of implementation, as well as how data is used to inform this process, is critical as Fixsen and colleagues articulate, “the use of effective interventions without implementation strategies is like serum without a syringe; the cure is available but the delivery system is not” (Fixsen, Blase, Duda, Naoom & Van Dyke, 2010). We will further explore this relationship later in the chapter as we explore the activities of an exemplar site that has started to integrate these SMH and PBIS in everyday practice.

Just as the development of the specific questions may depend upon the implementation stage, so does the selection of appropriate methods, or data sources and tools. In this next step, teams must identify the data points that will allow them to address the identified questions. School teams must collect data that allows for accurate assessment of the target behavior or

competency, understand how this data will inform the development or selection of an appropriate intervention, and finally, determine whether the data will provide sufficient sensitivity to monitor progress (Batsche, Castillo, Dixon, & Forde, 2008). To illustrate the ways in which data supports a problem solving approach, the Evaluation Blueprint for School-Wide Positive Behavior Support (Algozzine et al., 2010) provides excellent examples of ways in which schools can utilize data across the evaluation cycle. The Blueprint presents practical examples of how school teams can use data to inform decision-making across the phases of program evaluation, including plan development, implementation, measurement, and outcome evaluation. This model also highlights the ways in which schools can assess contextual factors, inputs, fidelity, and impact to improve this cycle, as well as to replicate, sustain, and improve effective programs and practices.

As part of this step, school teams may find it helpful to map out their data sources and tools in an organized manner. For example, this information could be mapped onto each tier of a three-tiered model, across stages of implementation and/or problem solving steps, or based upon the level of information that they address. Specifically, organizing data tools by level of information, or at the level of the individual student or family, classroom, program, school-wide, and/or at the community level may help schools to match the correct data tool or data source to the identified question. In the table below, we provide examples of data sources and tools, in this case, at Tier One (Universal) that have originated out of Positive Behavioral Interventions and Supports and School Mental Health realms, across several dimensions.

In addition, data can also be combined across sources, types, and levels. For example, universal screening may identify individual students that may be at greater risk of developing mental health difficulties, while further assessment among this particular group of students with a positive screen may indicate a common need for a social skills intervention. It is also important to consider the decision rules applied

Table 1. Examples of Measures/Tools at Tier One by Level

LEVEL	EXAMPLES OF MEASURES/TOOLS AT TIER 1
Student or Family	Systematic Screening for Behavioral Disorders (Walker & Severson, 1990); Columbia University TeenScreen Program (Shaffer et al., 2004); Disability status.
Classroom/Program	Disciplinary referrals by class; Number of disciplinary actions for students in Special Education; Classroom Assessment Scoring System (Pianta, La Paro, & Hamre, 2008)
School	School-wide Evaluation Tool (Todd, Lewis-Palmer, Irvin, Sugai, & Boland, 2004); School Development Program School Climate Survey (Haynes, Emmons, & Ben-Avie, 2001); Effective Behavior Support Survey (Sugai, Horner & Todd, 2003); School Mental Health Quality Assessment Questionnaire (Weist, Stephan, Lever, Moore & Lewis, 2006)
Community	Juvenile arrests and court appearances; Participation and attendance in extracurricular activities; Domestic violence information; Substance abuse treatment data; Pediatric Symptom Checklist (Jellinek et al., 1988) Massachusetts Youth Screening Inventory 2nd Edition (Grisso & Barnum, 2000); Adolescent Alcohol and Drug Involvement Scale (Moberg, 2003); Drug Abuse Screening Test-Adolescents (Martino, Grilo, & Fehon, 2000).

to the data. Using an example related to disciplinary data for challenging behavior, students with 0-1 office discipline referrals (ODR) may indicate a different level of need for intervention, such as ongoing monitoring whereas students with 3-5 ODR's may benefit from a more intensive intervention such as Check In / Check Out (Crone, Hawken, & Horner, 2010).

In this example, it is clear that the same data source may indicate different levels of need based on slight modifications to the decision rules applied to the data.

Finally, schools must determine how the data will be used for decision-making at the level of the school, classroom, and individual student. Activities based on these decisions may include continuing or discontinuing the intervention, modifying the intervention, or when

effective, broadly disseminating the intervention. To maximize utility of the data, the obtained information must be readily accessible to those decision makers for whom that data is most pertinent, guided by methods that have sufficient empirical grounding, and logically linked to the outcomes of interest.

Implementation of an Interconnected Data Framework

Now that we have addressed the core activities to develop an integrated interconnected data system, we now turn our attention to the implementation process. While we outline these important steps below, we recognize that the needs of an individual school, as well as practical limitations such as time and staff availability, can limit the capacity and complexity of the

system. In addition, the traditionally isolated approaches and discipline-specific perspectives will require school teams to come together around implementation activities to develop a truly integrated, interconnected data framework. The following sections outline a few critical steps needed to successfully develop, install, and implement an Interconnected Data System.

Establish a regular team-based approach. The successful development of an Interconnected Data System requires teams to establish procedures to promote collaboration across school and mental health professionals. As such, the development of school teams, consisting of both school and mental health personnel, is essential for improving communication amongst these groups. Not only can leadership teams provide a forum for professionals to discuss specific issues, but effective interdisciplinary teaming allows for a common language and shared vision for implementation to be established. Effective teams are typically composed of stakeholders from diverse school and mental health backgrounds including school administrators, school psychologists, various community members, community organizers, and teachers. Because an integrated data system is based on understanding the “whole child,” it is important to include individuals with expertise across the range of disciplines, such as curriculum and instruction, special education, juvenile justice, family advocacy, substance abuse, and mental health. Moreover, a diverse membership of key stakeholders also allows the leadership team to more effectively address the diverse array of tasks, which may include developing institutional policies, obtaining funding to allow the framework to be sustained, increasing local visibility to ensure the integration of key data, providing training and coaching to facilitate widespread adoption of data collection activities, and ongoing evaluation to monitor implementation efforts and student progress.

Develop a locally shared vision. The conglomerate of local stakeholders has several responsibilities, but none of these is as important as developing a shared vision of the problems confronting students and generating a clear,

comprehensive, and flexible approach for addressing these concerns. To develop a shared vision, the team must understand local needs and identify the most appropriate methods for evaluating those needs. For these exploratory activities, data can be used to better understand local concerns, inventory available data sources, and assess school and community readiness for intervention. These initial or exploratory data collection methods may include the use of existing data collection tools or techniques or lead to the development of new measures to evaluate organizational priorities, resources, and readiness. For example, the leadership team might develop a survey to disseminate to key stakeholders such as teachers, student groups, and community members to better understand their perspectives on a particular problem, such as community or school violence. It might also be necessary for the leadership team to request that local mental health agencies and related community service providers share their resources and data gathering methods to begin to build an integrated system for prevention, early identification, and continuous monitoring.

Process for collection and integration of student data. Following the initial exploration phase in which data is used to build consensus amongst key constituencies, assess availability of and gaps in local resources, and identify existing, pertinent data sources, the next step is to construct a blueprint to build an interconnecting data system that will address identified questions. The data blueprint requires the articulation of several key factors, beginning with an inventory analysis, or an outline of readily available data sources. Where readily available data is lacking, the team must clearly state the type and source(s) of data, identify how the data will be used (e.g., universal screening or progress monitoring), as well as develop feasible data collection procedures (e.g., person responsible, frequency of data collection). An example of such a blueprint has been provided in Table 2. By outlining this information, the leadership team can determine whether the compendium of data sources allows for evaluation of the “whole child” and if not, develop methods to better refine these sources over

time. This blueprint also helps teams to determine whether the data collection plan is being implemented properly, and can further utilize this information to inform subsequent decisions to revise the plan. Ultimately, the blueprint provides a general, systemic approach to identify students in need and evaluate the effects of various practice and policy initiatives.

Table 2. Example of a Data Blueprint

DATA	SOURCE ORGANIZATION	DEFINITION	PURPOSE	SCHEDULE
Student Grades	School	Student grades refer to the assigned proficiency and quality level for student work in a given content area.	Universal Screening	Reviewed each quarter.
Attendance Records	School	The regular attendance of students to class including whether the student is tardy.	Universal Screening	Reviewed each quarter.
Office Discipline Referrals	School	ODRs are the number of times a student has been referred to the office for disciplinary reasons.	Universal Screening	Reviewed each quarter.
Strengths and Difficulties Questionnaire (Goodman & Goodman; 2009)	School	SDQ will be used to screen for psychiatric disorder and/or impairment.	Secondary Screening	Administered and reviewed in fall and spring.
Direct Behavior Ratings	Teachers	DBRs will be collected for students demonstrating disruptive, unengaged, or disrespectful behaviors. Student behavior will be related daily in a 10-point scale.	Progress Monitoring	Administered daily to students receiving tertiary supports.
Benchmarks for Advanced Tiers (Anderson et al., 2010)	School Team	BAT will be administered to determine the extent to which Tier 2 and Tier 3 interventions are being implemented as designed.	Implementation Fidelity	Administered and reviewed in fall and spring.

DATA	SOURCE ORGANIZATION	DEFINITION	PURPOSE	SCHEDULE
Assess- Intervene- Monitor FBA Tool (Anderson & Bateman, 2011)	Behavioral Specialist	AIM will be completed to help school personnel identify the function of student behavior and develop an appropriate intervention plan for students requiring tertiary supports.	Intervention Development	Completed each time the student has not effectively responded to a tertiary intervention.

Process for using data for decision making and evaluation. The purpose of an Interconnected Data System is to support the selection, delivery and evaluation of interventions to address identified needs. As such, there are two primary roles that data might serve. The first role is to assist school personnel and mental health professionals to accurately identify students in need. Identification of students in need of additional support requires teams to examine the data to locate those students with outlying data patterns on some variable of interest. School teams may choose to conduct systematic screening of all students on key variables multiple times per year, after careful consideration of relevant issues (Sadler & Sugai, 2009; Weist, Rubin, Moore, Adelsheim, Wrobel, 2007). Given the comprehensiveness of an integrated data system, teams can select from an extensive array of variables to assess a wide range of student factors to ensure efficient detection for overt, covert, and comorbid problems. Whereas the challenges experienced by some students will be readily detectable because of the overt nature of the issue, there might be other students whose struggles are less apparent or driven by multiple issues. These realities further emphasize the need to use a plurality of measures to better understand the problems faced by individual students. It is also necessary to develop decision rules to support the systematic identification of students. That is, there needs to be some benchmark established for each measure to identify students in need of further evaluation or intervention. Depending on the measure, these benchmarks may already be

available, as in the case of standardized assessments, or they might be logically or empirically derived based on the population of students being assessed. These benchmarks should not be viewed as static, but rather as entities to be reviewed and adjusted over time to ensure they continue to accurately identify students in need. In addition, this same process can be adapted to identify teachers or classrooms in need of additional support and/or intervention.

The second use of data within the Interconnected Data System is to allow school personnel and mental health professionals to evaluate the effects of practices, policies, and interventions. Students identified through routine screening procedures to have outlying data patterns are then typically provided an intervention. Progress monitoring evaluations are then used to assist teams determine whether a given intervention strategy is working as intended. As such, school personnel and mental health professionals consider data both before and after the introduction of an intervention to make decisions about whether the practice should be altered or remain intact. There are three essential considerations for developing a systemic process for monitoring student progress. First, those charged with monitoring student responses must consider the intensity of the behavior being studied to determine the appropriate monitoring schedule. Within a PBIS framework, students receiving Tier II services typically have their data reviewed by the school team on a monthly basis while those assigned to more

intensive, Tier III supports have their data reviewed on a weekly or sometimes daily schedule depending on the nature of the behavior. The second consideration is the selection of an appropriate measure to evaluate student responsiveness. This requires understanding the goals of the intervention and matching these to an appropriate measure that can be feasibly obtained. There are several approaches to data collection available to school personnel and mental health professionals which can be used. For instance, the identification of students with behavioral problems may be obtained through examination of office discipline referrals or standard rating scales completed by caregivers or parents, while a daily report card might be used for day-to-day progress monitoring of student behavior. A final consideration for school and mental health personnel developing methods to gauge student progress is to develop rules for determining when to make changes to the intervention. That is, the decisions to withdraw, revise, or retain an intervention based on progress monitoring data should be done according to some prearranged criteria, to the extent possible, to allow for full evaluation of the selected practice.

Process for tracking fidelity. The evaluation of the effectiveness of various policies, practices, and interventions requires additional considerations beyond simply examining student response. Among the most important of these is considering the extent to which the instructional or management procedure was implemented as intended. Also known as implementation fidelity, this data is needed to facilitate interpretations of student outcomes by providing a measure of whether the intervention or policy was used as intended by those school personnel charged with carrying it out. Consider the case in which treatment integrity is low and effects are not present, a reasonable conclusion might be that improved implementation would result in greater effects. Conversely, if adequate treatment integrity is observed and effects were still not present, the interpretation would be that the intervention was ineffective. The importance of treatment integrity is made even more apparent by research indicating that the magnitude

of treatment effect is often associated with the level of implementation (Perepletchikova & Kazdin, 2005). As such, it is critical for treatment integrity data to be collected and examined at multiple levels, including at the school level to determine whether universal supports are being implemented as intended, as well as the secondary and tertiary intervention levels to ensure that students are receiving their prescribed interventions appropriately. The development of these integrity measures should focus on the measurable features of the intervention, practice, or policy. The School-Wide Evaluation Tool (SET: Todd et al., 2004) provides an example of how the implementation can be evaluated using multiple methods, such as interviews of school community members, observations, and permanent product review. Collecting integrity assessments is also important to understand whether a given intervention is working or not. For evaluations of intervention protocols, these integrity assessments might be provided for well-researched programs such as Check-In/Check-Out (Crone, Hawken, & Horner, 2010). However, it is important to note that the task of developing integrity methods might fall to school personnel developing interventions, particularly for the more individualized interventions in Tier III.

Process for reporting and informing key stakeholders. A successful Interconnected Data Framework must ensure that information is delivered to key stakeholders in a timely, efficient manner. The data system described in the foregoing sections is data rich, with evaluation occurring at many different levels and at various points in time. There is little doubt that being able to evaluate student, staff, and community factors equips school personnel and mental health professionals with a better understanding of individual students and their context. Without the efficient delivery of information to those individuals that need it most, there is little purpose in investing the time and energy in establishing and collecting this information. As such, procedures must be developed to provide parents, administrators, teachers, collaborating mental health providers, and cooperating community organizations with the data they need to assist students

in realizing their potential. In essence, this is where the rubber meets the road for the success of the system. The development of a successful system requires a comprehensive understanding of the measures and services available across the system and how these are linked. As such, the data blueprint described above should be distributed to key collaborating organizations to facilitate communication related to student needs, and ongoing procedures to share information, such as responsiveness to intervention, should be developed. Sharing this information facilitates the efficient delivery of resources outside the school community to address the challenges being experienced by individual students and may promote the use or augmentation of successful intervention strategies in other areas of the individual's life. The ultimate goal of this data sharing between constituent organizations such as schools, mental health service purveyors, and community organizations is to maximize local resources so that these collaborating institutions can work in concert to address the variety of challenges faced by today's youth.

Exemplar Site for Interconnecting School Behavior and Mental Health Data

Several exemplar sites have been identified as pioneers in the development and implementation of an ISF. Examination of these sites, through interviews and surveys, have identified commonalities as they independently progress through the implementation stages of exploration, installation and early implementation. While a more thorough presentation of structures, systems, and practices developed at each site can be found in the Appendix, we highlight various facets of the interconnected data framework evident at an exemplar site below. An emphasis has been placed on the themes described in the previous sections.

In Scranton, Pennsylvania, a partnership between district personnel and a local behavioral health managed care organization, Community Care Behavioral Health Organization, illustrates movement towards the integration of school and mental health

services to improve the delivery of services to students. In this area, mental health services were traditionally delivered in relative isolation from school settings. Dissatisfied with the current approach, the school district and Community Care developed and installed an integrated school-based behavioral health and school-wide PBIS team which operated from an "accountable clinical home" model. These partners convened leadership meetings with key stakeholders from the school, mental health, and community organizations. These school leadership teams began by taking an inventory of the available resources to understand the local services available and identify potential data sources. The development of these leadership teams assisted with building consensus amongst those working directly with at-risk students.

After careful consideration, the team identified several key measures and indicators in support of this goal. For example, mental health indicators included formal measures, such as the Child Outcome Survey (to assess child and family functioning as related to receiving services) and the Strengths and Difficulties Questionnaire, as well as informal measures, such as referrals to higher levels of mental health care, referrals to emergency evaluations, and measures to assess quality of interventions. This team also utilized formal PBIS tools, such as data from SWIS and fidelity tools (e.g., SET), as well as other school level indicators such as attendance, suspensions, and referrals to special education. According to the partners, this was the first time that mental health and education professionals effectively shared data to inform intervention decisions and develop student oriented action plans together to achieve valued outcomes. This collaborative approach overcame many of the limitations and barriers associated with a more isolated approach, and resulted in a more cohesive and effective system of care for students and families.

This exemplar site, along with those presented in the Appendix of this monograph, illustrates the equifinality inherent in the ISF process. While

each exemplar site started from a different place, with different partners, data sources/tools, and approaches, the outcome was the same. Specifically, the development of collaborative partnerships, with a shared vision and passion, supported the data-driven implementation of programs and policies, to positively impact valued outcomes for targeted students. While many more examples exist across the nation, sharing these stories in a systematic way will likely lead to more lessons learned, which then can in turn, be tested and systematically implemented in order to achieve widespread change.

Summary and Recommendations for Interconnecting School and Mental Health Data Systems

As Atkins and colleagues articulated, “education and mental health integration will be advanced when the goal of mental health includes effective schooling and the goal of effective schools includes the healthy functioning of students (Abstract; Atkins, Hoagwood, Kutash & Seidman, 2010). Schools across the nation are adopting this goal of integrated systems and interrelated outcomes in theory; however, the necessary infrastructure to support this integration in practice is lacking. This chapter, along with the other chapters presented in this monograph, constitutes a preliminary attempt to present a developing framework for true integration of systems, structures, policies and practices in support of this vision.

Specifically, school teams interested in developing and implementing an interconnected data framework should first familiarize themselves with a few foundational underpinnings. As presented in this chapter, teams should consider the “whole child” and the associated implications of such an assumption, adopt a tiered model to organize data and interventions, and contemplate the various types and sources of data available to assist in this endeavor. Teams must address a few key tasks, namely, to develop clearly stated questions, select appropriate measures, and establish procedures to utilize this information to inform

decision making. These three core tasks are embedded in an iterative problem solving process informed by implementation science, and include activities such as establishing a collaborative team process, articulating a shared vision, collecting and integrating data, evaluating data, monitoring fidelity, and reporting the results to inform future activities.

To advance toward full implementation and sustainability, teams must carefully monitor and reflect upon quality of implementation, rigorously evaluate targeted outcomes, and fully integrate these components into the culture of the school. While the exemplar site presented above represents just one approach to the development and implementation of an ISF, multiple sites across the nation are engaged in a similar process of adapting and adopting the core features presented in this chapter to utilize data as part of an integrated PBIS and SMH system to achieve desired outcomes for all.

