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The Nonprofit Evaluation Support Program (NESP) is a collaborative effort between two University of North Carolina Greensboro organizations – The SERVE Center and The Office of Assessment, Evaluation, and Research Services (OAERS). NESP's mission is to provide program evaluation services and program evaluation capacity building support to nonprofit and community-based organizations while providing authentic learning experiences for future leaders in the field of program evaluation.



The SERVE Center at The University of North Carolina Greensboro is a university-based research, development, dissemination, evaluation, and technical assistance center. For more than 24 years, SERVE Center has worked to improve K-12 education by providing evidence-based resources and customized technical assistance to policymakers and practitioners.



The University of North Carolina Greensboro (UNCG) is one of the sixteen university campuses of The University of North Carolina. UNCG holds two classifications from the Carnegie Foundation for the Advancement of Teaching, as a "research university with high research activity" and for "community engagement" in curriculum, outreach, and partnerships.

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#### **Communities In Schools of North Carolina**

222 North Person Street, Suite 203 | Raleigh, NC 27601 Phone: (919) 832-2700 | Toll Free: (800) 849-8881 | Fax: (919) 832-5436 http://www.cisnc.org/



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#### **Overview**

#### **CISNC Introduction**

In the 2014-2015 school-year, Communities In Schools of North Carolina (CISNC) introduced a framework that aligns site and student metrics and interventions and supports to four areas that have been shown to have the greatest impact on student success: attendance, behavior, coursework, and parent involvement, or ABC+P. Both combined and individually, attendance, behavior, and coursework are among the best predictors of a student's academic success and on-time graduation. While collecting data around ABC+P is critically important to understanding the school and student, it is even more important to use the data to drive high impact intervention and support delivery to empower each student to reach their full potential. To this end, Communities In Schools of North Carolina has partnered with the SERVE Center at the University of North Carolina at Greensboro to design curricula specifically for CIS within the ABC+P framework to enhance student outcomes in school and success in life. This document is one of more than 50 modules developed to support local CIS staff and most importantly the students that are served. We encourage you to explore all of the modules available online at <a href="https://www.cisnc.org">www.cisnc.org</a>.

#### **Using Evidenced-Based Strategies**

There are a multitude of strategies that claim to address attendance, but there are few that actually do so for all students. We suggest that schools use an evidence-based, decision-making model to ensure that high quality information informs the decisions made.

The Institute of Education Sciences (IES) at the U.S. Department of Education defines evidence-based decision making as routinely seeking out the best available information on prior research and recent evaluation findings before adopting programs or practices that will demand extensive material or human resources (including both funding and teacher time) and/or affect significant numbers of students (Whitehurst, 2004).

Evidence-based practice means delivering interventions and supports to students (clients) in ways that integrate the best available evidence from data, research, and evaluation; professional wisdom gained from experience; and contextual knowledge of the particular classroom, school, district, or state that might impact the design or implementation.

The ABC +P framework is inextricably bound; challenges in one area can lead to challenges in another and often exacerbate a student's issues. This document focuses on student behavior, in particular, a problem behavior. Wang and Fredricks (2014) state, "...problem behaviors often elicit negative interpersonal interactions with teachers and parents, in turn leading to aggravated disengagement from school" (Bachman et al., 2008). Association with deviant peers also provides incentives for truancy and a devaluing of academic achievement (Wang & Dishion, 2012). When students are not engaged, the risk of them becoming involved in disruptive behaviors like truancy, substance abuse, gangs, delinquent behavior and others are higher; and participation in those activities weakens the bonds to



their school environment and families (Steward, Steward, Blar, Jo & Hill, 2008; Wang & Fredricks, 2014). While the terminology may differ across fields, the challenge boils down to a disconnect between students and their schools; this module provides an example of a strategy that will reconnect students to their schools, address students challenging behaviors, and hopefully make schools safer, supportive, and engaging.

### Problem/Rationale

According to the North Carolina 2013 Middle School Youth Risk Behavior Survey, 12.7% of students reported having used marijuana; 7.5% of students reported having sniffed glue, breathed contents of spray cans, or inhaled paints or sprays to get high; and 5.1% reported taking a prescription drug (North Carolina Healthy Schools, 2013). Additionally, 10% of students reported that they had their first drink of alcohol (other than a few sips) before age 11, and 4.7% of students reported they usually got the alcohol they drank from someone who gave it to them (North Carolina Healthy Schools, 2013).

Teens use alcohol more than tobacco or other drugs. While adolescents and young adults drink less often than adults, when they do drink they tend to drink more than adults, sometimes having as many as five or more drinks on a single occasion (Substance Abuse and Mental Health Services Administration, 2013).

Research shows that brain development continues throughout adolescence and well into young adulthood, which gives reason for concern that drinking during this critical developmental period may cause lifelong impairments in brain function, particularly as it relates to memory, motor skills, and coordination (Hiller-Sturmhöfel & Swartswelder, 2005).

