

# **New Research, New Conclusions: Sex and HIV Education Programs that Work**



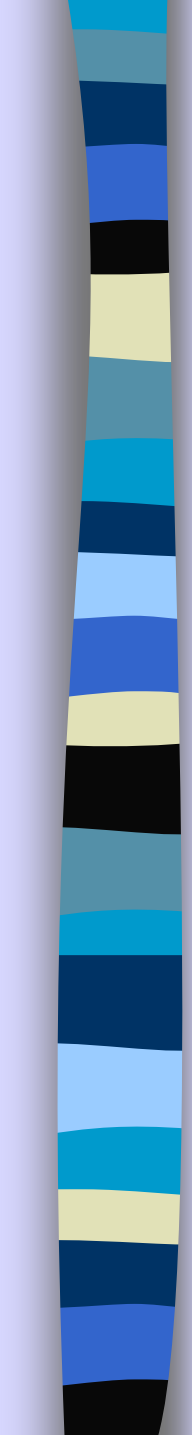
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# Based on Two Reports

- **The Impact of Sex and HIV Education Programs in Schools and Communities on Sexual Behaviors among Young Adults**
  - By Douglas Kirby, B.A Laris, & Lori Rolleri
  - More U.S. focused and slightly more detailed
- **Impact of Sex and HIV Education Programs on Sexual Behaviors of Youth in Developing and Developed Countries**
  - By Douglas Kirby, B.A Laris, & Lori Rolleri
  - More developing country focused and slightly shorter

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- Both are available on the web at:  
[http://www.fhi.org/en/Youth/YouthNet/  
Research/researcheducation.htm](http://www.fhi.org/en/Youth/YouthNet/Research/researcheducation.htm)



- Or by e-mail from Doug Kirby at:  
[dougk@etr.org](mailto:dougk@etr.org)



# Sex and HIV/AIDS programs have multiple goals:

- Decrease unintended pregnancy
- Decrease STD including HIV/AIDS
- Improve sexual health in other ways



# Study Criteria

## Programs:

- Targeted young people up to age 25
- Were curriculum-based with structured activities involving groups of youth (not one-on-one interaction)
- Were implemented in schools or community settings
- Were implemented *anywhere in the world*



# Study Criteria

## Studies:

- Employed experimental or quasi-experimental design
- Had a sample size of 100 or larger
- Measured impact on initiation of sex for at least 6 months and other behaviors for at least 3 months
- Were published in 1990 or later

# The Number of Programs with Indicated Effects on Sexual Behaviors (N=83 Studies)

	United States	Other Developed Countries	Developing Countries	All Countries in the World
<u>Initiation of Sex</u>				
▶ Delayed initiation	14	2	6	22
▶ Had no sig impact	15	6	8	29
▶ Hastened initiation	1	0	0	1
<u>Frequency of Sex</u>				
▶ Decreased frequency	7	0	2	9
▶ Had no sig impact	15	1	3	19
▶ Increased frequency	2	1	0	3
<u># of Sexual Partners</u>				
▶ Decreased number	9	0	3	12
▶ Had no sig impact	16	0	5	21
▶ Increased number	1	0	0	1

# The Number of Programs with Indicated Effects on Sexual Behaviors

	<u>Abstinence-Only Programs</u>	<u>Sex &amp; HIV Education Programs</u>
<u>Initiation of Sex</u>		
▶ Delayed initiation	0	14
▶ Had no sig impact	3	12
▶ Hastened initiation	0	1
<u>Frequency of Sex</u>		
▶ Decreased frequency	2	5
▶ Had no sig impact	2	14
▶ Increased frequency	1	1
<u># of Sexual Partners</u>		
▶ Decreased number	1	8
▶ Had no sig impact	1	15
▶ Increased number	0	1