References

- Algozzine, B., Horner, R. H., Sugai, G., Barrett, S., Dickey, S. R., Eber, L.,... Tobin, T. (2010). *Evaluation blueprint for school-wide positive behavior support*. Eugene, OR: National Technical Assistance Center on Positive Behavior Interventions and Support. Retrieved from www.pbis.org
- Anderson, C. M., & Bateman, L. (2011). *Assess, Implement, Monitor*. Eugene, OR: Educational and Community Supports, University of Oregon.
- Anderson, C., Childs, K., Kincaid, D., Horner, R., George, H., Todd, A.,... Spaulding, S. (2010). *Benchmarks for Advanced Tiers*. Unpublished instrument. Educational and Community Supports, University of Oregon & Department of Child and Family Studies, University of South Florida.
- Atkins, M., Hoagwood, K., Kutash, K., & Seidman, E. (2010). Toward the integration of education and mental health in schools. *Administration and Policy in Mental Health*, 37, 40–47.
doi: <http://dx.doi.org/10.1007/s10488-010-0299-7>
- Batsche, G. M., Castillo, J. M., Dixon, D. N., & Forde, S. (2008). Best practices in linking assessment and intervention. In A. Thomas & J. Grimes (Eds.), *Best Practices in School Psychology V* (pp. 177–194).
- Crone, D. A., Hawken, L. S., & Horner, R. H. (2010). *Responding to problem behavior in schools: The Behavior Education Program*. New York, NY: Guilford Press.
- Dowdy, E., Ritchey, K., & Kamphaus, R. W. (2010). School-based screening: A population-based approach to inform and monitor children's mental health needs. *School Mental Health*, 2, 166–176.
doi: <http://dx.doi.org/10.1007/s12310-010-9036-3>
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, 82, 405–432.
doi: <http://dx.doi.org/10.1111/j.1467-8624.2010.01564.x>
- Fixsen, D. L., Blase, K. A., Duda, M. A., Naoom, S. F., & Van Dyke, M. (2010). Implementation of evidence-based treatments for children and adolescents: Research findings and their implications for the future. In J. R. Wiesz & A. E. Kazdin (Eds.), *Evidence-based psychotherapies for children and adolescents*. New York, NY: Guilford Press.
- Goodman, A., & Goodman, R. (2009). Strengths and difficulties questionnaire as a dimensional measure of child mental health. *Journal of the American Academy of Child and Adolescent Psychiatry*, 48, 400–3.
doi: <http://dx.doi.org/10.1097/CHI.0b013e3181985068>
-

-
- Grisso, T., & Barnum, R. (2000). *Massachusetts Youth Screening Instrument—Version 2: User's manual and technical report*. Worcester, MA: University of Massachusetts Medical School.
- Haynes, N. M., Emmons, C. L., & Ben-Avie, M. (2001). *The School Development Program Student, Staff, and Parent School Climate Surveys*. New Haven, CT: Yale Study Center.
- Jellinek, M. S., Murphy, J. M., Robinson, J., Feins, A., Lamb, S., & Fenton, T. (1988). The Pediatric Symptom Checklist: Screening school-age children for psychosocial dysfunction. *The Journal of Pediatrics*, *112*, 201–209.
doi: [http://dx.doi.org/10.1016/S0022-3476\(88\)80056-8](http://dx.doi.org/10.1016/S0022-3476(88)80056-8)
- Kelly, M. S. (2011). Data-driven decision making in school-based mental health: (How) is it possible? *Advances in School Mental Health Promotion*, *4*, 2-4.
doi: <http://dx.doi.org/10.1080/1754730X.2011.9715637>
- Martino, S., Grilo, C. M., & Fehon, D. C. (2000). Development of the Drug Abuse Screening Test for Adolescents (DAST-A). *Addictive Behaviors*, *25*, 57–70.
doi: [http://dx.doi.org/10.1016/S0306-4603\(99\)00030-1](http://dx.doi.org/10.1016/S0306-4603(99)00030-1)
- Moberg, D. P. (2003). *Screening for alcohol and other drug problems using the Adolescent Alcohol and Drug Involvement Scale (AADIS)*. Madison, WI: University of Wisconsin, Center for Health Policy and Program Evaluation.
- Perepletchikova, F., & Kazdin, A. E. (2005). Treatment integrity and therapeutic change: Issues and research recommendations. *Clinical Psychology: Science and Practice*, *12*, 365-383.
doi: <http://dx.doi.org/10.1093/clipsy.bpi045>
- Pianta, R. C., La Paro, K. M., & Hamre, B. K. (2008). *Classroom Assessment Scoring System*. Baltimore, MD: Paul H. Brookes
- Roeser, R., Eccles, J., & Freedman-Doan, C. (1999). Academic functioning and mental health in adolescence: Patterns, progressions, and routes from childhood. *Journal of Adolescent Research*, *14*, 135–174.
doi: <http://dx.doi.org/10.1177/0743558499142002>
- Sadler, C., & Sugai, G. (2009). Effective Behavior and Instructional Support A District Model for Early Identification and Prevention of Reading and Behavior Problems. *Journal of Positive Behavior Interventions*, *11*, 35-46.
doi: <http://dx.doi.org/10.1177/1098300708322444>
- Shaffer, D., Scott, M., Wilcox, H., Maslow, C., Hicks, R., Lucas, C. P.,...Greenwald, S. (2004). The Columbia Suicide Screen: Validity and reliability of a screen for youth suicide and depression. *Journal of the American Academy of Child and Adolescent Psychiatry*, *43*, 71–79.
doi: <http://dx.doi.org/10.1097/00004583-200401000-00016>
- Sugai, G., & Horner, R. H. (2009). Responsiveness-to-intervention and school-wide positive behavior supports: Integration of multi-tiered system approaches. *Exceptionality*, *17*, 223–237.
doi: <http://dx.doi.org/10.1080/09362830903235375>
-

-
- Sugai, G., Horner, R. H., & Todd, A. W. (2003). The EBS Self-Assessment Survey Version 2.0. Eugene, OR: University of Oregon. Retrieved from http://www.pbis.org/pbis_resource_detail_page.aspx?Type=4&PBIS_ResourceID=219
- Todd, A. W., Lewis-Palmer, T., Irvin, L. K., Sugai, G., & Boland, J. B. (2004). The School-wide Evaluation Tool: A research instrument for assessing school-wide positive behavior supports. *Journal of Positive Behavior Interventions*, 6, 3-12.
- Walker, H. M., & Severson, H. H. (1990). *Systematic Screening for Behavior Disorders (SSBD): Users Guide and Technical Manual*. Longmont, CO: Sopris West.
- Weist, M., Rubin, M., Moore, E., Adelsheim, S., & Wrobel, G. (2007). Mental health screening in schools. *Journal of School Health*, 77, 53-58.
doi: <http://dx.doi.org/10.1111/j.1746-1561.2007.00167.x>
- Weist, M. D., Sander, M. A., Walrath, C., Link, B., Nabors, L., Adelsheim, S., ... Carrillo, K. (2005). Developing principles for best practice in expanded school mental health. *Journal of Youth and Adolescence*, 34, 7-13.
doi: <http://dx.doi.org/10.1007/s10964-005-1331-1>
- Weist, M. D., Stephan, S., Lever, N., Moore, E., & Lewis, K. (2006). *School Mental Health Quality Assessment Questionnaire (SMHQAQ)*. Baltimore, MD: University of Maryland Center for School Mental Health Analysis & Action.
- Widmark, C., Sandahl, C., Piuva, K., & Bergman, D. (2011). Barriers to collaboration between health care, social services and schools. *International Journal of Integrated Care*, 11, 1-9.
- Zins, J., Bloodworth, M., Weissberg, R., & Walberg, H. (2004). The scientific base linking social and emotional learning to school success. *Journal of Educational and Psychological Consultation*, 17, 191-210.
doi: <http://dx.doi.org/10.1080/10474410701413145>
-

The District/Community Role in Advancing the Interconnected Systems Framework

MARK SANDER, KATHY LANE, MARK VINCIGUERRA, JEANNE DAVIS, KELLY PERALES, AND ROB HORNER

The purpose of this chapter is to define the role that school districts and communities play in implementing the Interconnected Systems Framework (ISF). Content for the chapter draws from many sources, but especially from successful experiences by schools and school districts in Maryland, New York, Illinois and Pennsylvania. The exemplar schools from these states (see Appendix G) document that ISF is more than just a conceptual model. ISF can be implemented successfully in typical schools with typical resources, and with benefits to students, families and staff. Concrete procedures are being used in these schools to link educational, behavioral and mental health supports. This linkage is improving the effectiveness of schools to successfully support a wider range of students. Earlier chapters in this monograph have outlined the ISF logic and practices needed in the classroom, school and home. Our focus is on the organizational structures needed in school districts and communities to encourage and nurture effective use of ISF. Basic assumptions about ISF are reviewed and used to frame the elements of district/community involvement needed for successful ISF implementation.

Basic Assumptions that Shape the Role of Districts/Communities in Implementing ISF

The *Interconnected Systems Framework* emphasizes how mental health, educational and behavioral supports are linked. The often recommended call to combine effective supports has too long contrasted with the traditional unconnected, silo-like, educational and mental health process. ISF is more than bringing therapy into the schools, or bringing educational classes into the home/community. ISF is about unified teams that organize around the specific needs of a student and

his/her family. Support is NOT organized around the service units available from respective disciplines, but around the single support plan for a student and his/her family. The framework for this interconnected system of support is based on core assumptions about the role of education in our society and how educational, behavioral and mental health supports should be accessed. Central among these assumptions are the following:

Effective Education for All Students. The first, and in many ways most important, assumption of ISF is that schools should be designed to deliver effective educational, behavioral and mental health supports for all students. All students, including those who learn more slowly, do not have English as their first language, or experience barriers due to mental health challenges, are assumed to be best supported in their local neighborhood, their local school, and (in most cases) with their family. Building schools and communities that meet this goal requires linking the talent, technology and knowledge from multiple disciplines. In addition, we need to change the way the resulting constellation of supports is made available to students and their families. Schools need to become the locus of support, and the type and level of support required to achieve valued child outcomes (e.g. career or college ready) should expand as the complexity of students' needs expand. Districts and communities that embrace ISF organize not by adding more responsibility and burden to schools, but through efficient unification of the impressive mental health resources within an interconnected organizational structure that builds on the strengths of both the educational and mental health disciplines. Establishing a district-level commitment to successfully educating all students is at the foundation of ISF.

Evidence-based Practices. For ISF to be effective we must harvest the practices from each discipline that are most effective and prune those activities that may have long historical roots, but little demonstration

of improving outcomes for students and families. Implementing ISF requires focus on efficiency, effectiveness and equity. A core assumption is that practices used to define ISF will be continuously examined through rigorous empirical research and ongoing local evaluation. Those practices that are demonstrated to benefit students and families will be retained, and those that do not will be discarded or improved. Districts adopting ISF will include formal policies and procedures for selecting and supporting implementation of evidence-based practices (Horner, Sugai & Anderson, 2010).

Multi-tiered System of Prevention. Among the advances that has most influenced and supported the emergence of ISF has been the integration of the multi-tiered community health prevention logic (citations) with early assessment and intervention efforts promoted through “Response to Intervention” (Bradley, Danielson & Doolittle, 2005; Fuchs & Fuchs, 2006; Stephens, 2013). The result is an expectation that any formal approach to support will need to be (a) school-wide in scope, (b) focused first on delivering the supports for all students that prevent academic and social problems, and (c) expandable to additional tiers of support intensity that meet the needs of students and families who outstrip the primary prevention efforts. Districts adopting ISF will look to educational, behavioral and mental health professionals not just for strategies that address the most complex support needs, but initially for the primary prevention features that will both benefit all, and reduce the number of students needing more intensive (and more expensive) supports. ISF support starts with attention to the quality of school-wide academic instruction, behavior support, and mental health supports that all students access by simply being part of the local learning community. Districts that invest in ISF implementation focus as much attention on the initial prevention efforts as on the more intensive supports needed by those students who require additional support.

Build the Systems that Support Effective Practices.

A final assumption is that any district or community committed to adopting ISF will look beyond the practices that directly affect students and their families, and attend with equal care to the organizational systems that ensure sustained, high fidelity access to those practices. Too often educators are enthusiastic in their adoption of new practices, only to have the gains from those practices evaporate as the lack of organizational systems allows the practices to wither. Schools do not sustain effective practices, districts and communities are the organizational units needed for long-term implementation. If district and community roles are well defined and accepted, ISF adoption is more rapid, more effective and more likely to sustain. A key assumption of ISF is that districts and community mental health partners will invest in the organizational systems as well as the direct service practices that make ISF effective.

The Roles and Functions of Districts/Communities in Implementation of ISF

Clear and Consistent Leadership. ISF requires change in the way typical educational and mental health services are delivered and the process by which the educational and mental health systems work together. Any change of this magnitude benefits from the protection of clear and consistent leadership. In some cases this leadership comes from a superintendent or board with a specific vision. More often the leadership comes from a Leadership Team composed of multiple voices and a common vision.

Schools that have been successful in implementing ISF note repeatedly that their success was guided by district-level and mental health leaders who (a) placed student and family outcomes as the foundation from which all efforts were assessed, and (b) provided the formal policies and systems that gave clarity and validity to the effort. Specific district and mental health agency functions of effective leadership include:

1. Define how evidence-based practices are selected so the process is predictable and transparent.
2. Provide the authority and problem solving needed to overcome organizational barriers and implement the efficiencies needed to functionally interconnect educational, behavioral and mental health supports. This typically requires engaging in the difficult process of abandoning long held patterns of “doing business,” creating new models based on the strengths of the schools/district/ community, and the changing needs of students and families, and understanding how to work effectively across the educational and mental health systems.
3. Provide the funding, visibility, and political support needed to allow school/community teams to travel through the full sequence of adoption stages. Adopting ISF is process that will challenge the assumptions and traditional practices of most school faculty, and mental health systems. Effective Leadership typically was critical for successful schools and mental health agencies to navigate the stages of ISF adoption.
4. Provide the training, coaching and feedback systems needed to establish personnel (educational and mental health) with both the specific technical skills needed to deliver ISF and the organizational vision to deliver those skills within a unified framework.

Invest in the Time and Process Needed to Follow “Stages of Implementation”. Adoption of any new strategy, program, practice or model occurs across a natural cycle of implementation stages. Fixsen and Blase (2011) have defined four key implementation stages: (a) Exploration, (b) Installation, (c) Initial Implementation, and (d) Full implementation. These

stages are relevant for adoption of ISF, and schools that have successfully implemented ISF described both constructive and destructive paths through the stages of adoption. The core messages we received from exemplar schools included a consistent recommendation for investing in an ISF implementation process that is collective, collaborative, and incremental. Specific recommendations include:

1. *Adopt ISF through a team-based process.* The heart of ISF is the linking (specifically the “interconnecting”) of different, but mutually beneficial, approaches to common social, academic and societal challenges. This linking is not something that one person typically can do alone. Adoption of ISF starts by building a team that represents the leadership, families, and constituents of the full school community. The team should be small enough to be functional, invested enough to be pragmatic, and collaborative to lead the school to a useful outcome.
2. Honor the “Exploration” stage of implementation. A key role in adoption of ISF if working first with the implementation team, and then with the full school and community to ensure that there is a common understanding of (a) the defining features of ISF, (b) what need ISF addresses for the school, and (c) the extent to which the process of adoption is reasonable, practice, and likely to result in valued outcomes. The major theme was to take time to explain and build agreement between school and community mental health staff about the “what, how and why” of ISF before launching into a program of training and professional development. The “exploration” stage of adopting a new practice involves building agreement about the need, and value of a new approach before launching into the active implementation steps.

3. Installation means “getting ready.” Readiness involves building the foundation pieces that will allow training and professional development to be effective. The policies, staffing patterns, team time allocation, organizational systems, and data tools needed to implement new and sustain successful existing practices should be in place before investing in direct training.
4. Initial and Full implementation takes time. Initial implementation is the fun part. Lots of work, but after taking the time to build agreement on the adoption of ISF, and after ensuring that policies and procedures are defined that allow staff to collaborate, and build unified plans of support, the training and professional development is much more likely to be effective. Initial implementation involves documenting that ISF can be done in a small way. Full implementation is demonstration that under normal conditions, with normal resources ISF can be used throughout the district or region. Real change in the organizational systems of a school can take 2-4 years to put in place. Building a plan that will allow for this level of gradual development is important. Going into full implementation the schools will be faster at adoption due to the presence of local examples, improved district systems and policies, and an increased number of professionals skilled in contributing to an integrated framework of support.
5. Educational and mental health programs connected through ISF might be at different stages of implementation. ISF can interconnect Positive Behavior Interventions and Supports (PBIS) and school mental health. However, schools and districts can be in different stages of adoption of these specific programs. When implementing ISF, staff should be aware of where each program is in its own implementation cycle as this could have an impact in the overall

implementation of ISF

Most school districts have extensive experience adopting new programs and strategies. In too many cases, however, the experience involves immediate use of training workshops without taking the time to invest in the Exploration and Installation stages of implementation. Moving too quickly often results in lost resources (e.g., training that does not lead to real change, and needs to be repeated). Following the stages of implementation is more likely to lead to full fidelity implementation, and across multiple schools is more likely to be the more efficient strategy for adoption.

Build the personnel capacity for effective implementation of ISF. Among the most important roles that a district and mental health agency can play in ISF adoption is recruiting, hiring and supporting the personnel needed for successful implementation. The Interconnected Systems Framework is, by definition, a connection of different technical parts to achieve a comprehensive system of support. Districts and mental health agency establish the policies and protocols that make it possible for ISF to emerge. ISF requires that a district employ individuals who are knowledgeable about school operations, student needs, family engagement, academic instruction, behavior support, mental health, systems of care, and data-based decision-making. To achieve this constellation of competence at least four central district considerations are relevant: Selection procedures, Training procedures, Coaching procedures and Performance Feedback procedures. Similarly, community mental health agencies must address these four central considerations as well.

1. Selection of talented personnel. The process for selecting talented personnel is extremely important, and too often under-emphasized. District and building personnel need to be very clear and specific about the skills needed from individuals who will implement ISF. Desired skills should be listed in position recruitment postings, and be active probes in

- the interview process. One very strong recommendation related to interviews is to do more than ask if a candidate is aware of multi-tiered systems of academic, behavioral and emotional supports, but ask (a) for examples of how they have applied those skills, and (b) offer simulations for them to demonstrate their knowledge, (e.g., "... given this specific situation, what considerations would you have for the student or the team?"). Selection of community mental health providers working in schools also is critically important. Providers need to be not only high quality mental health providers, but additionally need to possess the skills to effectively collaborate and think from a systems perspective.
2. **Training talented personnel.** School districts and mental health agencies throughout the United States spend a significant amount of time, money and talent focused on staff development. Districts that are especially effective (a) link staff development efforts to a small set of core district or school improvement goals, (b) provide staff development activities that lead to specific performance outcomes, (c) require that staff development occur in teams, and across multiple training events, and (d) ensure that each staff development effort result in documentation of performance competence at the end of the training sequence. Districts and mental health agencies that successfully implement ISF typically invest also in staff development that actively targets the team-based processes, data use strategies, and coordination policies that are essential for talented professionals to operate effectively as a team rather than individuals in professional silos. It is important to teach personnel how to work together effectively, not just how to do their unique piece of the professional pie.
 3. **Coaching for trained personnel.** Coaching is the on-site support that professionals receive to (a) build precision, and fluency of newly acquired skills, and (b) assist in adapting those skills to the unique challenges of the local context. Coaching is done by skilled members of the district/community who have the experience of implementing new skills/practices, and access to the supports needed to help others implement effectively. Coaches are not expected to be "trainers," (e.g., building new skills) but they are expected to help faculty/staff/families adapt new skills/programs supports to fit the local context. In schools, coaching is often done by school psychologists, social workers, counselors, special educators or administrators. Joyce and Showers (2002) that the importance of coaching is undervalued. New programs and procedures are dramatically more likely to be used in real-contexts when training is coupled with effective coaching than when training is simply provided alone. One recent example of this phenomenon was provided by schools adopting the Team-Initiated Problem Solving (TIPS) approach to decision-making. Teams who received a 4-hour training were very successful in describing the core features of the TIPS approach, but actually used those features with limited fidelity. Teams who received the same training, but also received coaching during the two meetings following training were very effective both at implementing the TIPS process, and improving student outcomes (Newton et al., 2012). Additionally, coaches can help implementers identify building, district and community policies and procedures that either facilitate or hinder successful adoption of new practices.
 4. **Performance feedback is important both for initial and sustained use of effective ISF.** Effective use of ISF procedures is challenging.

