**Diffusion of Innovations and
Science-Based Practices to
Address Barriers to Learning
& Improve Schools:
A Series of Information Resources**

As calls for addressing barriers to student learning and improving schools increase, new directions are imperative. And, this involves more than tinkering with prevailing approaches. The need is for developing major innovations (e.g., comprehensive school-level prototypes) and taking them to scale throughout a school district.

The success of all this depends on stakeholders in public education becoming more knowledgeable about the complexities and strategies related to diffusion of innovations, making major systemic changes, and developing a *sophisticated* understanding of the role of empirically-based practices.

To these ends, the Center is producing a series of resources, such as this one, to provide informational aids for use as tools in policy and practice analyses, research, education, and school improvement planning.

Excerpts from Child Trends' series of *Research-to Results Briefs* on Adopting, Implementing, Sustaining, and Replicating Evidence-Based Practices

Child Trends, an independent, nonpartisan research center focused exclusively on children, publishes a variety of helpful documents (see www.childtrends.org). In their series of *Research-to Results Briefs* are several that have relevance to our Center's series of info resources on enabling system change.

On the following pages are excerpts from the Child Trend briefs entitled:
> *A 10-step Guide to Adopting and Sustaining Evidence-based Practices in Out-of-school Time Programs*
> *Implementing Evidence-based Practices: Six "Drivers" of Success*
> *Seven Activities for Enhancing the Replicability of Evidence-based Practices*

Excerpt from a Child Trends *Research-to Results Brief* series *on Fostering the Adoption of Evidence-Based Practices* (June 2007)

A 10-STEP GUIDE TO ADOPTING AND SUSTAINING EVIDENCE-BASED PRACTICES IN OUT-OF-SCHOOL TIME PROGRAMS
Allison J.R. Metz
http://www.childtrends.org/Files//Child_Trends-2007_06_04_RB_EBP2.pdf

The 10 steps to enumerated in this brief for implementing evidence-based practices in out-of-school time programs are:

(1) **Prioritize Outcomes:** Prioritize the outcomes your program hopes to achieve and assess how current gaps in programming, staffing, and/or services have impeded your ability to produce desired results.

(2) **Conduct Readiness Assessment:** Collect data on your program's *ability and motivation* to change. Tools exist to help programs measure their readiness to change at both the frontline staff and administrative levels.

(3) **Garner the Support of Critical Stakeholders:** Gain broad support from program funders,
administrators, managers, frontline staff, and program participants and their families to create and sustain change.

(4) **Research and Identify a "Good Fit":** Select an evidence-based practice which matches the needs of your program participants, can be incorporated into your existing program and delivered by trained frontline staff, and will help you achieve desired outcomes.

(5) **Decide on Necessary Program Adaptation:** Make necessary and feasible adaptations to the program model to meet the unique needs of your community without undermining the core elements of the original program.

(6) **Seek Information, Technical Assistance, and Program Consultation:** Gather information on the evidence-based practice including essential intervention components, staff training guidelines, and necessary financial and organizational resources for implementation. When possible, consult with the program developer or seek outside expert consultation.

(7) **Provide Staff Training and Coaching:** Train staff at all levels on the new practice, including directors, supervisors, and frontline staff. Provide staff with ongoing coaching and mentoring in the field.

(8) **Begin Initial Implementation:** Incorporate changes at multiple levels to support the implementation of the practice, including changes in policies and procedures, operations, staffing, and resource allocations.

(9) **Conduct Ongoing Evaluation and Fidelity Assessments:** Collect formative evaluation data to inform continuous program improvement and conduct an outcome evaluation to assess whether you have achieved desired outcomes. A fidelity assessment can provide information on the level of adherence to the original program model.

(10) **Create Feedback Loops and Ongoing Opportunities for Learning and Reflection:** Institute procedures for ongoing learning and reflection such as monthly meetings for staff to discuss challenges associated with implementing the new practice, training or technical assistance needs, and successes and achievements.

