Lessons Learned and Outcomes from Six Pennsylvania Schools
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The Team

- Pennsylvania Commission on Crime and Delinquency
- Bennet Pierce Prevention Research Center
- Dr. Steve Sussman, University of Southern California

Providers
- Alcohol and Drug Abuse Services, Inc
- West Branch Drug and Alcohol Services
- Today Inc.
July 2012 PCCD Funds TND in 6 Schools Across 4 Counties
PCCD Scale up of 8 Evidence-based Programs Since 2008
Which Programs?
www.EPISCcenter.org

- Aggression Replacement Training
- Big Brothers Big Sisters
- Functional Family Therapy
- LifeSkills Training Program
- Multidimensional Treatment Foster Care
- Multisystemic Therapy
- Olweus Bullying Prevention Program
- Project Towards No Drug Abuse
- Promoting Alternative THinking Strategies
- Strengthening Families Program: For Parents & Youth 10–14
- The Incredible Years
Why these programs?

- Evidence of effectiveness
- Ready to scale up
- Meeting a need for PA youth and families
- More programs being added
Blueprints for Healthy Youth Development

- List of 47 well researched promising and model programs
- Information available about logistics, funding, and published research
- When available summarizes cost benefit information from Washington State Institute for Public Policy (WSIPP)
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 Week 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 3-4 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
Program’s Mechanism for Change & Goals

Training
Instructor attends a 2-day training in order to implement with fidelity.

Curriculum Reach
12 lessons taught to high school classrooms of youth ages 14-19. 30 students max.

Retrieved Interaction Frequency and Duration (Dose)
40-50 minute lessons taught over 3-4 weeks. Minimum of 2 lessons per week. Maximum of 3 per week.

Goals
Stop or reduce the use of cigarettes, alcohol, marijuana, and hard drugs.
Stop or reduce weapon carrying.
State accurate information about environmental, social, physiological, and emotional consequences of drug use and abuse.
Demonstrate behavioral and cognitive coping skills.
Make a personal commitment regarding drug use.

Program Modalities
Specific strategies, methods, and techniques used to accomplish the program goals.

Change in Motivation:
- Increased Open Mindedness
- Recognition of the benefits of self-fulfilling prophecies and negative stereotyping impact choices.
- Decreased tendency to overestimate peer use.
- Understand the negative consequences of drug use.
- Understand the connection between health & happiness.
- Understand the connection between general sense of self and behavior.

Change in Skills:
- Communicate more effectively
- Learn to resist negative stereotypes
- Knowledge of resources for family members of addicts.
- Know how to stop smoking
- Improved ability to seek social support, practice self-control & assertiveness
- Learn to match social behavior to social context
- Recognition of negative or positive process loops
- Methods to avoid violence (fogging)

Increase Decision Making Ability:
- Improved perspective taking
- Develop age-neutral self-statement about beliefs
- Learn to identify pros and cons
- Learn to make a commitment

Proximal Outcomes
Targeted outcomes that the program is designed to impact immediately following program completion.

Change in Motivation:
- Increased Open Minded Listening
- Recognition of how self-fulfilling prophecies and negative stereotyping impact choices.
- Decreased tendency to overestimate peer use.
- Understand the negative consequences of drug use.
- Understand the connection between health & happiness.
- Understand the connection between general sense of self and behavior.

Change in Skills:
- Communicate more effectively.
- Learn to resist negative stereotypes.
- Knowledge of resources for family members of addicts.
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Increase Decision Making Ability:
- Improved perspective taking.
- Develop age-neutral self-statement about beliefs.
- Learn to identify pros and cons.
- Learn to make a commitment.

Targeted Risk and Protective Factors
Risk factors, which increase the likelihood of drug use, delinquency, school dropout, and violent behavior, are targeted for a decrease. Protective factors, which exert a positive influence and buffer against negative outcomes, are targeted for an increase.

Risk Factors:
- Norms Favorable to Drug Use
- Poor Social Skills
- Favorable Attitudes towards ATOD use
- Favorable Attitudes towards Anti-social behavior
- Low Perceived Risks of Drug Use
- Low School Commitment
- Peer Rewards for Anti-Social Behavior

Protective Factors:
- Exposure to community/cultural norms that do not favor antisocial behaviors and substance use.
- Recognition of the value of pro-social activities.
- Promotion of healthy beliefs and clear standards.
- Goal setting/Positive future orientation.
- Increased knowledge of the negative consequences of Drug Use.
- Improved relations with pro-social peers.
- Positive orientation to school.
- Communication/Interpersonal skills.
- Decision making and critical thinking skills.
- Coping/self-management skills.

Distal Outcomes
Outcomes impacted by the program months/years following program completion that have been demonstrated through research.

Data from most recent randomized control trial shows at one year follow up youth demonstrate:

- Reduced Substance Use:
  27% prevalence reduction in 30-day cigarette use;
  22% prevalence reduction in 30-day marijuana use;
  26% prevalence reduction in 30-day hard drug use;
  9% prevalence reduction in 30-day alcohol use among baseline drinkers.