Not only must personnel be skilled in their focused professional area, but they need the skills to appreciate, integrate and implement the talents of their cross-discipline partners. There are few who do this well without practice and feedback. The message from this experience is that any effective implementation of ISF will include regular and systematic strategies for educational, behavioral and mental health professionals to receive feedback on how well they are applying core ISF practices. Performance feedback should be a regular, frequent, inexpensive, and constructive process. The basic message is that a school faculty, an implementation team, or an individual professional should on a regular basis have a formal way to assess if they are actually implementing core ISF procedures. This can occur through scripted self-assessment, peer-evaluations, administrative reviews or collaborative teaming (citations). There is no single mechanism that is required. The key is that at least quarterly (if not more frequently) a team should be able to answer the question, “are we implementing ISF with integrity?” Building the policies, data systems, organizational expectations and personnel skills to accomplish this goal is the responsibility of the district/community.

Build the technical capacity for effective implementation of ISF. Implementation of ISF assumes that school teams and community mental health partners will have access to both administrative organization and the technical elements needed for effective collaboration. It is not enough to give teams a vision, mandate and challenge. They need to the tools to work effectively. Exemplar schools consistently built on resources already available in their district, and recruited, developed or borrowed other resources as the need presented. From this experience the following are core “technical capacity” elements that should be provided by any community, or school district implementing ISF.

1. Defined process for team operations. Most people think they know how a team should work, but education is rife with examples of teams that meet without practical accomplishments. A major role that a school district plays in implementing ISF is helping team members work toward building the agreements and procedures that make a group of individuals a truly functioning team. Agreements on roles of facilitation, coordination, minute taking, data analysis and communication make a difference. Agreements related to when, where, and how meetings will occur make a difference. Agreements on how to identify problems, solve problems, agree with each other, and move forward in the face of constructive disagreement are all essential. The strength of ISF is the bringing together of different perspectives and different professional assets. This strength is lost without careful attention to the process by which a team will function to achieve real change for children and families.
2. Define a clear process for universal screening, early identification and triage targeting academic, behavioral and mental health needs. The effectiveness of ISF lies in large part on a commitment to early intervention. Typically, the challenges faced by a student and his/her family are more responsive to support procedures when these challenges are addressed earlier rather than later. A school implementing ISF will need a formal process for regularly identifying academic, behavioral and mental health needs of students. For academic content in elementary schools this process involves universal screening of numeracy and literacy skills. Three times a year (Sept, Dec, Mar) all students are assessed to determine the status of their academic skills. Those students substantially below norms are targeted for extra support. Similar protocols have been proposed

- for behavioral screening, although the recommendation is for twice a year (skipping the initial, Aug/Sept academic assessment) (Lane et al., 2012). We anticipate that similar protocols will emerge for regular mental health screening for all students as the ISF approach becomes more widely adopted.
3. Progress monitoring to match student needs. The multi-tiered structure of ISF assumes that every school/community will have a basic standard for quality support in educational, behavioral and emotional content. When universal screening or other sources of identification indicate that the basic level of support is insufficient, a team will build a plan of assistance that delivers a constellation of assistance that is projected to help a student be successful. Any student receiving more than basic support should also receive more frequent assessment. Level of risk for a student should be matched with level of on-going assessment. For academic supports in elementary grades, this would typically mean regular assessment of literacy and/or math skills every two to three weeks. For behavior supports, progress monitoring of office discipline referrals, daily progress points, or individualized measures, may occur daily, weekly or monthly (May et al., 2012). One of the important elements of ISF is that the goal is not just to provide additional support, but to provide support that makes a difference. The greater the support needs of a child, the greater his/her risk for long-range problems. As such, the ISF calls for an increased attention to assessing the extent to which support is being provided with fidelity and effective. This information is then used to maintain, modify or terminate support. School districts have the responsibility for establishing the technical data tools that will allow teams to efficiently and accurately monitor student progress. When
 4. Assessing if support plans are implemented. Among the newest and most important features of ISF is the need for teams to regularly assess if the plans they develop are actually being implemented. Both education and mental health are able to offer examples where brilliant plans of support floundered, not because the plan was flawed, but because the plan was not put in place. The emergence of practice computer technology now makes it possible to assess the perception of team members about the quality of plan implementation. This is becoming identified as an impressive source of information (Rodriguez, et al., 2011). Districts that build the technical capacity for ISF implementation will provide teams with simple, efficient systems for assessing support plan implementation fidelity. Community mental health agencies need to develop the technical capacity for their staff to generate similar mental health data to bring to the team. This information will then be used by the team to adjust the plan, or adjust the support for plan implementation.
 5. Systems to measure valued student outcomes. ISF is based on collective decision-making that gives strong weighting to the voice of the student and his/her family. One source of this voice is through the academic, behavioral and mental health performance of the student. A school using ISF would be expected to have very accurate and timely access to information about student literacy and numeracy performance, behavioral incidents, mental health concerns, and family recommendations. The theme is that a team of professionals needs a common framework of information to build a unified plan of support. Some data
- the focus is on mental health, the community mental health agency has the responsibility for establishing these critical tools.

sources (academic, behavior) are more readily available. Other data sources are in need of development. But the key message is that schools implementing ISF consistently came from school districts where investment had been made to provide the information about student performance that allowed a team to move forward with multiple veins of information that could guide the design of uniquely appropriate and minimally intrusive support.

6. Formal training on use of data for active problem solving. ISF support plans are the result of team problem solving. Barriers to student development and success are identified. Strengths of the student/family are organized. A plan of support is developed that builds on the strengths to achieve valued outcomes currently perceived as at-risk. The process of using information from many sources to build support that produces valued student outcomes is not simple. Schools successful in establishing ISF typically invest in building formal systems, skills and experience in team problem solving.

Working smarter not harder. Implementation of ISF by community mental health agencies and school districts should focus on using current resources differently, not adding new resources. None of the districts successfully implementing ISF (a) obtained new resources for on-going operation (e.g., new positions) or (b) added new tasks/responsibilities to already demanding job descriptions. In some cases there were funds for initial “transition” to ISF, and in most cases districts were required to invest in training and support of personnel to build the teaming structures and data systems needed for effective support plan design/implementation. Following this transition, however, schools and community mental health units were expected to operate differently (and better) with existing resources.

Expanding ISF throughout a district/community.

The initial focus of ISF adoption is often centered on the individual student team, or individual school building. With initial success, however, a district will face the challenge of how to expand something positive throughout a district, region or community. Expansion of ISF is challenge that districts should plan for. At this point we have more examples of individual schools using ISF well, than of districts and communities that have made ISF the ubiquitous operating norm. Preliminary recommendations for expanding ISF throughout a district/community include:

1. Start small. Demonstrating that ISF can be implemented and produces outcomes that students, families, and faculty value is paramount. As part of the normal stages of implementation at a district level is providing the opportunity to provide unequivocal demonstration that the core feature of ISF can be done, done well, and done with effect.
2. Build the training and coaching infra-structure. Districts that are ready to scale up effective practices (including ISF) will have invested in developing the training and coaching capacity within the district needed to move to scale with cost-effective and efficient professional development opportunities. It is far easier to hire external trainers, and this is feasible as long as program is small. Expanding an effective program or implementation requires an economy of scale that only becomes possible if the training, coaching and data systems needed for implementation are indigenous to the district.
3. Using data for continuous improvement. Expanding the adoption of something as complex as ISF will require continuous adaptation and improvement. Collecting and using data about fidelity and impact is important not just for student support teams, and building

administrators, but for district decision-makers engaged in the expansion.

Summary

This chapter focused on the essential components needed from school districts and mental health agencies to successfully implement an Interconnected Systems Framework. Several major themes emerged in this examination. First, key basic assumptions were outlined: delivering effective education for ALL students, integrating multi-tiered systems of prevention, and committing to building the systems that support effective practice. Second, the implementation roles and functions of districts and communities are critical to support the success of ISF. These roles and functions are to provide: clear and consistent leadership, investment in the time and process of the “stages of implementation”, commitment to build the personnel capacity to effectively implement ISF, and commitment to build the technical capacity for effective implementation. Exemplar schools have emphasized the importance of investing in internal capacity and resources (coaching, trainers, technical tools, etc.). They state that too often we bring in the “experts” to train staff and then the experts leave and the schools and school districts have not built the internal capacity to continue to monitor implementation and make certain that there is a successful installation of the necessary practices and systems to make evidence based practices such as PBIS and school mental health effective and properly interconnected.

In addition to these important themes, school districts and mental health agencies that have successfully implemented ISF tells us that districts and mental health agencies need to build and implement ISF together! Districts and mental health agencies need to start small; capture and reflect on and disseminate lessons learned – not as a “product” but as an ongoing “process” for discussing, clarifying, evaluating and learning from the implementation to date. This ongoing process should be used by partners to enhance cross systems learning and deepen understanding, commitment and effectiveness.

References

- Bradley, R., Danielson, L., & Doolittle, J. (2005) Response to Intervention. *Journal of Learning Disabilities*, 38, 485-486. doi: <http://dx.doi.org/10.1177/00222194050380060201>
- Fixsen, D. L., & Blase, K. A. (2011, August). *Expanding implementation science*. Presented at the Global Implementation Conference, Washington, DC.
- Fuchs, D., & Fuchs, L., (2006). Introduction to response to intervention. What, why and how valid is it? *Reading Research Quarterly*, 41, 93-99. doi: <http://dx.doi.org/10.1598/RRQ.41.1.4>
- Horner, R. H., Sugai, G., & Anderson, C. M. (2010). Examining the evidence base for school wide positive behavior support. *Focus on Exceptional Children*, 42, 1-16.
- Lane, K. L., Oakes, w. P., & Cox, M. (2012). Functional assessment-based interventions: A university-district partnership to promote learning and success. *Beyond Behavior*, 20, 3-18.
- May, S., Talmadge, N., Todd, A. W., Horner, r. H., McGovern, S., Morris, J., Conley, K., Sampson, N., Eliason, B., & Cave, M. (2012). Individual Student Information System (ISIS). <http://swis.org>
- Newton, J. S., Horner, R. H., Algozzine, B., Todd, A. W., & Algozzine, K. (2012). A pilot study of a problem-solving model for team decision making. *Education and Treatment of Children*, 35, 25-49.
- Rodriguez, B. J., Loman, S., & Horner, R. (2009). A preliminary analysis of the effects of coaching feedback on teacher implementation fidelity for Fist Step to Success. *Behavior Analysis in Practice*, 2, 11-21.
- Stephens, D. (2013). Response to intervention. *Language Arts*, 20, 214-218.
-

Advancing the ISF in States

CARL E. PATERNITE¹ AND ERIN BUTTS^{2,3}

The purpose of this chapter is to provide information about how state leaders, policy makers, and policy implementers can work collaboratively to promote and better ensure positive academic, social, mental wellness, and academic outcomes for all students, through development and implementation of an Interconnected Systems Framework (ISF). This chapter focuses on key strategies and exemplars for how state-level “personnel” can develop, implement, and support effective policies, practices, and procedures at the state, school district and local levels. Opportunities for multi-scale learning within and across states and with national and federal initiatives will be highlighted.

The overarching themes focused on include:

1. Building and sustaining strong cross-sector relationships at the state level, including developing and communicating a shared vision reflecting shared values and desired
2. Leveraging cross-sector assets and resources
3. Building and facilitating strong, well-informed, and effective leadership at the state, school district, and local community levels
4. Building and supporting an effective interconnected systems workforce, including pre-professional, continuing education, supervision, and coaching
5. Building and using data to inform decision-making. These themes emphasis capacity building within states, with a strategic focus on sustainability, as reflected in the Flaspohler, Duffy, Wandersman, Stillman, and Maras (2008) definition of capacity building as the

“dissemination of innovations and sustainability of those innovations once they are implemented” (p. 183).

Building and Sustaining Strong Cross-Sector Communities of Practice within States

Much of the work being highlighted in this chapter has been informed fundamentally by the Communities of Practice model of interdisciplinary collaboration, through which professionals from diverse disciplines, and representing diverse stakeholders, share ideas and strategies, via emergent processes, to promote a common shared agenda (Wenger, McDermott & Snyder, 2002). As defined by the IDEA Partnership (2013), a community of practice (CoP) consists of a group of professionals who care deeply about a common issue and decide to work together voluntarily to improve practice related to that issue.

In 2004, a National Community of Practice (NCoP) on Collaborative School Behavioral Health (IDEA Partnership, 2013) was developed via collaboration between the IDEA Partnership and the Center for School Mental Health (CSMH). This NCoP works with 22 national organizations, 9 technical assistance centers, leaders in 16 states, and other interested stakeholders to facilitate a “shared agenda” across education, mental health and families. Work of this NCoP is implemented significantly through efforts in 16 states, guided by state-specific leadership teams and targeted national initiatives associated with 12 *practice groups*. Each of the 12 *practice groups* is focused on work related to a specific issue or theme, including the following:

1. Building a collaborative culture for student mental health;
2. Connecting school mental health with juvenile justice and dropout prevention;

¹ Carl E. Paternite, Professor of Psychology and Interim Associate Dean, College of Arts and Science, Miami University (Ohio);

² Erin Butts, Behavioral Health Specialist, University of Montana

³ Special thanks to Carol Anderson (Educational Specialist, Emotional Disturbance/Mental Health Needs, Utah State Office of Education) and James Palmiero (Director, Pennsylvania Training and Technical Assistance Network) for submitting narratives describing ISF work in their respective states.

3. Connecting school mental health and positive behavior supports;
4. Education: An essential component of systems of care;
5. Families in partnership with schools and communities;
6. Improving school mental health for youth with disabilities;
7. Learning the language/promoting effective ways for interdisciplinary collaboration;
8. Psychiatry and schools;
9. Quality and evidence-based practice;
10. School mental health for military families;
11. School mental health for culturally diverse youth;
12. Youth involvement and leadership.

The 16 collaborative school behavioral health CoP states currently include HA, IL, MD, MN, MO, MT, NH, NM, NC, OH, PA, SC, SD, UT, WV, and VT. These state-specific CoPs have representation from the professional fields of mental health, general education, and special education, and include members from family organizations. Such an amalgamation of stakeholders collectively strives to “bring diverse organizations into a working relationship around their common interests; bring stakeholders into the work of state education agencies as allies; and bring fresh approaches to persistent problems by uniting decision-makers, practitioners, and consumers around a common goal” (IDEA Partnership, 2013). As suggested by Pope, MacKean, Casebeer, Milward, and Lindstrom (2013), in their comprehensive literature review, inter-organizational networks such as these state-specific CoPs “can be viewed as a way to

address complex social and population health problems by taking advantage of a broader set of resources and increased capacity.” (p. 17). As highlighted by Pope et al. (2013), diverse potential benefits include shared accountability and risk, learning and capacity building, flexibility and responsiveness, innovation and positive deviance, advocacy, service quality and coordination, efficiency, and access to and leveraging of resources.



Specific information about the initiatives of the 16 state-specific CoP teams and the 12 practice groups, including current status of the work can be accessed on the NCoP website (IDEA Partnership, www.sharedwork.org, 2013). With regard to the work within states, various initiatives in several states highlight effective strategies to:

- Engage key stakeholders and decision makers;
- Develop purpose and create and sustain buy-in and commitment to a shared vision, values, and desired outcomes;
- Develop realistic commitments for action;
- Adopt adaptive state level leadership and organizational structure, including political action, and promote strong, adaptive local leadership and organizational structure;

- Focus on continuous quality improvement of the collaboration, and building and using data to inform decisions;
- Maximize family and youth engagement;
- Leverage cross-sector assets and resources.

Three specific examples of state-specific CoP work that highlight development of Interconnected Systems Frameworks are described below:

Pennsylvania Example

The Pennsylvania narrative, as it relates to concepts specific to an Interconnected Systems Framework (ISF), begins and ends with aligning state level structures to support a shared agenda focused on the development of a multi-tiered system of support. It is the CoP on School Behavioral Health (SBH) that serves as the structure by which Pennsylvania is leveraging action to ensure that an ISF is taking root within the Commonwealth's schools. This narrative highlights the origins of PA's CoP on SBBH and underscores how the CoP is positioned to take action to ensure integrated, tiered programs and services for students and their families in general and special education.

Pennsylvania's CoP on SBH was established in 2007, born from a vision that held state agencies to a higher level of efficiency and productivity when working in concert with one another. Convened through the Bureau of Special Education, PA's CoP membership still includes representation from the Departments of Education, Health and Public Welfare, along with private partners and family and youth representatives. To this day, the CoP maintains a shared commitment to the advancement of early childhood, school age, and adult behavioral health and wellness within the Commonwealth. Currently, the CoP focuses on promoting implementation and sustainability of evidenced based multi-tiered systems of supports, promoting integration of evidence based programming

into decision-making frameworks, and fostering articulated and robust school-community partnerships.

However, in an ironic twist of fate, the absence of state-level dedicated funding and clear policies addressing instillation and scale up of Positive Behavioral Interventions and Supports (PBIS), including integrated school mental health services for children and youth, became assets that advanced the mission of PA's CoP. In 2011, the CoP realized that its ability to fulfill its mission was at risk if all partners were not otherwise prepared to address its barriers head-on. Thus, CoP members collectively chose to overcome the funding and policy issues by pooling resources and in-kind services to install and expand PBIS in what is now over 400 schools and 50 early childhood center-based sites. As a result, all system partners in the SBH community contributed to PBIS instillation and scale-up efforts.

With the many CoP partners investing and braiding assets, it became second nature for Education and Welfare to think about Systems of Care integration as well as opportunities in which to address higher-intensity student mental health needs thorough what we now recognize as an ISF. The path PA's CoP followed was organic and informed by the social, political, and economic contexts of the time in which its formative work was developed. However, there are several major considerations the CoP unanimously centered on when defining its ability to ensure the current and future installation of integrated, tiered programs and services for students.

First, the CoP holds fast to the importance of having a clearly defined vision and mission. While PA's SBH community coalesced around a concept that suggested a better way for state agencies to operate, the CoP was not able to take substantive action until it formed an authentic, shared vision for behavioral health and wellness.

