

REDUCING THE USE OF MARIJUANA AND OTHER DRUGS (MOD)

PROCESS EVALUATION BRIEFING

COMMUNITY RESEARCH AND SERVICES TEAM UNIVERSITY OF RHODE ISLAND

The Reducing the Use of Marijuana and Other Drugs (MOD) initiative funded by the Rhode Island Department of Behavioral Healthcare, Developmental Disabilities and Hospitals (BHDDH) made awards to nine Rhode Island communities: Barrington, Central Falls, Chariho, Glocester, Pawtucket, South Kingstown, Tiverton, Warren, and Woonsocket. These communities are implementing an array of prevention strategies designed to reduce the use of marijuana and other drugs. Each community is targeting a high school within the community and provides (i) an evidence-based universal direct prevention curriculum, delivered each year to all students in 9th grade; (ii) a social marketing / social norming campaign targeted at all the students in the high school and (iii) services for students referred by school staff for professional help with substance use. This brief reports on the implementation (process) evaluation for the universal curriculums that have been delivered to date.

Universal curriculums

Five different evidence based programs listed in SAMHSA's National Registry of Evidence-based Programs and Practices (NREPP) are being delivered by the communities (Class Action, Delta 9, Life Skills, Toward No Drug Abuse and Too Good for Drugs and Violence). Appendix A is a table that lists, in columns #1 - #3 respectively, the participating communities, the high schools they are targeting and which universal curriculum they are delivering. Column #7 of the table displays the total number of students who received the universal curriculum in the 2012-2013 and 2013-2014 academic years. ***Across all communities a total of 2,750 students have participated in an evidence-based universal curriculum that has been verified as being delivered with fidelity.*** (Fidelity is described further below).

Because all the universal curriculums had been proven in previous efficacy trials and, in several cases, produced results in effectiveness trials (e.g., delivered in the field by others than developers), BHDDH did not require communities to implement pre-post surveys. The assumption is that, if implemented with fidelity, each curriculum should produce effects.

However, considerable research points to the importance of quality implementation. One major review found mean effect sizes favoring better implementation are two to three times higher than with poorer implementation. With this in mind, BHDDH directed the Community Research and Services Team (CRST) of the University to Rhode Island to develop program implementation measures and BHDDH required all those teachers / health educators and others delivering evidence-based curriculum to complete these measures.

The CRST developed program fidelity measures tailored to each of the five curriculums. Appendix B is an example from one session of the *Life Skills Training* curriculum. Checklists asked the teachers about each separate component / activity (the content and number of these varied by curriculum) and whether it was completed fully, partially or not at all. In addition, the teachers rated student response to each lesson, as well as their confidence in the effectiveness of the lesson and its suitability. Curriculums were delivered primarily by health education teachers, but sometimes by physical education teachers or student assistant counselors. Each teacher filled out a fidelity checklist for *each* of the lessons in a curriculum for *each* class that they taught. For example, for *Life Skills Training* there were 12 different fidelity checklists; if a teacher taught four classes they would fill out 48 fidelity checklists.

Columns #10 and #11 in the Appendix A table display the results of the fidelity checks. **By Spring 2014, fidelity checklists from eight of the nine MOD communities indicated 80% to 100% of the curriculum sessions were being delivered.** (Delivering 60% of the number of sessions in a curriculum is commonly considered an adequate "dose strength"). Fidelity of content was measured by the percentage of different curriculum components / activities reported as being implemented. **Communities implemented their curriculums with between 80% - 100% of components covered.** Finally, as can be seen in the last column of the table, the curriculums were highly rated by teachers across all dimensions. Teachers thought students engaged with the curriculum and expect the curriculum to be effective¹.