The literature suggests that drug abuse prevention programs for middle and high school students should increase academic and social competence in the following skills (Botvin, Baker, Dusenbury, Botvin, & Diaz, 1995; Scheier, Botvin, Diaz, & Griffin, 1999; Eisen, Zellman, & Murray, 2003; Ellickson, McCaffrey, Ghosh-Dastidar, & Longshore, 2003; Haggerty, Skinner, MacKenzie, & Catalano. 2007):

- Study habits and academic support
- Communication
- Peer relationships
- Self-efficacy and assertiveness
- Drug resistance skills
- Reinforcement of anti-drug attitudes
- Strengthening of personal commitments against drug abuse

Additionally, research suggests that prevention programs should focus on enhancing protective factors and reversing or reducing risk factors, and should address all forms of drug abuse, alone or in combination, including the underage use of legal drugs (e.g., tobacco



or alcohol); the use of illegal drugs (e.g., marijuana or heroin); and the inappropriate use of legally obtained substances (e.g., inhalants), prescription medications, or over-the-counter drugs (Hawkins, Catalano, & Arthur, 2002; Johnston, O'Malley, & Bachman, 2002).

#### **Purpose**

The purpose of this three-part lesson is to provide students with the opportunity to explore the social, emotional, and physical consequences of using legal or illegal drugs; develop skills in communicating with others about substance abuse; recognize peer pressure and practice techniques for resisting peer pressure or avoiding situations that may lead to harmful situations; and practice and reflect on personal decision-making skills.

Teachers and school staff can promote a positive, safe, drug-free environment by:

- Including substance abuse prevention in the curriculum,
- Recognizing and addressing risk factors for potential substance abuse,
- Informing and engaging families in the discussion about substance abuse prevention, and
- Encouraging community participation in substance abuse prevention.

### **Implementation Plan**

#### **Uses**

Teachers can use the information provided in this guide to help students understand the risks associated with using harmful substances (e.g., legal and illegal drugs), develop techniques for resisting peer pressure, and reflect on their decision making process when it comes to engaging in practices that may be potentially harmful.

#### **Audiences**

The primary audience for the lesson is middle school students.

#### **Activities**

This is a three-part lesson to be completed over four class periods. The purpose of this extended lesson is to:

- Help students understand the harmful effects of some common substances adolescents may be tempted to experiment with.
- Practice skills for resisting peer pressure to experiment with harmful substances.
- Explore options for removing themselves from potentially tempting or harmful situations.
- Develop skills for making wise decisions regarding the use of harmful substances.



### Materials/Equipment/Space

- Space for students to work in groups
- Access to computers
- Access to the Internet
- Word processing software and PowerPoint or other presentation software/platform
  - Teachers may choose to have students create posters if access to computers for creating PowerPoints is limited.
- List of recommended sites (refer to the Resources section)
- Handouts (refer to the Resources section and Appendix D)

Note: For presentations, check for access to computer, Smartboard or data projector and screen, relevant power cords, and remote slide advancer.

#### Time

This is a three-part lesson to be completed over several days, including time for homework. The total time needed for the full lesson is about four hours or four class periods.

## **Lesson Plan of Activity**

This sample lesson will allow students to conduct research on the effects of harmful substances (e.g., legal and illegal drugs), engage in role play to practice peer resistance techniques, work through a decision making tree, and reflect on beliefs and attitudes about harmful substances.

Teachers should be prepared to help students recognize the myths versus the realities of the effects of abusing harmful substances as well as to offer examples of wise choices and reactions to decision making and risk taking.

# Sample Lesson - Making Wise Choices—More Than Just Saying No to Drugs

Activity	Process Notes
Introduce the lesson.	Students will:
Let students know that this is a three-part lesson that will require them to work in teams and individually to explore various substances and the effects they can have on the human body and brain, the myths and realities of these effects, peer pressure and resistance techniques, and decision making skills as it relates to making wise choices to respect and protect oneself.	<ol> <li>Work in teams to conduct research and develop a presentation.</li> <li>Work in teams to develop a scenario for role play about peer pressure and demonstrate techniques for resisting peer pressure.</li> <li>Students will work individually through a scenario to reflect on consequences of decisions.</li> </ol>



Activity	Process Notes
Team Research Project: 2 hours	
Respecting Yourself—Protecting Your Body and	Divide class into five teams, one for each substance
Mind from the Effects of Harmful Substances	listed to be researched.
Allow two class periods to complete the research and develop the presentation and one class period for presentations and debrief. Additionally, encourage teams to divide the work so they can continue working on the research outside of class.  Teams will work together to research information about five common substances that middle school students may be tempted to experiment with:  Cigarettes	Refer to the handout provided, "Making Wise Choices-More Than Just Saying No to Drugs," for guiding questions for students to answer during their web-based research as well as a list of suggested websites students can use to access pertinent information for this lesson. While students should be able to address all research questions by accessing information on the websites listed, students should be encouraged to access at least one additional website or other resource as part of their
- Other nicotine products–smokeless tobacco and	research.
e-Cigarettes - Alcohol - Marijuana - Inhalers	Review good practices in conducting research (e.g., evaluating quality and accuracy of content, validity of source, proper citation of sources, etc.).
Teams will create a 5-10 minute presentation using posters, PowerPoint, or other media format.	Establish grading criteria for the presentation and share the criteria with students at the beginning of the assignment.
Team Presentations: 1 hour	If you do not have a rubric that you normally use for student presentations, review the suggested links in the Resources section. Consider:  - Research-answers all the questions, demonstrates additional facts, uses multiple sources, properly cites sources.  - Content-accuracy of information, clearly presented facts.  - Creativity-graphics are interesting and used to support content/convey meaning.  - Organization-logical sequence of information, presentation is easy to read/follow.
Student presentations	As students complete each presentation, provide time for other students to ask questions about each substance.
	Be prepared to ask questions of the presenting teams-refer to the research questions.
	As a wrap-up to all presentations, ask students questions about how the harmful effects of the substances discussed are contradictory to respecting their minds and bodies. Be prepared to pose questions that encourage students to consider how maintaining a healthy body and mind includes