Second, the CoP grew and has matured its mission and vision by investing its resources in

demonstration and learning sites. Such sites became the physical crossroads between evidence-based practices and the realities that exist within schools and provider agencies. Learning resulting from the demonstration sites enabled PA's CoP to better understand the how to support field attempts to integrate practices while, at the same time, informing the policies and practices of state agencies.

Finally, the CoP centers its decision-making efforts on data. Thus, all data collected in demonstration and learning sites need to be meaningful to all CoP members for the purpose of joint decision-making.

Utah Example

Utah's school improvement efforts have demonstrated the need for unified and comprehensive school and classroom learning supports to provide educators with the tools and skills to recognize and address learning barriers and re-engage disinterested students. Rather than requiring a solitary school to face these issues alone, Utah continues efforts to build a seamless system of care or interconnected framework to proactively address these challenges. Utah's school districts and charter schools are actively engaged in both preventative activities and responsive planning to support academic success, normal youth development, behavioral health wellness, and keeping children and families united and in their communities. In an effort to avoid duplication of services, strong collaboration between public schools and local substance abuse/mental health agencies is paramount. One major asset enjoyed by Utah's CoP on School Behavioral Health is the close collaboration between the Utah State Office of Education (USOE) and the Division of Substance Abuse and Mental Health (DSAMH).

The Framework for School Behavioral Health Services was developed in 2008 by state stakeholders including public education, mental health and substance abuse professionals, community members, and youth and family advocates, in consultation with Mark Weist,

previous director of the Center for School Mental Health (CSMH). Components of the framework include recommendations for schools, agencies, and communities regarding: readiness and implementation; school and local authority policies; staff development; program awareness; internal referral process; interdisciplinary team; discrete services to children and students; integration with school-based programs; cooperation and collaboration with other agencies and resources; and program evaluation and sustainability.

The CoP on School Behavioral Health has expanded on the framework and continues statewide technical assistance support and professional development opportunities related to implementation of school-based behavioral health in Utah schools. Utah's CoP, which includes mental health and substance abuse is guided by principles that services are: child-centered, youth-driven, and family-focused, with the needs of the students and their families dictating the types and mix of services provided.

The approaches and framework of the Utah CoP support and integrate existing school-based services and provide a comprehensive, multifaceted, and integrated approach to structuring student support services in collaboration with community based agencies and resources. The CoP has used a participatory planning process to enhance the collaboration with key stakeholders. A cohesive sense of vision has been established to guide the work and the planning process. Interagency agreements have been developed to formalize the collaboration process and protocol. Additionally, personal networking has been cultivated to facilitate the integrated efforts. State level training, consultation and technical assistance have been provided to enhance participant's attitudes, knowledge, skills and competency in system integration.

Through this active collaboration and planning, the CoP has expanded awareness and a greater understanding of resources, ultimately improving efficiency with regard to the implementation of school

⁴ Manual may be found at http://www.dsamh.utah.gov/docs/Utahs_School_Behavioral_Health_Services_Implementation_Manual.pdf

mental health services throughout the state. This has helped to bridge the gap between local schools and substance abuse/mental health providers by creating a common mission, vision, and shared accountability of school-based services. The CoP sustains consistent knowledge/skills development to respond to mental health needs of all students. It fosters partnerships designed to align systems, resources and public policies on behalf of youth and families. Moreover, the CoP helps Utah's schools, community-based agencies, and families work together to improve educational, behavioral, and developmental outcomes for children with particular focus on those with mental health needs.

Through these collaborative partnerships Utah has increased students' access to quality mental health services. Most public behavioral health services in Utah are provided by 13 Community Mental Health Centers (CMHCs) supported by public funds and Medicaid. All CMHCs provide a continuum of services mandated by the Utah Legislature. Currently, 11 CMHCs have collaborative partnerships to provide school behavioral health services in 21 school districts, 161 schools and 5 charter schools. The CoP provides technical assistance to ensure that the services provided have the highest level of evidence, and that they consider community characteristics, resources and limitations. District and School Leadership Teams with MH/SA providers have the autonomy to jointly determine what evidence-based services will be adopted and adapted to specific community needs. Some of the sources used to help the CoP focus on evidence-based practices are the: 1) Substance Abuse and Mental Health Services Administration (SAMHSA), which has a web-based national Registry of Evidence-Based Programs and Practices (NREPP); 2) U.S. Department of Education's What Works Clearinghouse; and resources from 3) the Collaborative for Academic, Social and Emotional Learning (CASEL) and 4) the University of Maryland Center for School Mental Health (CSMH).

The continuum of services that is available through the planned linkages with school behavioral health and mental health systems includes: 1) assessment; 2) crisis intervention (available 24/7 through phone and mobile crisis intervention team); 3) outpatient treatment including therapy, medication management, and testing; 4) case management; care coordination, outreach; 5) family support services (Family Resource Facilitators, respite and in-home services); 6) day treatment, currently not statewide; 7) residential treatment; and 8) inpatient care. Crisis intervention is available to all residents of the community, regardless of ability to pay. For non-crisis intervention services, mental health/substance abuse (MH/SA) providers work with schools, student and their families to identify funding sources to support treatment needs. These funding sources may include Medicaid, state general funds, charities, and insurance.

These partners work together in collaborations for learning to support children's development and reduce barriers to their overall success. These non-academic barriers have been proven to constrain optimal student success. Together they serve as reminders of the interdependence among academic learning and achievement, social development, and positive health and mental health. Given the interdependence of all these factors that promote school success, it is clear that schools cannot possibly address all of their students' needs alone (e.g., Adelman & Taylor, 2000; Flaspohler, Anderson-Butcher, Paternite, Weist, & Wandersman, 2006; Weist, 1997). School- and community-based resources must be mobilized in support of all students, particularly those experiencing nonacademic barriers to learning. In addition to student-level outcomes, additional impacts have included: 1) enhanced and expanded funding streams from the Utah State Legislature; 2) enhanced systems and structures for meeting youth needs; 3) service integration with comprehensive continuous improvement; and 4) expanded use of multiple data sources across human service agencies.

The ongoing identification of barriers through evaluation and data collection has recently fostered a partnership with the Community and Youth Collaborative Institute (CAYCI) in conjunction with the Ohio Community Collaboration Model for School Improvement (OCCMSI) (<http://csw.osu.edu/cayci/school/occmisi/>). The OCCMSI has evolved through a combination of research-based educational and community collaborative practices. The model emphasizes five core improvement priorities: 1) academic learning, especially connections between in-school learning and learning during out-of-school time; 2) youth development; 3) parent/family engagement and supports; 4) health and social services; and 5) community partnerships. Each of the components of the model reflects a best-practice philosophy. The relationships among the components, including how they fit and flow together and how assessment and evaluation are used, indicate a firm commitment to continuous improvement. The Utah State Office of Education and the Division of Substance Abuse and Mental Health are very committed to ensure all youth within Utah have the learning and development supports necessary for them to achieve at the highest level possible.

Montana Example

In spring 2010, Montana's Department of Public Health and Human Services (DPHHS) and Montana's Office of Public Instruction (OPI) collaboratively agreed on the need to hire a researcher to develop and disseminate a White Paper on School Mental Health best practices and evidence-based practices. The purpose of the White Paper was to inform Administrative Rules for Montana's School Mental Health Program, Comprehensive School and Community Treatment (CSCT), and Community Licensed Mental Health Centers contract with school districts for CSCT services.

This was the first time state leaders invested in research to implement policy that would contribute to Administrative Rule changes in Montana. The idea

for this type of research developed from Montana's first statewide school mental conference in 2009. The formation of Montana's statewide school mental health (SMH) Community of Practice (CoP) also began in 2009. In addition, the Licensed Mental Health Centers providing CSCT also began meeting monthly in 2009 and continue this practice today.

The White Paper was disseminated to the public at the 2011 statewide SMH CoP meeting. This meeting paralleled the CSMH national conference and took place one day prior to the state SMH conference. At the statewide conference, the White Paper was presented as part of a general session as one strategy for helping participants learn from the research and prepare for new Administrative Rules that would be changing in the near future.

The Administrative Rule re-write process was facilitated by DPHHS and OPI administrators putting together a multi-disciplinary working group of primary contributors. Key aspects of this process led to innovative rule changes and collaborative energies to increasing mental health accessibility in Montana's public schools.

Extensive and on-going dialogue among key stakeholders has been transparent and open. The working group was intentionally set up and sought to be as diverse as possible in perspectives and professional roles, consistent with best practice recommendations modeled by the national CoP on Collaborative School Behavioral Health. In addition, all Administrative Rule re-write working group meetings were open to the public. Public members were given opportunities to provide feedback at specific times throughout the process. Prior to the working group's first meeting, each invited member was given information and clear expectations for the working group. Setting up such expectations prior to the working group meetings parallels what is taught as a best practice in the PBIS framework. This type of working group or team is a good example of an ISF state example and a strong demonstration of what

a working group can accomplish if expectations are clearly established. Through intentional and thoughtful process the working group was able to engage in difficult dialogue with great respect for various opinions and ideas that were presented and discussed.

Changes in Administrative Rules were written in an effort to match the research findings from the White Paper, specifically from Section VI titled Pillars for Expanded School Mental Health Practice (Butts, 2010). Section VI included subsections focused on Prevention and Early Intervention, Family-School-Community, Interdisciplinary Collaboration, Supervision, Outcomes and Evaluation, Evidence-based Practices, Promotion of Mental Health, Youth Leadership Opportunities, and Training. The first working group meeting incorporated a general presentation of the research, while working group meetings two and three involved extensive time spent on the nine pillars, focusing on how the pillars and CSCT could be further expanded as a more research- and evidence-based program.

The new CSCT Administrative Rules are effective starting July 1, 2013. Highlights to rule changes include: a) a contract between the licensed mental health center and school district specify the details about services and staffing; b) specification of what the school will provide in terms of space, technology, transportation, etc.; c) specification of the referral process to CSCT; d) an expectation that PBIS is required in schools in which CSCT is housed; e) specification that training offered by the school and mental health centers includes parents; f) requirements for data sharing; and g) and specification of administrative requirements.

In addition to the open and transparent dialogue related to the new Administrative Rules, complementary statewide efforts in interconnecting PBIS and SMH continue to advance. From 2009–2012, Montana hosted an annual statewide school mental health conference. At the end of the 2012 SMH conference, state leaders elected to shift resources to integrating an ISF strand to Montana's statewide PBIS conference. In Montana, our

PBIS framework is the Montana Behavioral Initiative (MBI). In June 2013, the MBI Summer Institute has a very strong ISF track paralleling the national PBIS forum. The ISF track includes key national presenters matched with Montana exemplars from various geographical areas. The 2013 ISF strand has sessions to include state leadership representation from DPHHS, two diverse school districts, and one school building in a rural area. Through such collaborative work, DPHHS is able to guide the mental health community to participate in the MBI Summer Institute, which greatly enhances the partnership between DPHHS and OPI.

In Montana, a key principle for working with school districts and buildings emphasizes building relationships and following through. The connections allow for flexibility in exploring opportunities to address gap areas that might exist, leads to trust building and moving towards collection and use of shared data, and decreasing the research to practice gap. For example, one school district in Montana was able to use the nine pillars from the White Paper and incorporate much of the research into a successful grant proposal. This was an excellent opportunity for a school district to use what state leaders are supporting and outlining as new expectations for practice; and through the success of this particular grant, the district has been able to improve the work in schools using the same research foundation state leaders are using at the state level.

Critical Factors for Building the Capacity of Interconnected Systems Frameworks Within States

As reflected by the work of the NCoP on Collaborative School Behavioral Health and the above examples of three CoPs, within states (PA, UT, and MT), there is a growing number of collaborative partnerships that are seamlessly aligning state level structures and strengthening alliances between schools and community-based organizations and agencies that are expanding service capacity. This work is optimizing schools as points of contact for developing and sustaining Interconnected Systems Frameworks, and ensuring

effective multi-tiered systems of social, emotional, behavioral, and academic support for students and families (Foster et al., 2005).

While these collaborative efforts are mutually beneficial to schools and broader communities (see Weist, Evans, & Lever, 2003), they are quite challenging to develop and sustain, and the evidence base is quite limited on key strategies needed for large scale capacity building within state and local education systems (Hooper & Britnell, 2012).

Stephan, Hurwitz, Paternite, and Weist (2010) addressed this gap in a recent qualitative study focused on strategies for advancing statewide collaborative school behavioral health, with a clear emphasis on the importance of interconnected systems to ensure academic success and the social, emotional, behavioral well-being of youth. The Stephen et al. (2010) study was undertaken as an initiative of the School Mental Health-Capacity Build Partnership (SMH-CBP), with funding provided through a cooperative agreement between the National Assembly on School-Based Health Care (NASBHC) and the Center for Disease Control Division of Adolescent Health (CDC-DASH).

The purpose of the initial SMH-CBP study was to inform development of a model for capacity building. Site visits and focus groups were conducted in four early adopter states (Maryland, Missouri, Ohio, and Oregon), selected based on their track records of success in relation to school mental health policies and effective practices. Aspects of the success in these four states included strong state level leadership, receipt of federal funding, demonstrated interconnected, cross-agency collaborations, and broad, diverse stakeholder investments. The site visits and focus groups were conducted to systematically examine how the initiatives had been developed and were being implemented within each state at the state and local levels.

Twelve focus groups were conducted, three in each state, including approximately 120 participants

representing state level leaders from the education, mental health/health system, and youth development sectors, as well as family advocates. Each focus group had mixed representation across the types of participants. Based on structured, iterative content analysis of the focus group data, Stephan et al. (2010) distilled and reported 10 critical factors for capacity building:

1. A unified, cohesive, and compelling vision and a shared agenda with stakeholders – one that can inspire local action;
2. A centralized organizational infrastructure and accountability mechanisms to ensure implementation of the vision and action agenda;
3. Feasible and sustainable funding models for comprehensive initiatives, including early intervention and prevention;
4. An understanding among state and local education leaders of the critical links and associations between student academic success and mental health;
5. Meaningfully engagement of diverse family members and youth in policy and program development;
6. Recognition of the needs of culturally diverse populations, ensuring steps to reduce disparities to access to effective programs and services;
7. Pre-professional and in-service training for educators and allied professionals related to youth development, youth mental health, academic success, with emphasis on best practices;
8. Support for practitioners in using evidence-based strategies;
9. Equitable distribution of resources and services

across schools related to ensuring student academic success, mental health, and well-being; and

10. Focus on continuous quality improvement by collecting and using outcome data to inform decision-making at the local school, school district, and state levels.

In conjunction with these 10 critical factors, Stephan et al. (2010) also described 54 specific action steps that reflect detailed, concrete recommendations offered by focus group participants to facilitate establishing and sustaining the critical factors. With these 10 critical factors and 54 action steps as a guide for developing a training curriculum for state leaders, the SMH-CBP developed and piloted a capacity building model and curriculum for training state leaders (Stephan, Paternite, Grimm & Hurwitz, 2013). The initial model and curriculum reflected an attempt to balance comprehensiveness and feasibility, by focusing on topics and issues, referred to as modules, deemed to be foundational and essential for any state to begin capacity building work. Those four modules, described more fully by Stephan et al. (2013), include: 1) *Overview and Fundamentals*, with emphasis on understanding the critical links between student mental health/well-being and academic success; 2) *Social Marketing to School Administrators*, including identifying steps in social marketing, and learning how to develop and deliver key messages about importance addressing the social, emotional, and behavioral health and school success of students; 3) *Quality Improvement*, including learning steps in quality assessment process, discovering how to develop an assessment team; and 4) *Statewide Planning*, with emphasis on identifying and assessing the current status of each of the 10 critical factors for , as well as prioritizing and identifying action steps for state-wide planning. The model and training, focused on four modules, was pilot tested in two states through 2-day training sessions (WV and UT). Stephan et al. (2013) reported promising results of these trainings based on pre- and post-training participant assessments, as well

as 6-month follow-up assessments of capacity building competencies. More detailed information about the capacity building model and training modules is available in the Stephan et al. (2013) paper and on the NASBHC website (School Mental Health-Capacity Build Partnership, 2013).

Workforce Needs for Promotion of an Interconnected Systems Framework

Critical factor #7 noted by Stephan et al. (2010) emphasizes the importance of training for educators and allied professionals related to youth development, youth mental health, academic success, with emphasis on best practices. This highlights the importance of a well-trained workforce needed for developing, implementing, sustaining, and continuously improving an interconnected systems framework. One of the essential elements of such training is that it de-emphasizes traditional preparation of professionals, which is routinely discipline-specific and overly siloed. Instead, the integrative work that is essential for a successful interconnected systems framework relies on strong interdisciplinary and cross-discipline training. One approach described by Weist and Paternite (2006) is that mental health professionals (school and community employed) are trained together and with educators, both in pre-service preparation and through continuing education. Yet another approach is to conceptualize interdisciplinary preparation as building advanced competencies that rest upon traditional preparation. For example, Paternite, Weist, Axelrod, Weston, and Anderson-Butcher (2006), in their paper prepared on behalf of the Mental Health-Education Integration Consortium for the Annapolis Coalition's National Plan on Behavioral Health Workforce Development, recommended development and implementation of a sequential and iterative workforce training strategy, focusing on five key elements:

1. Identification and validation of core competencies need for advanced interdisciplinary practice in schools;

2. Design of training curriculum, methods, and experiences for developing the critical, core competencies;
3. Implementation and evaluation of relevant curricula, methods, and experiences, within the context of model (or optimal) school-community collaboratives, that essentially serve as real world learning laboratories;
4. Development of a certification process and mechanisms to acknowledge those who have mastered the core competencies;
5. Vigorous “social marketing” with university-based training programs and accreditors to encourage institutionalizing relevant training curricula, methods, and programs.

This agenda is decidedly ambitious, and one that requires persistent work. The Mental Health–Education Consortium is an exemplar of a group that has taken up this agenda through a variety of initiatives. Broadly, the consortium is focused on promoting workforce development for interdisciplinary school mental health practice, including current work in relation to four priorities — training, practice, research and policy (MHEDIC, 2013). Current key activities include:

- Establishment of interdisciplinary competencies for school mental health professionals.
- Ongoing refinement of the MHEDIC-endorsed educator competencies for school mental health, as well as development of related professional development experiences.
- Engagement with graduate students from diverse institutions and across disciplines working with and in schools to focus on and instill a commitment among young colleagues to interprofessional collaboration and practice.

Summary

The intent of this chapter was to provide information about how state leaders, policy makers, and policy implementers can work collaboratively to promote and better ensure positive academic, social, mental wellness, and academic outcomes for all students, through development and implementation of an Interconnected Systems Framework. The chapter highlighted the key facilitative role of the Communities of Practice model of interdisciplinary collaboration (Wenger et al., 2002), and the strong work in states that have developed communities of practice. In addition, the chapter highlighted key critical factors for building the capacity of statewide, interconnected systems to ensure academic success and the social, emotional, behavioral well-being of youth (Stephan et al., 2010, 2013). Work within 16 CoP states, including PA, UT, and MT which were featured in this chapter, exemplify emerging and promising strategies to: a) engage key stakeholders and decision makers; b) develop purpose and create and sustain buy-in and commitment to a shared vision, values, and desired outcomes; c) develop realistic commitments for action; d) adopt adaptive state level leadership and organizational structure, including political action, and promote strong, adaptive local leadership and organizational structure; e) focus on continuous quality improvement of the collaboration, and building and using data to inform decision; f) maximize family and youth engagement; and g) leverage cross-sector assets and resources.

