

Prevention Brief

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Finding the Right Fit: Program Fidelity and Adaptation for Prevention Programs

By Christina Borbely

Introduction

The California Safe and Drug-Free Schools and Communities (SDFSC) grant calls on prevention providers to adopt science-based program models. The Center for Substance Abuse Prevention (CSAP) defines “science-based” as theory-driven, reasonably well evaluated, and including program activities related to the theory¹. A benefit of science-based prevention programs is that they are empirically proven to garner positive impacts. In other words, they have been proven to work. In an age of increasing accountability for resources used and outcomes achieved, this is a desirable feature in a program model.

Taking program models rigorously tested in controlled research studies and implementing them in the “real world” is not, however, always a seamless transition. The implementation of evidence-based prevention begs the question: what is the optimal balance between fidelity to and adaptation of a program model? This is the question addressed in the current brief which more specifically focuses on:

- The nature of program fidelity and program adaptation
- Strategies for finding and maintaining an optimal balance between fidelity and adaptation
- Profiles of fidelity and adaptation in practice based on input from SDFSC grantees and other experts in the field.

What factors and priorities influence program fidelity and adaptation? What are the implications of modifying program design? How can programs strategically arrive at a balance that allows for optimal implementation? What have SDFSC grantees accomplished in the way of balancing predetermined program models with the reality of delivering prevention services? This brief will address these questions and offer prevention providers practical strategies for arriving at an optimal compromise between fidelity and adaptation.

What is the role of science-based prevention in California's SDFSC programs?

Over the past 40 years, the prevention field has been host to a proliferation of approaches, strategies, and program models¹. In order to differentiate among practices and arrive at viable methods for achieving prevention of negative outcomes and promotion of positive adjustment, program evaluations are conducted. As a result, the focus on program accountability has expanded and programs with demonstrated effectiveness are in demand. Evidence-based “best practices” and program models are proven to translate into program impact.

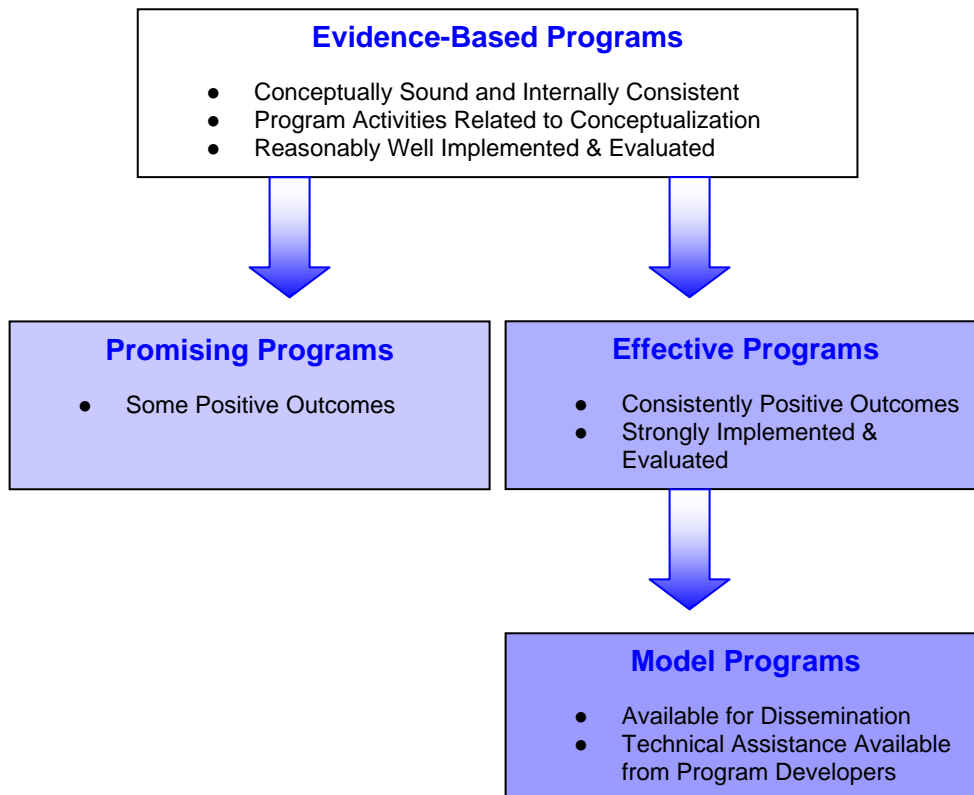
Based on the evolution of evaluation and accountability and in an effort to promote safer and healthier individuals, the field of prevention has adopted articulated standards for programs. These standards are driven by policy that promotes the integration of effective, scientifically tested methods in prevention practice. The *No Child Left Behind Act* (NCLB), enacted by President George W. Bush in January 2001, specifies as a core premise the use of science-based programming for children and families. Aligned with the principles of this legislation is the emphasis by the U. S. Department of Education on the quality and efficacy of SDFSC programs. This emphasis is detailed in The Principles of Effectiveness (POE) guidelines that inform SDFSC programs’ planning, implementing, and monitoring of services. The POE that guide California’s SDFSC projects indicate “programs or activities must model or be based on scientifically based research demonstrating that the program to be used will reduce violence and illegal drug use”². Scientifically based research is defined by the following²:

Research that involves the application of rigorous, systematic, and objective procedures to obtain reliable and valid knowledge relevant to education activities and programs; and includes research that:

- employs systematic, empirical methods that draw on observation or experiment;
- involves rigorous data analyses that are adequate to test the stated hypotheses and justify the general conclusions drawn;
- relies on measurement or observational method that provide reliable and valid data across evaluators and observers, and across studies by the same or different investigators;
- is evaluated using experimental or quasi-experimental designs in which individuals, entities, programs, or activities are assigned to different conditions and with appropriate controls to evaluate the effects of the condition of interest, with a preference for random-assignment experiments, or other designs to the extent that those designs contain within-condition or across-condition controls;
- ensures that experimental studies are presented in sufficient detail and clarity to allow for replication or, at a minimum, offer the opportunity to build systematically on their findings; and
- has been accepted by a peer-reviewed journal or approved by a panel of independent experts through a comparably rigorous, objective, and scientific review.

The proliferation of programs and program evaluations has led to a full spectrum of quality. Among the most common systems for defining quality is the one established by the National Registry of Evidence-Based Programs and Practices (NREPP) as part of the U.S. Department of Health and Human Services’ Substance Abuse and Mental Health Services Administration (SAMHSA) and the Center for Substance Abuse Prevention (CSAP). Any prevention program may apply to this system and based on adherence to defined quality standards may be deemed “promising” (level 3), “effective” (level 4), or “model” (level 5) programs.

SAMHSA: Evidence-Based Programs	
Promising Programs	Promising Programs have been implemented and evaluated sufficiently and are considered to be scientifically defensible. They have demonstrated positive outcomes in preventing substance abuse and related behaviors. However, they have not yet been shown to have sufficient rigor and/or consistently positive outcomes required for Effective Program status.
Effective Programs	Effective Programs are well-implemented, well-evaluated programs that produce a consistent positive pattern of results (across domains and/or replications). ... Effective Programs [meet] with all the criteria as the Model Programs ...with one exception. The exception is that their developers have yet to agree to work with SAMHSA/CSAP to support broad-based dissemination of their programs but may disseminate their programs themselves.
Model Programs	Model Programs are well-implemented, well-evaluated programs, meaning they have been reviewed by the National Registry of Evidence-based Programs and Practices (NREPP) according to rigorous standards of research. Developers, whose programs have the capacity to become Model Programs, have coordinated and agreed with SAMHSA to provide quality materials, training, and technical assistance for nationwide implementation.



Programs or strategies that do not meet minimum NREPP standards are considered level 1 or level 2 quality programs. Though these prevention methods may be “best practices” or be associated with some quality-assurance guidelines, they do not meet or have not been evaluated by NREPP’s stringent standards. Other systems defining standards of quality are available through the U.S. Department of Education and state or local level commissions. It should be noted, that the NREPP criteria are currently undergoing a review and revision process.

Selecting high quality programs or strategies from the available science-based prevention programs answers the call for increased accountability, excellence, and efficacy. Based on individual circumstances, agencies may opt to implement a program model or a set of strategies. Programs tend to be more comprehensive with well-defined context and content. A strategy is a specific approach or method that may be implemented independently or in conjunction with/as part of a program, or with other strategies. For example, a local agency may select a comprehensive program such as Second Step, a classroom based curriculum designed to develop skills around empathy, impulse control/problem solving, and anger management. Another agency may opt to integrate a strategy for developing problem solving skills as a component of an after school program. Once a program or strategy is selected, implementation of prevention services is the next step. **Using existing, structured program models or strategies within the unique and variable context of schools and communities often requires establishing a compromise between the original service design and novel circumstance.**

What are fidelity and adaptation?

Fidelity, also referred to as “adherence”, “integrity”, and “purity”, is the extent to which a curriculum or program model is delivered in accordance with the intended (and tested) design. Strict adherence to the original program model, including its timeline, sequence, content, and context is associated with high program fidelity. For example, the Second Step Grade 6-8 curriculum has been designed and proven effective when:

- delivered by classroom teacher in classroom or youth service provider in a group setting
- 15 lessons in 6th grade; 8 lessons in 7th and 8th grade are administered
- lessons are delivered according to proscribed sequence
- lessons occur within approximately 55 minutes each
- designated teaching aides (overhead transparencies and videos) are incorporated
- specified lesson activities are conducted
- lesson content includes skill development in empathy, impulse control, problem solving, and anger management
- a parent component (6 session) is optional

Implementing the Second Step curriculum with *fidelity* entails maintaining these program elements with accuracy. As indicated by the program guidelines, the parent component is available but not a required element of the model.

Adaptation, also referred to as “reinvention”, is the unintentional or deliberate modification of original program model. Modifications may take the form of eliminating, abbreviating, reorganizing, or supplementing program structure or content. Using the Second Step Grade 6-8 curriculum for reference, the following are examples of various program adaptations (with explanations): These adaptations vary in the extent of the modification as well as the impetus for change.