In concluding the brief, the author states:

"Adopting evidence-based practices is a formidable challenge for programs. In many cases, it calls for organizational restructuring, ongoing staff training and practice changes, and the upfront allocation of financial resources. The adoption of an evidence-based practice takes a sustained effort, as well as ongoing support and maintenance of the model. It is important to remember that implementation is not a single event, but rather "a mission-oriented process involving multiple decisions, actions, and corrections."* As the out-of-school time field continues to promote the effective dissemination of evidence-based program models, researchers also need to disseminate practical information to practitioners on the "how to" of applying evidence-based practices in their own programs. Our hope is that this brief has outlined concrete steps practitioners can take to utilize evidence-based practices. We will update and expand this dialogue as more information is learned on "what works" in the implementation of evidence-based practices. In the short-term, forthcoming briefs in this series will address issues such as program fidelity, replication, and research-based strategies for successfully implementing evidence-based practices and programs.

*Fixen, D. L., Blasé, K. A. (2006). "What *works" for implementing "what works" to achieve consumer benefits*. National Implementation Research Network, University of South Florida, Louis de la Parta Florida Mental Health Institute.

Excerpt from a Child Trends *Research-to Results Brief* series *on Fostering the Adoption of Evidence-Based Practices* (October 2007)

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IMPLEMENTING EVIDENCE-BASED PRACTICES:
SIX "DRIVERS" OF SUCCESS
Allison J. R. Metz, Ph.D., Karen Blase, Ph.D., and Lillian Bowie, M.A.
http://www.childtrends.org/Files//Child_Trends-2007_10_01_RB_6SuccessDriversRev.pdf

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The authors use the definitions of implementation offered by the National Implementation Research Network (see http://nirn.fmhi.usf.edu/):

>*a "specified set of activities designed to put into practice an activity or program of known dimensions."*
>*"a mission-oriented process involving multiple decisions, actions, and corrections."*

Implementation is described as involving six stages that typically take place over two to four years:

Stage 1: Exploration Stage – Programs begin to consider the idea of adopting or replicating an evidence-based program or practice, searching various options, examining the "fit" of various programs and practices with their target population, assessing the feasibility of implementing a new program or practice, and investigating whether technical assistance is available from program developers or other sources.

Stage 2: Preparation Stage – Once a decision to adopt a certain program or practice is made, preparation for implementation begins. This includes securing funding; hiring staff; arranging space, equipment, and organizational supports; and creating new operating policies and procedures.

Stage 3: Early Implementation Stage – At this stage, staff members have been hired, participants recruited or referred for program services, and organizational supports put in place. This stage of implementation is often characterized by frequent problem-solving at practice and program levels.

Stage 4: Full Implementation Stage – A program or practice is considered fully implemented when new staff members have become skillful in their service delivery, new processes and procedures have become routine, and the new program or practice is fully integrated into the agency or organization.

Stage 5: Sustainability Stage – When a program is no longer new, the focus of implementation becomes sustaining the program through continuous training for practitioners and other staff members and seeking new funding to support the program in future years. However, sustainability should not be thought of only as a sequential stage that only follows full implementation, but should be an active part of each stage above. For example, it is important to identify and maintain funding and other start-up resources during the early stages of implementation as well.

Stage 6: Innovation Stage – Once a program has been implemented effectively and adheres to the original model, an organization may choose to test innovations or improvements. This step often involves consultation with the original program developer or expert consultants to ensure that essential elements of the program or practice are not lost when changes are made.

Successful implementation involves activities and outcomes at the practice level, organizational level, and systems level. Practice-level changes are important because, in out-of-school time programs, practitioners are the ones who actually carry out the intervention. Simply put, there is no such thing as an "administrative" decision; all decisions and changes need to affect frontline practices with children and youth participating in out-of-school time programs. The successful and sustainable implementation of evidence-based practices and programs always requires organizational and systems change to support practice changes on the front line. It is, therefore, critical to align the following implementation activities on these three levels to ensure that programs will be able to achieve intervention outcomes:

>**Change the behavior of practitioners and other key staff members** – In order to adopt a new program or practice, practitioners and other key staff members, such as supervisors and program managers, will need to increase their knowledge and learn new skills related to the new program or practice.