# The Number of Programs with Indicated Effects on Contraceptive Behaviors

	United States	Other Developed Countries	Developing Countries	All Countries in the World
<u>Use of Condoms</u>				
▶ Increased use	18	1	5	26
▶ Had no sig impact	19	4	7	28
▶ Decreased use	0	0	0	0
<u>Use of Contraception</u>				
▶ Increased use	5	1	0	6
▶ Had no sig impact	5	1	2	8
▶ Decreased use	1	0	0	1
▶				
<u>Sexual Risk-Taking</u>				
▶ Reduced risk	14	0	0	14
▶ Had no sig impact	11	1	2	14
▶ Increased risk	0	0	0	0



# The Number and Percent of Programs with Indicated Effects on *Any* Behavior

	United States	Other Developed Countries	Developing Countries	All Countries in the World
<u>Any Behavior</u>				
▶ Had positive impact	36 (64%)	5 (56%)	13 (72%)	54 (65%)
▶ Had negative impact	4 (7%)	1 (11%)	1 (6%)	6 (7%)
▶ Total number	56 (100%)	9 (100%)	18 (100%)	83 (100%)



# Conclusions about the Impact of Sex/HIV Education Programs *continued*

- Sex/HIV education programs
  - Do not increase sexual activity
- Some sex/HIV education programs:
  - Delay initiation of intercourse
  - Reduce number of sexual partners or
  - Increase use of condoms/contraception
- Some do all three
- Emphases upon abstinence, fewer partners and condoms/contraception are compatible, not conflicting



# 1<sup>st</sup> Policy Implication

Your *most* promising strategy:

- Implement programs with strong evidence that they were effective with populations similar to your own



## 2<sup>nd</sup> Policy Implication

Your *second* most promising strategy:

- Implement sex/HIV education programs with the common characteristics of those programs that were effective at changing behavior



# Why are these important?

They can help people:

- Develop programs
- Assess and select programs
- Adapt and improve program



# Factors Affecting the Effectiveness of Curriculum-based Programs

- What are they?

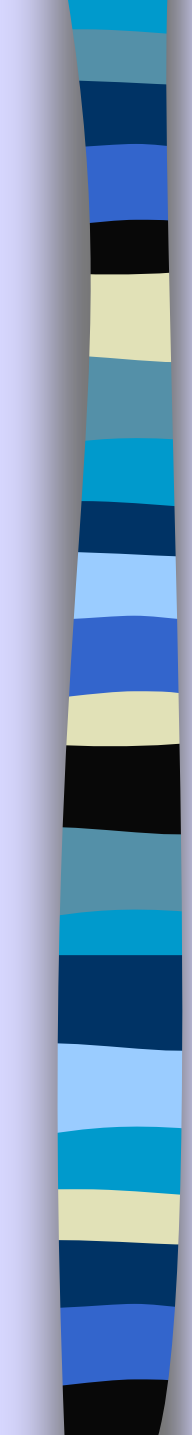




Reality is complex!







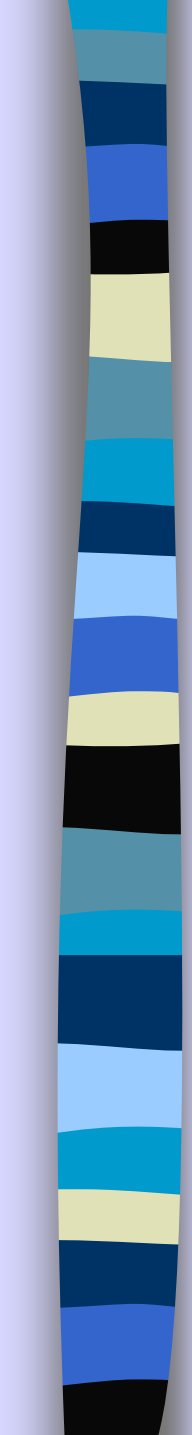
# Overall Factors Affecting Effectiveness of Curricula

