GETTING RESULTS *fact sheet*

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What Does *Getting Results* Say About Implementing Programs with Fidelity?

What Is Fidelity?

Fidelity is the extent to which a science-based curriculum or program is delivered in accordance with its tested design. *Implementing a program with fidelity* means delivering the program as it was implemented in the research that provided evidence of effectiveness.

What Are the Consequences of Not Implementing with Fidelity?

If a program is not delivered as designed, its outcome (i.e., impact on students) is likely to be changed, diminished, or eliminated. Also, once a program has been modified, no one quite knows how it will operate or what unexpected consequences it might produce.

The following examples illustrate what happens when programs are implemented without the key factor of presenting the number of lessons that are needed to replicate the program with fidelity.

- *Life Skills Training (LST).* When less than 60 percent of the curriculum was implemented, the program had no measurable effect.[1]
- *Project STAR (Midwestern Prevention Project).* The outcomes for the students at schools that taught most of or the entire curriculum were significantly higher than were the outcomes for those in schools that did not teach the entire curriculum. The results for student-reported usage of cigarettes, when implemented with fidelity, was 18 percent versus 43 percent without fidelity; for alcohol use, 25 percent versus 34 percent; and for marijuana use, 0 percent versus 33 percent.[2]

What Factors Promote High Fidelity?

Research has identified the following key factors that make it more likely that a program will be implemented with a high level of fidelity:

Training to Implement Programs

- Providers/teachers who receive program-specific training are more likely to implement programs with fidelity than are those who do not receive training.[3]
- More extensive training is associated with higher-quality implementation.[3, 5]

- Live training results in greater fidelity of implementation than does video-based training.[3]
- Effective program-specific training familiarizes participants with program materials and methods, provides opportunities to practice and receive feedback on program delivery skills, and facilitates participants' reflection on relevant attitudes, perceptions, and beliefs about program objectives and approaches.[4]
- Ongoing training and support via phone, e-mail, newsletters, booster sessions, Web site resources, and/or one-on-one mentoring also promote high fidelity.[2, 4]

Program Characteristics

- Programs that are packaged to simplify the tasks of implementation are more likely to be implemented with fidelity than are complex programs (e.g., those that require special skills and coordination by many people).[3]
- Program instructions that include clear and detailed instruction manuals have a greater potential to enhance fidelity of implementation.[3, 4]
- Programs that are a good match with the needs of the target population and school site are more likely to be implemented with fidelity. To ensure a good match, a school or school district should ask the following questions when selecting a prevention curriculum or program:
  - Does it target an audience similar to our students (e.g., in age, race, culture, and socioeconomic status)?
  - Does it target our prevention priorities (e.g., bullying, alcohol use)?
  - Does it have appropriate components (e.g., classroom lessons, school-family partnerships) for our students and school/district? [4]

Characteristics of Successful Providers/Teachers

A variety of provider/teacher characteristics indicate that a program will be implemented with high fidelity:

- Positive attitudes toward and support for prevention programs [3]
- Fewer years in the provider/teacher profession [3]
- More thorough, program-specific training [3, 4, 5]
- Confidence in the ability to use interactive teaching methods [3]

Organizational Characteristics

Both research and common sense suggest that programs fully supported by administrators, staff, and faculty are more likely to be well implemented than not. Administrative support is especially important because faculty and staff often look for clear evidence of enthusiasm from their administrators before embracing the prevention program. Further, the persons implementing the program are more likely to receive adequate training and ongoing support if the administration authorizes that support and training.[3, 4, 5]

One specific type of administrative support that promotes high fidelity is the identification of a staff coordinator to ensure the successful implementation and evaluation of the prevention program. The coordinator acts as a resource and has experience with the program and its successful implementation.[3, 6, 7]

An often overlooked step in prevention planning is involving staff and faculty who implement the program in the program review, selection, and adoption process. Involving those implementing the program in this process has been shown to increase their support of the program and therefore increases fidelity of implementation.[6, 7]

Integration of prevention programs into normal school activities and operations provides for increased fidelity of implementation. By connecting prevention programs with normal education activities, schools can prevent duplication of efforts and make the most of limited resources.[4, 5]

Finally, a positive school culture can affect fidelity. Variables such as faculty morale, past history with prevention programs, and administrative buy-in can each have a significant effect on fidelity of implementation.[3, 4, 5]

What Are the Fidelity-related Dimensions of Program Implementation?

