

# Youth Marijuana Prevention Symposium

## What Works? Program Review

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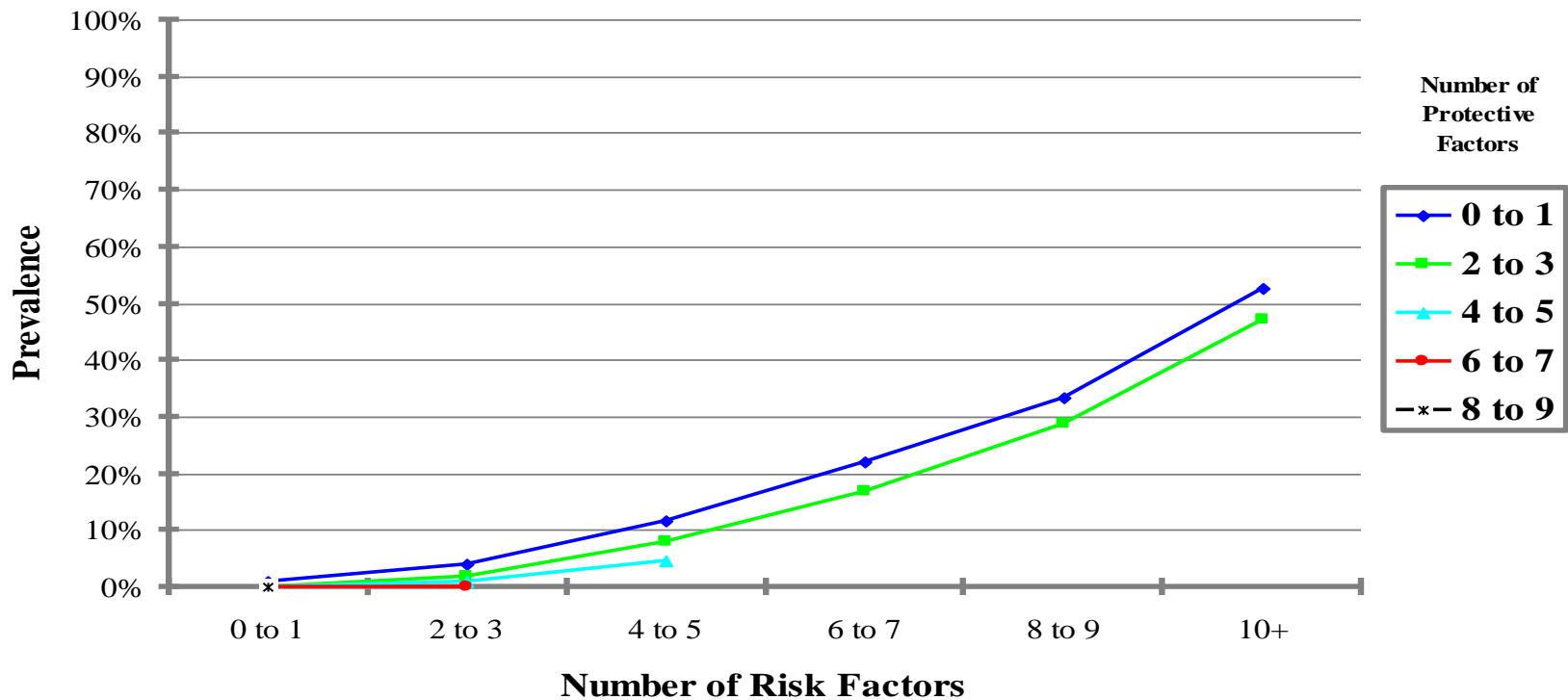
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<http://www.youtube.com/watch?v=ODKz4fTXi4s>



# Prevalence of 30 Day Marijuana Use By Number of Risk and Protective Factors

**Six State Student Survey of 6th-12th Graders, Public School Students**



# Why evidence-based programs?



- Stronger & more consistent positive outcomes
- Strong ethical argument – avoid potential harmful effects
- Potential cost savings to taxpayers and society
- Improving the well-being of our children at a population level



# Key Elements of Effective Programs

- Content is based on theory and data about mechanisms of change
- Materials are developmentally appropriate
- Sensitive to the culture and community
- Delivered as intended
- Participants receive sufficient dosage
- Interactive teaching techniques are used
- Implementers are well trained
- Continually evaluated