avoiding substance abuse.

Activity	Process Notes
	Set-up the assignment for the group role play activity.
	Download the following handouts and give to students to read prior to the activity: - Facts Into Action - Peer Influence
	As time allows, give teams time for initial brainstorming for their role play.
Group Role Play Activity: 1 hour	<i>y</i> ,
Staying True To Yourself-Resisting Peer Pressure	Ensure students have read the two handouts: - Facts Into Action - Peer Influence
This activity provides students with the opportunity to practice options for not engaging in substance abuse by thinking through aspects of the situation, resisting peer pressure, and/or removing themselves from the situation.  This lesson consists of:  1. Reading the two handouts listed in the process notes.  2. Allowing teams 20-30 minutes to create a scenario in which they are offered the opportunity to use the substance the team researched and role play how they would avoid not using the substance.  3. Role plays.	<ul> <li>Peer Influence</li> <li>Allow teams time to create their own scenarios in which they might be approached by a friend or friends to engage in using a harmful substance (e.g., cigarettes, alcohol, drugs, inhalants) and role play how they can remove themselves from the situation or avoid engaging in substance abuse.</li> <li>Teams should use the substance they researched for their scenario.</li> <li>Scenario should be realistic (may even be a situation in which they have found themselves).</li> <li>Scenario should include some myth about the substance (e.g., it is safe, it is not addictive, just once will not hurt).</li> </ul>
<ul><li>4. Debrief of scenarios.</li></ul>	Conduct a whole-class debrief at the conclusion of all scenario role play.
<ul><li>During the debrief, ask students:</li><li>What are the myths associated with the substance?</li><li>What pressures do students encounter and from</li></ul>	Engage all students in the conversation. Seek to include students who you think might have difficulty resisting peer pressure.
<ul><li>whom?</li><li>Peers, older students, siblings?</li><li>Do most pressures come when at school or when away from school?</li></ul>	Do any student's responses giving you reason to be concerned that s/he is engaging in the use of harmful or illegal substances? If so, consider school
<ul> <li>What difficulties do students experience when attempting to resist peer pressure to engage in substance abuse?</li> <li>Do students feel that the pressure will increase or decrease as they make a stand to resist abusing harmful substances?</li> </ul>	policy for next steps to assist students who may be at risk from substance abuse.
Individual Activity with Whole Class Debrief: 45 mi	
You're In Control-Wise Decision-Making	Download the "Drugs: Your life: It Isn't Pretty" handout.



This lesson will allow students to explore decision- Have students complete the decision-making activity

Activity	Process Notes
making and potential consequences based on a	individually. Students should write down their
scenario. Students will complete individually the	answers to the three questions about their decisions.
activity as instructed in the Drugs: Your life: It Isn't	
Pretty handout.	Debrief as a whole class. Solicit questions from
	different students for each of the decision points.
Upon completion, conduct a whole class debrief.	
During the debrief:	
- Ask students how they reached their decision.	
<ul> <li>What factors they considered.</li> </ul>	
- Ask students how difficult or easy it was to make	
each decision.	
• Why?	
- Ask students if they have been in a situation in	
which they needed to make a decision about	
whether to do something their peers (or others)	
were encouraging (or pressuring) them to do, or	
to make the choice not to.	
Encourage students to describe their	
decision-making process.	



## **Tier 2 Intervention and Support Examples**

#### Example #1: Life Skills Training

The study assessed the effectiveness of a universal drug abuse preventive intervention called Life Skills Training (LST) on youth identified as high risk for substance use initiation based on exposure to substance-using peers and poor academic performance in school. LST teaches drug resistance skills, norms against substance use, and material designed to facilitate the development of important personal and social skills. The generalizability of a successful school-based universal drug abuse prevention program was successful for youth at higher than average risk for substance use initiation (based on substance-using peers and poor academic achievement).

Griffin, K. W., Botvin, G. J., Nichols, T. R., & Doyle, M. M. (2003). Effectiveness of Universal Drug Abuse Prevention Approach for Youth at High Risk for Substance Use Initiation. *Preventive Medicine*, *36*(1), 1-7.

