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# **17** Characteristics of Effective Curriculum-Based Programs

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Seventeen characteristics of effective programs all affect whether or not the programs will have a significant impact on sexual behavior. The 17 characteristics describe the development of the curriculum, the content of the curriculum, and the implementation of the curriculum. They also provide a better understanding of how effective programs have worked—that is, what kinds of activities have affected which risk and protective factors, which in turn have contributed to change in one or more types of sexual behavior.

Nearly all effective programs incorporate these characteristics; nearly all programs with these characteristics are effective; and randomized trials have demonstrated that programs with these characteristics are more likely to be effective than programs without them.

The first two categories of characteristics (characteristics 1-13) can be used to select programs that are likely to be effective, to adapt programs that have been selected in order to increase their effectiveness, or to develop new curricula from scratch. The third group of characteristics (characteristics 14-17) can be used to guide implementation of effective curricula.

Reprinted from *Emerging Answers 2007: Research Findings on Programs to Reduce Teen Pregnancy and Sexually Transmitted Diseases*. November, 2007. The National Campaign to Prevent Teen and Unplanned Pregnancy.

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# Development of the Curriculum

Effective curriculum development teams and their efforts to develop effective curricula shared five characteristics. These teams:

## ***1. Included multiple people with expertise in different areas.***

Teams often included people with backgrounds in areas such as health behavior theory, adolescent sexual behavior, risk and protective factors affecting that behavior, theory of instructional design, specific activities used to teach young people about sexual topics, experience teaching sex or HIV education, cultural knowledge and evaluation.

## ***2. Assessed the needs and assets of the young people they were targeting.***

Curriculum developers typically reviewed quantitative data on rates of HIV, other STDs and pregnancy, as well as adolescent sexual behavior. These data helped them determine which health goals to focus on and which types of behavior to address and at what grade levels. Curriculum developers often conducted focus groups or interviews with young people and adults working with young people on reproductive health concerns. They often tried to learn why teens engaged in risky sexual behavior and what specific risk and protective factors prevented protective behavior or encouraged risk behavior (e.g., what specific beliefs, attitudes or skills should be changed). They also tried to determine what needed to be done to change those types of behavior and what situations led to unwanted sex or unprotected sex.

## ***3. Used a logic-model approach.***

In published materials, discussions of the development of the curriculum, the use of theory, and the measurement of sexual and contraceptive behavior and the risk and protective factors affecting such behavior all suggest that, consciously or unconsciously, the teams used a logic model that (1) specified health goals, (2) identified behavior that affects those goals, (3) identified factors that affect the behavior, and (4) developed activities to change the factors.

The curriculum development teams used theory to develop their logic models. In particular, they often used health and sociopsychological theories (Social Cognitive Theory, the Theory of Planned Behavior, the Health Belief Model, and other theories) to identify the important mediating factors (e.g., knowledge, attitudes, perception of norms, self-efficacy and intentions) that in turn affect behavior. Sometimes they also used Instructional Theory to determine what types of activities would produce positive change in the mediating factors.

***4. Designed activities consistent with community values and available resources.***

In communities that valued abstinence highly, for example, teams developed a curriculum that emphasized abstinence as the safest or best approach for young people. Teams also took into account community resources such as facility availability, staff availability, staff skills, supplies and time. For example, in communities that lacked video equipment, teams did not design curricula that incorporate videos or films.

***5. Conducted pilot tests on some or all activities.***

Many curriculum developers pilot-tested some or all of the activities and modified them before implementing the version of the curriculum that was eventually evaluated.

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## **Content of the Curriculum**

The content of effective curricula had eight common characteristics. Some of them described the goals and objectives of the curriculum, and others described the activities and teaching methods.

Three characteristics describe the goals and objectives of effective curricula:

***6. Focused on at least one of three health goals: the prevention of HIV, the prevention of other STDs, the prevention of unintended pregnancy.***

The curricula typically focused on young people's susceptibility to HIV, other STDs, pregnancy, or some combination of these and the negative consequences of disease and unintended pregnancy. They sent a clear message about health goals and tried to motivate young people to avoid STDs and unintended pregnancy.

***7. Focused narrowly on the specific types of behavior that cause or prevent HIV, other STDs or pregnancy and gave clear messages about them.***

This is a particularly important characteristic. Effective curricula repeated clear and consistent messages about sexual and protective behavior. They talked explicitly about sex or condom use, identified specific situations that might lead to unwanted sex or unprotected sex, discussed how to avoid or get out of such situations, and practiced saying no to sex or insisting on condom or contraceptive use. They also described how to use condoms or contraceptives correctly and how to overcome barriers to obtaining and using them.

The messages were appropriate to the age, sexual experience, gender and culture of the young people targeted by the program. For example, programs designed for younger adolescents, who were less likely to be sexually experienced, were more likely to place greater emphasis on abstinence than on condom use, while programs designed for older, more sexually experienced adolescents were more likely to place greater emphasis on condom use.

***8. Focused on specific sexual psychosocial factors that affect the specified types of behavior and changed some of those factors.***

In the original studies, these risk and protective factors were chosen in part by theory and in part by research on factors affecting adolescent sexual behavior.