- Reduced Antisocial Behavior:
  25% prevalence reduction in one-year weapon carrying among males.
Why did schools choose Project TND?

To Decrease Risk Factors (Identified by PAYS):
- Norms Favorable to Drug Use
- Favorable Attitudes towards ATOD use
- Favorable Attitudes towards Anti-social behavior
- Low Perceived Risks of Drug Use
- Low School Commitment
- Peer Rewards for Anti-Social Behavior
- Exposure to community/cultural norms that do not favor antisocial behaviors and substance use
- Poor Social Skills
Why did schools choose Project TND?

- Increase Protective Factors (Identified by PAYS)
  - School Opportunities for Prosocial Involvement
  - School Rewards for Prosocial Involvement
  - Belief in the Moral Order

- Project TND Meets 12 out of 27 standards for Health Safety and Physical Education for Grades 9 and 12.
Objectives

From Project TND Manual – Steven Sussman, Sande Craig, Mary Ann Moss, USC Institute for Health Promotion and Disease Prevention Research

- Youth will be able to not start, stop, or reduce the use of cigarettes, alcohol, marijuana, and hard drugs
- Not start, stop, or reduce weapon carrying
- Provide accurate information about environmental, social, physiological and emotional consequences of drug misuse and abuse
- Demonstrate behavioral and cognitive skills
- Make a personal commitment about whether or not they desire to avoid drug abuse
### Youth Served in First Year

<table>
<thead>
<tr>
<th></th>
<th>Goal for year 1</th>
<th>Actual</th>
<th>Completing 9 out of 12 Lessons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Youth Served</td>
<td>1210</td>
<td>1294</td>
<td>1210</td>
</tr>
<tr>
<td>Percentage</td>
<td></td>
<td>107%</td>
<td>94%</td>
</tr>
</tbody>
</table>
MODEL FIDELITY PROCESS:

- Observe 20% of the lessons taught to assess model fidelity.
- External and Self Observation
- Use observation to correct drift from model
- Quality Assurance review is conducted by the Project TND developer after the first full year of implementation.
Why is Model Fidelity important?

“Evidence Based” programs are proven to get high quality outcomes for youth, families, and communities. However, these programs only predictably produce quality outcomes when they are implemented as they were designed by the researchers who developed them, with fidelity to the model.

Quality of Implementation: 99 Lessons Observed

- TND Lessons Identified as Needing improvement 3%
- TND Lessons Meeting Minimum fidelity 97%
Strengths and Barriers

- All providers were highly effective in completing fidelity observations and in collecting/reporting outcomes data.
- Providers embraced the more interactive TND lessons.
- Providers expressed concerns with managing classroom behavior during less interactive lessons.
- Across all three providers 74% of students reported a high level of engagement.
Project TND Youth Survey Administration

- Collected using a 29 item survey adapted tools used in the original Project TND research.
- It is completed by each youth before the first TND lesson and then again after the 12th lesson.
- Assesses changes in knowledge, skills, and substance use intentions.
Increases in Knowledge and Skills

- **Negative Consequences of Drug Abuse**
  - Youth With Increased Knowledge: 839 (75%)

- **Interpersonal Skills**
  - Youth With Increased Knowledge: 617 (55%)

- **Critical Thinking Skills**
  - Youth With Increased Knowledge: 789 (70%)

Out of 1123 Surveyed
## Decreased or Positively Stable Substance Use Intentions

<table>
<thead>
<tr>
<th>Substance</th>
<th>Number of Youth</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>Cigarettes</td>
<td>910</td>
<td>81%</td>
</tr>
<tr>
<td>Alcohol</td>
<td>765</td>
<td>68%</td>
</tr>
<tr>
<td>Marijuana</td>
<td>939</td>
<td>84%</td>
</tr>
<tr>
<td>Inhalants</td>
<td>1070</td>
<td>95%</td>
</tr>
<tr>
<td>Hard drugs</td>
<td>1084</td>
<td>97%</td>
</tr>
</tbody>
</table>

Out of 1123 surveyed, 910 youth have stable or decreased substance use intentions.

![Bar chart showing the percentage of youth with stable or decreased substance use intentions for different substances.]
Youth With a Decrease in Intention to Use Substances

<table>
<thead>
<tr>
<th>Youth</th>
<th>Total Youth Surveyed</th>
<th>Youth with Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1123</td>
<td>235</td>
</tr>
</tbody>
</table>

21%
Potential Long Term Impacts of Project TND Shown in Randomized Control Trials

- 27% prevalence reduction in 30-day cigarette use
- 22% prevalence reduction in 30-day marijuana use
- 26% prevalence reduction in 30-day hard drug use
- 9% prevalence reduction in 30-day alcohol use among baseline drinkers
- 25% prevalence reduction in one-year weapon-carrying among males
What is the Cost Benefit of Project TND?

- Washington State Institute for Public Policy (WSIPP) reports that for every dollar invested in Project TND there is a potential savings of $8.61 or $109 for every youth who participates.
- By multiplying the number of youth who **completed** we can make a conservative estimate of the cost savings from decreased need for services.
- \[1210 \times $109 = $131,890\] potential savings for Pennsylvania