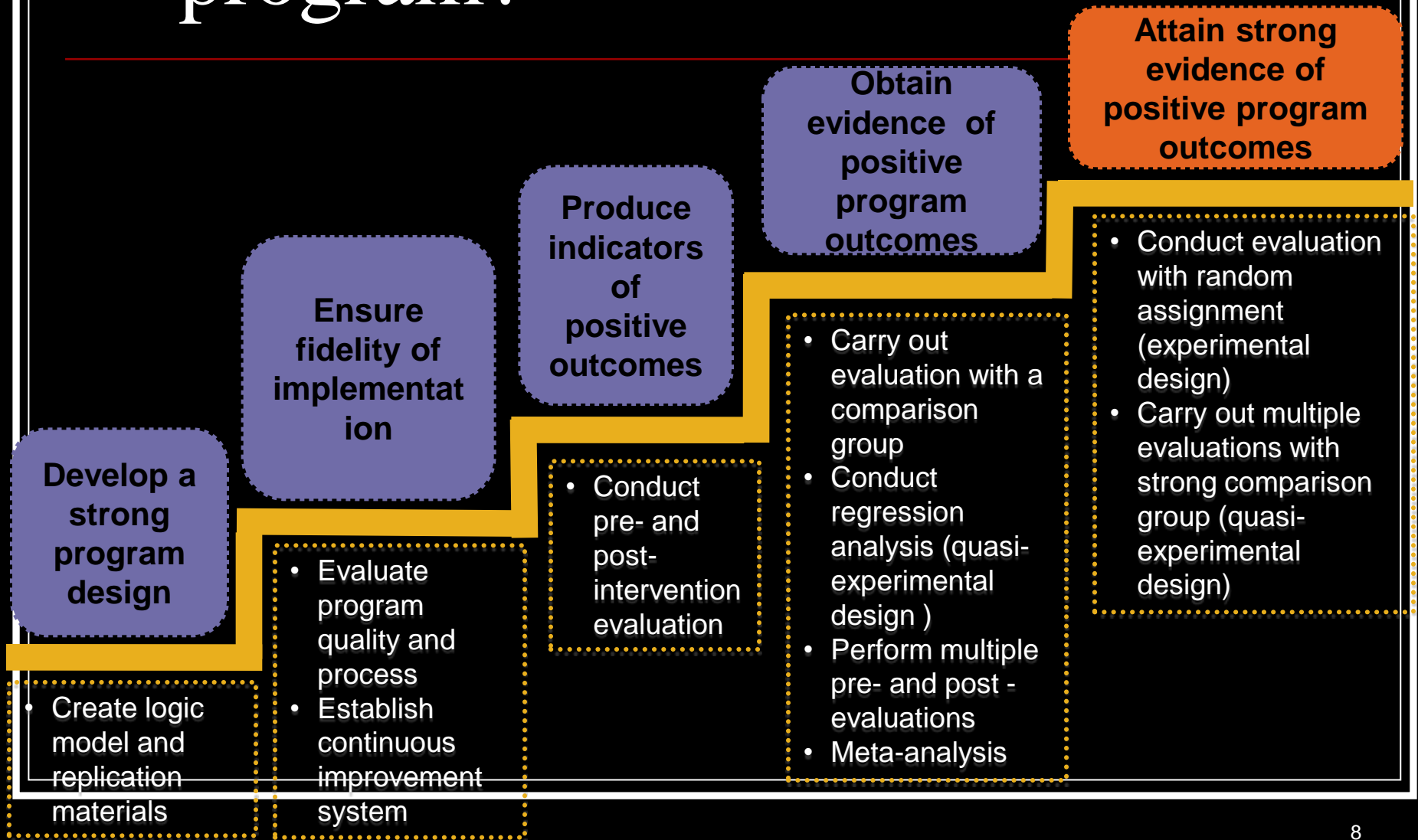


# Why Evidence Based? What DOES NOT Work?

- Didactic programs targeted on arousing fear (e.g. *Scared Straight*).
- D.A.R.E.
- Peer counseling programs.
- Segregating problem students into separate groups.
- After school activities with limited supervision and absence of more potent programming.
- Summer jobs programs for at-risk youth.
- Boot camps, group homes, detention centers, wilderness camps



# What is an Evidence Based program?







# How do you assess the evidence?

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**On the one hand....**



**On the other hand...**

Ask two questions:

1. Does it work?
2. How do you know it works?



## The importance of *implementation fidelity*

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### What does “**low implementation fidelity**” look like?

I didn't have potatoes, so I substituted rice.

I didn't have paprika, so I used another spice.

I didn't have tomato sauce, I used tomato paste--

A whole can, not a half a can--I do not like to waste.

A friend gave me the recipe, she said you couldn't beat it!

There must be something wrong with her

--I couldn't even eat it



# Why is fidelity important?

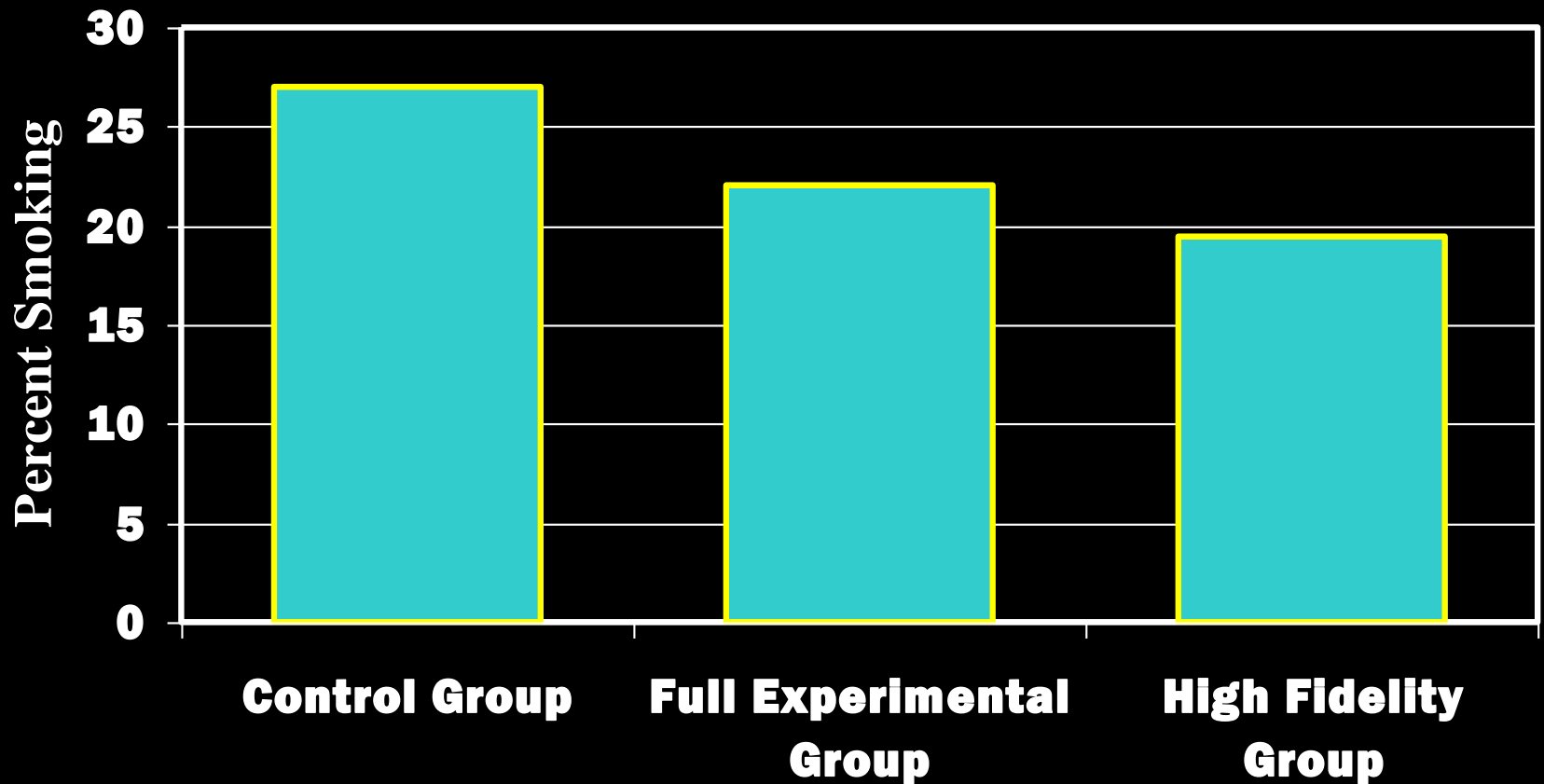
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Fidelity = faithfully and fully replicating the program model you have selected