Adaptation: abbreviation
<ul style="list-style-type: none"> • Conduct lessons in 35 minute periods due to demands on classroom instruction time. • Only one of the sessions on empathy is conducted as it is not a priority of the school administration.
Adaptation: elimination
<ul style="list-style-type: none"> • Final lesson is not administered because of end of academic year activities (field day). • Teaching aide (overheads) are not used because there is no overhead projector.
Adaptation: reorganization
<ul style="list-style-type: none"> • The students watched all the videos in one sitting because there was a substitute teacher in the classroom.
Adaptation: supplementing
<ul style="list-style-type: none"> • Activities to enhance adolescent communication skills are conducted after each lesson to enhance this protective factor. • Guest speakers are brought in to on issues associated with empathy and perhaps impulse control. Topics included alternative family structures and racial diversity.

What difference does program fidelity make?

So what’s the big deal about fidelity? “Fidelity is important because we typically do not know which components of a program may be responsible for the [positive outcomes]. Therefore, the belief that some intervention is better than none may be erroneous.”³

If schools and agencies are not committed to program fidelity, they may be utilizing a great deal of valuable time and resources with little to no effect on the behaviors they are trying to change.³

Program developers, much like car manufacturers, conduct extensive testing to learn about the performance of their product. Programs perform differently under different conditions. Quality programs that are available for dissemination (such as CSAP’s model programs) have been scientifically tested through a series of program evaluations. Through this process the program curriculum or model has been rigorously honed for maximum performance. It is easy to imagine that a vehicle’s demonstrated performance would be altered (for bad or good) by using low-grade motor oil or installing a turbo, or compromised by operating without a left rear wheel or by an unskilled driver. Similarly, a program’s proven maximum performance is based on the developer’s proscribed “test conditions”. Some adaptations may not impact a program’s performance (like changing the car’s hood ornament or opting for power windows). It is not always clear whether adaptations will have negative, positive, or neutral effects on program outcomes.

Examples of Adaptation Effects on Program Outcomes

Life Skills Training

Research indicates that the Life Skills Training (LST) program is repeatedly associated with positive youth outcomes, has no impact when less than 60% of the curriculum is delivered.⁴

Midwestern Prevention Project/Project STAR

Fidelity levels were evaluated in a study of the Midwestern Prevention Project STAR. Findings compared student outcomes at no (schools without the program) to those from “low” and “high” implementation schools. Students at “high” implementation schools demonstrated 43% less cigarette smoking compared to students at schools with no program. Students at “low” implementation schools demonstrated 18% less cigarette smoking than no-program peers. Compared to students with no program, students at “high” implementation schools demonstrated 25% less alcohol and the same level of marijuana use; students at “low” implementation schools demonstrated 34% less alcohol and 33% less marijuana use”.⁵¹

What influences program implementation?

Selecting the best curriculum for the program

Make informed and strategic decisions about program curriculum. Determine the parameters that must be observed, for instance pricing (for program materials, training, and evaluation tools), target age and gender, and language and cultural factors. Consider the duration of the curriculum (e.g. is it designed to be administered across a span of time such as 6th, 7th, and 8th grade or can it be completed over summer vacation). Identify desired program outcomes based on the needs assessment and appropriately targeted curriculum/strategy options.

Upon narrowing the potential choices to curriculum that meet these basic parameters, ask the following questions⁶:

- ✓ What products are included in the curriculum package (e.g. manuals, lesson plans, booster training sessions, activity props)? And what are the a la carte costs associated with each?
- ✓ What are the format, frequency, and duration (per session and overall) of curriculum delivery?
- ✓ What level of clarity and completeness characterize the program description and implementation instructions?
- ✓ What is the method and quality of implementation training?
- ✓ Is on-going technical assistance available? In what form? At what cost?
- ✓ Are evaluation tools (including program impact and program process assessment) available? At what cost? Do they address concepts related to my proposed outcomes?

Across programs there is extensive variability in these options. Rarely is there a perfect match. In selecting an optimal curriculum for the given circumstances, consider the extent to which these elements align with the project's overall mission, the context of delivery, and the previous experience of program administrators and staff. The closer the alignment between these elements of the curriculum and the project needs, the more optimal the implementation.

When choosing the best curriculum for the project, seek and consider input from all key stakeholders. This may be school administration, teachers, program staff, parents, youth, parole officers, caseworkers, etc. Involving key parties in the selection process will yield considerations relevant to those involved in program implementation. Engaging stakeholders in decision-making promotes their investment in facilitating the implementation process – a critical element for success.

Strategies for Success

- Do a curriculum “walk-through” before purchase. A curriculum lending library is available at the California Healthy Kids Resource Center, online at: www.hkresources.org
- Go to see the curriculum in action at nearby agencies or organizations. The program developer or CARS can provide contacts for programs of interest.

Maintaining integrity of chosen curriculum

The quality of implementation can be promoted from multiple angles. Researchers from CSAP reviewed model and effective prevention programs in order to determine what factors contribute to program success⁷. Among the general recommendations derived from this meta-analysis were:

Know your participant

- Focus on rapport building first, then focus on practicing learned skills or behaviors

Make it relevant & practical

- Address the target population characteristics that place them at-risk of ATOD use/abuse through program activities.
- Integrate ATOD content with life skills strategies.

Leverage relationships

- Rely on multiple sources (e.g. parents, peers, and teachers) to promote consistent messages.
- Consider incorporating the program into existing structures (e.g. school, community program, church).
- Build and nurture long-term and productive partnerships.
- Involve parents in meaningful ways. Do so regularly.