Example #2: The Juvenile and Adolescent Substance Abuse Prevention program
The Juvenile and Adolescent Substance Abuse Prevention program (JASAP) is based on the knowledge base of substance abuse prevention and strong community decision maker support. It is a curriculum-based prevention and health promotion program for youth between the ages of 13 and 18 years old, identified through juvenile court, schools, churches, community, and other youth organizations. A majority of the participants (94%) made significantly more healthy decisions. There was an increased attitude about alcohol and drugs on the posttest compared to the pretest, although not significant, mean pretest = 3.63 and mean posttest = 3.84.

Talpade, M., Lynch, D., Lattimore, B., & Graham, A. (2008). The juvenile and adolescent substance prevention program: An evaluation. *International Journal of Behavioral Consultation and Therapy*, 4(4), 304-310.



#### Resources

The following resources are student handouts for the lesson:

#### Heads Up (Scholastic) - <a href="http://www.scholastic.com/">http://www.scholastic.com/</a>

**Facts Into Action** 

http://headsup.scholastic.com/sites/default/files/NIDA8-INS3 Stu Mag.pdf

Peer Influence

http://www.scholastic.com/headsup/pdfs/NIDA7-PTG%20Bk-worksheet4.pdf

Drugs + Your LIFE: It Isn't

Pretty <a href="http://headsup.scholastic.com/sites/default/files/block/images/NIDA11-">http://headsup.scholastic.com/sites/default/files/block/images/NIDA11-</a>

PTG Activity3.pdf

The following resources are suitable for students to use in completing the lesson.

## Center for Substance Abuse Prevention (Substance Abuse and Mental Health Service Administration). Too Smart to Start.

Resources for teens on underage drinking, including FAQs, quizzes, scenarios, and advice on resisting peer pressure.

http://www.toosmarttostart.samhsa.gov/Start.aspx

#### **Center for Technology in Teaching and Learning (Rice University)**

Interactive lessons on substance abuse &

neuroscience <a href="http://webadventures.rice.edu/">http://webadventures.rice.edu/</a>

#### Foundation for a Drug-Free World - <a href="http://www.drugfreeworld.org/#/interactive">http://www.drugfreeworld.org/#/interactive</a>

Facts about various drugs; PSAs and documentaries for teens and adults; and free resources for educators.

The Truth about Drugs brochure for teens

http://f.edgesuite.net/data/www.drugfreeworld.org/files/truth-about-drugs-

booklet-en.pdf

#### Learn.Genetics. Drugs of Abuse.

Animated clips of effects of various drugs on the body.

http://learn.genetics.utah.edu/content/addiction/abuse/

#### NIDA for Teens: The Science Behind Drug Abuse – http://teens.drugabuse.gov/

Facts, interactive lessons, infographics, blogs, and FAQs on drugs.

Inhalants

http://teens.drugabuse.gov/drug-facts/inhalants

Marijuana

http://teens.drugabuse.gov/drug-facts/marijuana

Tobacco, Nicotine, and E-Cigarettes

http://teens.drugabuse.gov/drug-facts/tobacco-nicotine-e-cigarettes



#### **National Institute on Drug Abuse (NIDA)**

This Web site contains information about drug abuse and a section designed specifically for parents, teachers, and students. Publications and other materials are available free of charge.

http://www.drugabuse.gov/children-and-teens

#### Drugs + Your Body (Scholastic)

http://www.scholastic.com/drugs-and-your-body/

## The Cool Spot. National Institute on Alcohol Abuse and Alcoholism (National Institute of Health; U.S. Department of Health and Human Services)

Information for teens about alcohol, including tips for resisting peer pressure. <a href="http://www.thecoolspot.gov/index.asp">http://www.thecoolspot.gov/index.asp</a>

#### Heads Up (Scholastic) - <a href="http://www.scholastic.com/">http://www.scholastic.com/</a>

The Power of Pausing: What Would You Do? <a href="http://headsup.scholastic.com/sites/default/files/NIDA12-INS3">http://headsup.scholastic.com/sites/default/files/NIDA12-INS3</a> TE-worksheet.pdf

The following resources pertain to developing rubrics.

#### **Resources for Using Rubrics in the Middle Grades**

(Edutopia) http://www.edutopia.org/rubrics-middle-school-resources

#### Assessment and Rubrics (Kathy Schrock's Guide to Everything)

http://www.schrockguide.net/assessment-and-rubrics.html

#### 6-8 Presentation Rubric—CCSS Aligned (Buck Institute for Education)

http://bie.org/object/document/6 8 presentation rubric ccss aligned

The following optional resources provide additional information and concepts, or may be used in sharing with others or to expand the activity. Read through these resources to become familiar with the information and to determine their level of usefulness within the school setting.

## Center for Substance Abuse Prevention (@ Substance Abuse and Mental Health Service Administration) – <a href="http://www.samhsa.gov/topics">http://www.samhsa.gov/topics</a>

The "Talk. They Hear You." campaign aims to reduce underage drinking among youth ages 9 to 15 by providing parents and caregivers with information and resources they need to start addressing the issue of alcohol with their children early. <a href="http://www.samhsa.gov/underage-drinking">http://www.samhsa.gov/underage-drinking</a>

Too Smart to Start: provides additional resources for youth, teens, parents and educators.



http://www.toosmarttostart.samhsa.gov/Start.aspx

### Foundation for a Drug-Free World - <a href="http://www.drugfreeworld.org/home.html">http://www.drugfreeworld.org/home.html</a>

Facts about various drugs; PSAs and documentaries for teens and adults; and free educator's resources and toolkit.