Example of Pre-Post outcomes for one of the evidence-based curriculums: Although communities were *not* required to administer pre-post surveys for their curriculum, at Blackstone Academy Charter School, Pawtucket voluntarily administered pre-post surveys. Data from 50 of 52 students who received the *Toward No Drug Abuse* curriculum were analyzed according to procedures developed by the Evidence-based Prevention and Intervention Support Center (EPIS Center) at Penn State University. Appendix C contains the two-page report generated from a template supplied by EPIS Center. Of particular interest is that nearly 50% of the participating students reported an increase in knowledge of the negative consequences of drug abuse and over a quarter reported increasing their interpersonal skills. These are the kinds of changes in risk and protective factors (aka intermediate or mediating variables) that prevention curriculum are intended to bring about which then lead to further changes in substance use behavior. Also, participants show stable or decreased substance use intentions. Finally, as noted in yellow (added by the EPIS Center) long-term impacts are projected to produce cost savings (based upon assumptions in analysis performed on the curriculum by the Washington State Institute for Public Policy).

In summary, nearly three thousand high school students in the MOD communities have received an evidence-based curriculum and three thousand more are projected to receive such curriculums in the next two years. In addition, all current instructors can be considered to be delivering their curriculum with fidelity to the model. These instructors do *not* need to repeat the fidelity ratings every year but any new instructors of these curriculums should be required to use the fidelity ratings to reach "criteria".

¹ Outcomes on behavior will be assessed by student report of substance use in yearly school surveys.

Community	School	Universal Curriculum	Delivered by...	During...	grade	total # students reached	demographics	# sessions / spacing	ROBURY # classes / % of sessions completed	ROBURY # of curriculum content # of curriculum activities # (%) completely covered in average class # (%) partially covered in average class # (%) not covered in average class	TEACHER RATINGS OF CURRICULUM Scale of 1=low to 5=high Student engagement with lessons Student understanding of key concepts Teacher confidence in effectiveness Suitability of curriculum for students
Barrington	Barrington High School	9th grade Delta 9; 10th Class Action	Health Teachers	spring 13, 14	9th 10th	442 279	9th grade: 65% female, 43% male; 65% white, 5% black, 5% american indian, 11% asian, 7% hispanic 10th grade: 62% female, 48% male; 83% white, 2% black, 2% american indian, 7% asian, 4% hispanic	Delta 9: 8 sessions / weekly Class Action: 7 sessions / weekly	10 classes (60% of sessions completed) 11 classes (100% of sessions completed)	Delta 9 has 27 activities in the classes given. 22 (81%) were completely covered in the average class, 1 (3%) partially covered and 4 (15%) not covered Class action has 30 activities 20 (66%) were completely covered in the average class, 9 (30%) partially covered and 1 (10%) not covered	Student engagement: 4.2 Student understanding: 4.8 Confidence in effectiveness: 4.5 Suitability for students: 4.5
Charo	Charo Regional High School	Class Action	Health / PE Teachers	fall 13	9th grade	272	47% female 53% male, 97% white, 3% american indian, 12% black, 3% hispanic	7 sessions / weekly	4 classes (100% of sessions completed)	Class Action has 30 curriculum activities 28 (93%) were completely covered in the average class, 2 (6%) were not covered in average class	Student engagement: 4.4 Confidence in effectiveness: 4 Suitability for students: 3.9
Foster/Glocester	Ponaganset High School	Life Skills	Teachers in home rooms	spring 14	9th	155	53% female 47% male 93% white, 1% black, 0% hispanic	12 sessions / weekly	4 classes (100% of sessions completed)	Life skills has 35 curriculum activities 35 (100%) were completely covered in the average class	Student Engagement: 4.4 Student Understanding: 4.5 Confidence in effectiveness: 4.7 Suitability for students: 4.5
Pawtucket	Blackstone Academy Charter	Towards No Drug Abuse	Health Teacher / Felicia Smith	fall 12, spring 13, fall 14	9th	98	62% female 38% male 15% white, 15% black, 68% multiple races 60% hispanic	12 sessions / weekly	4 classes (100% of sessions completed)	TNDA has 35 activities 32 (91%) completely covered in average class 4 (11%) partially covered in average class	Student engagement: 4.9 Student understanding: not available Confidence in effectiveness: 4.9 Suitability for students: 4.9