>**Change the organizational structures, cultures, and climates** – Changes in both formal and informal organizational structures and cultures (i.e., values, philosophies,policies, procedures, and decision-making) are needed to bring about and support the changes in staff.

>**Change systems and policies, as well as relationships with external partners** – Changes in policies, management, and relationships with external partners are needed to support the implementation of the new practice or program. System-level partners may include organizations or agencies that can help support the actual delivery of services or can provide financial or human resources to support a program. When implementation activities are not aligned on these three levels, the result is failed or fragmented implementation.

The 6 drivers of successful implementation enumerated in this brief are:

Staff Selection: Staff recruitment and selection are key components of implementation at practitioner and organizational levels.

Staff Training: Staff members at all levels require training when a new practice is implemented. Effective training involves theory and discussion; demonstration of skills; and opportunities for practice and feedback.

Coaching, Mentoring, and Supervision: Whereas skills needed by successful practitioners can be introduced in training, many skills can only really be learned on the job with the help of a consultant or coach.

Internal Management Support: Internal management support provides leadership to support implementation, makes use of a range of information to shape decision making, and provides structures and processes for implementing new practices and keeping staff focused on desired outcomes.

Systems-Level Partnerships: Systems-level partnerships involve working with external partners to support program implementation and the frontline work of practitioners.

Staff and Program Evaluation: Evaluation entails using measures of practitioner performance and adherence to the program model, along with program outcome measures, to assess overall program performance and develop quality improvement plans.

In concluding, the authors state:

"The implementation of high-quality evidence-based practices cannot occur without well-trained, well-prepared practitioners who are supported by informed and competent supervisors, coaches, and program managers. We believe that understanding "what works" in program *implementation* is just as important as understanding "what works" in a program *model*. Knowledge of both these factors will minimize the research-to-practice gap and facilitate the application of innovative, evidence-based practices throughout out-of-school time programs. In this brief, we have outlined the six core components or 'drivers' of successful implementation. While the services that out-of-school time programs provide and the outcomes that these programs want to achieve vary greatly, research indicates that these core implementation drivers are important across programs. Programs are encouraged to consider these drivers when trying to implement sustainable programs or practices and seeking to tailor them to meet the needs and resources of their organization."

Excerpt from a Child Trends *Research-to Results Brief* series *on Fostering the Adoption of Evidence-Based Practices* (October 2007)

SEVEN ACTIVITIES FOR ENHANCING THE REPLICABILITY OF EVIDENCE-BASED PRACTICES
Allison J. R. Metz, Ph.D., Lillian Bowie, M.A., and Karen Blase, Ph.D.
http://www.childtrends.org/Files//Child_Trends-2007_10_01_RB_Replicability.pdf

At the outset, the authors note that:
> *The successful replication of a program or practice involves the replication of both core intervention components and core implementation components.*

The 7 activities to enhance program replicability enumerated in this brief are:

Identify core intervention components: Intervention components refer to the most essential and indispensable components of an intervention practice for achieving desired participant outcomes. These include program philosophy, direct treatment and service components, program structure components, and program improvement components.

Identify core implementation components: Implementation components refer to the most essential or indispensable components for implementing a practice or program. These include program cost, staff selection criteria, staff training, staff coaching and mentoring, and administrative structures and systems-level activities necessary for supporting program implementation.

Identify discretionary and adaptable program components: Multicomponent programs typically include *discretionary* and *adaptable* program components. These components allow program adopters to tailor or customize an effective program to meet the unique needs of their target population or community.