The Truth About Drugs Educator's

Guide <a href="http://f.edgesuite.net/data/www.drugfreeworld.org/files/the-truth-about-drugs-educators-guide-english.pdf">http://f.edgesuite.net/data/www.drugfreeworld.org/files/the-truth-about-drugs-educators-guide-english.pdf</a>

Drug-free Pledge

http://f.edgesuite.net/data/www.drugfreeworld.org/files/truth-about-drugs-pledges.pdf

#### **Mothers Against Drunk Driving**

MADD provides free resources and on-line workshops for parents. <a href="http://www.madd.org/">http://www.madd.org/</a>

#### National Institute on Alcohol Abuse and Alcoholism

http://www.niaaa.nih.gov/

Note: All posters, images, and activity guides identified are copyright cleared for non-commercial use.



## **Measuring Success**

Identifying outcomes and collecting data to measure the success of substance abuse prevention strategies can help the school track quality of implementation as well as the effectiveness of these strategies. Following are some suggestions that schools may find useful to begin measuring success.

Issue pre/post substance use questions to students regarding the use of legal and illegal drugs. Refer to the 2013 North Carolina Youth Risk Behavior Survey: Middle School Questionnaire for questions that may be adopted and/or adapted for pre/post questionnaires.

#### Sample Pre-Lesson Question Related Smoking

Have you ever smoked a whole cigarette?

- A. No
- B. Yes

If you have smoked a whole cigarette, how old were you when you smoked a whole cigarette the first time?

- A. I have never smoked a whole cigarette
- B. 8 years old or younger
- C. 9 years old
- D. 10 years old
- E. 11 years old
- F. 12 years old
- G. 13 years old

Do you belief that smoking cigarettes is harmful to your health and could lead to premature death or other chronic illnesses?

- A. No
- B. Yes

#### Sample End-Of-Year Questions Related To Smoking

When was the last time that you smoked a whole cigarette?

- A. Within the last month
- B. More than one month ago, but less than two months ago
- C. More than two months ago, but less than three months ago
- D. More than three months ago, but less than four months ago
- E. More than four months ago, but less than six months ago
- F. More than six months ago



If you have smoked a whole cigarette within the last six months, how did you obtain the cigarette?

- A. From a friend.
- B. From a family member.
- C. From someone else.
- D. I bought it or obtained it myself.

Do you believe that smoking cigarettes is harmful to your health and could lead to premature death or other chronic illnesses?

- A. No
- B. Yes

Please share why you choose to or not to smoke.

Additionally, teachers can ask students about changes in their beliefs and attitudes about legal and illegal drug use and explore their understanding about the harmful effects substances have on their cognitive and physical abilities as well as their self-esteem and social connections.



## **Appendices**

- A. Glossary
- **B.** References
- C. Research Alignment
- **D. Student Handout Research/Presentation Activity**



## **Appendix A: Glossary**

**Addiction** – is a chronic, relapsing disease characterized by compulsive drug seeking and use, despite serious adverse consequences, and by long-lasting changes in the brain.

**Binge drinking** – drinking 5 or more alcoholic drinks on the same occasion on at least 1 day in the past 30 days (Substance Abuse and Mental Health Services Administration, 2013).

**Electronic cigarette** (e-cigarette) – battery-operated products designed to deliver nicotine, flavor and other chemicals. They turn chemicals, including highly addictive nicotine, into an aerosol that is inhaled by the user (U.S. Food and Drug Administration, n.d.).

**Heavy alcohol use** – is defined as drinking five or more drinks on the same occasion on each of 5 or more days in the past 30 days (Substance Abuse and Mental Health Services Administration, 2013).

**Illicit drugs** – include marijuana/hashish, cocaine (including crack), inhalants, hallucinogens, heroin, or prescription-type drugs used nonmedically, based on data from original NSDUH questions, not including methamphetamine use items added in 2005 and 2006 (Substance Abuse and Mental Health Services Administration, 2013).

**Inhalants** – are a variety of substances–including solvents, aerosols, gases, and nitrites—that are rarely, if ever, taken via any other route of administration (National Institute on Drug Abuse). Inhalants are often ordinary household products that children inhale or sniff in order to get high. May also be known as Gluey, Huff, Rush, or Whippets (Partnership for Drug-Free Kids, n.d.).

**Marijuana** (weed, herb, pot, grass, bud, ganja, Mary Jane) – is a greenish-gray mixture of the dried, shredded leaves and flowers of Cannabis sativa—the hemp plant used by smoking, baking in products, or infusing as a tea in order to get high (National Institute on Drug Abuse, n.d.).

**Prescription Drug Abuse** (Nonmedical Drug Abuse) – is the use of a medication without a prescription; in a way other than as prescribed; or for the experience or feeling elicited. May also be known as: Opioids: Hillbilly heroin, oxy, OC, oxycotton, percs, happy pills, vikes; Depressants: barbs, reds, red birds, phennies, tooies, yellows, yellow jackets, candy, downers, sleeping pills, tranks; A-minus, zombie pills; Stimulants: Skippy, the smart drug, Vitamin R, bennies, black beauties, roses, hearts, speed, uppers (NIDA for Teens, n.d.).