In particular, the PA, UT and MT examples highlight strong leadership and interagency partnerships that impact the ability of states to move their work forward. Underlying each is a strong community of practice spirit. Consistent with the work of Rowling (2009), which highlights the direct relevance of school leadership for systems change to promote school success and positive wellbeing for youth, in each state leaders are critical to the process and progress, including sustaining that progress. As the three state examples demonstrate, there are multiple ways through strong leadership

to promote ISF processes and engagement, to break down traditional silos, and to increase the influence of interdisciplinary stakeholders. In addition, the Stephan et al. studies (2010, 2013) point to critical factors exemplified by work in PA, UT and MT, including strong state leadership, seamlessly interconnected, cross-agency collaboration, and broad, diverse stakeholder investments. PA, UT, and MT also work from the state to local levels to promote and implement PBIS, incorporating team members who work with, engage, and value professionals and families at the district and school building levels, which facilitates working through an ISF lens as a norm.

Importantly, each state has availed itself to some risk taking with innovations, in addition to capitalizing on opportunities for multi-scale learning within and across states and with national and federal initiatives. In each state the development and implementation of policies and practices have been impacted by the commitments of multiple talented individuals from within and outside the states who were willing to share lessons learned and knowledge. PA, UT and MT are examples of states that continue to learn from best practices and invest in resources that allow for groundbreaking ways of setting expectations and working. Importantly, strong Interconnected Systems Frameworks within states, such as those emerging in PA, UT, and MT, and other states, promote attention to accountability focused on mindfully keeping children, youth, and families in the forefront of our attention at all levels of the work of their behalf.

References

- Adelman, H. S., & Taylor, L. (2000). Promoting mental health in schools in the midst of school reform. *Journal of School Health, 70*, 171-178.
- Butts, E. (2010). A Report on Changes to Administrative Rules for Comprehensive School and Community Treatment. *The Montana Office of Public Instruction* (White Paper, 56 pages).
- Flaspohler, P. D., Anderson-Butcher, D., Paternite, C. E., Weist, M. D., & Wandersman, A. (2006). Community science and expanded school mental health: Bridging the research to practice gap to promote child well being and academic success. *Educational and Child Psychology, 23*, 27-41.
- Flaspohler, P., Duffy, J., Wandersman, A., Stillman, L., & Maras, M. (2008). Unpacking Capacity: The intersection of research to practice and community centered models. *American Journal of Community Psychology, 41*, 182-196. doi: <http://dx.doi.org/10.1007/s10464-008-9162-3>
- Foster, S., Rollefson, M., Doksum, T., Noonan, D., Robinson, G., & Teich, J. (2005). *School Mental Health Services in the United States, 2002-2003*. DHHS Pub. No. (SMA) 05-4068. Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.
- Hooper, L. M., & Britnell, H. B. (2012). Mental health research in K-12 schools: Translating a systems approach to university-school partnerships. *Journal of Counseling & Development, 90*, 81-90. doi: <http://dx.doi.org/10.1111/j.1556-6676.2012.00011.x>
- IDEA Partnership. (2013). *Communities of Practice*. Retrieved May 20, 2013, from Idea Partnership Website: www.ideapartnership.org
- IDEA Partnership. (2013). *Shared work*. Retrieved May 20, 2013, from Idea Partnership Website: <http://www.sharedwork.org>
- Mental Health Education Integration Consortium. (2013). Retrieved May 20, 2013 from MHEDIC Website: <http://www.mhedic.org>
- Paternite, C. E., Weist, M. D., Axelrod, J., Weston, K., & Anderson-Butcher, D. (2006). School mental health workforce issues. In M. Hoge, J. Morris, A. Daniels, N. Adams, L. Huey, & G. Stuart (Eds.), *A thousand voices: The national action plan on behavioral health workforce development* (pp. 199-210). Rockville, MD: U. S. Substance Abuse and Mental Health Services Administration.
- Pope, J. K., MacKean, G., Casebeer, A., Milward, H. B., & Lindstrom, R. (2013). *Inter-organizational networks: A critical review of the literature to inform practice*. Alberta, Canada: Alberta Centre for Child, Family and Community Outreach.
-

-
- Rowling, L. (2009). Strengthening “school” in school mental health promotion. *Health Education, 109*, 357-368. doi: <http://dx.doi.org/10.1108/09654280910970929>
- School Mental Health-Capacity Build Partnership. (2013). Retrieved May 20, 2013 from National Assembly on School-Based Healthcare
Website: http://www.nasbhc.org/site/c.ckLQKbOVLkK6E/b.7629883/k.8621/Mental_Health.htm
- Stephan, S., Hurwitz, L., Paternite, C., & Weist, M. (2010). Critical factors and strategies for advancing statewide school mental health policy and practice. *Advances in School Mental Health Promotion, 3*, 48-58. doi: <http://dx.doi.org/10.1080/1754730X.2010.9715686>
- Stephan, S., Paternite, C., Grimm, L., & Hurwitz, L. (2013, unpublished). *School mental health capacity building at state and local levels*. Submitted for publication.
- Weist, M. D. (1997). Expanded school mental health services: A national movement in progress. In T. Ollendick & R. J. Prinz (Eds.), *Advanced in Clinical Child Psychology* (Vol. 19, pp. 319-352). New York, NY: Plenum Press.
- Weist, M. D., Evans, S. W., & Lever, N. (2003). *Handbook of school mental health: Advancing practice and research*. New York, NY: Kluwer Academic/Plenum Publishers. doi: <http://dx.doi.org/10.1007/978-0-387-73313-5>
- Weist, M. D., & Paternite, C. E. (2006). Building an interconnected policy-training-practice-research agenda to advance school mental health. *Education and Treatment of Children, 29*, 173-196.
- Wenger, E., McDermott, R., & Snyder, W. (2002). *Cultivating communities of practice: A guide to managing knowledge*. Cambridge MA: Harvard Business School Press.
-

Policy Practice and People: Building Shared Support for School Behavioral Health

JOANNE CASHMAN, MARIOLA ROSSER, AND PATRICE LINEHAN
WITH THE STAKEHOLDER ADVISORY TO THE ISF

Over the last two decades, the focus on both academic performance and well-being of children and youth has repeatedly cast education and mental health as potential partners. The design of these collaborations has been influenced by the agency goals that shaped specific initiatives. Collaborations between education and mental health systems have emerged at the local, state and national levels. Each of these initiatives has introduced values, strategies, practices, vocabulary and funding mechanisms. Individually, they have solidified the understanding that education and mental health are interconnected. Collectively, they have highlighted the gaps in understanding, roles and relationships which can occur due to limited cross-system exposure. This chapter focuses on the efforts that have shaped experiences working across education and mental health. It explores the approaches to collaborating across boundaries that will be effective in building support for behavioral health and aligning efforts through the Interconnected System Framework (ISF) for School Mental Health (SMH) and Positive Behavioral Interventions and Supports (PBIS). Further, it offers a set of essential learnings to help bring decision-makers, practitioners and families together in shared support of policies that advance school-wide positive behavior supports and school mental health.

Investment at the Intersection of Education and Mental Health

While an array of federal agencies have advanced collaboration related to the ISF through policies, regulation and initiatives, the preponderance of these efforts has been under the influence of the U.S. Department of Education (USDOE) and Department of Health and Human Services (DHHS). Investments in education are sponsored by the Office of Elementary and Secondary

Education (OESE) and the Office of Special Education Programs and Rehabilitative Services (OSERS) (Kutash, Duchnowski, & Lynn 2006). Investments by Health and Human Services were primarily provided by Substance Abuse and Mental Health Administration (SAMHSA) or the Health Resources and Services Administration (HRSA) through its Maternal and Child Health Bureau (MCHB). Initiatives supported by the USDOE are supported by focused grants from the Office of Safe and Drug Free Schools (now the Office for Safe and Healthy Students (OSHS) in the Office of Elementary and Secondary Education (OESE), and the Office of Special Education Programs (OSEP). Although these agencies made the most substantive investments in school behavioral health, other related efforts have also contributed to our understanding of the issues. In recent years, overlapping priorities have led to joint funding of initiatives with SAMSHA, MCHB, OESE, OSEP, the Institute of Education Sciences (IES) and the Center for Disease Control (CDC) as potential collaborators and sometimes joint funders on national issues such as school climate and bullying prevention (Jonathan Cohen, National School Climate Center, ISF Advisory, Personal Communication, May 30, 2013).

While federal investments have led the way to exploring interagency connections, states and national organizations have also supported efforts to cross inter-agency boundaries, contributing to the many other efforts that have influenced the learning of individuals in the field. In states, unique initiatives also have made the connection between well-being and achievement. Increasingly, programs described as drop-out prevention, character education, social emotional learning, youth engagement, school climate and other designations linked behavior with initiatives designed to improve student success (Cashman, 2010).

While the investments described in this chapter may serve to clarify some programs that have shaped the experiences of decision makers and practitioners, they are not intended to be an exhaustive treatment of cross-sector investments. They identify major investments

in the landscape of education and mental health with emphasis on the contributions of the technical centers that are united in defining an Interconnected Systems Framework (ISF): the MCHB funded, Center for School Mental Health (<http://csmh.umaryland.edu>); the OSEP funded Center on Positive Behavioral Interventions and Supports (www.pbis.org), and the OSEP funded, IDEA Partnership (www.ideapartnership.org).

Investments by Health and Human Services

Substance Abuse and Mental Health Services Administration Investments. For over 30 years the concept of a ‘system of care’ has been the predominate force in programs supported by SAMHSA. This system has its origins in the 1980 work of noted mental health researchers who identified the complicated network of services that families needed to negotiate to get the help they needed (Kutash et al., 2006). A system of care endeavors to help children, youth and families achieve better outcomes at home, in school, in the community and throughout life. A system of care is both a set of beliefs on how to organize services to create systemic connections and a funding stream for state and local efforts to operationalize those principles. The essence of a system of care can be summarized in the following definition by SAMHSA:

“A system of care is a coordinated network of community-based services and supports that are organized to meet the challenges of children and youth with serious mental health needs and their families. Families and youth work in partnership with public and private organizations to design mental health services and supports that are effective, that build on the strengths of individuals, and that address each person’s cultural and linguistic needs (SAMHSA, 2013, p. 1).”

Among the investments guided by the systems of care philosophy, two technical assistance centers are funded by SAMHSA to support states and communities undertaking this work. Drawing exclusively on the systems of care principles and incorporating evidence-based practice, the National Technical Assistance Center

for Children’s Mental Health at Georgetown University and the Technical Assistance Partnership at the American Institutes for Research (AIR) help systems of care grantees to weave programs and people together and unite them in action, building from the foundational recognition that education is an essential component of systems of care. These centers work nationally, across states and with each other to build these connections and support grantees in making connection to enhance their work.

Another component of SAMHSA’s System of Care work was the critical funding of a network of family centers. This investment actualized the family-led and youth-guided principle at the core of the systems of care work and brought new attention to family voice (SAMHSA, 2013).

Lastly, SAMHSA has been a long-standing partner with the Department of Education in funding the federal, state and local programming developed under the Office of Safe and Drug-Free Schools (OSDFS) investments and continues its partnership with education through the Office of Safe and Healthy Schools (OSHS). SAMHSA funds the National Center for Mental Health Promotion and Youth Violence Prevention at the Education Development Center (EDC) to disseminate evidence based practice and support local planning and implementation.

Health Resources and Services Administration Investments. In 1995, the Health Resource and Services Administration (HRSA), through its Maternal and Child Health Bureau (MCHB) first designed an investment that was shaped to explore the ways in which schools can impact the mental health of children and youth. Through four iterations of this investment, HRSA asserts:

“Schools are in a position to promote students’ mental health and positive development as well as their motivation to learn by creating a climate that fosters a sense of connectedness and caring relationships among all members of the school community,

including students, educators, administrators, support staff, student services and mental health professionals, and family members. School policies and programming efforts can have effects on student behavior and mental health, connectedness to school and motivation to learn, and academic performance that range from minimal to profound, and these effects can be positive, negative, or a complex mixture. (Federal Register, November 19, 2010)."

The Center for School Mental Health (CSMH) at the University of Maryland, a co-sponsor of this monograph, was one of the initial investments under this priority and has been continuously funded since 1995. The Center is the fourth generation of this initiative designed to advance mental health in schools on a national basis. Initially, MCHB funded two national centers to provide training and technical assistance to various programs at national, state and community levels. Together with its sister center at University of California at Los Angeles (UCLA), these investments were crafted to develop and provide mental health resources and services for the school-aged population. At the same time, five states (Kentucky, Maine, Minnesota, New Mexico, and South Carolina) received grants that supported collaborative school mental health activities among state departments of health, mental health, and education, with emphasis on building infrastructure for sustainable state level school mental health initiatives (see Adelman et al., 1999).

In 2000, a new competition refunded the two original technical assistance and training centers with an emphasis on providing resources and services to organizations and institutions delivering mental health services in schools serving the K–12 populations. The overall purpose was to strengthen the personnel and systemic capacities of schools and communities for addressing students' psychosocial issues and mental health problems. It was during this iteration that cross-sector work began to become more formally organized. SAMHSA contributed partial funding support to the second generation of the initiative and the specific focus on aligning goals across federal investments became

more prominent.

Concurrent with this work, the Office of Special Education programs had invested in two Centers that were working in the behavioral health arena. The Center on Positive Behavioral Interventions and Supports was pioneering school wide interventions and the IDEA Partnership was coalescing national organizations with authority and influence over behavioral health at the state and local level.

The third generation MCHB investment beginning in 2005 focused on program and policy analysis and also continued to support the two national centers. CSMH had organized its work around an 'expanded school mental health' frame which highlighted the roles of both school employed and community employed staff in creating a comprehensive system. Exploring this connection opened the potential for collaboration across groups that were similarly poised to begin working together. The focused and formal connection with the PBIS Center and the IDEA Partnership began during this period.

CSMH is now in the fourth generation of this effort. It is the sole investment by HRSA/MCHB. Its purpose is two-fold:

- to advance understanding of successful and innovative school mental health policies and programs in order to strengthen the abilities of educators, schools, school districts, colleges and universities, and state education agencies, as well as community-based health and mental health providers,
- to promote student mental health and both to prevent and address student mental, emotional and behavioral problems (see <http://csmh.umaryland.edu>).

In pursuing these goals, CSMH is a core partner in defining the Interconnected Systems Framework.

United States Department of Education Investments

Office of Safe and Drug Free Schools, and Office for Safe and Healthy Student. For over a decade, the Office of Safe and Drug Free Schools (OSDFS) supported state and local grants aimed at improving health and mental health, reducing drug usage and maintaining safe school environments. In 2011, OSDFS was reshaped as the Office for Safe and Healthy Students (OSHS) in the Office of Elementary and Secondary Education (OESE) (OSDFS, 2012). Currently, the National Center for Safe and Supportive Learning Environments at AIR supports capacity building efforts for state administrators, especially in the 11 states that have grants through shared funding with SAMHSA.

Office of Special Education Programs Investments

Positive Behavioral Interventions and Support.

The broad set of research validated strategies focus on positive approaches to behavior designed to create and support school environments that lead to appropriate behavior in all students have been promoted by several researchers (McKevitt & Braaksma, 2008).

OSEP has invested in a specific set evidence based practices, set in an implementation framework designed to support the academic and behavioral outcomes for all students (Sugai & Simonsen, 2012). This investment, the Center on Positive Behavioral Interventions and Supports (PBIS) provides resources, technical assistance and coaching related to school-wide PBIS (Sugai & Simonsen, 2012). Its school-wide approach has opened opportunities to make important connections with a range of investments across education and mental health. The leadership role that the Center on PBIS has played in the development of the ISF is just one example of crossing boundaries to pursue shared work.

In describing its history, the Center on PBIS points out that OSEP's investment was originally funded to disseminate evidence-based practices for serving students with behavior disorders (BD). Given its series of

applied demonstrations, research studies and evaluation projects, researchers at the University of Oregon posed a different approach. They suggested that prevention, data based decision-making and school wide programs should be the central focus for improving outcomes for all students, including students with BD. Together with researchers for several other key sites, they secured funding through a competitive grant. One important feature, which set the stage for the ISF, was their early recognition of the need to include specialized supports. In meeting this need, they developed a relationship with the Illinois Emotional and Behavioral Disabilities (EBD) Network and the Sheppard Pratt Health Systems in Baltimore, Maryland (Sugai & Simonsen, 2012). These initiatives had undertaken early work in connecting Wraparound, Systems of Care and PBIS.

Today, over 17,000 schools are implementing PBIS and many states have achieved numbers that indicate a capacity for sustaining and scaling up (Sugai & Simonsen, 2012). OSEP's National PBIS Center has successfully communicated the concept of tiered interventions to a huge audience at the state and local levels. This understanding has spawned dialogue and planning about how to successfully blend services to meet the needs of students in all the tiers. Inevitably, this shared work brought the PBIS Center and the CSMH together. The development of the IL EBD Network into the IL PBIS Network made the possibilities even clearer. The stage was set to build the ISF and engage key stakeholders through another OSEP investment, the IDEA Partnership.

IDEA Partnership. Throughout the reauthorization of the Individuals with Disabilities Education Act (IDEA) in 1997, the shared implementation of evidence-based practice became a driving force and shaped the initial investment in four linked partnerships each focused on the information needs of a broad stakeholder group. The Partnerships were charged to coalesce discrete organizations and their members around shared interests and common goals. The IDEA Partnership (then known as the Policymaker

Partnership) at the National Association of State Directors of Special Education (NASDSE) affiliated 11 organizations that represented state level leaders. Among this group was the National Association of State Mental Health Program Directors (NASMHPD). As individuals in state leadership roles, NASDSE and NASMHPD members were well aware of the multiple initiatives, multiple goals, multiple funders and multiple partners. In 2001, through the IDEA Partnership, they convened leaders in the major federal and state initiatives to begin a relationship aimed at developing clear messages and leveraging the influence of all the partners.

Across the nation, school-wide PBIS was uniting special and general education leaders around the role of behavior in academic performance; student support systems were identifying shared goals; expanded school mental health was bringing community and school based practitioners into aligned work and systems of care were working to engage education. A NASDSE/NASMHPD initiative known as the *Shared Agenda* convened all the players in an effort to make logical connections among investments, to build the relationships among investments and stimulate the drive for deeper collaboration. A concept paper, *Mental Health, Schools and Families Working together: Toward a Shared Agenda* encouraged systemic collaboration and identified family networks as a ‘system’ to be meaningfully engaged. Further, the concept paper presented ideas for national dialogue and gave rise to five state technical assistance awards to states committed to working across agencies, initiatives and networks at the state and local level.

As we look back at the concept paper in light of today’s understanding, it is surprising to recognize that the idea of tiered interventions, an adaptation of a public health model, was just beginning to be widely acknowledged as a framework for behavioral services in both school based MH and education (Andis et al., 2002). NASDSE and NASMHPD became important purveyors of these ideas and promoters of collaboration across the boundaries of agencies. Their messages

conveyed that children, youth and families are the central figures and their needs should organize systemic and program level collaboration with established networks as real partners.