Without high fidelity, your desired outcomes may not be achieved

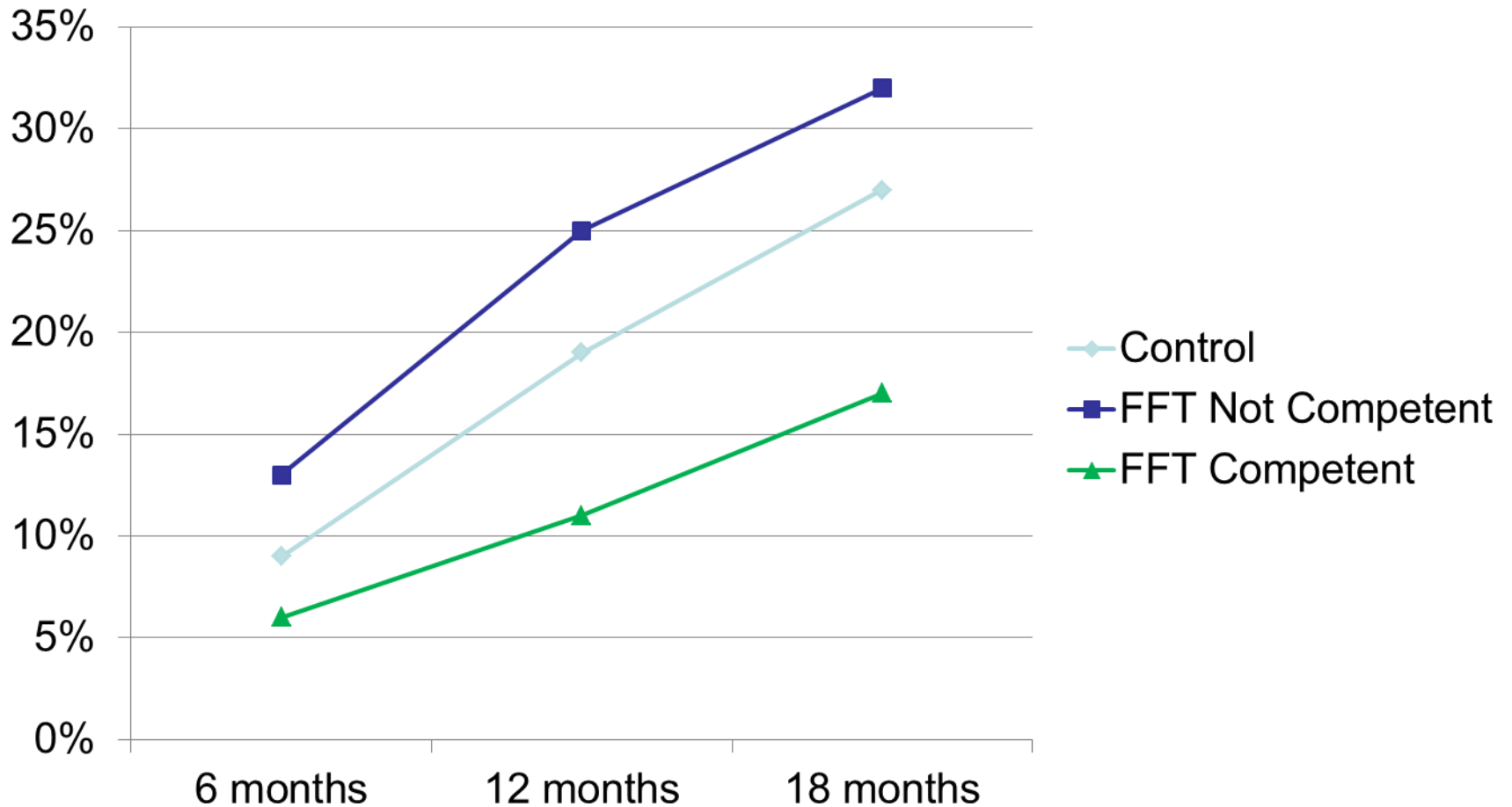


# Effects of program fidelity on past month smoking reported by middle school students



Source: Botvin, Baker, Dusenbury, Botvin, & Diaz. (1995). *JAMA*, 273, 1106-1112.

# Felony recidivism rates over time, by therapist competency





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# The Programs



# Caring School Community

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K–6 program that builds classroom and school-wide community.

- focused on strengthening students' connectedness to school



# Caring School Community

In a Caring School Community, students learn to take responsibility for their own learning and behavior. They also learn the values of fairness, helpfulness, caring, and respect. The program's four components support that learning.