Ease implementation

- Use written, session-by-session, user-friendly plans to follow the curricula.
- Eliminate logistical barriers to participation.
- Employ known and trained experts to deliver the curriculum.

Assess the parameters and characteristics of the implementation environment in order to tailor implementation planning to the strengths and challenges at hand. Consider the following options for enhancing the quality of implementation⁶:

- **Establish the support** of program administrators and staff and, if applicable, school administrators and faculty. Address any concerns directly.
- **Identify and emphasize the importance of adhering to the core components or theoretical underpinnings** of the curriculum. Maintaining fidelity of the elements essential for program success should be a priority.
- **Allocate resources** towards effective and efficient training. This may entail establishing buy-in from individuals who are apathetic towards, resistant to, or too busy to participate in (another) curriculum training.
- **Access technical assistance** support.
- **Seek answers, input and recommendations** from the program developer (or program evaluator) regarding questions, concerns, clarifications or confusion.
- **Collaborate** with other agencies/organizations implementing the same curriculum to access or develop implementation support resources.
- Establish a **concise and easy-to-use protocol** for documenting feedback or issues related to implementation.
- Use **follow-up trainings or implementation mentoring** to sustain the fidelity of implementation over time and to address arising problems or concerns.

What factors should be considered in striking a balance between fidelity and adaptation?

Fidelity and adaptation continue to be controversial matters. More and more, focus is shifting towards finding compromise that incorporates the value of preserving fidelity with the opportunity to maximize program effects through strategically tailored adaptations. Voices in prevention science are calling for practitioners to use a **planned, organized, systematic approach**^{8; 9} to program implementation. Rigid adherence to program curriculum may not be universally appropriate. If a program package is not relevant and accessible to participants, absolute fidelity may result in lessened program impacts due to disenfranchised or apathetic participants. Alternatively, adapting programs without scrutiny and rationale runs the risk of diluting or eliminating program components essential for positive outcomes.

Hallmarks of “watered down” programs

- Issues/focus of local agenda typically take priority to program mission.
- Implementers pick and choose from model/curriculum components at will
- Program staff do not demonstrated a clear & detailed understanding of the program model.
- Modifications can not be articulated or identified within the implementation process

Program developers disseminate a product that has been scientifically tested and retested to establish formats that yield optimum program performance. The conditions of such research include controlled settings, evaluation funding, and support from experts. In the “real world”, program application is subject to an array of conditions that effect implementation. Anticipating potential challenges to program fidelity in advance of implementation will lead to more effective adaptations.

The “right fit” of fidelity and adaptation is contingent on individual circumstances. As a rule of thumb, implement the core components in a manner that preserves the integrity of the program’s theory of change; adaptations should be strategic and consistently documented.

Core Components : Researchers who study the balance between program fidelity and adaptation suggest that program curriculum is comprised of *core components* that are critical to achieving program impact. These are the “**active ingredients**” of the formula for program success. Each curriculum has unique core components that may or may not be identified by the program developer. They may be elements of program structure (e.g. the sequence of sessions or context of delivery), program content (e.g. specific concepts or skill sets), or method of delivery (e.g. “homework” assignments, classroom infusion, or youth-led group activities). In theory, core components must be implemented precisely as intended in order to achieve demonstrated outcomes. Modification to core components jeopardizes the likelihood that a program will be effective.

Core components may be specified in the program description, itemized within the implementation manual, or referred to as “required” (versus “optional”, like the Second Step 6-8th Grade parent component) elements. Core components are not always identified. If this is the case, contact the program developer or program representative for information. Alternatively, review the research literature for studies pertaining to the curriculum as a means of augmenting the information provided by the curriculum package.

Viable Adaptations: Even in “best case” conditions, the reality of implementing research-based curriculum calls for adjustments to accommodate variability in program circumstances. Having selected an optimal curriculum and preparing the highest fidelity implementation possible, what are viable program adaptations? The CSAP researchers who conducted a core components analysis of model and effective programs⁷ included recommendations for making effective adaptations.

- Adapt program content to the culture and language of participants.
Example: Adjust language, or activities to account for relevant participant characteristics
- Identify and modify program content to account for developmental influences.
Example: Opt not to use designated puppets if inappropriate for participants’ maturity level.
- Capitalize on participant strengths; acknowledge but do not focus exclusively on weaknesses.
Example: Spend more time on group activities for cohesive participant groups to maximize engagement; “work on” but do not dwell on public speaking activities with youth uncomfortable with conversational English.

How are fidelity and adaptation monitored?

Tracking the specifics of program implementation is valuable for multiple reasons. Detailed accounts documenting the nature of service delivery provide insight on strengths and challenges of the implementation. Information can be used to highlight positive attributes that facilitate implementation such as collaborations and partnerships, highly skilled staff, or appropriate resources. On the other hand, the information can be used to understand and address program challenges such as lack of adequate staff training or support, ill-equipped facilities, or lack of cooperation from supporting agencies such as schools.

Documenting program implementation is also useful for interpreting program evaluation outcomes. Knowing what happened when and how may provide an explanation for data analysis results. For instance, if survey scores are unexpectedly low on a certain program module (e.g. negotiation skills) referring to the implementation documentation may reveal that that module was not implemented due to time constraints or that the majority of participants failed to attend that session due to a flu epidemic. In addition, documentation of individual adaptations may yield cross-site summaries that support systemic protocol changes for future implementations. Another benefit of program implementation records is that data may be categorized based on levels of program fidelity (e.g. students in high versus low fidelity sites or classrooms).