South Kingstown	South Kingstown High School	Too Good for Drugs	Health Teachers	spring 13, spring 14	9th	546	50% female, 60% male, 91% white, 3% black, 5% asian, 3% native american, 0% hispanic	10 sessions in 6 weeks	13 classes (100% of sessions completed)	Too good for drugs has 46 activities 44 (95%) completely covered in average class 1 (2%) partially covered in average class 1 (2%) not covered in average class	Student engagement: 4.8 Student understanding: 4.9 Confidence in effectiveness: 4.9 Satisfaction for students: 4.9
Tiverton	Tiverton High School	Life Skills	Health Teachers	spring 13, spring 14	9th	287	51% female, 49% male 99% white, 4% black, 3% asian, 0% hispanic	12 sessions in 6 weeks	8 classes (100% of sessions completed)	Life Skills has 35 activities 35 (100%) completely covered in average class	Student engagement: 3.5 Student understanding: 3.2 Confidence in effectiveness: 3.2 Satisfaction for students: 4.3
Warren/Bristol	Mount Hope High School	Toward No Drug Abuse	Health Teachers	fall 13 - spring 14	8th	516	51.9% female, 48.1% male 87% white, 5.5% black, 4.2% asian, 5.1% american indian, 3.3% hawaiian / pacific islander, 0.2% more than 1 race, 1.5% hispanic	12 sessions / weekly	4 classes (95% of sessions completed)	TND has 36 activities provided by 8 teachers: 26 of 35 activities (74%) completely covered in average class; 8 of 35 (23%) partially covered in average class; 1 of 35 (2%) not covered in average class	Student engagement: 4.2 Student understanding: 4.1 Confidence in effectiveness: 4.2 Satisfaction for students: 4.7
Woonsocket	Bacon Charter School	Toward No Drug Abuse	Health Teachers (Student Assistance Counselor)	spring 13, spring 14	9th	117	60% female, 40% male 80% white, 5% black, 15% hispanic	12 sessions in 3 weeks	5 classes (85% of sessions completed)	TND, 36 activities provided by teachers: 24 of 30 (80%) completely covered in average class 2 of 30 (7%) partially covered in average class 4 of 30 (13%) not covered in average class	Student engagement: 3.3 Confidence in effectiveness: 3.4 Satisfaction for students: 4.3

APPENDIX B
LIFE SKILLS TRAINING 2 – Implementation Checklist
Decision Making

School: _____ Teacher: _____ Class Period: _____ Date: _____

How much time was devoted to teaching this session? _____

How many youth were present at this session? _____ How many were absent? _____

Rate on a scale from 1 (low) to 5 (high) how well students responded to this session: _____

1. Achieving Objectives: For each major objective and corresponding points to make listed below, please mark the box that indicates the level of coverage when you taught the session:
 N = Not covered, P = Partially covered, and C = Completely covered.

• **Review suggested formula for making decisions**

An organized, logical approach is best when making decisions or solving problems.

N	P	C
---	---	---

• **Recognize that different people make different decisions in the same situations**

Different people make different decisions according to their beliefs.

N	P	C
---	---	---

What is important to a person may change from situation to situation.

N	P	C
---	---	---

• **Analyze decisions or problems to be solved using the decision-making formula**

Each person should make decisions on their own and not just go along with others.

N	P	C
---	---	---

Decisions require time and thought and should not be made impulsively.

N	P	C
---	---	---

• **Identify common external influences on decision making**

Group members influence our decisions because no one wants to feel unaccepted.

N	P	C
---	---	---

Hypocrisy is believing in one thing but doing something else.

N	P	C
---	---	---

• **Practice making decisions using the suggested formula**

Practice making decisions using the suggested formula

N	P	C
---	---	---

2. Content: For each of the topics and activities listed below, please mark the box that indicates the level of coverage when you taught the session:

N = Not covered, P = Partially covered, and C = Completely covered.

• Review The 3 Cs of Effective Decision Making

N	P	C
---	---	---

• Putting the 3 Cs Into Practice (Worksheet 3)

N	P	C
---	---	---

• Group Decision-Making Planner (Worksheet 4)

N	P	C
---	---	---

• Session Summary

N	P	C
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3. Please answer the following additional questions about this lesson.