- **Class Meeting**
- **Cross Age Buddies**
- **Homeside Activities**
- **Schoolwide Activities**

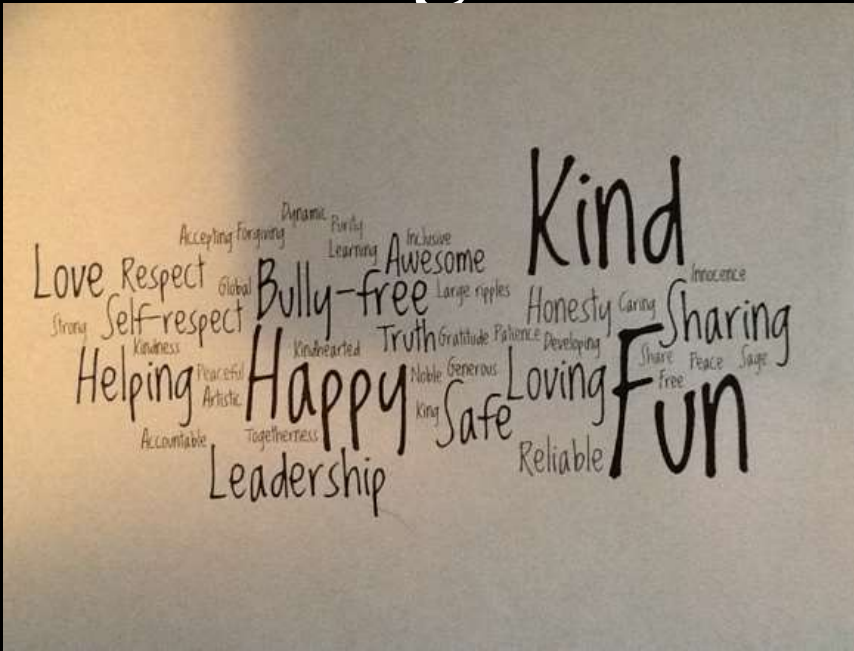
Guided by Four Principles:

1. Emotional and Physical Safety
2. Supportive relationships,
3. Autonomy
4. Sense of Competence





# Caring School Community



## Class Meetings

Teachers learn:

- How to build unity and give students a more meaningful voice in the classroom
- Ways to build students' social skills and commitment to responsibility, helpfulness, and respect

Students learn:

- How to set class norms and goals, create plans, make decisions, and solve problems related to classroom life
- How to better understand and empathize with other students

# CCS marijuana outcomes

Impact in elementary school	
Outcomes	Relative to other students
• Greater sense of the school as a caring community	33% higher
• Stronger academic motivation	24% higher
• Less use of alcohol and marijuana	19% lower
• Better conflict-resolution skills	17% higher
• Stronger commitment to democratic values	12% higher
• More concern for others	10% higher





# InShape

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- Universal Prevention
- Age: Early Adulthood (19-22)
- Race/Ethnicity: All Race/Ethnicity
- Gender: Male and Female



**Brief Programs for Health**  
Promoting Positive Image & Behavior



# InShape

- ~~Based on Behavior-Image Model (BIM).~~
- Emphasizes the positive image benefits of
  - setting goals to increase physical activity and exercise, healthy eating,
  - sleep, and stress management,
  - avoiding alcohol, cigarette and illicit drug use.
- Program components
  - a self-administered behavior image survey,
  - a brief talk about fitness and health with a designated Fitness Specialist,
  - a set of fitness recommendations and goal plan to improve fitness behaviors and future image.



**Brief Programs for Health**

Promoting Positive Image & Behavior



# InShape Outcomes

- **Outcomes**
- 12 weeks after program initiation, In-Shape relative to a control group resulted in:
  - reduced frequency and heavy use of alcohol,
  - reduced driving after drinking,
  - **reduced initiation, quantity, and heavy use of marijuana,**
  - increased hours of sleep,
  - improved spiritual and social health,
  - no significant results on cigarette use, exercise, and nutrition behaviors.



**Brief Programs for Health**

Promoting Positive Image & Behavior



[Click here to watch my personal video message.](#)

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**VIDEO GUIDANCE**

strategic visual communications







Keepin' it

REAL

- Keepin' it REAL is a multicultural, school-based substance use prevention program for students
- 12-14 years old.
- 10-lesson curriculum taught by trained classroom teachers in
- 45-minute sessions over 10 weeks,
- Booster sessions delivered in the following school year.



keepin' it

REAL

- Multicultural middle school drug prevention program that has been shown to reduce alcohol, marijuana, and tobacco use.
- Teaches youth to think critically and communicate effectively.
- Lessons cover risk assessment, decision making, where to go for support, and communication skills such as conflict resolution and drug refusal.
- REAL stands for the resistance strategies –
  - Refuse
  - Explain
  - Avoid
  - Leave
- Ten school lessons and five videos developed by kids for kids.
- A series of “boosters” that reinforce the program.



keepin' it

REAL

- Curriculum participants reported lower alcohol, **marijuana**, and cigarette use than students who did not receive the program. Effects lasted up to 14 months for alcohol use and marijuana use and up to eight months for cigarette use.
- Students who received the **multicultural version of the curriculum reported a slower increase in marijuana use** over time compared with control students. Curriculum participants who saw fewer than four videos did not report lower rates of substance use.
- Students in the intervention group reported **greater use of these strategies to resist marijuana use two months after the intervention** and to resist cigarette use two and eight months after the intervention. The effect was not found 12 months after the intervention.
- The Mexican American and multicultural versions of the curriculum both **affected marijuana use**. However, the non-Hispanic version did not have an impact on use. (NREPP)