There are various methods for monitoring program implementation. Observation, record keeping, and surveys are the most common strategies. Observation entails trained outside observers documenting program sessions according to designated criteria. For example, an observer may sit-in on two randomly selected sessions to record the extent to which the implementer followed the lesson plan. Record-keeping strategies require that the implementer report on specific details of each session after the session is administered. Surveys are similar in content, but may be completed retrospectively. Other methods for tracking implementation deadlines include structured “check-ins” at regularly scheduled staff or supervision meetings.

It is important to emphasize the purpose of tracking program implementation. Implementers should feel that their feedback is integrated into program improvement (such as additional training or adoption of program-wide adjustments), not used for punitive purposes. The process for documenting program implementation details and other feedback should be clear and concise and regularly requested by program administration.

Process evaluation data can yield valuable information about the realities of using research-based programs.⁶

Thomas E. Backer, Ph.D. (2003)

Key Steps for Finding the Balance between Program Fidelity and Adaptation

ASSESS community needs and assets related to substance abuse prevention

1. **Choose definition** of fidelity/adaptation balance, and share your definition with everybody who's collaborating on the program's implementation.
2. **Assess initial community concerns** about fidelity/adaptation issues with everybody who's collaborating on the program's implementation.
3. Conduct a **due diligence review** of the program to identify fidelity/adaptation challenges more precisely.
4. Examine **science-based elements** of the program to increase understanding of fidelity/adaptation issues - its theory of change, logic model and core components.

BUILD community capacity to implement a program successfully

5. Determine what **resources** may be needed to deal with fidelity/adaptation issues, and how to present need for these resources to funders.
6. Look at what **initial training** the program developer or others offer that might help you address fidelity/adaptation issues.
7. Define how **document** fidelity/adaptation aspects of program implementation, including possible use of Pathways to Effective Programs and Positive Outcomes and/or a fidelity instrument.
8. Determine whether an individualized **technical assistance** on fidelity/adaptation issues, by the program developer or others, might be feasible and useful.
9. **involve the community** in addressing the fidelity/adaptation issues you've identified.

SELECT the evidence-based program that's right for a community, and get it (and the community) ready for implementation

10. Weave results from all these steps into a **plan for addressing fidelity/adaptation balance**, and make this part of your overall implementation plan.

IMPLEMENT the program, and get ready to evaluate it

11. Include fidelity/adaptation issues in designing the **evaluation** strategy for this implementation of the program.

COMPLETE EVALUATION, and promote long-term sustainability of the program when Appropriate

12. Set in place an **ongoing process** for addressing fidelity/adaptation issues that are likely to come up after the program has been implemented, and throughout its lifetime in the new setting.

Sonoma County SDFSC: Padres Unidos

Program Description: Padres Unidos provides alcohol, other drug, and violence prevention education and parenting support of monolingual or marginally bilingual Spanish-speaking parents and their children in Santa Rosa, CA. The focus of the program is to strengthen the relationships between these parents, their youth, the schools, and law enforcement, and to enhance community and school-based efforts to provide prevention services that can be replicated.

Fidelity/Adaptation Overview: Padres Unidos has been adapted from the Parent Project curriculum (which offers Spanish language materials) to be culturally appropriate for the target population of Spanish-speaking, immigrant Latino families of high risk middle and high school students. The adaptations are considered “program enhancements” designed to facilitate program implementation according to the language and cultural customs of the participants.

Core Parent Project Components (original program model)	Implemented by Padres Unidos (adapted program)?
1 of 2 facilitators required completes the 40hr/1week training	✓
10 of 16 workshops/classes be delivered	✓
workshops/classes be delivered as designed	✓
use of “6-step” goal/action framework	✓
Optional Parent Project Components	Implemented?
6-unit youth curriculum	no

Key Adaptations:

- Intensive referral/recruitment process including direct personal outreach and targeted marketing strategies.
- Intake process designed to build rapport/relationships between facilitator and parents before meetings begin.
- Parent Support Group integrated into Parent Project curriculum sessions.
- A Family Advocate providing one-on-one support for: 6-Step Plan implementation, connection to ongoing support from program alumni, and referral to wraparound/follow up services.
- Youth Support: Family Advocate meets with youth for one-on-one targeted advising, focused group sessions for youth, links to youth-relevant services and activities.
- Resources for participation and retention: conveniently located meeting place, transportation, childcare (all ages), nutritious/heartly food at sessions, rewards/incentives for participation.
- Family-oriented approach: young children are supervised in childcare, school-age (including teens) participate in study sessions, and parents attend classes at same time/same place.
- Alumni Program including parent and youth support from participating families and a quarterly newsletter.

Lessons Learned:

- Gain extensive knowledge of community/target population needs in order to make strategic program enhancements.
- Having a man and a woman representing the cultural group attending the course is the best combination of presenters for a parent curriculum. In this way, both genders feel safe and supported, and parent participants can rely on a natural cultural affinity with their presenters.
- Offering simultaneous services (Parent Class, Teen Program, and Child Care) in one building took effort. Initially we thought offering childcare would be enough, but parents brought older children and teens along who weren't content with just playing games or watching movies. The kids grew rowdy and bored. We decided to offer more structured activities and engaged the older kids in homework. This was a great idea in reinforcing a focus on school and engaged the kids in quiet activities.
- Monitor & evaluate program enhancements. Do so independently of the program evaluation designed to assess program participation and outcomes/impact.