In its second iteration, NASDSE became the lead for a new unified IDEA Partnership, expanding the partners to include national organizations that represented policymakers, administrators, practitioners and family groups. Across the newly united partners, behavioral health emerged as an issue of shared interest and permitted the Partnership to garner support across groups for continued interaction and outreach to mental health. A core strategy was the active engagement of state agencies and state affiliates of the organizations to leverage both authority and influence toward practice change. In establishing a unified Partnership, authentic engagement and Communities of Practice became the organizing concepts and were applied to the collaboration across the school and community partners around mental health. It is these guiding principles that led the IDEA Partnership to become an active collaborator in the Interconnected System Framework. In 2004, leaders from state pilots – along with many of the original collaborators – met together to create the National Community of Practice (CoP) in School Behavioral Health.

Now in the third iteration of the IDEA Partnership, 21 of 55 national organizational members express school behavioral health as a priority, and join with the CSMH and the PBIS Center in defining the Interconnected System Framework. This effort is coordinated across groups through the CoP. Advising the development of the Interconnected System Framework is a major task on the work scope of the national CoP.

Building support for a shared agenda. The work of building a shared agenda demanded an infrastructure for collaboration that afforded the opportunity to the range of stakeholders in education, mental health and family groups to build understanding and define common interests. The National Community of

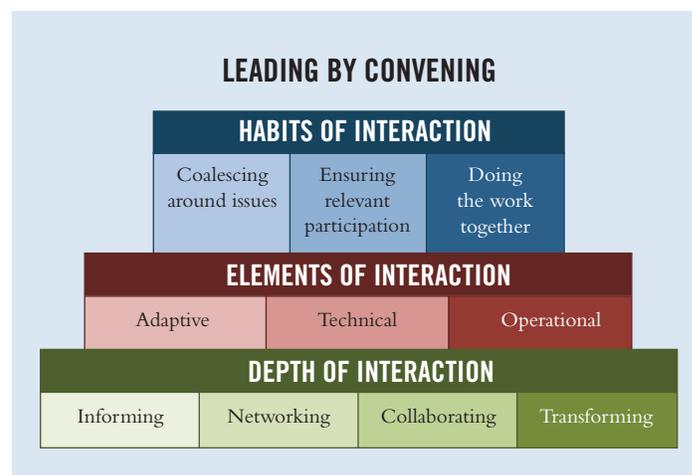
Practice on School Behavioral Health provided such an infrastructure. Convened by NASDSE and NASMHPD, and facilitated by the IDEA Partnership and the Center for School Mental Health, the CoP is constructed at multiple levels of scale, affiliating national state, local and site based partners. Seventeen state teams, many of whose efforts have been described in previous chapters, endeavor to follow the national design and advance their own shared work. Across organizations and state teams, twelve practice groups pursue critical issues through cross-stakeholder leadership. Among the most active of these practice groups issues is the collaboration across school based efforts in PBIS and school mental health. This issue resonated so highly with all partners that it was raised to a CoP-wide effort. Since 2010, the CoP has been engaged in helping to bring the array of agency investments, organizational roles and family groups into the work of the ISF. This focused work has built relationships that will advance the ISF while exploring the factors that pose potential barriers to implementing the ISF in the field.

Community of Practice (CoP) as strategy.

Communities of Practice are described as an infrastructure for sharing and learning across groups (Lave & Wenger, 1990), but are often overlooked as a strategic investment in creating a safe space where individuals and groups can explore boundary collaboration, build understanding across varying perspectives and support new learning informed by shared work (Cashman, 2010). CoPs convened and facilitated by the IDEA Partnership operate through this approach. These CoPs are intentionally designed to bring strategic value by creating and sustaining practice change around critical issues. In bringing researchers, decision makers, practitioners, families and technical assistance investments together, common interests emerge. Then, through ongoing interaction and attention to relationship building, it becomes safer to discuss the issues for which there is not shared support. With repeated interaction and a shared focus, the CoP becomes the vehicle for bridging perspectives for practice change that meets shared goals.

The National Community of Practice on School Behavioral Health is co-convened and facilitated by the IDEA Partnership and CSMH. The CoP affiliates 17 state teams, 21 national organizations and 8 technical assistance centers funded by SAMHSA, MCHB, OESE and OSEP. The CoP members are united in the belief that authentic engagement is the foundation for any effort that intends to create sustainable change. They have learned that different habits of interaction are required to build deep understanding and change that endures. These habits of interaction are captured in a framework called the Partnership Way. Although the name may sound as though it is a proprietary framework, it is actually a blueprint for addressing both the technical and the human side of implementation when making operational decisions. The framework also helps leaders understand the varying depth of collaboration across groups. It permits leaders to recognize early opportunities and build deeper relationships through more frequent interaction that result in greater understanding. The Partnership Way defines the role of the national CoP in supporting the ISF. Some CoP members had understanding and strong support for the framework, others predicted tensions as the ISF is implemented in states and local districts and across roles and the blending of these perspectives can help the work move forward in ways that reflect overcoming similar tensions in schools and school districts.

Figure 1: The Partnership Way



Note: The Partnership Way will be available as an online tool in August, 2013 at www.ideapartnership.org.

The Partnership Way culminates almost fifteen years of the IDEA Partnership's work in addressing persistent problems through communities of practice. Its organization is informed by the direct guidance of Etienne Wenger and the research of Ronald Heifetz and Marty Linsky. The overarching principle, Leading by Convening, as well as the three habits of interaction were articulated by Wenger in the forward to the Partnership's manual on Communities of Practice (Cashman, Linehan & Rosser, 2007). The elements of interaction draw on the research of Heifetz and Linsky in technical and adaptive solutions (Heifetz & Linsky, 2002). The four depths of interaction reflect the Partnership's designations in documenting observable behavior change in individuals, organizations and systems.

Building on a CoP approach, partners came together to ensure greater understanding and express deep feelings. Understanding that broad support is

critical to adoption in the field, the ISF authors engaged the partners over and over again, sometimes co-leading dialogue with organizations that had reservations about implementation. This behavior, actively listening while continuing efforts, modeled the interaction for those that will implement the ISF in states and local districts. This is important as there are honest differences based on experience and role that must be addressed. While both school-employed and community-employed practitioners have essential skills that are important in creating a comprehensive program of school behavioral health, they have different training traditions and varying degrees of familiarity with the school as the prime site of service delivery. These tension should inform efforts, not derail them! Sustainable site-based efforts will need to include both groups and address how each contributes to the comprehensive effort. To explore these perspectives, a 37 member Advisory Group to the ISF was established bringing together groups that have deep and durable networks in the field (see Table 1 below).

Table 1: Integrated Systems Framework Advisory

ROLE	REPRESENTATION	LEVEL OF SCALE
School Psychologist	National Association of School Psychologists	National
School Psychologist	National Association of School Psychologists	National
School Social Worker	American Council for School Social Work	National
School Counselor	National Association of School Counselors	National
School Social Worker	School Social Worker Association of America	National
Technical Assistance Provider	Technical Assistance Partnership; Center for Safe and Supportive Learning Environments	National
Occupational Therapist	American Occupational Therapists Association	National
School Psychologist	National Education Association	State
Elementary School Principal	National Association of Elementary School Principals	Local
Secondary School Principal	National Association of Secondary School Principals	National
Secondary School Principal	National Association of Secondary School Principals	National

School Administrator	American Association of School Administrators	National
Higher Education Faculty	Behavioral Health Practitioner Preparation	State
State Children’s Cabinet, Director	State Cross-agency Policy Structure	State
Higher Education Faculty	Special Education Teacher and Administrator Preparation	Local
State Education Agency	State-based Cross-agency Behavior Initiative	State
State Special Education Directors	National Association of State Directors of Special Education	State
Technical Assistance Provider	National Technical Assistance Center for Children’s Mental Health	National
School Counselor	American School Counselors Association	National
State Deputy Superintendent	Council of Chief State School Officers	State
School Superintendent	American Association of School Administrators	Local
School Psychologist	Regional State Professional Development Investment	Local
Director of Children’s Mental Health	National Association of Mental Health Program Directors	State
National Family Organization	Federation of Families for Children’s Mental Health	Local
Director of School Mental Health	New York City Public Schools	Local
School Psychologist, Higher Education Faculty	National Association of School Psychologists	State
State Technical Assistance Provider	Professional Development – Behavioral Health	State
Community Mental Health Provider	Private Mental Health Providers	State
School Psychologist	Local practitioner	Local
National Technical Assistance Providers	Center for School Mental Health	National
National Technical Assistance Providers	Center for School Mental Health	National
Government Relations	National Association of School Psychologists	National
Special Education Director	Council of Administrators of Special Education	Local
Behavior Specialist	State Behavior Initiative	State
Technical Assistance Provider	National School Climate Center	National
Higher Education Faculty	Council on Behavior Disorders a Division of The Council for Exceptional Children	National

Given the array of initiatives that have shaped understanding of school behavioral health in groups and in individuals, the perspective of these advisors was important to understand implementation opportunities and challenges. Based on their regular interaction, they were better able to translate the differing vocabulary for shared practices and learn each other's language. As well, they understood the unintended consequences of initial policy efforts and could provide insights for new recommendations. Lastly, because they work deeply in one or more levels of scale, these advisors could provide a unique understanding of the state, local and organizational influence needed to build support for the ISF.

The Landscape of Practice in School Behavioral Health

A useful analogy in understanding the journey to practice change is captured in the common expression, 'getting the lay of the land.' In research terms, this is the landscape of practice. A landscape is a social body of knowledge with varying perspectives on practice (Wenger, 2011). Learning is the real goal in practice change and learning within the landscape involves several processes. First, it is important to examine boundaries where discontinuity usually occurs as well as the central issue where continuity is often evident. Equally, it is important to understand the ways in which individual or group identities impact their views of the issue and their ability to learn (Wenger, 2010). Identity is tied to deeply held beliefs that are often associated with role. When roles change or practices associated with one role are expanded to include other roles, tension can develop. Successful collaborations surface and address these tensions before they become barriers to shared practice. Examining identity can yield important insights in charting an effective path to practice change.

The ISF advisory process was structured as a landscape effort. Several important investigations surfaced during the advisory process, including: the extent of support for the principles of the ISF, the unique contributions of school employed and community

employed roles; the shared roles for school employed and community employed staff; common visions of a comprehensive systems; and, predictable problems of implementation.

After two webinars and a face-to-face meeting, the Advisory Group completed a survey to make the range of perspectives explicit. Nineteen respondents from the 37 person Advisory Group - representing school employed and community employed practitioners, higher education, state mental health agencies, state educational, local schools and family groups - explored the results in a web meeting. While there was broad support for the ISF principles, there was general skepticism about the state and local application of the principles. Given the small number of respondents from any one role, the Advisory Group suggested that they extend the opportunities for input on the ISF through a survey to their networks. The survey captured the key points expressed during initial Advisory Group exchanges: respondent's role and the level of scale at which they work, agreement with ISF Principles, contributions of school and community practitioners, definitions of a comprehensive system and predictable problems of practice.

Each advisory group member was invited to redistribute the survey link to their leadership networks through their own communication vehicles. Within one week, 432 responses were submitted and 327 respondents substantially addressed the full survey. Although a full range of roles were represented in the responses, school employed practitioners represented almost double the number of respondents than all the other roles combined. Given that these responses represented the views from a variety of roles - including teachers, teacher educators, school psychologists, school social workers, school counselors, occupational therapists, school administrators and local directors of special education - the large response is expected. Although the overrepresentation of school staff in the response is noted, it does address practice across school based roles important to the ISF. Of the 327 respondents,

15 described themselves as working at the national level of scale, 23 identified with the state level, 177 indicated a local level, 89 worked at the site level and 23 at the individual level.

Respondents reviewed the principles of

the ISF in two ways. On a scale of 1-10, they first indicated agreement with the principle as a guide for implementation. Next, they indicated the extent to which they have experienced the principle in practice (See Table 2).

Table 2: Stakeholder Agreement with Principles of Integrated Systems Framework (ISF)

ISF PRINCIPLE	AGREEMENT			EXPERIENCE		
	Mean	Range	Mode	Mean	Range	Mode
Programs and services reflect a “shared agenda” with strong collaborations moving to partnerships among families, schools, and mental health and other community systems.	8.3	1-10	19	5.3	1-10	5
At all three tiers, programs and services are for students (and their families) in special and general education, with close collaboration between these two systems within schools.	8.3	1-10	10	5.3	1-10	6
Tier 1 represents systems that support ALL youth; Tier 2 represents systems that additionally support some students (typically 10-15%) and Tier 3 represents systems that provide an additional level of support to a few youth (typically 1-5%).	9.0	1-10	10	6.2	1-10	6
Tier 2 and Tier 3 interventions are anchored in Tier 1 interventions and are natural extensions or scaled-up versions of Tier 1. For example, students who do not sufficiently respond to SW-PBS Tier 1/universal interventions receive preventive and supportive interventions at Tier 2, and students whose problem behavior persists despite Tier 1 and Tier 2 intervention, receive intervention at Tier 3.	9.0	1-10	10	5.8	1-10	5
The three tiers represent system structures for providing interventions – the tiers do not represent youth.	8.7	1-10	10	6.3	1-10	6
At all three tiers of programs and services, emphasis is on data-based decision making and on the implementation of evidence-based promotion and intervention.	8.8	1-10	10	5.5	1-10	5
There is strong training, coaching and implementation support for all efforts.	8.4	1-10	10	4.7	1-10	4
All aspects of the work are guided by youth, families, school and community stakeholders with an emphasis on ongoing quality assessment and improvement.	8.4	1-10	10	4.5	1-10	5

For each principle the most frequent response was 10, the highest level of agreement. At the same time, each principle received responses across the continuum of ratings. This reveals the high extent of support for these ideas as well as the existence of varying views. While the cumulative support for each principle was high, structural elements defining the tiers and the reliance of data were rated among the highest principles. Principles related to shared agendas and collaboration were high but somewhat lower than those describing structural elements.

Wide differences are noted between the agreement on the principles and the extent to which the respondents had experienced these principles in practice. The most frequent response was in the mid-range and again the responses spanned the continuum. The mean response was also in the mid-range and somewhat lower than the mid-range for agreement on principles. This finding suggests that there is a core of shared beliefs, but a dearth of experiential knowledge about how to cross the boundaries of place and role to operationalize those beliefs. In this regard, the ISF holds significant promise.

Roles of school employed and community employed staff

Next, the respondents were asked to describe the unique insights and contributions of school employed and community employed practitioners, as well as the roles they may effectively share. Predictably, the comments identified the knowledge of the school environment and the application of behavioral health practice in schools to be a significant strength of school employed practitioners. At the same time, many identified the ability to think and act beyond the school setting as a significant benefit of community employed staff. A large number of responses clearly were based in the identity of the respondents. Many responses detailed the value school based or community based training and capability over the other. This finding points out the issues that must be seriously considered in implementing the ISF.

The issues of professional skills and role have been evident in the work on ISF over time. The persistent nature of these issues mirrors the dialogue among the Advisory Group and their support for a summary statement that validates the worth of both groups and the potential strength of a partnership. They stated: “Recognize that nobody wins when we stereotype the potential partner. School staffs have skills and are in the environment ... value that! Community staff has skills too and can support what those that have caseloads in the hundreds cannot do ... value that!” (ISF Advisory Webinar, Personal Communication, April 10, 2103).

Interestingly, when respondents were asked to describe the role that both school employed and community staff might share, they were able to suggest opportunities to work across roles. Many respondents identified small group interventions, training on evidence based practices, consultation, support and advocacy as roles that could be shared by both school employed and community employed staff. They were clear that for these opportunities to work well there needed to be a clear vision of how each contributes and what specifically each will do. There was significant concern about differences in orientation, vocabulary, role confusion, service overlap and duplication. One respondent summarized these as areas of “quiet competition ... who can do what better and faster.” (ISF Survey, April 2013).

Predictable Problems of Practice

Two predictable problems of practice that were repeatedly identified in web and face-to-face meetings were presented to the respondents. These were considered by the advisors to be important as they surface tensions that may be encountered in implementing the ISF. As well, they reveal identity issues that are important in gaining support of critical practitioner roles.

The first scenario described the role confusion in school based collaborations. One important issue

was the treatment of school employed and community employed staff as though they had interchangeable skill sets, especially when finances are scarce. School based practitioners expressed the desire to have school and agency administrators understand the therapeutic skills that are part of their training. They want to become valued members of the comprehensive system, both delivering service and acting as bridges between school and community staff on behalf of students. At the same time, they know that they need to share routine responsibilities for general supervision and other assigned responsibilities. They recognize the importance of these roles in understanding the whole school dynamic. Yet, they also want recognition of the trade-off in assigning them to general supervision while prevention and intervention roles are filled by others.

Likewise, community employed providers express the need to become part of the school, understand the culture and develop relationships with school staff. But they, too, are assigned roles to fulfill in a school based program. They value what their school employed counterparts might bring to the collaboration, but have no real influence on their role assignments.

Both groups report that these situations are often exaggerated when finances become scarce. School employed practitioners report that they are sometimes pulled from more therapeutic services and sometimes even replaced by community employed staff. Community employed staff describe the *'push back'* for assuming roles that may have been changed or eliminated. For both roles, the need to *'make do'* with limited resources could be better addressed in a comprehensive program where skill sets are recognized and assignments balance the school-wide and therapeutic demands (ISF Advisory Webinars, Personal Communication, May, 2012; April, 2013, National School Behavioral Health CoP Meeting, November, 2012; ISF Survey, April, 2013).

The second scenario addressed the notion that school mental health is *'therapy moved to the school setting'*. To this misconception, participants from both

the advisory and the extended networks described the difference between co-location of services and a comprehensive system of services guided by both school and community personnel. Attention to shared responsibility for mental health promotion, risk prevention and effective intervention was prominent. The need to create better professional development opportunities for all school staff and across school and community providers was highly identified as an important strategy. Another important action was outreach to school and agency administrators who will be instrumental in shaping the design of programs and building the culture of collaboration (ISF Advisory Webinars, Personal Communication, May, 2012; April, 2013; National School Behavioral Health CoP Meeting, November, 2012; ISF Survey, April, 2013).

Envisioning a Comprehensive System

Continuing to define the field perspective, respondents identified the characteristics of a comprehensive program. Here, the tone of the responses *notably* changed. While the former questions were polarizing, this question was inclusive and hopeful. Many comments discussed a truly comprehensive, systemic view where decision makers recognized the value of all the roles in successfully serving students and families and did not put them into competition. They talked about creating responsive systems that are constantly learning together how to meet challenges. They described the value of their own role in this system, and did not seem to put their contribution above that of the other potential partners. Rather, they cited the importance of not designating any group to an exclusive role but involving them in learning all aspects of the effort. They thought it was important for community staff to understand wellness promotion and prevention efforts embedded in curriculum and delivered in school services. They expressed the need for school staff to understand intensive intervention with individuals and families so that carryover in the school environment would be more likely.

Policy-to-practice: The focus on transformation

This chapter began by conveying the array of investments undertaken at the intersection of education and mental health. It further communicated the range of roles engaged in the settings where these investments have played out. Lastly, it explored the issues as they are experienced by key partners and the professional identities that will advance and constrain progress in the future.

These partners operate within our federal system. National and state priorities influence how issues are conveyed and what decisions are open to influence. Programs at the intersection of education and mental health systems, like those described in this chapter, will continue to be shaped by research and evidence. As well, they will continue to be edited by political and fiscal realities. Many knowledgeable individuals have promising ideas about the most challenging situations. They are working today in federal agencies, state governments, universities, schools and communities. Collectively, they hold the formal and tacit knowledge we need to meet our challenges.