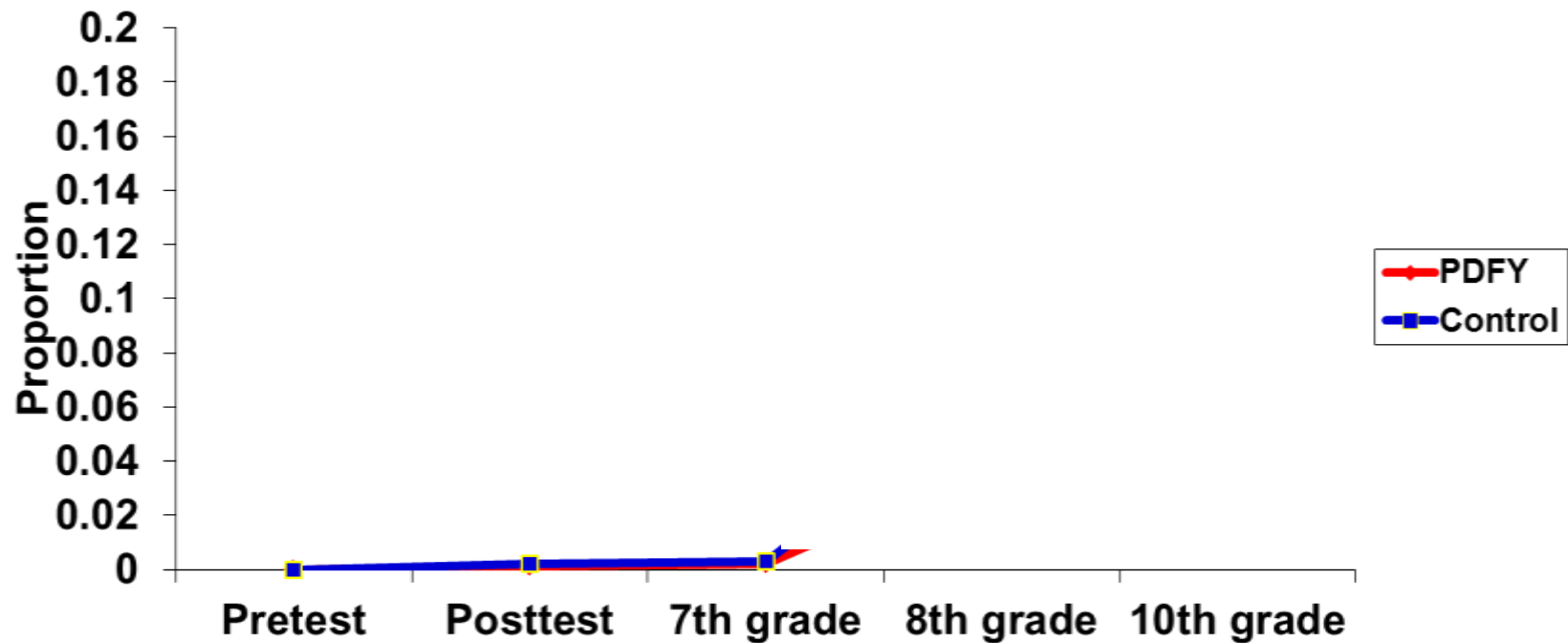
# Guiding Good Choices



- Strengthens parents' skills to:
  - build family bonding,
  - establish and reinforce clear and consistent guidelines for children's behavior,
  - teach children skills to resist peer influence,
  - improve family management practices, and
  - reduce family conflict.

# Guiding Good Choices – Preventing Marijuana Use

## New User Proportions for Marijuana Use by Experiment Conditions



# Guiding Good Choices Evidence of Effects

- 4 years later increased the likelihood that non-users would remain drug free by 28%
  - Reduced alcohol and marijuana use by 40.6%.
- Reduced progression to more serious substance abuse by 54% six years later.



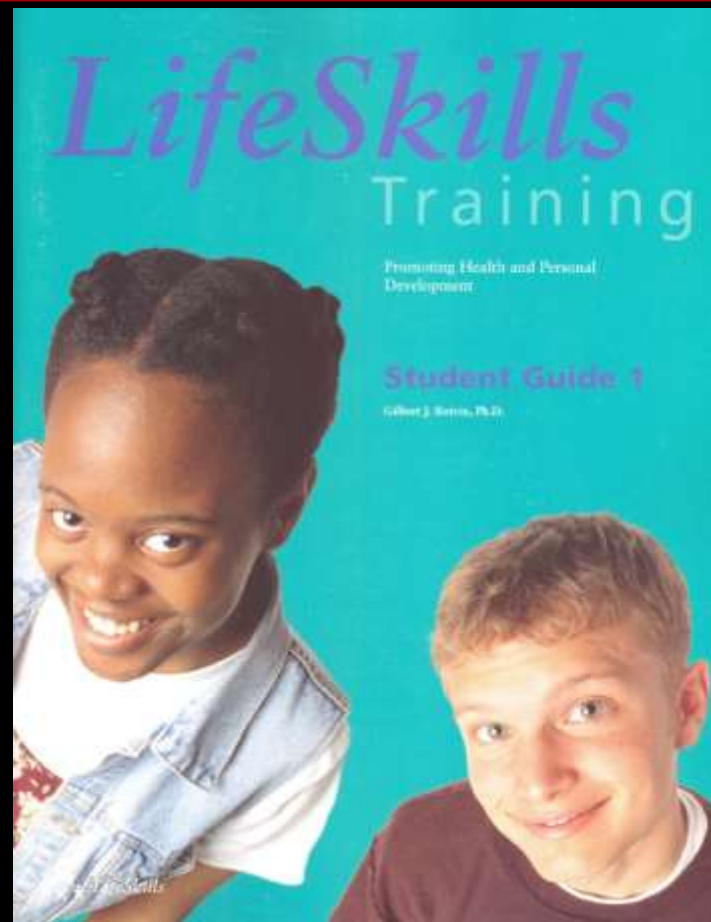
Spoth, Redmond, & Shin, 2001; Spoth, Reyes, Redmond, & Shin, 1999)



Curriculum for social competence promotion and drug abuse prevention

Students ages 11 to 14.

- 15 Class Periods (6th or 7th Grade)
- 10 Class Periods (7th or 8th Grade)
- 5 Class Periods (8th or 9th Grade)





## *Major Components*

- Drug Resistance Skills and Norms
- Self-Management Skills
- General Social Skills