Kings County SDFSC: Second Step

Program Description: Second Step is a SAMHSA model program providing classroom-based social skills curricula for preschool through junior high students (4 to 14 years old). It is designed to reduce impulsive, high-risk, and aggressive behaviors; and increase children's social-emotional competence and other protective factors. Focus is on increasing students' social competence, risk assessment, decision-making ability, self-regulation, and positive goal setting. The program's lesson content varies by grade level and is organized into three skill-building units covering empathy, impulse control and problem solving, and anger management.

Fidelity/Adaptation Overview: Kings County maintains a fairly high level of fidelity to the Second Step program. Adaptations are primarily based on formal and informal input from principals, teachers, and facilitators. In addition, program feedback is provided by a committee of local agency representatives, school district officials, and youth collaborating with principals, teachers, facilitators, and the project director to arrive at optimal implantation strategies.

Core Parent Project Components (original program model)	Implemented by Kings County Second Step?
Delivered by classroom teacher in classroom or by youth service provider in a group setting	Adapted
Deliver curriculum content in designated number of sessions (e.g. 15 sessions in middle school curriculum)	Adapted
Lessons are delivered according to proscribed sequence (within each grade level)	✓
Lessons occur within designated time allotment (e.g. 55 minutes in middle school curriculum)	✓
Designated teaching aides (overhead transparencies and videos) are incorporated	✓
Specified lesson activities are conducted	✓
Lesson content includes skill development in empathy, impulse control, problem solving, and anger management	✓
Optional Program Components	Implemented?
Spanish language version	Adapted
A parent component (6 session) is option	Adapted

Key Adaptations:

- Curriculum is implemented in the classroom by trained facilitators to avoid adding additional responsibilities to teachers' "full plate". Facilitators are masters' level counselors.
- Curriculum lessons are sometimes merged/combined for fewer total sessions due to restricted timeframes (content and individual session duration are maintained with fidelity).
- Optional Spanish language versions are supplemented by translating flyers and other resource materials into Spanish.
- Optional parent component is implemented with the supplement of a Spanish translator at sessions with Spanish-speaking parents.
- Additional children's books identified by facilitators are added to the recommended "lesson extension" classroom teaching aides.
- Appropriate curricula level is identified for each classroom based on emotional and cognitive maturity of students. While Second Step offers grade/age-specific curriculum for pre-K through 8th grade students, Kings County may move up or down a curriculum level depending on the needs of each classroom.

Kings County SDFSC: Second Step

Key Adaptations, cont.

- In conjunction with providing curriculum in the classrooms, Kings County offers small, intensive curriculum groups for students with identified need for supplemental support around the curriculum content.
- Service learning “mini grants” promoting the Second Step mission (violence prevention) are available to teachers/classrooms with students prepared to use their Second Step skills to give back to their school community.

Lessons Learned

- Small-scale implementation allows for better monitoring of fidelity and adaptation than large-scale implementation. Maintaining the same level of fidelity and strategic adaptation at a large-scale requires proportional administrative resources.
- Being flexible helps get the “foot in the door” of the classroom. Negotiate and compromise with teachers in order to secure opportunity for service delivery. Once teachers see the program value they are likely to support the process to full capacity. If a teacher can promise 20 of 25 required sessions, take the deal and likely end up with 25 sessions. Be flexible but realistic – if a teacher can only promise half the required sessions it isn’t realistic to expect a viable implementation.
- For school-based programs, a partnership with the Office of Education facilitates the logistics of implementation. It is worth the front-end investment to develop a strong symbiotic relationship – the highest level of partnership.

Monitoring program implementation should include documentation of the following¹⁰: **how** the program is delivered; **where** the program is delivered; **who delivers** the program; and **who participates** in the program (see Monitoring Program Implementation Checklist).

Monitoring program adaptations (including supplements) should include documentation of the following³: date of adaptation; program site; description of adaptation; reason/rationale for adaptation; and implications (see Monitoring Program Adaptation Checklist).

Monitoring Program Implementation Checklist

How the program is delivered:

- Duration of program
- Number of sessions
- Length of each session
- Order of sessions
- Materials/aides used (e.g. activities, assignments, videos, posters, puppets, etc.)

Where the program is delivered:

- Setting/location

Who delivers the program:

- Who provides the training
- Who recruits participants
- Who is in charge of retention
- Who delivers the program curriculum

Who participates in the program:

- Attendance Records
- Absence Records

Monitoring Program Adaptation Checklist

- Date of adaptation
- Program site
- Description of adaptation
- Reason/rationale for adaptation
- Implications (e.g. for subsequent implementation, for program evaluation, etc.)

SDFSC Interview with the Experts

Thomas E. Backer, Ph.D.