Given this complex landscape, it is important to bring a collaborative approach to every effort. Not the shallow collaborations of the past, but a new kind of transformative work that encourages decision makers to open communication with the field and empowers practitioners and families to become active partners in learning what works. The ISF stakeholders believe that a CoP approach is the vehicle for this interchange and provides much needed support for the human side of implementation. They advise decision makers and implementers to look for the ways that individual work intersects and can become shared work. The ISF provides a great start!

From the cross-stakeholder work on the ISF, several broad recommendations emerge for building the habits of interaction that lead to shared meaning, deep connections and effective implementation of policy

into practice at every level of scale. Readers may have already formed ideas in response to this chapter. The ISF Advisory Group encourages you to recognize your opportunities to contribute to this ongoing work.

Recommendation 1: Take a landscape view.

Spend time exploring the range of stakeholders that have interest in the issues and are impacted by programs designed to address them. Learn why they care about the issue and what work is already underway. Help individuals to communicate their capacities and value the capacities of others. Create regular interaction to build the relationships.

Recommendation 2: Keep children and youth at the center of the work.

Be clear and consistent in making improved outcomes for children and youth in the highest priority. Recognize that children's lives play out in schools, but also in homes and communities. There are roles that each of us should play. Decisions, especially in lean fiscal times, may impact one or another group of stakeholders, but when they are authentically engaged in creating the system, they understand the realities. Redesign, as initial design, must include all and never waiver in holding children and youth at core of the work.

Recommendation 3: Pay attention to identity.

Personal meaning drives behavior. Implementers are decision makers too. At a personal level, they decide every day whether they will act on what they are told to do or modify it with their own insights. Never stop asking how practices impact the identity of important players and never stop asking them to become aware of how their identity opens or limits their perspective. Make sure that the potential partners understand the vocabulary that each other is using. Language is a can be a factor for those that are bound by their own identity. Learning each other's language can be the bridge to recognizing each other's identity (Scott Bloom, New

York City Public Schools, ISF Advisory, Personal Communication, May 30, 2013).

Recommendation 4: Pay attention to context.

The fit between an evidence based practice and the setting into which it is implemented is important. In under-resourced settings, highly resourced settings and everything in between, challenges arise. Stay true to the fidelity of the practice but understand the need to craft solutions that fit the setting. Structure the dance between fidelity and flexibility as a chance for the stakeholders to cross their own boundaries of their roles to create customized approaches that meet the standard of evidence. Continually work with front line staff in designing implementation strategies that will ‘fit’ in their particular setting to increase the likelihood that they will be applied (Susan Bazyk, Cleveland State University, ISF Advisory, Personal Communication, May 30, 2011).

Recommendation 5: Aim for authentic engagement.

While a critical mass is important in getting any initiative underway, sustainability depends on broad and deep support. Keep inviting the skeptics. Be intentional about including families, teachers, support personnel, administrators and agencies who question or challenge the process (Claudette Fette, Texas Federation for Families of Children with Mental Health Needs, Stacy Skalski, National Association of School Psychologists and Judie Shine, American Council for School Social Work, ISF Advisory, Personal Communication, May 30 and June 3, 2013). They will need to become your allies for the practice changes that you support to be sustainable and they may hold information that is important in crafting the right strategy to move the initiative to scale.

Recommendation 6: Recognize the impact of authority and influence.

In public settings funded by public funds,

designated leaders have responsibility for efficient and effective implementation. These leaders act under the authority vested in them by federal, state and local government. But not all leaders lead with authority. Some lead with influence. Professional and family organizations affiliate deep and durable networks and have the trust of their members. They are important partners in exploration and adoption of new practices. Leading practice change means helping others to join the effort as leaders too.

Recommendation 7: Remember, in complex systems, everybody comes as a learner.

Among the most important recommendations is grounded in an appreciation for the enormity of the issue and the diverse perspectives that compete for our attention. The CoP supports the ISF because it provides an evidence-based structure for thinking, acting, evaluating and adapting. But even greater support has developed for the process undertaken in delineating the ISF. This process was informed by the array of federal investments in research, with each chapter co-written by education and mental health leaders, and a chapter dedicated to stakeholder perspective, bringing messages from and giving messages to the field. This is clearly an example of leading by convening ... the leadership of the future. In defining itself, the Interconnected Systems Framework (ISF) lives up to the challenge of its name!

Recommendation 8: Act! Convene and collaborate based upon the shared values and goals of children’s mental health and education.

Education and mental health will continue to share the responsibility for behavioral health. System of Care values and the principles from children’s mental health are aligned with the values of positive behavior supports, including: (1) the strengths and needs of the family, child, and youth, (2) using data to make decisions, (3) shared decision-making, (4) community-based supports, and, (5) evidence-based practices. We also know that under different names and funding streams, many

efforts have a common orientation. These shared values can be used as focal points for engaging in shared work at the child, school/agency, community, state and federal levels. Reach out and invite! (Joanne Malloy, Institute on Disability, University of New Hampshire and Sally Baas, National Association of School Psychologists, ISF Advisory, Personal Communication, May 30, 2013).

Summary

It has been a privilege to chronicle the journey of these stakeholders as they surface issues and work through tensions. Implementers in the field will need to do the same as they undertake the ISF framework. It takes the active engagement of decision makers, practitioners and families to operationalize the cross-cutting principles in the ISF. It is your efforts to bring the potential partners into a comprehensive system that will be the most instructive. Each new example of the ISF in practice reveals more about issues, meaning, identity, and context. Together, we will continue to be explorers in the landscape of practice.

References

- Adelman, H. S., Taylor, L., Weist, M. D., Adelsheim, S., Freeman, B., Kapp, L., Lahti, M., & Mawn, D. (1999). Mental health in schools: A federal initiative. *Children's Services: Social Policy, Research, and Practice*, 2, 95-115. doi: http://dx.doi.org/10.1207/s15326918cs0202_3
- Andis, P., Cashman, J., Oglesby, D., Praschil, R., Adelman, H., Taylor, L., & Weist, M. (2002). A Strategic and Shared Agenda to Advance Mental Health in Schools through Family and System Partnerships, *International Journal of Mental Health Promotion*, 4, 28-35. doi: <http://dx.doi.org/10.1080/14623730.2002.9721886>
- Cashman, J. (2010, October). *Insulating the Pipeline: The Interconnected Systems Framework*. Presentation for cross-stakeholder dialogue at the National Community of Practice on Behavioral Health Meeting, Albuquerque, NM.
- Cashman, J., Linehan, P., & Rosser, M. (2007). *Communities of Practice: A new approach to solving complex educational problems*. Alexandria, VA: National Association of State Directors of Special Education.
- Heifetz, R., & Linsky, M. (2002). *Leadership on the Line: Staying alive through the dangers of leading*. Cambridge, MA: Harvard Business Press.
- Kutash, K., Duchnowski, A. J., & Lynn, N. (2006). *School-based mental health: An empirical guide for decision-makers*. Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, Dept. of Child and Family Studies, Research and Training Center for Children's Mental Health.
- Lave, J., & Wenger, E. (1990). *Situated Learning: Legitimate Peripheral Participation*. Cambridge, UK: Cambridge University Press. doi: <http://dx.doi.org/10.1017/CBO9780511815355>
- McKevitt, B. C., & Braaksma, A. D. (2008). Best practices in developing a positive behavior support system at the school level. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology V* (pp. 735-747). Bethesda, MD: National Association of School Psychologists.
- National Association of State Mental Health Program Directors and National Association of State Directors of Special Education. (2002). *Mental Health, Schools and Families Working Together for All Children and Youth: Toward a Shared Agenda*. Alexandria, VA.
- National Center on Safe Supportive Learning Environments. (2013). *Overview of the National Center on Safe Supportive Learning Environments*. Retrieved on May 30, 2013
Website: <http://safesupportiveschools.ed.gov/index.php?id=13>
- National Center for Mental Health Promotion and Youth Violence Prevention. (2013.) *Overview of the National Center on Mental Health Promotion and Violence Prevention*. Retrieved on June 3, 2013
Website: <http://www.promoteprevent.org>

- Office of Safe and Drug-Free Schools. (2012). Archived information from 6/27/2012. *Offices*. Retrieved May 30, 2013 Website: <http://www2.ed.gov/about/offices/list/osdfs/index.html>
- Substance Abuse and Mental Health Services Administration. (2013). *Schools and Systems of Care: We Work Together*. Retrieved May 22, 2013 Website: <http://www.samhsa.gov/children/schools-sc.asp>
- Substance Abuse and Mental Health Services Administration. (2013). *System of Care Core Values*. Retrieved May 22, 2013 Website: <http://www.samhsa.gov/children/core-values.asp>
- Sugai, G., & Simonsen, B. (2012). *Positive Behavior Interventions and Supports: History, Defining Features, and Misconceptions*. Retrieved May 22, 2013 Website: http://www.pbis.org/school/pbis_revisited.aspx
- Wenger, E. (2010) Communities of Practice and Social Learning Systems: the Career of a Concept. In C. Blackmore (Ed.), *Social learning systems and Communities of Practice* (pp. 179-198). London: Springer. doi: http://dx.doi.org/10.1007/978-1-84996-133-2_11
- Wenger, E. (2011, December). *Learning in and across landscapes of practice*. Presentation to Organisation and Educational Development. UK: Manchester University.
-

Understanding the Complexity of the Children and Families We Serve

KRISTA KUTASH¹ AND AL DUCHNOWSKI² FROM UNIVERSITY OF SOUTH FLORIDA

The overarching aim of this monograph is to suggest ways to integrate and implement Positive Behavioral Interventions and Supports (PBIS) and School mental health (SMH) into one Interconnected Systems Framework (ISF). This is clearly ambitious, but it is also greatly needed. Too often, the school and mental health systems work in isolation under the false assumption and expectation that each will work effectively as independent systems. An approach that considers the features and operations of an implementation framework for effective school-based mental health practices, especially at the Tier 2 and Tier 3 levels, should help move the field forward, faster than the “trial and error” method too often used by local schools. There are, however, aspects about the mental health system and the population of child and families served by this system that should be acknowledged during implementation to help ensure success. These aspects can be represented by three critical concerns: the enormity of the task at hand, given the large numbers of children and families needing assistance; the complexity of the needs of youth who are best served in Tier 3; and the importance and challenge of parent engagement in the systems we build and the services we deliver.

The Number of Children with Mental Health Needs

Our research base is slowly accumulating regarding the number of children who have some type of emotional disturbance and the nature of those disturbances (Forness, Freeman, Paparella, Kaufmann, & Walker, 2012; Wagner, Kutash, Duchnowski, & Epstein, 2005; Wagner, Kutash, Duchnowski, Epstein, & Sumi, 2005). Estimates of the number of children with emotional disturbances are always more than expected,

and their conditions are more diverse and often more long-standing than previously estimated. Showing the long-term nature of this condition, a recent national study of adults with mental health disabilities documented that for most of these adults, their problems reportedly started in early adolescence or around 14 years of age (Kessler, Berglund, Demler, Jin, & Walters, 2005). Although these problems are highly prevalent, the use of services within the mental health specialty sector is limited (Wang, Lane, Olfson, Pincus, Wells, & Kessler, 2005).

Too often, the sheer number of children needing help can be overwhelming to a school and community planning committee. Within the vision for the implementation of an interconnected framework, however, needs of children and families are prioritized and strategies are implemented to address the needs. The vision also includes continuous progress monitoring and planning for effectiveness, efficiency and relevance (see Chapter 2). Therefore, once a framework has been established, a continuous process to establish new priority areas can occur to help ensure adequate coverage of unmet needs is eventually achieved.

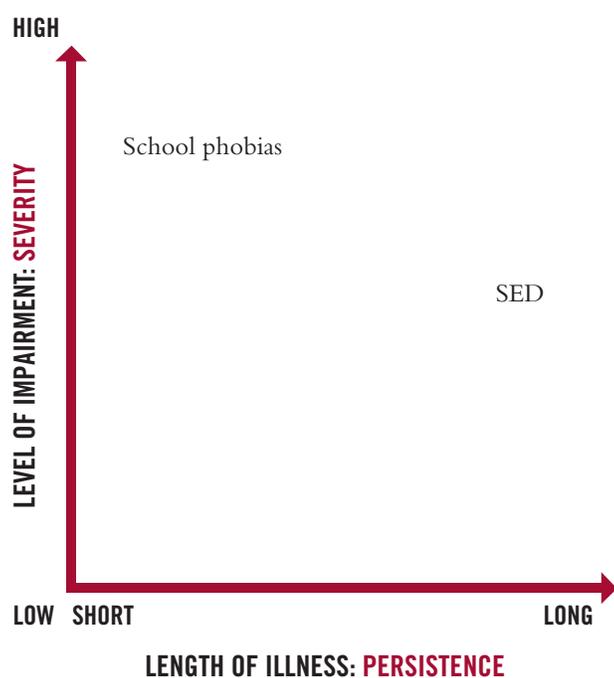
Research on the causes of emotional disturbance in children is also growing. There is rarely a single cause of this condition, but rather it can be explained as a combination of biological factors and environmental factors with the influence of each of these changing across the developmental spectrum. For a discussion of the causes associated with emotional disorders in children, see Chapter Three of the Surgeon General’s report on Mental Health (U.S. Department of Health and Human Services [U.S. DHHS], 1999) and Eyberg, Schuhmann, and Rey (1998). For schools, however, cause is not as relevant as are the characteristics of the behaviors that are currently being exhibited in the classroom—such as the intensity, duration, and level of impairment associated with the behaviors (Zionts, Zionts, & Simpson, 2002).

¹ Krista Kutash is Professor Emeritus in the Department of Child and Family Studies, Florida Mental Health Institute, University of South Florida, Tampa. Contact email: Kutash@usf.edu

² Albert J. Duchnowski is Professor Emeritus in the Department of Child and Family Studies, Florida Mental Health Institute, University of South Florida, Tampa. Contact email: Duchnows@usf.edu

One way for both school personnel and mental health providers to understand the range of emotional and behavioral problems in children and adolescents has been to classify the mental health need by severity of the impairment (i.e., how much does the problem interfere with daily functioning) and by the expected duration of the illness (Stroul & Friedman, 1994). As illustrated in Figure 1, a child experiencing fear of attending school or school phobia, for example, has a condition that can severely disrupt everyday functioning since attending school is a major activity of childhood. However, the length or duration of the problem is thought to be of a short-term nature. On the other hand, children with a severe emotional disorder (SED) are thought to have functional impairments in multiple life domains (in school, the community, and within the family), and the condition is projected to persist for a long period of time. The concepts of severity and persistence have played major roles in designing mental health delivery systems and treatment approaches and provides a common vocabulary for school and mental health providers when building service systems.

Figure 1. Severity and Persistence in Children’s Mental Health Disorders



The interconnected framework can be viewed as a potentially effective approach to systematically addressing the multi-faceted educational and mental health needs of children and families. Inherent in this framework is the ability to potentially address the needs of a large number of children when the planning is systematically developed around driving principles such as the developing agreed upon measurable goals, building on an existing structure such as an existing PBIS framework, securing an adequate dedicated funding stream to support implementation structures, and establishing a cross-system team to select and monitor the implementation of new evidence-based practices. Instead of being thwarted by the number of children needing help, the ISF provides school and community teams an effective mechanism to begin to address this challenge.

Mad, Bad, Sad, Can’t Add?

The interplay of severity, duration in understanding mental health disorders and environmental influences on mental health functioning is illustrated by a study conducted in the early 1980’s when the awareness of the complexity of mental health deficits in children was just emerging. To help plan the amount and types of public child mental health services that might be needed by a community, a survey of four child serving agencies—child welfare, juvenile justice, education, and mental health agencies—was conducted (Friedman & Kutash, 1986). It is interesting to reflect on what these professionals reported at the time of the survey when less was known about the emotional and behavioral problems in children. Administrators from the child welfare system reported in this survey that were more likely to view the children they serve as having very “sad” histories of abuse and neglect rather than mental health disorders, while the administrators in juvenile justice were more likely to view their children as being “bad” more than “mad” or having a mental health disorder. Likewise, schools were more likely to view the population they serve through a more academic lens and perceived their children as being

unable to function in the classroom (can't add). Since that time, a more complete picture of youth with mental health disorders has emerged and we know that mental health disorders can be found in children in all the child serving agencies and that these youth often demonstrate a complex interplay of functioning across domains and have a combination of characteristics including "sad, mad, bad and can't add." While a substantial knowledge base of the mental health needs of youth in child welfare (McCrae, Guo, & Barth, 2010) and juvenile justice (Schubert, Mulvey, & Glasheen, 2011) has emerged, little is known about the mental health needs of youth serviced in special education settings due to emotional and behavior challenges.

Emotional functioning of students with ED. A recent study (Kutash, Duchnowski, & Madias, 2011) provided an in depth description of the emotional functioning of youth with ED who are served by Special Education in public schools across the country and offers insights in to the complexity of their mental health needs. Students from 9 elementary schools, 4 middle schools, 5 K-8 schools, and 6 high schools in 9 states were represented. These students (n=314) were in special education classrooms due to emotional disorders, and were mostly male (85%) and Black (58%), and they averaged 12.4 years of age. The large majority of the students were from lower income families, as indicated by receiving free or reduced meals at school (79%) and a median monthly income of \$1,000 to \$1,999. Parents in the study reported that they first noticed behavioral problems in their children at an average age of 5.2 years. On average, the youth were placed in special education at 8 years old (approximately 3rd grade), and they had spent on average of 3.3 years in a special education classroom when the study was conducted. When this length of time is compared to time in a non-special education classroom, youth had spent 67% of their school careers in special education.

This study used a standardized measure of emotional functioning (The Child Behavior Checklist: Achenbach, & Edelbrock, 1980) and revealed that the

majority of students (64%) scored in the highest level of need in terms of overall mental health problems, while 65% scored in the highest level of need for externalizing mental health problems, such as delinquent and aggressive behaviors. Additionally, 35% of the students scored in the highest level of need for internalizing problems such as being withdrawn, anxious, or depressed. Perhaps more interesting is that 60% of the youth who scored in the highest level of need in externalizing mental health problems also scored in the highest level of need in the internalizing mental health problem area. These results support the notion that the mental health needs of students in special education settings are complex including both externalizing disorders and internalizing disorders. These results also underscore that students placed in special education settings have both mental health and educational deficits, not just educational deficits as many may believe.

Services for youth with ED. The needs of youth with ED are best addressed by providing an array of services and supports over a prolonged period of time. This makes the resource mapping of available community resources and established agreements between child serving agencies (described in Chapter 3 of this monograph) critically important. The service array for children with ED usually involves a combination of four important areas including (a) learning new skills such as emotional regulation, social skills or coping skills; (b) encouragement and reinforcement for using these new skills, which comes from supportive adults who have a positive relationship with the youth (e.g., caregivers, mentors, school staff, and therapists); (c) an environment to practice and use the new skills with positive peer role models (such as a classroom or recreational activities), and (d) a mechanism that provides support to caregivers and coordination of services over time. The Wraparound process (Eber, Sugai, Smith, & Scott, 2002; Suter & Bruns, 2009) is a common approach to coordinating services for youth with multiple and complex needs. The use of high fidelity Wraparound is a thorough and staff-intensive mechanism that should be reserved for the most complex cases. The principles used in the Wraparound process, however, provide an

Engaging Parents

One of the major challenges still facing both the education and mental health system is the lack of engagement of parents of children with emotional and behavioral challenges in the education and support services of their children. An extensive body of research investigating the extent to which parents are involved in the schooling of their children indicates that greater parent involvement is associated with better academic achievement and mental health of children (e.g., Pomerantz, Moorman, & Litwack, 2007). Numerous studies examining outcomes such as reading and math achievement, attendance, behavior, and graduation rates support this relationship (for reviews, see Fan & Chen, 2001; Hill & Taylor, 2004; Jeynes, 2005 & 2007; Pomerantz, Grolnick, & Price, 2005; Pomerantz et al., 2007). Not surprisingly, schools perceive parent involvement as an important component of school improvement activities aimed at increasing student achievement (Domina, 2005).