1. The characteristics of the curriculum, its development and its implementation
2. The needs and assets of the youth being served by the program
  - E.g., awareness and knowledge of pregnancy and STD/HIV
3. The characteristics of the youths' environment
  - E.g., saliency of pregnancy or STD/HIV



# Bases for the 17 Characteristics

1. Coding of 83 studies of sex and HIV programs
2. In-depth content analysis of 19 effective curricula
3. Analysis of randomized trials that compared programs having most of the characteristics with programs not having most of the characteristics



# Characteristics of Effective Curricula

Three broad categories:

1. Process of development
2. Curriculum characteristics
3. Implementation



# Category 1: Characteristics Describing the Process of Development





# Category 1: Process of Development

1. Involved multiple people with different backgrounds to design curriculum
  - Theory
  - Research on adolescent sexual behavior
  - Educational theory and curriculum design
  - Experience teaching youth about sex
  - Cultural knowledge
  - Evaluation



# Category 1: Process of Development

## 2. Assessed relevant needs and assets of target group

- Reviewed quantitative data
  - STD or pregnancy rates, survey data on sexual behavior
- Conducted focus groups with youth
- Interviewed professionals working with youth

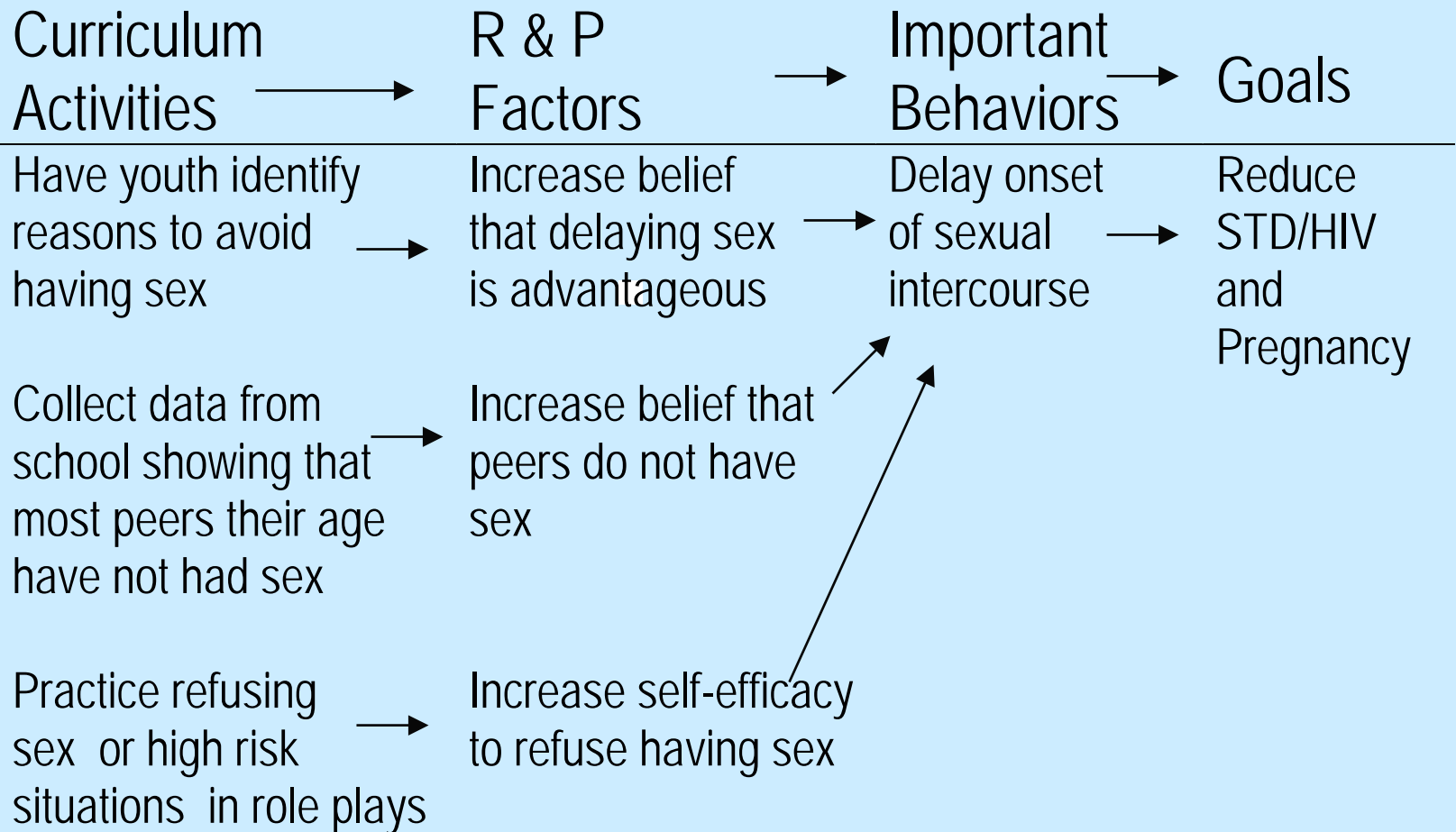


# Category 1: Process of Development

## 3. Used logic model approach

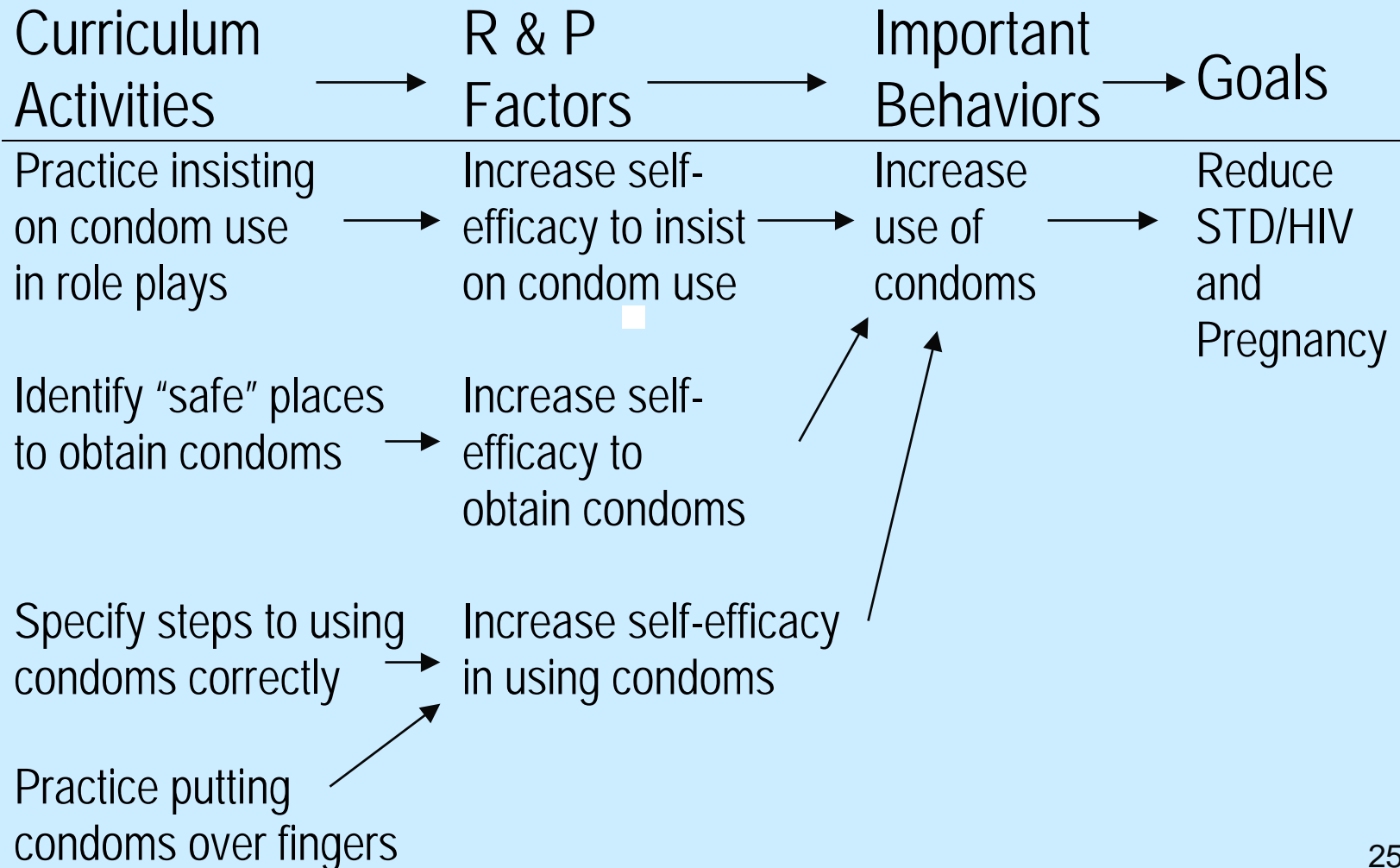
1. Specified the health goals (prevention of HIV, other STD, or pregnancy)
2. Specified the behaviors that cause or prevent HIV, other STD or pregnancy
3. Used theory, research, and personal experience to identify the psychosocial sexual risk and protective factors affecting those behaviors
4. Designed activities to affect those factors