At least three programs that reduced sexual activity and at least three programs that increased condom use focused on and improved each of the following factors:

- Knowledge, including knowledge of sexual issues, HIV, other STDs and pregnancy (including methods of prevention).
  - Perception of HIV risk.
  - Personal values about sex and abstinence.
  - Attitudes toward condoms (including perceived barriers to their use).
  - Perception of peer norms and behavior about sex.
  - Confidence in the ability to refuse sex and to use condoms.
  - Intention to abstain from sex or to restrict frequency of sex or number of partners.
  - Communication with parents or other adults about sex, condoms or contraception.
- In addition, at least three programs that reduced sexual activity focused on and improved: Confidence in youth's ability to avoid STD/HIV risk and risky behavior.
- Actual avoidance of places and situations that might lead to sex.
- And at least three programs that increased condom use focused on and improved: Intention to use a condom.

Five characteristics describe the activities and teaching methods of effective curricula:

***9. Created a safe environment.***

Virtually all of the effective programs started by creating a set of groundrules for class involvement, such as not asking personal questions and respecting the opinions of others. Some programs tried to create a safe environment by separating the class into same-sex groups for certain topics, or, occasionally, by limiting the entire course to only boys or girls.

***10. Included multiple instructionally sound activities to change each of the targeted risk and protective factors.***

To increase knowledge about topics such as modes of transmission of HIV and other STDs, symptoms of STDs, susceptibility to and consequences of STDs, and methods of preventing STDs and pregnancy, the curricula included short lectures, class discussions, competitive games, simulations, skits, videos and other techniques. Notably, many of these activities required that students obtain and share information rather than passively listen to the educators and encouraged students to personalize the information.

To increase perceptions of risk (both susceptibility and severity), effective curricula provided data on incidence of STDs and pregnancy, videos of HIV-positive or pregnant teens, HIV-positive or pregnant speakers, and simulations demonstrating STD or pregnancy risk and consequences.

To change personal values and attitudes about sex and the use of condoms or other contraceptives, effective curricula included group discussions that emphasized the advantages of abstinence or condom/contraceptive use, voting activities and survey data to demonstrate peer support for abstinence or condom use, methods of resisting lines to pressure someone to have sex, and so on.

To teach students how to refuse unwanted, unintended or unprotected sex or to insist on using condoms or contraception, effective curricula commonly used roleplaying. Each teen had multiple opportunities to practice important verbal skills.

To increase self-efficacy to use condoms, some curricula demonstrated how to use condoms and had students temporally order the steps for using condoms that were written on 3 x 5 cards.

***11. Employed instructionally sound teaching methods that actively involved the participants, that helped participants personalize the information, and that were designed to change specific risk and protective factors.***

The following interactive teaching methods were most commonly implemented: short lectures, class discussions, small-group work, video presentations, stories, live skits, roleplaying, simulations of risk, competitive games, forced-choice activities, surveys of attitudes and intentions with anonymous presentation of results, problem-solving activities, worksheets, homework assignments (including assignments to talk with parents or other adults), question boxes and condom demonstrations.

***12. Employed activities, instructional methods and behavioral messages that were appropriate to the adolescents' culture, developmental age and sexual experience.***

Some curricula were designed for specific racial or ethnic groups and emphasized the high rates of HIV, other STDs or pregnancy among those groups. Some curricula were designed specifically for girls and emphasized that they can be powerful and in control in sexual situations. Programs for younger, less sexually experienced adolescents focused more on abstinence, while those for older, more sexually experienced adolescents focused more on condoms.

***13. Covered topics in a logical sequence.***

Effective curricula often presented topics in the following order: basic information about HIV and other STDs or pregnancy, including susceptibility and severity; behavior that will reduce vulnerability; knowledge, values, attitudes and barriers surrounding protective behavior; and skills needed to adopt protective behavior. Thus, the curricula first enhanced teens' motivation to avoid STDs and pregnancy, and then addressed the knowledge, attitudes and skills needed to do so.

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## Implementation of the Curriculum

Effective programs shared four characteristics in implementing their curricula:

### ***14. Secured at least minimal support from appropriate authorities.***

Virtually all of the effective programs obtained approval from authorities such as school principals, district superintendents, or directors of local youth-based organizations. This approval may have provided needed support or sanction for educators who were covering topics that were controversial in some cultures; it was certainly needed to conduct the research.

### ***15. Selected educators with desired characteristics (whenever possible), trained them, and provided monitoring, supervision and support.***

While some programs were implemented by classroom teachers, other programs hired their own educators. Usually, they hired people who they believed could relate to young people and who had a background in health education, especially sex or HIV education. Although most studies did not examine the impact of the characteristics of the educators on changes in behavior, results from five studies indicate that neither the age (adult versus peer) nor the gender or race of the educator is important—the ability of the educator to relate to young people is what makes a difference. Virtually all of the programs trained their educators in the implementation of the curriculum.

### ***16. Implemented activities to recruit and retain adolescents.***

If needed, effective programs implemented activities necessary to recruit young people and avoided or overcame obstacles to their participation (e.g., they informed teens about the program, provided food and/or other incentives, ensured that parents were notified, provided transportation, implemented activities at convenient times, and ensured the teens' safety). If the programs were implemented in school classrooms, then support from appropriate authorities was needed; in such cases, presumably, additional recruitment activities were not needed.

### ***17. Implemented curricula with reasonable fidelity.***

Most of the effective programs implemented all or nearly all of the activities in the curriculum. This was in part because the programs were being evaluated.