**Risk-avoidance** – places emphasis on eliminating or avoiding behaviors that lead to adverse health outcomes. Examples include: not smoking, not drinking alcohol or using other drugs; not engaging in sexual intercourse; and not engaging in violence (Health Education Curriculum Tool, n.d.).

**Tobacco product** – is any product made or derived from tobacco that is intended for human consumption, including any component, part, or accessory of a tobacco product, including cigarettes, cigars, roll-your-own tobacco, and smokeless tobacco (U.S. Food and Drug Administration, n.d.).



## **Appendix B: References**

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## **Appendix C: Research Alignment**

Citation	Brief Summary of Strategy	Sample Size	Impact/Evidence of Effectiveness	Implementation
Abbey, A., Pilgrim, C., Hendrickson, P., & Buresh, S. (2000). Evaluation of a family-based substance abuse prevention program targeted for the middle school years. <i>Journal of Drug Education</i> , 30(2), 213-228.	The Families in Action (FIA) program includes modules addressing parent/child communication, positive behavior management, ways for families to have fun together, interpersonal relationships for adolescents, enhancement of adolescent's selfesteem, factors which promote school success, and adolescent alcohol and tobacco use.	A quasi-experimental design was used to compare participants (29 students and 28 parents) and nonparticipant (268 students and 134 parents).	Student participants had higher family cohesion, F = 4.88, p = .03; less family fighting, F = 9.59, p = .002; higher school attachment, F = 6.35, p = .01; higher selfesteem, F = 9.24, p = .003; and believed that alcohol should be consumed at an older age, F = 4.41, p = .04, compared to student non participants. Parent participants had higher attitudes opposed to minor's alcohol use, F = 4.51, p = .04 and had believed that alcohol should be consumed at an older age, F = 3.84, p = .05 compared to parent non participants.	The program was comprised of six 2.5 hour sessions, offered once a week for 6 consecutive weeks. Videotaped vignettes of different families handling a variety of problems are the core component of the curriculum. Sessions 1 and 2 focused on positive thinking and how to use positive rather than negative strategies to reach behavioral goals. Sessions 3 and 4 taught interpersonal communication skills, session 5 focused on school success, and session 6 focused on the avoidance of alcohol, tobacco, and other drug use by youth.



Citation	Brief Summary of Strategy	Sample Size	Impact/Evidence of Effectiveness	Implementation
Dishion, T.J., Kavanagh, K., Schneiger, A., Nelson, S., & Kaufman, N.K. (2002). Preventing early adolescent substance use: A family-centered strategy for the public middle school. <i>Prevention Science</i> , 3(3), 191-201.	The Adolescent Transitions Program (ATP) intervention integrates universal, selected, and individual family- centered strategies to address the needs of students showing early and late onset of problem behaviors, in this study specifically substance use.	N= 672 multi-ethnic students from three middle schools, and their families randomly assigned at the individual level to a control condition or the ATP intervention.	The ATP school-based program was associated with a reduced incidence of substance use by the first year of high school, controlling for prior use of substances in middle school.	The principal sent a letter to parents to introduce and endorse the intervention study. Students were recruited and assessed in the 6 <sup>th</sup> grade and each year (7 <sup>th</sup> , 8 <sup>th</sup> , and 9 <sup>th</sup> grade) student surveys were conducted on 16 items.
Ellickson, P.L., McCaffrey, D.F., Ghosh-Dastidar, B., & Longshore, D.L. (2003) New inroads in preventing adolescent drug use: Results from a large-scale trial of project alert in middle schools. <i>American Journal of Public Health</i> , 93(11), 1830-1836.	Project ALERT is a drug prevention curriculum for middle school students that are based on the social influence model of prevention. The curriculum specifically seeks to change students' beliefs about drug norms and the social, emotional and physical consequences of using drugs.	The study includes 55 middle schools, N= 4276 students: 2553 students from 34 middle schools receiving the revised curriculum and 1723 students from 21 control schools.	Cigarette use: 18 months after baseline, Project ALERT had curbed cigarette initiation, reducing the proportion of new smokers by 19%, p < .01. Initiation rates were significantly lower for the intervention schools (25.5%) compared to the control schools (31.6%).	The revised curriculum has 11 lessons in 7th grade (3 new ones) and 3 lessons in the 8th grade. The additional 7th grade lessons focus primarily on smoking cessation and alcohol use while new home-learning opportunities seek to involve parents in substance use prevention. 7th and 8th grade teachers were