# Example: *Part* of a Logic Model





# Partial Example: Continued





# Category 1: Process of Development

4. Designed activities consistent with community values and resources available (staff time, staff skills, facility space, and supplies)



# Category 1: Process of Development

## 5. Pilot-tested the program





## Category 2: Characteristics Describing the Curriculum Content:

- Goals and objectives
- Activities
- Teaching Methodologies



# Category 2: Curriculum Content

1. Focused on clear health goals -- the prevention of STD/HIV and/or pregnancy
  - Talked about these health goals, including susceptibility and negative consequences
  - Gave a clear message about these goals
  - Identified behaviors leading to the health goal (see next characteristic)



# Category 2: Curriculum Content

2. Focused narrowly on specific behaviors leading to these health goals

- Specified the behaviors,
- Gave clear messages about these behaviors,
- Addressed situations that might lead to them



# Category 2: Curriculum Content

## *2. Continued*

What were the specific behaviors?

- STD/HIV:

- Abstinence and frequency of sex
- Number of partners (less commonly)
- Condom use

- Pregnancy:

- Abstinence and frequency of sex
- Contraceptive use



# Category 2: Curriculum Content

## *2. Continued*

What was the clear message about behavior?

- Emphasized abstinence as safest and best approach
- Encouraged condom/contraceptive use for those having sex
- Sometimes also emphasized other values:
  - Be proud, be responsible, respect yourself, stick to your limits, remain in control (for women)





# Category 2: Curriculum Content

## *2. Continued*

- The clear messages were appropriate for age, sexual experience, gender and culture



# Category 2: Curriculum Content

## *2. Continued*

- Discussed specific situations that might lead to unwanted or unprotected sex and how to avoid them or get out of them



# Category 2: Curriculum Content

3. Addressed multiple sexual psychosocial risk and protective factors affecting sexual behaviors



# Category 2: Curriculum Content

## *3 Continued*

For abstinence:

- Overall knowledge of sexual issues
- Knowledge of pregnancy, STD and HIV
  - Including HIV risk
- Personal values about sex and abstinence
- Perception of peer norms about sex
- Self-efficacy to refuse sex
- Intention to abstain from sex or restrict sex or partners
- Communication with parents or other adults about sex, condoms or contraception



# Category 2: Curriculum Content

## *3 Continued*

For condom and contraceptive use:

- Knowledge of pregnancy, STD and HIV
- Attitude toward risky sexual behavior and protection
- Attitudes towards condoms
- Perceived effectiveness of condoms to prevent STD/HIV
- Perceptions of barriers to condom use
- Self-efficacy to obtain condoms
- Self-efficacy to use condoms
- Intention to use a condom
- Communication with parents or other adults about sex, condoms or contraception



## Category 2: Curriculum Content

4. Created a safe social environment for youth to participate
  - Established and enforced class rules
  - Divided class by gender (occasionally)



## Category 2: Curriculum Content

5. Included multiple activities to change each of the targeted risk and protective factors
  - Created a logic model (see previous slides as a partial example)



# Category 2: Curriculum Content

## *5 Continued*

Included activities to increase basic knowledge about risks of teen sex and methods of avoiding sex or using protection

- Short lectures
- Class discussions
- Competitive games
- Simulations
- Statistics on prevalence
- Skits or videos
- Flip charts or pamphlets





# Category 2: Curriculum Content

## *5 Continued*

Included activities to address risk (susceptibility and severity)

- Data on the incidence or prevalence of pregnancy or STD/HIV (sometimes among youth) and their consequences
- Class discussions
- HIV+ speakers
- Videos, handouts, etc.
- Simulations
  - STD handshake
  - Monthly pregnancy risk
  - Immediate and long term effects on own lives



# Category 2: Curriculum Content

## *5 Continued*

Included activities to change individual values about abstinence and perception of peer norms

- Clear message
- Advantages of abstinence
- Forced choice value exercises
- Peer surveys/voting
- Peer modeling of responsible values
  - Discussion of lines, role plays



# Category 2: Curriculum Content

## *5 Continued*

Included activities to change individual attitudes & peer norms about condoms

- Clear message
- Discussions of effectiveness
- Peer surveys/voting
- Discussions of barriers
  - where to get
  - how to minimize hassle & loss of enjoyment
- Visits to drug stores or clinics
- Peer modeling of insisting on using condoms
  - Discussion of lines, role plays



# Category 2: Curriculum Content

## *5 Continued*

Included instructionally effective activities to improve three skills:

1. To avoid unwanted sex and unprotected sex
2. To insist on and use condom or contraception
3. To use condoms correctly



# Category 2: Curriculum Content

## *5 Continued*

To avoid unwanted/unprotected sex and to insist on using condoms or contraception

- Description of skills
- Modeling of skills
- Individual practice in skills -- Role playing
  - Everyone practices
  - Repetition
  - Increasing difficulty
  - Increasing use of own words
- Feedback (e.g., checklist)



# Category 2: Curriculum Content

## *5 Continued*

To use condoms properly

1. Arrange in order the proper steps for using condoms
2. Model and practice opening package and putting condoms over fingers, verbally stating and following the important steps



# Category 2: Curriculum Content

## *5 Continued*

Included instructionally effective activities to increase communication with parents or adults about sex (occasionally)

- Homework assignments
  - Information sent home to parents
  - Multiple assignments



# Category 2: Curriculum Content

## 6. Employed effective teaching methods

- Were instructionally sound
  - E.g., role playing to improve skills
- Actively involved participants
- Helped them personalize the information





# Category 2: Curriculum Content

## *6 Continued*

- Small group discussions
- Brainstorming
- Games and contests
- Simulations of risk
- Role playing
- Worksheets
- Other interactive experiential activities



## Category 2: Curriculum Content

7. Employed activities, instructional methods and behavioral messages that were appropriate to the youths' culture, developmental age, gender and sexual experience
  - *Be Proud; Be Responsible:* Focused on needs of African American youth
  - *Sihle:* Empowered women
  - Many: Appropriately addressed abstinence versus condom use