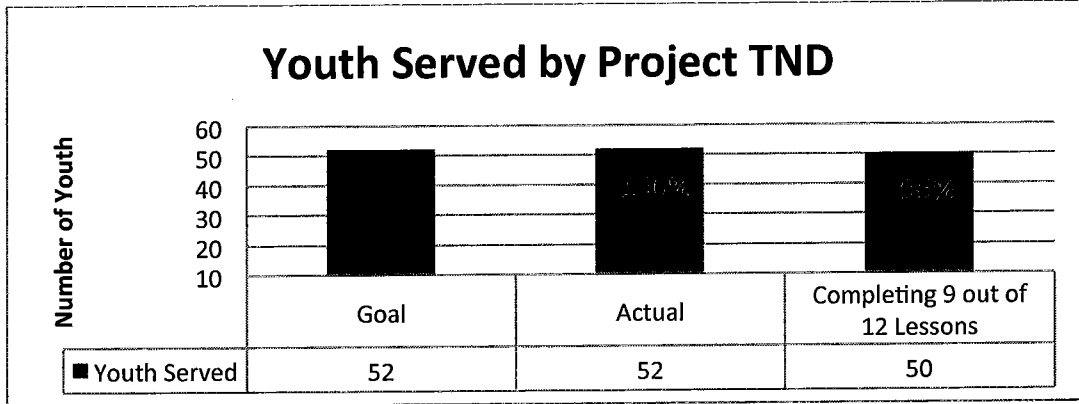
	High				Low
Student engagement with the lesson	5	4	3	2	1
Your confidence the lesson will be effective	5	4	3	2	1
Suitability of the lesson for these students	5	4	3	2	1

APPENDIX C

Pawtucket Blackstone Academy Charter

PROJECT Toward No Drug Abuse OUTCOMES SUMMARY

This report summarizes the results through (Spring 2014).



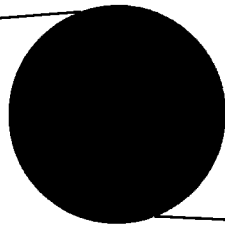
Additional Participants to be Served by the Grant's End: We plan to serve additional students.

School Population Characteristics: 62% Female 38% Male; 66% Multiple Races, 60% Hispanic, 19% Black, 15% White

Description of the Targeted Risk and Protective Factors: Marijuana and Other Illicit Drugs School, Community, Family, Peers and Individual Risk and Protective Factors regarding knowledge, peer use, coping skills.