Citation	Brief Summary of Strategy	Sample Size	Impact/Evidence of Effectiveness	Implementation
			Marijuana use: 18 months after baseline, Project ALERT had curbed marijuana initiation, reducing the proportion of new marijuana users by 24%, p < .01.  Alcohol use: students in the intervention schools had significantly lower overall alcohol misuse scores than those in the control schools, p < .05.	trained to deliver the curriculum; 88% of 7 <sup>th</sup> grade teachers and 93% of 8 <sup>th</sup> grade teachers indicated that they covered all of some of each activity in the curriculum.
Velicer, W.F., Redding, C.A., Paiva, A.L., Mauriello, L.M. Blissmer, B, Oatley, K., & Fernandez, A.C. (2013). Multiple behavior interventions to prevent substance abuse and increase energy balance behaviors in middle school students.	This study used a two- arm comparison trial of multiple behavior change interventions. The smoking and alcohol prevention program (SP) and the energy balance intervention (EB) were administered to a large middle school	Twenty middle schools in Rhode Island, N= 4, 158, stratified and randomly assigned by school to either a substance use prevention or an energy balance intervention group.	The EB group had less smoking acquisition than the SP group at 12 months (1.2 vs 2.6%, t(9, 460) = 2.40, p < .05), 24 months (3.7 vs 6.4%, t(9, 460) = 2.09, p < .05), and 36 months (5.7% vs 9.2%, t(9, 460) = 1.99, p < .05). The EB group also	The intervention was conducted between 2007 and 2011. Both groups received five tailored intervention sessions. The sessions were delivered at baseline (6th grade), 3 intervention sessions 2 months apart in the 7th grade, and the final intervention



Citation	Brief Summary of Strategy	Sample Size	Impact/Evidence of Effectiveness	Implementation
Translational Behavioral Medicine: Practice, Policy, Research, 3(1), 82-93.	population.		had less alcohol acquisition than the SP group at 12 months (2.2 vs 4.5%, t(9, 465)) = 2.87, p < .01), 24 months (5.3 vs 8.6%, t(9, 465) = 2.48, p < .05), and 36 months (10.1 vs 14.4%, t(9, 465)) = 2.02, p < .05).	session in the beginning of 8th grade. The SP intervention consisted of prevention and cessation feedback. The EB intervention was geared toward physical activity, fruit and vegetable consumption and limited TV viewing.
Warren, J.R., Hecht, M.L., Wagstaff, D.A., Elek, E., Ndiaye, K., Dustman, P., & Marsiglia, F.F. (2006). Communicating Prevention: The effects of the keepin' it real classroom videotapes and televised psas on middle-school students' substance use. Journal of Applied Communication Research, 34(2), 209-227.	Assessing the Drug Resistance Skills Project's (DRS) Keepin' it REAL (kiR) program. The kiR curriculum utilizes communication-based (televised public service announcements and classroom videotapes) components to reduce middle-school students' substance use.	4, 734 7th grade middle-school students who participated in the project's pretest (fall 1998) and/or its fourth and final posttest 14 months after the end of the kiR implementation.	Differences between the group of intervention students who recalled seeing 4 or 5 classroom videos and control students were significant for 4 of the 6 outcomes: the amount of alcohol consumed in the past 30 days, t(647) = -2.19, p = .029; the number of days on which the student had consumed alcohol in the past 30 days, t(425) = -3.79, p = .000; the number of	



Citation	Brief Summary of Strategy	Sample Size	Impact/Evidence of Effectiveness	Implementation
			hits of marijuana in the past 30 days, $t(178) = -3.3$ , $p = .001$ ; and the number of days in the past month on which the student had taken one or more hits of marijuana, $t(428) = -2.71$ , $p = .007$ .	

## **Best/Promising Practices**

Promising Practice	Source(s)	Comments/ Limitations
Computer based and parent involvement program	Schinke, S. P., Schwinn, T. M., & Fang, L. (2010). Longitudinal outcomes of an alcohol abuse prevention program for urban adolescents. Journal Of Adolescent Health, 46(5), 451- 457.	<ul> <li>The present study tested the long-term efficacy of a computer-delivered alcohol abuse prevention program for early adolescents.</li> <li>Seven years following post-intervention testing and relative to control-arm youths, youths in CD and CDP groups reported less alcohol use, cigarette use, binge drinking, and peer pressure to drink; fewer drinking friends; greater refusal of alcohol use opportunities; and lower intentions to drink</li> <li>Overall however, participants' older age was associated with increased 30-day alcohol and cigarette use at the 7-year follow up.</li> </ul>



Promising Practice	Source(s)	Comments/ Limitations
		- Study findings lend support to the potential of computerized, skills-based prevention programs to help urban youth reduce their risks for underage drinking, though it may be less effective as participants get older.
Parent involvement	Guilamo-Ramos, V., Jaccard, J., Dittus, P., Gonzalez, B., Bouris, A., & Banspach, S. (2010). The Linking Lives Health Education Program: A randomized clinical trial of a parent-based tobacco use prevention program for African American and Latino youths. American Journal Of Public Health, 100(9), 1641-1647.	<ul> <li>This study evaluated the effectiveness of a parent-based add-on component to a school-based intervention to prevent cigarette smoking among African American and Latino middle school youths.</li> <li>At follow-up, the odds of smoking cigarettes were reduced by 42% for adolescents in the parent add-on condition versus the TNT-only condition. The majority of parent-based tobacco reduction programs have focused on White middle-class youths. Thus, the program's effectiveness with African American and Latino adolescents is that much more important.</li> <li>Although results are promising, the study did not include a formal, randomized, "no intervention" control group, so any statements about the absolute effectiveness of the interventions should be taken tentatively.</li> </ul>
Promoting healthy decision-making skills	Talpade, M., Lynch, D., Lattimore, B., & Graham, A. (2008). The Juvenile and Adolescent Substance Abuse Prevention Program: An	- The JASAP program was established in 2007 to promote healthy decision-making skills that would eventually lead to informed choices and decisions surrounding drug and alcohol use. Program evaluation assessed the cognitive and behavioral impact of the program—how program participation had changed prior knowledge, and the processes and outcomes related to making decisions about