It has been observed that families of children with ED are the least involved in the education and support services of their children, as compared to families whose children have other disabilities or those whose children do not have a disability (Newman, 2005; Wagner, Newman, Cameto, Javitz, & Valdes, 2012; Zhang, Hsu, Kwok, Benz, & Bowman-Perrott, 2011). Ingoldsby (2010) reviewed research on interventions to promote family engagement in programs to improve the emotional functioning of their children, and found that between 20 to 80% of families drop out prematurely. Similarly, other researchers have suggested that families and children often receive less than half of the intended intervention due to dropping out of treatment programs early (Gomby, 2000; Kazdin, 1996; Masi, Miller, & Olson, 2003). The National Institute of Mental Health (National Advisory Mental Health Council on Child and Adolescent Mental Health Intervention Development and Department, 2001) has identified low engagement and retention as major threats to the effectiveness of evidence-based practices. Consequently, an important

priority in the field is to develop strategies to improve the engagement of families with children who have ED in the education and support services of their children continue to be an important priority in the field.

This lack of parent engagement has stimulated a growing interest in the potential of family education and support services. Family support services has been defined as being directed at meeting the needs of parents or caregivers of children with mental health needs with the explicit purpose of helping parents/caregivers (a) clarify their own needs or concerns; (b) reduce their sense of isolation, stress, or self-blame; (c) provide education or information; (d) teach skills; and (e) empower and activate them, so that they can more effectively address the needs of their families. (Hoagwood et al., 2010, p. 3)

At present, family education and support services that are offered by schools are under-utilized. In a recent analysis of data from a national database of youth serviced in Special Education due to ED, several important findings emerged. For example, schools attended by 71% of students in the study reported the availability of at least one type of family education and support service. However, only 17% of families of children with ED were reported by teachers as using these services. An especially discouraging aspect of the report was the finding that when compared with families who did not receive support services, those who did use them were more involved in their school, their children received more services in the community, and their children had higher achievement scores (Duchnowski, Kutash, Green, Ferron, Wagner, & Vengrofski, 2012).

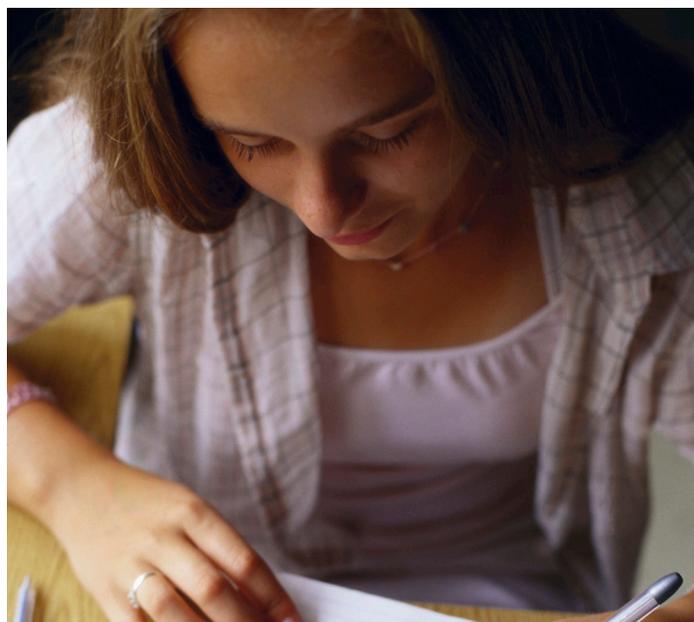
In the last three decades there has been a slow but steady increase in the awareness of the need to accept parents of children with ED as equal partners in the education and treatment of their children (Kutash, Garraza, et al., 2012) in order to have greater parent engagement. The expansion of the System of Care for children with ED (Stroul & Friedman, 1994), and the growing family support and empowerment movement (Hoagwood et al., 2008) have created a context

supportive of the need to more fully understand the potential value of family support in community-based, as well as school-based programs. Within this supportive context, peer-to-peer models are emerging to provide support and education to parents of children with ED (Gyamfi, Walrath, Burns, Stephens, Geng, & Stambaugh, 2010; Hoagwood, 2005; Kutash, Duchnowski, Green, & Ferron, 2011; Olin et al., 2009). In peer-to-peer program models, parents of children with ED who have navigated the service delivery system with relative success are trained to provide support. Goals of these programs include a reduction of stigma and isolation, increased self-efficacy and empowerment, and increased access to and engagement in the range of services available that are aimed at improving outcomes for families and children (Kutash, Garraza, et al., 2012).

Parent Connectors. One such peer-to-peer evidence-based program, Parent Connectors, has shown particular promise (Kutash, Duchnowski, Green, et al., 2011; Kutash, Cross, et al., 2012). This program is aimed at parents of children who have long histories of emotional and behavioral impairments that affect their academic and community functioning, and who have had limited success with the mental health and educational service systems. The overall goal of the Parent Connectors Program is to increase the engagement of parents in the education and mental health services their child receives in school and the community. The active ingredients of the intervention include the following: emotional support (not therapy); informational support (e.g., special education procedures, methods to support academic success); instrumental support (e.g., how to meet basic needs such as food and shelter, information about available recreation programs); and the promotion of positive attitudes towards the social norms of the family, perceived control of behavior, and the perceived benefit of engagement. Objectives of the intervention are accomplished by having veteran parents, called Parent Connectors (PCs), trained in communication skills, self-disclosure, and the program model. The PCs telephoned participating parents once a week during the school year to listen and offer support. They were also

supervised in a weekly group meeting with other PCs by a clinically trained staff member. Results from two randomized controlled studies (Kutash, Duchnowski, Green, et al., 2011; Kutash et al., under review) found that for parents who were highly strained at the start of the studies, and then received weekly peer support over the school year, there was a decrease in strain and need for support, and an increase in empowerment, mental health services efficacy, and hopefulness compared to highly strained parents in the “services as usual” group. Further, the positive results were also seen in the children of parents who received support: the children obtained more mental health services, experienced a decrease in emotional impairment, an increase in academic achievement and attendance, and fewer out-of-school suspensions, as compared to children whose parents were in the “services as usual” groups.

Although the research base providing evidence of positive effects of family education and support is at an initial stage, benefit from receiving the service has been found for parents and caregivers as well as for their children. However, practitioners in this field are clearly challenged by many issues, ranging from a lack of well-developed theory to the development of an implementation strategy that outlines innovations



to promote family participation in the education of their children as well as in supports available in their community.

As the evidence base for family support continues to grow in parallel with the development of ISF, the complementary nature of the two processes will become more and more apparent. There has been reference made in several of the chapters in this monograph to the challenges associated with implementing evidence-based practices. The need to ensure program fidelity and effective “dosage” through an acceptable level of participation in the intervention is critical. Then, once an evidence based practice is adopted in a school, the need to sustain its implementation must be addressed. A strong degree of parent engagement and involvement in the implementation of the ISF framework can provide effective support to professionals as they continue their efforts to sustain the development of ISF. Parents who are actively engaged in the interventions promulgated by IFS will experience favorable outcomes in their children. They can become effective advocates in school and district level committees that make decisions about program continuation and expansion. The inclusion of family support in the ISF framework will benefit school mental health practitioners, as well as the children and families they serve.

Summary

In summary, this monograph arrives on the scene at an opportune time. There is a renewed attention at present to the mental health need of the nation, particularly that of our children. Impending reform in health care policy offers hope for increased support to meet the mental health needs of children. At the same time, PBIS continues to expand across the nation’s schools and will reach a level of scale at which a clear positive impact will be evident. The chapters in this monograph offer a blueprint, some guiding principles, and several real-world examples to assist educators, school mental health professionals, families, and advocates who want to implement the best

possible practices in their schools to enable each child to achieve their educational and emotional potential. This is particularly true for those children who may be facing challenges that go beyond those that are part of typical development. The broad, systems-level approach advocated in ISF is the type of process needed to meet the challenges these children and their families face.

References

- Achenbach, T., & Edelbrock, C. (1980). *Child Behavior Checklist: CBCL*. Burlington, VT: University of Vermont.
- Domina, T. (2005). Leveling the home advantage: Assessing the effectiveness of parental involvement in elementary school. *Sociology of Education*, 78, 233–249. doi: <http://dx.doi.org/10.1177/003804070507800303>
- Duchnowski, A. J., Kutash, K., Green, A. L., Ferron, J. M., Wagner, M., & Vengrofski, B. (2012). Parent support services for families of children with emotional disturbances served in elementary school special education settings: Examination of data from the Special Education Elementary Longitudinal Study. *Journal of Disability Policy Studies*. Advance online publication. doi: <http://dx.doi.org/10.1177/1044207312460889>
- Eber, L., Sugai, G., Smith, C. R., & Scott, T. M. (2002). Wraparound and Positive Behavioral Interventions and Supports in the Schools. *Journal of Emotional and Behavioral Disorders*, 10, 171–180. doi: 10.1177/10634266020100030501
- Eyberg, S. M., Schuhmann, E. M., & Rey, J. (1998). Child and adolescent psychotherapy research: Developmental issues. *Journal of Abnormal Child Psychology*, 26, 71–82.
- Fan, X., & Chen, M., (2001). Parental involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review*, 13, 1–22. doi: <http://dx.doi.org/10.1023/a:1009048817385>
- Forness, S. R., Freeman, S. F. N., Paparella, T., Kaufmann, J. M., & Walker, H. M. (2012). Implications of Point and Cumulative Prevalence for Children with Emotional or Behavioral Disorders. *Journal of Emotional and Behavioral Disorders*, 20, 4–18. doi: <http://dx.doi.org/10.1177/1063426611401624>
- Friedman, R. M., & Kutash, K. (1986). *Mad, bad, sad, can't add?* The Florida Adolescent and Child Treatment Study (FACTS). Unpublished manuscript. Florida Mental Health Institute, University of South Florida, Tampa.
- Gomby, D. S. (2000). Promise and limitations of home visitation. *Journal of the American Medical Association*, 284, 1430–1431. doi: <http://dx.doi.org/10.1001/jama.284.11.1430>
- Gyamfi, P., Walrath, C., Burns, B., Stephens, R., Geng, Y., & Stambaugh, L. (2010). Family education and support services in systems of care. *Journal of Emotional and Behavioral Disorders*, 18, 14–26. doi: <http://dx.doi.org/10.1177/106342660933389>
- Hill, N. E., & Taylor, L. C. (2004). Parental school involvement and children's academic achievement: Pragmatics and issues. *Current Directions in Psychological Science*, 13, 161–164. doi: <http://dx.doi.org/10.1111/j.0963-7214.2004.00298.x>
- Hoagwood, K. (2005). Family-based services in children's mental health: A research review and synthesis. *Journal of Child Psychology and Psychiatry*, 46, 690–713. doi: <http://dx.doi.org/10.1111/j.1469-7610.2005.01451.x>
-

-
- Hoagwood, K. E., Cavaleri, M. A., Olin, S. S., Burns, B. J., Slaton, E., Gruttadaro, D., & Hughes, R. (2010). Family support in children's mental health: A review and synthesis. *Clinical Child and Family Psychology Review, 13*, 1-45. doi: <http://dx.doi.org/10.1007/s10567-009-0060-5>
- Hoagwood, K. E., Green, E., Kelleher, K., Schoenwald, S. K., Rolls-Reutz, J., Landsverk, J., ... Mayberg, S. (2008). Family advocacy, support and education in children's mental health: Results of a national survey. *Administration and Policy in Mental Health and Mental Health Services Research, 35*, 73-83. doi: <http://dx.doi.org/10.1007/s10488-007-0149-4>
- Ingoldsby, E. M. (2010) Review of interventions to improve family engagement and retention in parent and child mental health programs. *Journal of Child and Family Studies, 9*, 629-645. doi: <http://dx.doi.org/10.1007/s10826-009-9350-2>
- Jeynes, W. H. (2007). The relationship between parental involvement and urban secondary school student academic achievement: A meta-analysis. *Urban Education, 42*, 82-110. doi: <http://dx.doi.org/10.1177/0042085906293818>
- Jeynes, W. H. (2005). A meta-analysis of the relation of parental involvement to urban elementary school student academic achievement. *Urban Education, 40*, 237-269. doi: <http://dx.doi.org/10.1177/0042085905274540>
- Kazdin, A. E. (1996). Dropping out of child psychotherapy: Issues for research and implications for practice. *Clinical Child Psychology and Psychiatry, 1*, 133-156. doi: <http://dx.doi.org/10.1177/1359104596011012>
- Kessler, R. C., Berglund, P., Demler, O., Jin, R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry, 62*, 593-602
- Kutash, K., Cross, B., Madias, A., Duchnowski, A. J., & Green, A. L. (2012). Description of a fidelity implementation system: An example from a community-based children's mental health program. *Journal of Child and Family Studies, 21*, 1028-1040. doi: <http://dx.doi.org/10.1007/s10826-012-9565-5>
- Kutash, K., Duchnowski, A. J., Green, A. L., & Ferron, J. (2011). Supporting parents who have youth with emotional disturbances through a parent-to-parent support program: A proof of concept study using random assignment. *Administration and Policy in Mental Health and Mental Health Services Research, 38*, 412-427. doi: <http://dx.doi.org/10.1007/s10488-010-0329-5>
- Kutash, K., Duchnowski, A. J., Green, A. L., & Ferron, J. (Under review). Effectiveness of the Parent Connectors Program: Results from a Randomized Controlled Trial. *School Mental Health*.
- Kutash, K., Duchnowski, A. J., & Madias, A. (2011). Clinical Functioning of Youth Served in Special Education due to Emotional and Behavioral Challenges. Unpublished manuscript. Tampa, FL: Florida Mental Health Institute, University of South.
-

-
- Kutash, K., Garraza, L. G., Ferron, J. M., Duchnowski, A. J., Walrath, C., & Green, A.L. (2012). The relationship between family education and support services and parent and child outcomes over time. *Journal of Emotional and Behavioral Disorders*. Advance online publication. doi: <http://dx.doi.org/10.1177/1063426612451329>
- Masi, M.V., Miller, R. B., & Olson, M. M. (2003). Differences in dropout rates among individual, couple, and family therapy clients. *Contemporary Family Therapy*, 25, 63–75. doi: <http://dx.doi.org/10.1023/a:1022558021512>
- McCrae, J. S., Guo, S., & Barth, R. P. (2010). Changes in maltreated children's emotional Behavioral problems following typically provided mental health services. *American Journal of Orthopsychiatry*, 80, 350.
- National Advisory Mental Health Council Workgroup on Child and Adolescent Mental Health Intervention Development and Deployment. (2001). *Blueprint for change: Research on child and adolescent mental health*. (DHHS Publication No. CG 031-591). Washington, DC: National Institute of Mental Health. Retrieved from <http://wwwapps.nimh.nih.gov/ecb/archives/nimhblueprint.pdf>
- Newman, L. (2005). *Family involvement in the educational development of youth with disabilities: A special topic report of findings from the National Longitudinal Transition Study-2 (NLTS2)*. Menlo Park, CA: SRI International. Retrieved from http://www.nlts2.org/reports/2005_03/nlts2_report_2005_03_complete.pdf
- Olin, S. S., Hoagwood, K. E., Rodriguez, J., Ramos, B., Burton, G., Penn, M., ... Jensen, P.S. (2009). The application of behavior change theory to family-based services: Improving parent empowerment in children's mental health. *Journal of Child and Family Studies*, 19, 462–470. doi: <http://dx.doi.org/10.1007/s10826-009-9317-3>
- Pomerantz, E. M., Grolnick, W. S., & Price, C. E. (2005). The role of parents in how children approach school: A dynamic process perspective. In A. J. Elliot & C. S. Dweck (Eds.), *The handbook of competence and motivation* (pp. 259–278). New York, NY: Guilford.
- Pomerantz, E. M., Moorman, E. A., & Litwack, S. D. (2007). The how, whom, and why of parents' involvement in children's academic lives: More is not always better. *Review of Educational Research*, 77, 373–410. doi: <http://dx.doi.org/10.3102/003465430305567>
- Schubert, C. A., Mulvey, E. P. & Glasheen, C. (2011). Influence of Mental Health and Substance Use Problems and Criminogenic Risk on Outcomes in Serious Juvenile Offenders. *Journal of the American Academy of Child & Adolescent Psychiatry*, 50, 925–937.
- Stroul, B.A., & Friedman, R. M. (1994). *A system of care for children and youth with severe emotional disturbances*. Washington, DC: Georgetown University Child Development Center, CASSP Technical Assistance Center.
- Suter, J. D., & Bruns, E. J. (2009) Effectiveness of the Wraparound Process for Children with Emotional and Behavioral Disorders: A Meta-Analysis. *Clinical Child and Family Psychology Review*, 12, 336–351. doi: <http://dx.doi.org/10.1007/s10567-009-0059-y>
-

-
- U. S. Department of Health and Human Services [U.S. DHHS]. (1999). *Mental health: A report of the Surgeon General*. Rockville, MD: Author, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health.
- Wagner, M., Kutash, K., Duchnowski, A. J., & Epstein, M. H. (2005). The Special Education Elementary Longitudinal Study (SEELS) and the National Longitudinal Transition Study (NLTS2): Study designs and implications for youth with emotional disturbance. *Journal of Emotional and Behavioral Disorders, 13*, 25-41.
- Wagner, M., Kutash, K., Duchnowski, A. J., Epstein, M. H., & Sumi, W. C. (2005). The children and youth we serve: A national picture of the characteristics of students with emotional disturbances receiving special education. *Journal of Emotional and Behavioral Disorders, 13*, 79-96.
- Wagner, M., Newman, L., Cameto, R., Javitz, H., & Valdes, K. (2012). A national picture of parent and youth participation in IEP and transition planning meetings. *Journal of Disability Policy Studies, 23*, 140-155. doi: <http://dx.doi.org/10.1177/1044207311425384>
- Wang, P. S., Lane, M., Olfson, M., Pincus, H. A. Wells, K. B., & Kessler, R. C. (2005). Twelve-month use of mental health services in the United States: results from the National Comorbidity Survey Replication. *Archives of General Psychiatry, 62*, 629-40.
- Zhang, D., Hsu, H., Kwok, O., Benz, M., & Bowman-Perrott, L. (2011). The impact of basic level parent engagements on student achievement: Patterns associated with race/ethnicity and socioeconomic status (SES). *Journal of Disability Policy Studies, 22*, 28-39. doi: <http://dx.doi.org/10.1177/1044207310394447>
- Zionts, P., Zionts, L., & Simpson, R. L. (2002). *Emotional and behavioral problems: A handbook for understanding and handling students*. Thousand Oaks, CA: Corwin Press.
-