Quality of Implementation: 36 Activities in 12 Lessons

TND activities
reported as
partially
covered
11%



TND activities
reported as
completely
covered with
fidelity
89%

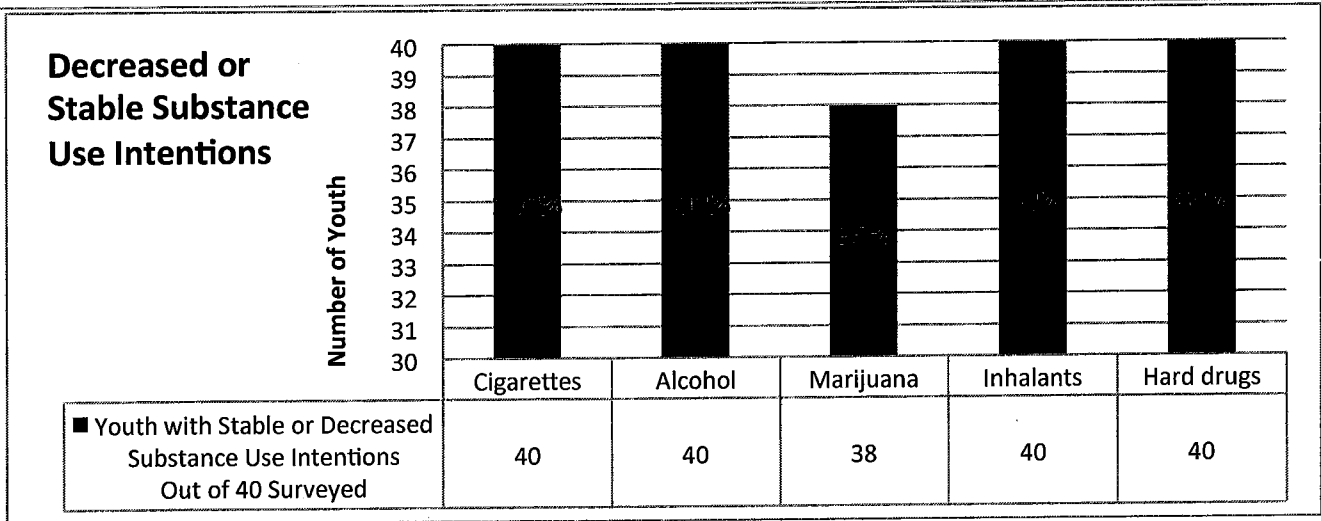
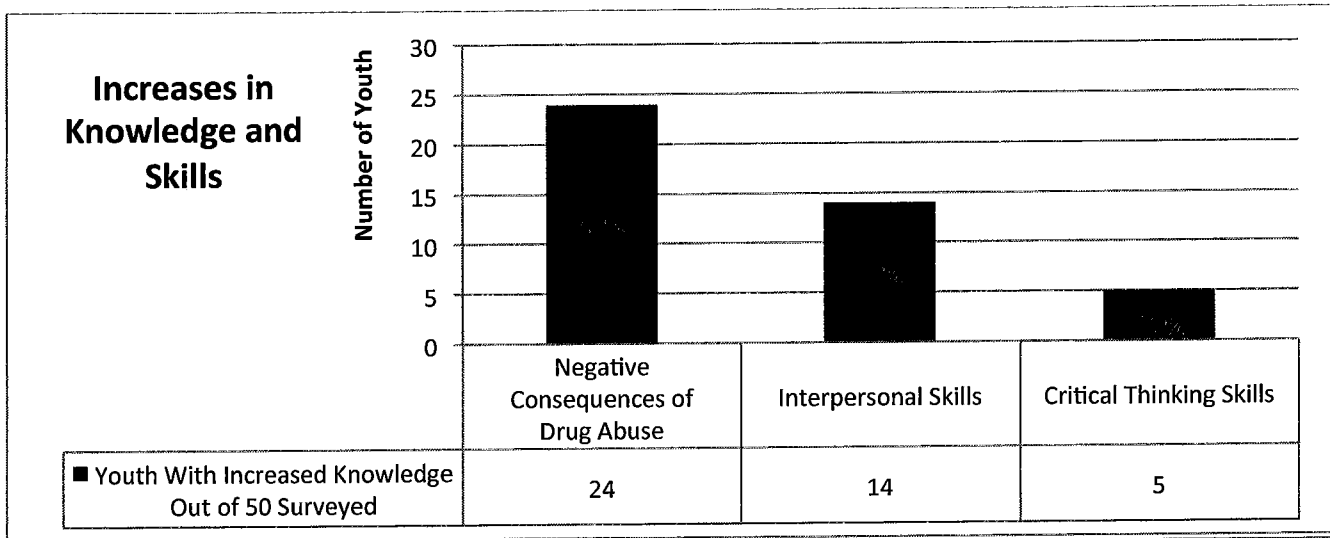
Why is **Model Fidelity** important?

*"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**.*

Project TND Substance Abuse Prevention Outcomes

Project TND Youth Survey Administration: The data shown below was collected using a 29 item survey adapted from a tool 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. The tool assesses changes in knowledge, skills, and substance use intentions. The post tool has an additional section that assesses level of student engagement in the TND lessons.

Total Number of Participants Surveyed: 50 youth out of 52 served, or 96 % completed the pre/post surveys.



What is the expected long-term impact of Project TND? The outcomes highlighted above reflect short-term participant changes in knowledge, motivation, and skills. These changes are expected to lead to long-term outcomes similar to those demonstrated in Project TND trials.

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? The Washington State Institute for Public Policy reports that for every dollar invested in Project TND there is a potential savings of \$8.61 or \$109 for every youth who participates.

With 50 youth completing Project TND lessons there is a potential savings of \$5450 for the community!