Tom Backer is President of the nonprofit Human Interaction Research and an Associate Clinical Professor of Medical Psychology at the UCLA School of Medicine. As a psychologist, his life work is devoted to helping people, organizations and communities meet the challenges of innovation and change. He concentrates on improving health and human services for vulnerable populations, enhancing nonprofit arts and culture programs, and helping highly creative people deal with the challenges of creative work. He conducts research, writes, teaches and consults in all three areas. We asked Tom to share his perspective on fidelity and adaptation as one of the foremost researchers in the field and he had this to say:

The simple answer is there is no simple answer.

There's a persistent belief that evidence-based interventions in fields like substance abuse prevention will almost automatically improve outcomes, simply because of the science behind them. Yet the above cliché better describes the reality for hard-working people who implement these interventions! They know that evidence-based interventions don't improve outcomes unless they are implemented properly, so that they'll produce good outcomes in a new setting, and last over time.

Program fidelity and adaptation are part but not all of this. An evidence-based program can be implemented exactly, but some or all of it still done so poorly that the "exact duplication" doesn't work. Or implementation can fail because a simple adaptation that is needed to make the program effective in a new setting doesn't happen.

Results from research done on program implementation make clear that in all too many cases (and despite good science behind an intervention), implementation in new settings is done poorly, with predictably poor results. This is the reality in other fields as well - for example, in business, "execution" has become shorthand for effective, rigorous implementation of good practices that are essential to business success. Business leaders are increasingly aware that strategy, planning and resources aren't enough, unless they are catalyzed into effectiveness by good execution.

Now "execution" where evidence-based interventions are concerned is beginning to get serious attention, partly due to the increasing number of well-validated interventions to implement. Some new research (such as the NIDA-funded PROSPER project in Iowa and Pennsylvania) is focused on "evidence-based implementation" - that is, on developing strategies for implementing interventions that are themselves the result of carefully-controlled research.

Good implementation centers on **people**. No matter how good the intervention or the science behind it, no matter how good the implementation strategy, efforts to promote change in any complex system are very likely to fail unless the change effort has the support and active involvement of the people who live in that system. In particular, those who'll be implementing the intervention need to feel some sense of **ownership** for it, and some degree of active **participation** in developing the implementation strategy.

Thus a major force pressing for adaptation of evidence-based interventions is that people and organizations want to feel "it's mine." There is good research evidence that felt ownership increases the likelihood of successful implementation. Some intervention developers, such as Lynn McDonald and the Families and Schools Together (FAST) program, include as part of implementation encouragement for such felt ownership - by allowing adaptations of certain components identified as "not core" by the developer. Future implementation research can include attention to these human factors, and to the impact of such tactics on outcomes - including "side effects" such as possible negative impact on fidelity of implementation in a new setting.

SDFSC Interview with the Experts

Robert Saltz, Ph.D.

Bob Saltz is a founder, Associate Director, and Senior Research Scientist at the Prevention Research Institute in Berkeley, CA. He is an expert in environmental prevention and has worked on the evaluation and implementation of Responsible Beverage Service (RBS) programs throughout California and contributions to the development of the CSAP model program, Community Trials. We asked Bob to share his perspective on fidelity and adaptation in terms of environmental prevention and he had this to say:

We are not at the point where, for any multi-component prevention program, we can identify what is essential for obtaining change. School-based and environmental programs do not have the research to isolate what aspects are essential to a program's efficacy. That may change as prevention research evolves. Given where we are in the history of environmental prevention, next steps entail detailing guidelines for implementing environmental strategies with specificity, and then focusing on researching implementation methods to find out what is essential to program success.

In EP there is a difference between adaptation and implementation failure. Adaptation implies deliberate (although sometimes uninformed) substitutions or omissions. Implementation failure may manifest in similar ways, but is driven by an inability to deliver the program as intended. It may be that a program did not have the capacity (support, resources, etc.) to make it [program or program strategy] happen. For example, a program may not have succeeded in getting law enforcement to enforce an ordinance limiting signage in alcohol retail outlet windows. This compromises the implementation of the RBS strategy inherent to the program model. In this case, it is an implementation failure. The "adaptation version" would entail a community opting not to pursue the program model's RBS strategy in favor of a local preference for using the community park to perform children's puppet shows on prevention topics.

At this point, EP does not have the level of specificity of implementation that characterizes school-based curricula. Rather than structured, detailed protocol to adhere to, environmental prevention programs offer strategies to implement. In my experience, even [environmental] model programs had different characteristics across community settings during the testing and replication of the original programs. **Since there is no precise recipe given, if this is adaptation, it's adaptation of necessity.**

There are various contributing factors to the nature of an environmental prevention program in a given setting. In general, local interests and opportunities to expand on a particular program focus are the primary factors that give each site its individual characteristics. For instance, a community may already have an interest in a specific topic and partnering with other agencies on common agenda items makes it the primary feature of the program, though it is not in exclusion of the other program strategies. In another example, local ordinances may be in place and a program can leverage those and focus on promoting their enforcement. In cases where there are no ordinances in place, the program focus may be on getting appropriate ordinances put in place. If the dominant thing is strategy, then the way it is pursued may vary. Since EP programs are not laid out with high levels of specificity, **one may use different methods to make the strategy happen.** Methods vary depending on the mechanism regulating the substance of interest in a particular community and the nature of the community.