Develop stand alone modules: *Stand alone modules* refer to the individual intervention components which, together, make up a multicomponent program. Program adopters may find it more feasible and desirable to implement single intervention components, rather than a multicomponent program.

Provide information on efficacy and effectiveness of the program: Program findings should be communicated clearly to program adopters, including the efficacy of individual program components or modules and the efficacy of the program with certain subgroups.

Provide program consultation and technical assistance: Program developers are encouraged to collaborate with program adopters to ensure that the program is implemented with integrity to the model. Program adopters are also encouraged to seek outside expert consultation.

Critically assess issues of culture: Program developers are encouraged to address issues of culture in program development, efficacy research, and potential program replication.

In concluding, the authors state:

"We have outlined seven specific activities program *developers* can carry out to enhance the replicability of evidence-based programs. We also encourage program *adopters* to focus on these activities, as well as to pursue the following: seeking out information on core program components; asking program developers or expert consultants for technical assistance and support during program implementation; evaluating their replication efforts rigorously in order to refine core program components, assess the effects of program adaptations, and analyze program outcomes with a new target population; and, finally, disseminating findings to the field."

A Few Other Related Center Documents and Publications

Systemic Change for School Improvement: Designing, Implementing, and Sustaining Prototypes and Going to Scale. Online at
http://smhp.psych.ucla.edu/pdfdocs/systemic/systemicreport.pdf

Toward a Scale-Up Model for Replicating New Approaches to Schooling. Online at
http://smhp.psych.ucla.edu/publications/06%20toward%20a%20scale%20up%20model%20for%20replicating%20new%20approaches.pdf

Scaling-Up Reforms Across A School District. Online at
http://smhp.psych.ucla.edu/publications/21%20SCALING-UP%20REFORMS%20ACROSS%20A%20SCHOOL.pdf

Organization facilitators: A change agent for systemic school and community changes.
http://smhp.psych.ucla.edu/pdfdocs/Report/orgfacrep.pdf

On Sustainability of Project Innovations as Systemic Change. Online at
http://smhp.psych.ucla.edu/publications/45%20on%20sustainability%20of%20project%20innovations%20as%20systemic%20change.pdf

New Initiatives: Considerations Related to Planning, Implementing, Sustaining, and Going-to-Scale. Online at http://smhp.psych.ucla.edu/pdfdocs/briefs/sustainbrief.pdf

Sustaining School and Community Efforts to Enhance Outcomes for Children and Youth: A Guidebook and Tool Kit. Online at   http://smhp.psych.ucla.edu/pdfdocs/sustaining.pdf

Getting From Here to There: A Guide book for The Enabling Component. Online at
http://smhp.psych.ucla.edu/pdfdocs/enabling/gettingfromhere.pdf

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The Center's Series of Information Resources on Enabling System Change

*Diffusion of Innovations and Science-Based Practices to
Address Barriers to Learning & Improve Schools*

>Brief Overview of a Major Review by L.W. Green, et al. (2009) entitled: Diffusion Theory and Knowledge Dissemination, Utilization, and Integration in Public Health
>Brief Overview of Major Concepts from E.M. Rogers' Work on Diffusion of Innovations
>Brief Overview of Malcolm Gladwell's Concept of the Tipping Point
>Some Key Terms Related to Enabling System Change
>Systemic Change for School Improvement
>Change Agent Mechanisms for School Improvement: Infrastructure not Individuals
>System Change and Empirically-Supported Practices: The Implementation Problem
>Policy Implications for Advancing Systemic Change for School Improvement
>Some Key References Related to Enabling System Change
>Dissemination Focused on Diffusion: Some Guidelines
>Diffusion: In Pursuit of Action
>Excerpts from Child Trends' series of Research-to Results Briefs on Adopting, Implementing, Sustaining, and Replicating Evidence-Based Practices
>Making and Disseminating Recommendations is Not Sufficient
>Intro to Multi-Level Community Based Culturally Situated Interventions