The published research that studied program implementation has greatly improved the understanding of fidelity. The California Healthy Kids Resource Center (CHKRC) reviewed the research and identified seven dimensions of program implementation related to fidelity:

- Delivery methods (e.g., role playing, interactive discussions)
- Dosage (number, length, and frequency of lessons)
- Setting (classroom, after-school program, community)
- Materials (student workbooks, teacher guides, videos)
- Target population (the characteristics—demographic, developmental, and risk-related—of youths who participated in the program when it was evaluated)
- Provider qualifications (the credentials or other qualifications of the classroom teachers, health educators, or other providers)
- Provider training (the nature and length of training for those who implemented the program in the research)

What Methods Are Used in Determining the Fidelity of Program Implementation?

There are various methods for determining if a prevention program is being implemented with fidelity. Observation and teacher/provider self-reporting are the most common methods.

Observations entail outside observers who are trained to watch the intervention (i.e., a lesson) in action, document program sessions (using notes and/or audio or video), and rate the intervention against an established set of criteria. Observations are considered the best method for checking on fidelity because they are objective.

Self-reporting requires those implementing the program to self-assess specific details of the intervention by using surveys and/or checklists, which are considered the minimum standard for checking on fidelity. The reason is that self-reporting is not as objective as data collected by an independent observer. Self-reporting also adds one more responsibility to an already-full workload for teachers.

Other methods for checking on fidelity include structured check-ins at regularly scheduled meetings of staff and supervisors.

What Are the *Fidelity Guidelines* and *Fidelity Checklists?*

The California Healthy Kids Resource Center developed the *Fidelity Guideline*s to highlight how research for specific programs demonstrated evidence of effectiveness according to the seven fidelity-related dimensions of program implementation. The corresponding *Fidelity Checklists* facilitate the process of checking program implementation according to the dimensions outlined in the *Fidelity Guidelines.* The *Fidelity Guidelines* and *Fidelity Checklists* are downloadable from the California Healthy Kids Resource Center Web site http://www.californiahealthykids.org; see the materials information page for the related program. Hard copies are included in the circulating copies of research-validated programs available for loan from the California Healthy Kids Resource Center.

Conclusion

Adding lessons, deleting lessons, and changing the delivery method of a program from role playing to didactic lecture can lead to no results, fewer results, and even negative results. Unless a prevention program is implemented as it was designed and evaluated, there is no guarantee it will have its intended effect of changing students' knowledge, attitudes, and behaviors. Implementing a program without fidelity misuses precious school resources and the time of students, teachers/providers, and staff. *Implementing a program with fidelity is the only way to ensure program effectiveness.*

Endnotes

[1] Botvin, G. J., Baker, E., Dusenbury, L., Botvin, W. M., and Diaz, T. (1995). Long-term follow-up results of a randomized drug abuse prevention trial in a white middle-class population. *Journal of the American Medical Association,* 273: 1106-1112.

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[3] Dusenbury, L., Brannigan, R., Falco, M., and Hansen, W. B. (2003). A review of research on fidelity of implementation: implications for drug abuse prevention in school settings. *Health Education Research,* 18(2): 237-256.

[4] Greenberg, M. T., Domitrovich, C. E., Graczyk, P. A., and Zines, J. E. (2005). The study of implementation in school-based preventive interventions: theory, research, and practice (Volume 3). Report to the Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, United States Department of Health and Human Services.

[5] Gottfredson, G. G., Gottfredson, D. C., Czeh, E. R., Cantor, D., Crosse, S. B., and Hantman, I. (2000). *National study of delinquency prevention in schools.* Ellicott City, Md.: Gottfredson Associates, Inc.

[6] Greenberg, M. T., Domitrovich, C. E., Graczyk, P. A., and Zines, J. E. (2005). The study of implementation in school-based preventive interventions: theory, research, and practice (Volume 3). Report to the Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, United States Department of Health and Human Services.

[7] Gottfredson, G. G., Gottfredson, D. C., Czeh, E. R., Cantor, D., Crosse, S. B., and Hantman, I. (2000). *National study of delinquency prevention in schools.* Ellicott City, Md.: Gottfredson Associates, Inc.