For EP programs, substituting an untested strategy for a program model strategy runs the risk of diluting implementation or reliance on inappropriate adaptation. To a large extent, the strategies integrated into the Community Trials program were initially selected because there was already scientific evidence to support each of them as effective strategies. When translated into real world delivery, communities might say they do not like a given strategy and omit or substitute a different strategy. When a program is adopted it is because you can presume that the program will be effective. You cannot change the program and expect the same effectiveness. It is possible you make luck out with an adaptation – but that would be a surprise [not a strategic approach to programming]! Whether the choice of program strategy is in the classroom or in the community, there is always pressure to adapt. For environmental prevention, fidelity is based on the extent to which the program has the same objectives as the original model. It is what you do more than how you do it.

SDFSC Interview with the Experts

Gil Botvin

Dr. Gilbert J. Botvin, an internationally known expert on drug abuse prevention, and developed Life Skills. For the past 20 years, Dr. Botvin has been a full-time faculty member of Weill Medical College at Cornell University, and he currently serves as a professor in both the Department of Public Health and the Department of Psychiatry. Dr. Botvin is also director of Cornell's Institute for Prevention Research. His groundbreaking work in the area of substance abuse prevention has received national and international attention. Most recently (1998), he received the Society of Prevention Research's Presidential Award for prevention research excellence. Dr. Botvin is founding editor of the scientific journal *Prevention Science* and president of the Society for Prevention Research.

There are two principle challenges to fidelity implementation of prevention programs. The first are institutional and the second are instructional. Institutional challenges are described as those obstacles that source from organizational policies, practices, and culture. Examples of these obstacles include lack of communication between program providers and program administrators or decision-making methods. Instructional challenges are those obstacles that source in the classroom or instructional setting. Examples of these are incomplete or poor delivery of the program, language or cultural barriers, and program materials that are above or below the academic ability of the learners.

Institutional and instructional barriers to fidelity implementation are often synergistic and compounding. There are currently two emerging views on solving the challenges of program implementation fidelity. One view is to adapt program elements to fit the delivery setting. The second view is to adapt the delivery setting to accommodate the program. Each view has its supporters and both are engaging problem statements for the research agenda on prevention program dissemination issues.

What is known is that implementation success (full fidelity and sustainability) is often determined by the integrity and sufficiency of the initial adoption decision and implementation planning process. One hypothesis is that the better the adoption decision and implementation planning, the fewer the needs for adaptation and modification of program elements.

Organizations that demonstrate sustained implementation fidelity have the following broad characteristics in common:

- Early and ongoing collaboration with the program developer
- Inclusion of all key stake holders in the planning and evaluation of the program
- Site based, rather than centralized implementation planning and adoption
- Internal marketing for organizational and community support
- Identification of a staff coordinator
- Application of a planning model that identifies the driving and restraining forces for program success and results in clear action steps that enhance driving forces and resolved restraints
- Three to five year commitment to funding and program institutionalization
- Training and on going technical support for providers
- Both formative (process-focused) and outcome evaluation processes

Despite adequate planning models, it may still be necessary or desirable to make adaptations to the program once implementation is underway. Adaptations are made for a variety of reasons. Successful adaptations have the following characteristics:

- They are made in consultation with the program developer
- Adaptations are consistent with and reflect the underlying theoretical foundations of the program
- Documentation of all adaptations is maintained by the site and referenced when conducting or reporting evaluation data
- Formative evaluation of adaptations is conducted after they have been implemented.

Getting (Back) on Track

It is never too late for prioritizing optimal fidelity and strategic adaptation. One step at a time. Program improvement is a process. Determine what is manageable for the given circumstances and move forward at your own pace.

- Don't sweep concerns under the rug. Identify areas that pose challenges, lack clarity, or need attention.
- Take stock of strengths *and* weaknesses related to program fidelity and adaptation. It's all part of the big picture
- Start documenting what you've done. Or take the "no looking back" approach and start documenting what you're doing as of today.
- Establish buy-in from key parties and make the new or renewed approach to fidelity and adaptation a team effort.
- Access support and resources from program partners, program developers and technical assistance, and the SDFSC TA Project.

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“Finding the Right Fit: Program Fidelity and Adaptations for Prevention Programs” is written by Christina Borbely. She is a research consultant at CARS providing technical assistance to California’s Safe and Drug Free Schools & Communities grantees. Also a member of the EMT team, Dr. Borbely coordinates program evaluations for El Dorado County Office of Education and San Francisco Big Brother Big Sister. Prior to joining EMT/CARS, Dr. Borbely was a member of the research staff at Columbia University’s National Center for Children and Families. Her work in the field of youth development and prevention programs has been presented at national conferences and published in academic journals. Specifically, Dr. Borbely has extensive knowledge and experience in program evaluation and improving service delivery by identifying factors that impact today’s young people. She is also involved as a volunteer in providing mentoring and developmental support to youth in underserved populations. Christina received her doctoral degree in developmental psychology, with a focus on children and adolescents, from Columbia University (2004).

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Contributing Editor: [Kerrilyn Scott-Nakai](#)

Production and Design: [Julienne Kwong](#)



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If you would like to suggest a topic, contact Kerrilyn Scott, SDFSC Project Director, at kerrilyn@emt.org.

The Center of Applied Research Solutions can also be contacted at:

CARS
558 B Street, Suite 100
Santa Rosa, CA 95401
(707) 568-3800 TEL
(707) 568-3800 FAX

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