*LifeSkills® Training*

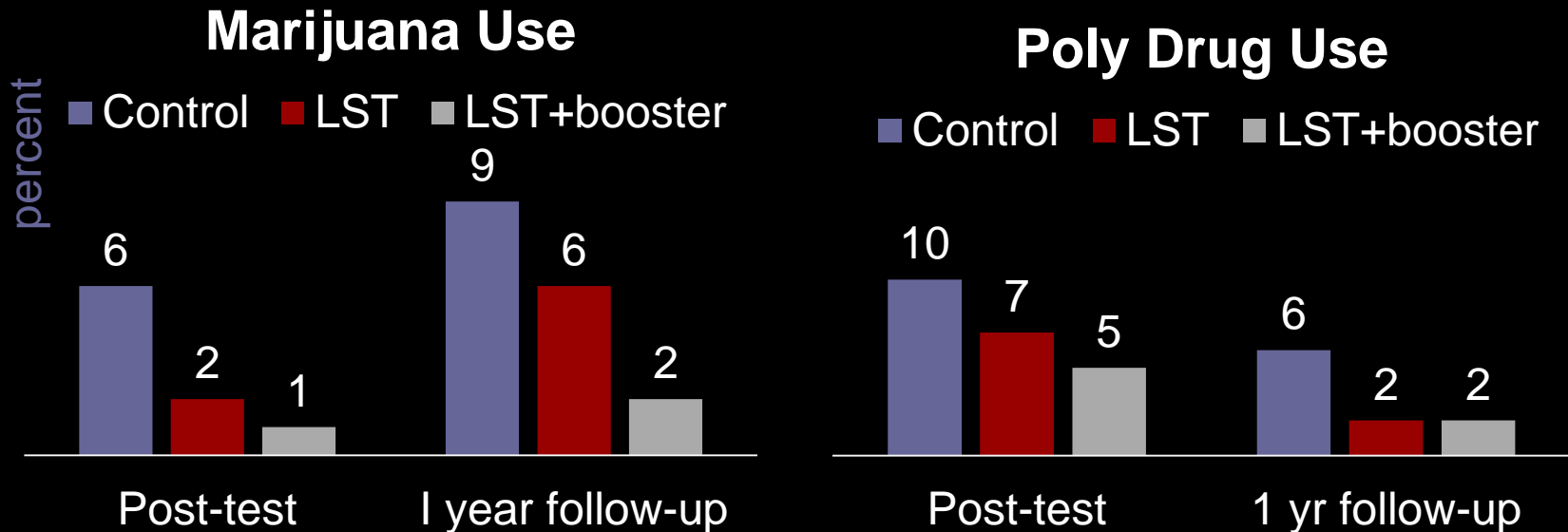
## ■ Content

- Refusal skills
- Reduce personal motivation to smoke, drink or use drugs
- Decision-making
- Insight into media influences
- Self-worth & assertiveness
- Communication skills
- Personal relationships
- Anxiety management





# Life Skills Training (LST) Outcomes



60% reduction in alcohol, cigarette and marijuana use 3 years later for students whose teachers taught at least 60% of the curriculum



- Reduces tobacco, alcohol, and marijuana use 50-75%.
- Effects maintained through grade 12.
  - Cuts polydrug use up to 66%.
  - Reduces pack-a-day smoking by 25%.
  - Decreases use of inhalants, narcotics, and hallucinogens 25% to 55%.



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- Darren Mattozzi

LIONS QUEST

A Program of Lions  
Clubs International  
Foundation

# Lions Quest

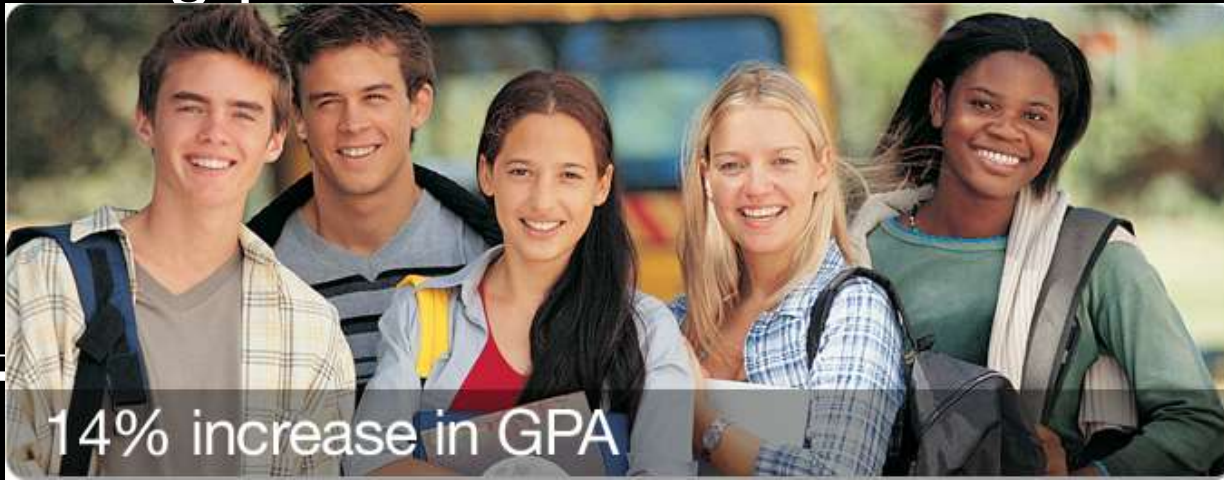
Increase Academic Achievement • Decrease Problem Behaviors • Improve Prosocial Behaviors

Grades K-5

Grades 6-8

Grades 9-12

- Learning to accept responsibility
- Communicating effectively
- Setting goals
- Making healthy decisions
- Resisting pressure to use alcohol or drugs



14% increase in GPA

LIONS QUEST

A Program of Lions  
Clubs International  
Foundation

# Lions Quest

Increase Academic Achievement • Decrease Problem Behaviors • Improve Prosocial Behaviors

Grades K-5

Grades 6-8

Grades 9-12



- Grades 6-8
- Comprehensive lessons
- Implemented by classroom educators
- Integrated into existing subject areas or taught as a stand-alone course
- Executed as a nine-week mini course or over the entire school year



A Program of Lions Clubs International Foundation

# Lions Quest

Increase Academic Achievement • Decrease Problem Behaviors • Improve Prosocial Behaviors

Grades K-5

Grades 6-8

Grades 9-12

Table 2

Adjusted substance use prevalence rates of eighth grade students at the spring of 2000 follow-up

Variable	SFA (%)	Control (%)	Difference	95% confidence interval	P
<i>Alcohol</i>					
Lifetime	66.97	66.33	0.64	-2.25, 3.53	.66
30-day	22.85	23.18	-0.33	-3.01, 2.35	.8
Binge drinking (3+) 30-day	12.67	13.11	-0.44	-2.78, 1.91	.71
<i>Cigarettes</i>					
Lifetime	28	27.5	0.5	-1.99, 2.99	.69
30-day	12.47	11.48	0.98	-0.66, 2.63	.23
<i>Marijuana</i>					
Lifetime	27.24	30.5	-3.26	-6.55, -0.0	.05
30-day	11.32	13.79	-2.47	-4.70, -0.23	.03
<i>Other illicit substances</i>					
Lifetime	18.95	18.44	0.51	-1.87, 2.90	.66
30-day	6.89	6.98	0.09	-1.66, 1.48	.91

Values were adjusted for baseline age, gender, race/ethnicity, two-parent household, site, sensation seeking, baseline survey language, and pretest drug use. The student sample size ranged from 5316 to 5610 depending on outcome variable analyzed. Differences between conditions are based on the  $F(1,32)$  statistic.