# Category 2: Curriculum Content

## 8. Covered topics in a logical sequence

1. Basic information about HIV, other STDs or pregnancy, including susceptibility and severity of HIV, other STDs and pregnancy
  2. Behaviors to reduce vulnerability
  3. Knowledge, values, attitudes (including perceived barriers) and social norms involving these behaviors
  4. Skills needed to perform these behaviors
- Note: Curricula first increased motivation to change behavior; then provided knowledge, attitudes and skills to do so



# Category 3: Characteristics Describing the Implementation of the Curriculum





# Group 3: Implementation

1. Secured at least minimal support from appropriate authorities
  - Note: Were research studies and therefore required approval and support
  - Provided sanction or support for educators



# Group 3: Implementation

2. Selected educators with desired characteristics, trained them and supervised them





# Group 3: Implementation

## *2. Continued*

Important selection criteria:

- Could relate to youth
- Had experience with health education
- Were comfortable with topic

Possibly *unimportant* selection criteria:

- Age (adult versus peer)
- Matched gender or race



# Group 3: Implementation

## *2 Continued*

### Training

- Virtually all studies trained educators
- But, one study showed level of training had no impact





# Group 3: Implementation

## *2 Continued*

### Supervision

- Monitoring
- Supervision
- Support
  - E.g., Discussed problems in small groups



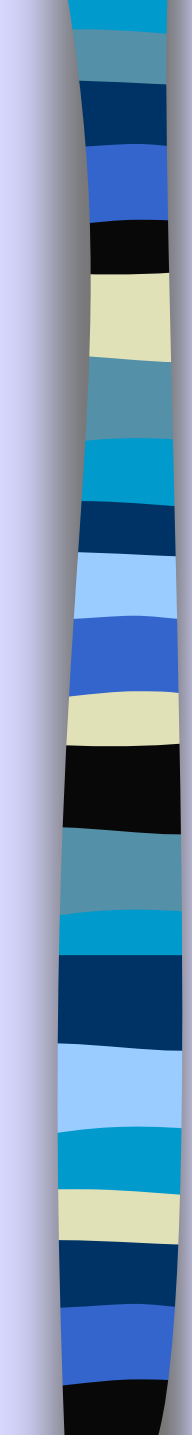
# Group 3: Implementation

3. If needed, implemented activities to recruit and retain youth and overcome barriers to their involvement
  - Publicized the program
  - Obtained parental consent
  - Arranged for transportation
  - Assured safety
  - Implemented at convenient times
  - Provided incentives to participate (e.g., food)



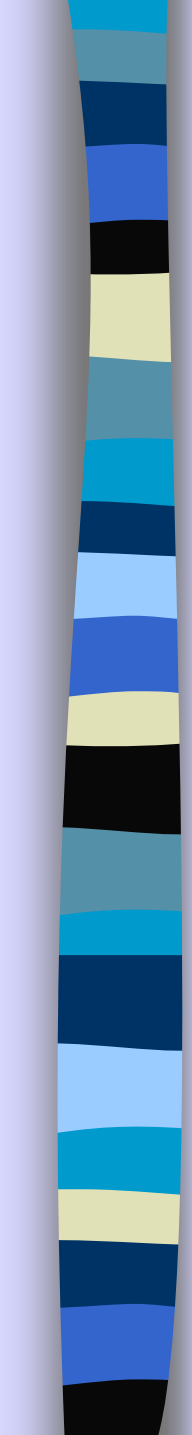
# Group 3: Implementation

4. Implemented virtually all activities with reasonable fidelity
  - Most activities ■
  - Same setting or structure as designed