Promising Practice	Source(s)	Comments/ Limitations
	Evaluation. International Journal Of Behavioral Consultation And Therapy, 4(4), 304- 310.	<ul> <li>drug and alcohol use and how this was reflected in behavioral measures.</li> <li>Results indicated that 94% of participants made more healthy choices regarding drugs and alcohol. The follow-up of participants a year later indicated that the positive effects were sustained for at least a short period of time.</li> <li>Although the early intervention showed promising results, it is acknowledged that the impact is short-term, and long-term support may be essential in sustaining the positive impact of the JASAP program.</li> </ul>



## **Appendix D: Student Handout - Research/Presentation Activity**

#### Making Wise Choices - More Than Just Saying No to Drugs

Respecting Yourself-Protecting Your Body and Your Mind from the Effects of Harmful Substances

For your groups' harmful substance, you will conduct web-based research to respond to the following questions. Cite at least two sources used for finding your information.

After conducting your research, your team will create a presentation to communicate your findings to the class.

- What is the harmful substance?
  - o What are the common street/slang names?
  - o How is it used?
  - o What are the common side effects?
- What are the chemicals in substance that cause reactions in the brain?
- What effects do the chemicals in the substance have on the brain?
- What effects do the chemicals in the substance have on the body?
- What are the short-term effects of the substance on the brain and body?
- What are the long-term effects of the substance on the brain and body?
  - o Illustrate the long-term effects the substance can have on your mind and body.
- Is the substance addictive?
- What are the potential effects of substance abuse on your behavior or ability to make decisions?
- What are other potential negative effects of abusing the substance?

Some suggested websites are listed on the following page.



Some suggested websites for students to explore for completing the lesson: **Respecting Yourself-Protecting Your Body and Your Mind from the Effects of Harmful Substances** 

## Center for Substance Abuse Prevention (Substance Abuse and Mental Health Service Administration). Too Smart to Start.

Resources for teens on underage drinking, including FAQs, quizzes, scenarios, and advice on resisting peer pressure.

http://www.toosmarttostart.samhsa.gov/Start.aspx

#### **Center for Technology in Teaching and Learning (Rice University)**

Interactive lessons on substance abuse & neuroscience <a href="http://webadventures.rice.edu/">http://webadventures.rice.edu/</a>

#### Foundation for a Drug-Free World - <a href="http://www.drugfreeworld.org/#/interactive">http://www.drugfreeworld.org/#/interactive</a>

Facts about various drugs; PSAs and documentaries for teens and adults; and free resources for educators.

The Truth about Drugs brochure for teens

http://f.edgesuite.net/data/www.drugfreeworld.org/files/truth-about-drugs-booklet-en.pdf

#### Learn.Genetics. Drugs of Abuse.

Animated clips of effects of various drugs on the body. http://learn.genetics.utah.edu/content/addiction/abuse/

#### NIDA for Teens: The Science Behind Drug Abuse - http://teens.drugabuse.gov/

Facts, interactive lessons, infographics, blogs, and FAQs on drugs.

**Inhalants** 

http://teens.drugabuse.gov/drug-facts/inhalants

Marijuana

http://teens.drugabuse.gov/drug-facts/marijuana

Tobacco, Nicotine, and E-Cigarettes

http://teens.drugabuse.gov/drug-facts/tobacco-nicotine-e-cigarettes

#### **National Institute on Drug Abuse (NIDA)**

This Web site contains information about drug abuse and a section designed specifically for parents, teachers, and students. Publications and other materials are available free of charge.

http://www.drugabuse.gov/children-and-teens

#### Drugs + Your Body (Scholastic)

http://www.scholastic.com/drugs-and-your-body/



## The Cool Spot. National Institute on Alcohol Abuse and Alcoholism (National Institute of Health; U.S. Department of Health and Human Services)

Information for teens about alcohol, including tips for resisting peer pressure. <a href="http://www.thecoolspot.gov/index.asp">http://www.thecoolspot.gov/index.asp</a>

#### Heads Up (Scholastic) - <a href="http://www.scholastic.com/">http://www.scholastic.com/</a>

Drugs + Your LIFE: It Isn't

 $Pretty \ \underline{http://headsup.scholastic.com/sites/default/files/block/images/NIDA11-lines/NIDA11-lines/NIDA11-$ 

PTG Activity3.pdf

The Power of Pausing: What Would You

Do? http://headsup.scholastic.com/sites/default/files/NIDA12-INS3 TE-

worksheet.pdf