# Multidimensional Treatment Foster Care

**Goal:** to decrease problem behavior and increase prosocial behavior in children and adolescents who are in need of out-of-home placement.

Accomplished by providing:

- close supervision
- fair and consistent limits
- predictable consequences for rule breaking
- a supportive relationship with at least one mentoring adult
- reduced exposure to peers with similar problems

Multifaceted in multiple settings.

- behavioral parent training and support for MTFC foster parents
- family therapy for biological parents (or other aftercare resources)
- skills training for youth
- supportive therapy for youth
- school-based behavioral interventions and academic support
- psychiatric consultation and medication management, when needed
- MTFC-A for adolescents (12-17 years)
- MTFC-C for middle childhood (7-11 years)
- MTFC-P for preschool-aged children (3-6 years)



**TFC**

*Consultants, Inc.*

*implementation of EVIDENCE-BASED PROGRAMS*



Families recruited, trained, and supervised to provide MTFC-placed adolescents with treatment and intensive supervision

Behavior modification program based on a three-level point system

- youth are provided with structured daily feedback.
- As youth accumulate points, they are given more freedom from adult supervision.
- Individual and family therapy is provided
- Case managers closely supervise and support the youths and their foster families through daily phone calls and weekly foster parent group meetings.



# MDTFC--Outcomes

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- When implemented with delinquent boys, significant program effects, relative to a comparison group, included:
  - less other drug use at 12 months
  - Less tobacco, marijuana, and other drug use at 12 and 18 months post-program.





FAMILY  
CHECKUP  
POSITIVE PARENTING  
PREVENTS DRUG ABUSE



# Positive Family Support

- Three-tiered, multi-staged program administered through the middle school
- To be embedded within schools that have an existing positive behavior support infrastructure.



# Positive Family Support

FAMILY  
CHECKUP  
POSITIVE PARENTING  
PREVENTS DRUG ABUSE



- Family Resource Center (FRC), operated by a Parent Consultant.
- A 6-week universal prevention program called SHAPe (Success, Health, and Peace) implemented homeroom classes.
- Family Check-Up
- Family Intervention Menu



# Positive Family Support...outcomes

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Significant effects for high risk youth who participated in the program on:

Lower likelihood of being diagnosed with lifetime alcohol, tobacco or **marijuana use** disorder in late adolescence

# Project Northland

- Multi-level intervention to include demand (individual level) and supply (environmental level) reduction strategies.
- Main intervention components include:
  - classroom curricula,
  - peer leadership,
  - youth-driven extra-curricular activities,
  - parent involvement programs,
  - community activism.

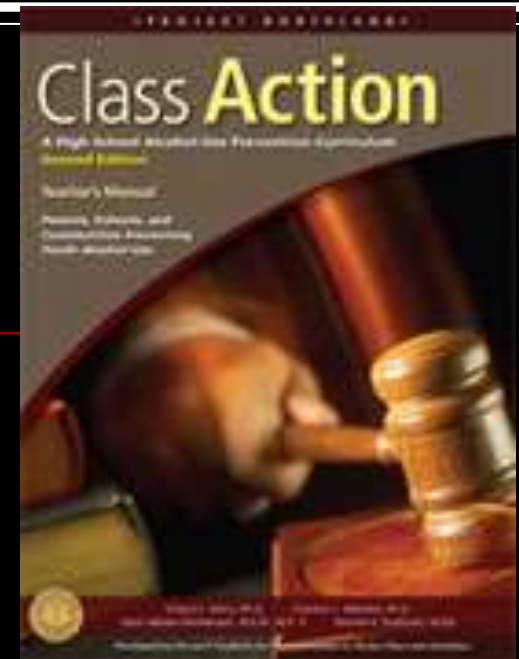




# Class Action

Real-world social and legal consequences involving teens and alcohol.

- Drinking and Driving on Trial
- Fetal Alcohol Syndrome on Trial
- Drinking and Violence on Trial
- Date Rape on Trial
- Drinking and Vandalism on Trial
- School Alcohol Policies on Trial
- Drinking and Hazing on Trial
- Binge-Drinking on Trial





# Project Northland Outcomes

Students in the intervention group who were never-drinkers at the beginning of sixth grade not only drank significantly less than students in the control group, they also smoked fewer cigarettes **and used less marijuana at the end of the eighth grade.**







# Project Toward No Drug Abuse

- High school classroom-based drug abuse prevention curriculum.

## Risk & Protective Factors:

### Risk

#### Community

- ✓ Availability of alcohol and other drugs

#### Individual

- ✓ Favorable attitudes toward drug use/Early onset of AOD use/Alcohol and/or drug use

- ✓ Poor refusal skills

#### Peer

- ✓ Peer alcohol, tobacco, and/or other drug use

### Protective

#### Individual

- ✓ Healthy / Conventional beliefs and clear standards

- ✓ Positive / Resilient temperament

- ✓ Self-efficacy

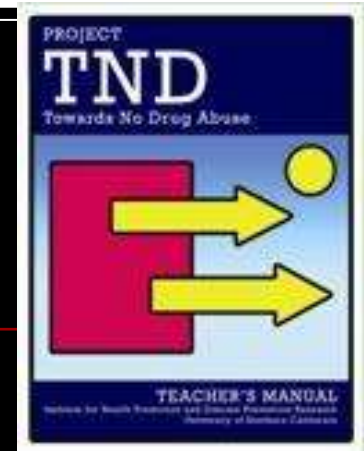
- ✓ Social competencies and problem solving skills



# Project Toward No Drug Abuse

Project TND focuses on three factors:

- **Motivation**--attitudes, beliefs, expectations and desires about drug use
- Social and Coping **Skills**
- Health Promoting **Decision Making.**





# Project Toward No Drug Abuse

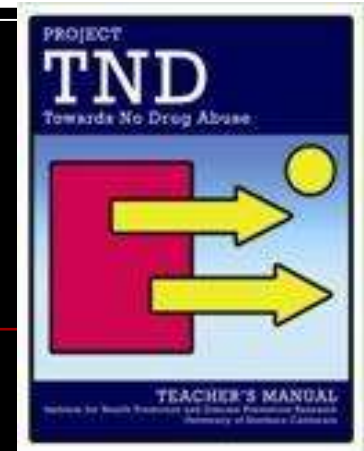
12 in-class interactive sessions

40 to 50 minutes each,

Implemented over a four-week period.