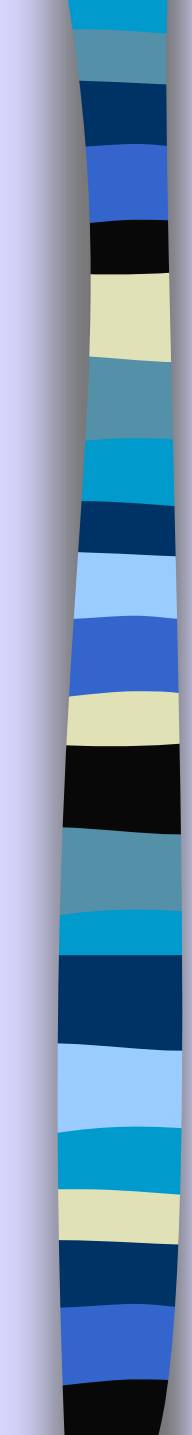
# Changes from Original “10 Characteristics”

- 8 of the original now in group 2
- 1 on training now in group 3
- 1 (length of program) was dropped



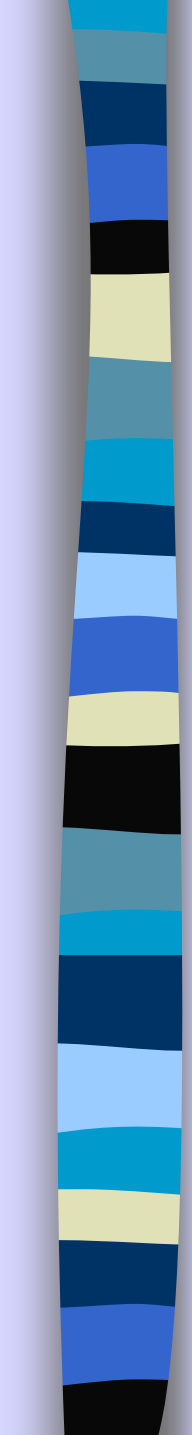
Whew – That's 17,  
But there's a few more for  
special groups of curricula

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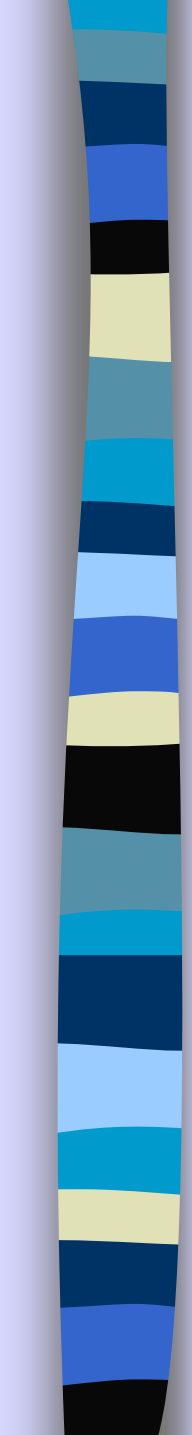
# Characteristics of Special Groups of Effective Curricula





# Characteristics of Effective *Short Curricula*

- Programs implemented after school or in non-school settings
- Youth volunteered to participate
- Programs implemented in small groups (e.g., 6 to 8)
- Programs sometimes focused on one behavior, typically condom use



# Additional Characteristics of Effective Programs with *Long-Term Effects*

- Often implemented in schools
- Included 14 or more sessions
- Were sequential over 2 or more years





# Conclusions





# Conclusions about the Impact of Sex/HIV Education Programs

- About two-thirds significantly improved behavior
- But, not all curricula were effective
- Most effective curricula had the characteristics summarized
- Most curricula with nearly all the characteristics were effective



# Implications for Policy

## Schools and communities:

- Should implement sex/HIV education programs
  - demonstrated to be effective with similar populations (1<sup>st</sup> choice) or
  - Incorporating the characteristics of effective curricula (2<sup>nd</sup> choice)
- If developing new programs:
  - Should follow the 5 characteristics for developing programs and
  - Should create curricula with the 8 characteristics of effective curricula
- Should follow the 4 characteristics for implementing programs
  - E.G.: Implement with fidelity



# Implications for Policy

## Schools and communities:

- Should *NOT* rely solely on these programs to reduce unintended pregnancy, STD, and HIV
- Should recognize they can be an effective component