## ■ Topics include:

- active listening,
- effective communication skills,
- stress management,
- coping skills,
- tobacco cessation techniques,
- self-control to counteract risk factors for drug abuse relevant to older teens.



# Project Towards No Drug Abuse (TND)

Program developed by Steve Sussman, Ph.D.,

This logic model was created by the Evidence-based Prevention and Intervention Support Center (EPISCenter) at Penn State University in collaboration with the developer.

## Program Components

### 12 Lesson Curriculum

High School Youth ages 14-19

Lessons taught sequentially using interactive, Socratic style. Must implement all activities as described in manual.

Lesson topics include:

- Open minded listening
- Stereotyping, myths & denial
- Consequences of substance use/abuse
- Tobacco cessation
- Stress & coping strategies
- Self control
- Conflict avoidance strategies
- Positive and negative thinking patterns
- Healthy lifestyle choices
- Decision making skills

Research based Frequency and Duration:

Delivered over 4-6 weeks  
Minimum 2 lessons per week  
Maximum 3 lessons per week  
40 – 50 minute lessons

## Proximal Outcomes (Short Term)

### Motivation

*Decreased desire to use ADOA and  
Increased desire for  
pro-social involvement*

### Skills

*Increased knowledge,  
social skills, and coping  
abilities*

### Decision Making

*Increased ability to  
plan healthy lifestyle*

## Targets

Decrease  
Risk Factors

Increase  
Protective  
Factors

## Distal Outcomes (Long Term)

Reduced  
Substance Use  
Reduced use of  
cigarettes, alcohol,  
marijuana, and hard  
drugs

Reduced  
Antisocial  
Behavior

Reduced weapon  
carrying



# Project Toward No Drug Abuse

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At 1-year follow-up across three studies, students in Project TND curriculum schools exhibited a 25% reduction in rates of hard drug use relative to students in control schools ( $p < .05$ ).

At 1-year follow-up of a study using an expanded 12-session TND curriculum, students in Project TND schools exhibited a reduction in marijuana use of 22% ( $p < .05$ ) relative to students in control schools.

At 2-year follow-up, students in Project TND schools were about one fifth as likely to use hard drugs ( $p = .02$ ) and, among males who were nonusers at pretest, about one tenth as likely to use marijuana (odds ratio = 0.12,  $p = .03$ ), relative to similar students in control schools.

At 4- to 5-year follow-up, students in Project TND schools were less likely to report using hard drugs than students in control schools ( $p = .02$ ).







# Project Venture

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- Project Venture programming can be adapted to empower youth and their communities from a variety of cultures and backgrounds.
- NIYLP is a partner in the Native Aspirations Project, funded by SAMHSA. The project is designed to work with the Native communities that are at highest risk for suicide.



# Project Venture Outcomes

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- At 18-month follow up, intervention youth reported less increase in alcohol use ( $p < .05$ ), **marijuana use ( $p < .01$ )**, and other illicit drug use ( $p < .05$ ) than youth in the control group. There was no program impact on tobacco use.





# Red Cliff Wellness School Curriculum

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Grades K-12, :

- school bonding
- success in school
- increased perception of risk from substances
- identification and internalization of culturally based values and norms.



# Red Cliff Wellness School Curriculum

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- Teachers trained in interactive, cooperative learning techniques and facilitation
- Activities to enhance the values of:
  - sharing, respect, honesty, and kindness
- Assist students in understanding their emotions.
- Small-group discussions -- talking circles -- are extensively used



# Redcliff Wellness Outcomes

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- Schools participating in the study were assigned to an intervention group, which received the Red Cliff Wellness School Curriculum, or to a wait-list control group. **Although intention to use marijuana increased among students in both groups over the course of the study (from pretest through 1-year follow-up), the increase was significantly smaller among students in intervention schools than among those in control schools ( $p < .01$ ).**
- **At the 2-year follow up, intervention youth reported significantly less past 30-day marijuana use ( $p < .001$ )**







# SPORT

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- In-person health behavior screen
- One-on-one consultation
- Take-home fitness prescription targeting adolescent health promoting behaviors and alcohol use and risk and protective factors
- A flyer reinforcing key content provided during the consultation mailed to the home.



# SPORT

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## SPORT fitness consultations

- administered using a standardized protocol
- designed to provide tailored, scripted communications
- by trained fitness specialists (nurses and certified health specialists)
- to adolescents one-on-one.

At the conclusion, a take-home fitness prescription is provided recommending the adolescent set goals in the areas of sleep, nutrition, physical activity, and alcohol.



# SPORT

- A health-promotion program for high school adolescents to improve their physical fitness, nutrition, sleep habits, and avoid alcohol, tobacco and drug use.
- Highlights positive image benefits of an active lifestyle by showing youth as active and fit,
- Emphasizes substance abuse as counterproductive to achieving positive image and behavior goals.



# Sport Outcomes

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- Drug-using students who participated in SPORT showed significant positive effects at 3-month follow-up compared with drug-using control students in alcohol consumption (frequency, quantity, heavy use), current drug use (cigarette smoking, **marijuana use**), and past drug use (cigarette smoking, marijuana use),  $p < .005$  for all findings. Positive effects for past cigarette and **marijuana use continued through 12-month follow-up** ( $p < .003$  for both findings).