THE OVERLOOKED CAUSE OF CHILDREN
BEING LEFT BEHIND

Drug Use Compromising Academic Success

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Drug Use Compromising Academic Success

Executive Summary

Every day in the United States drug use compromises the academic success of our children. The most ambitious undertaking of educational reform ever proposed, the No Child Left Behind Act (NCLB), has set a goal of each student performing at the “proficient” level by 2014. However, unless the hidden population of drug-impaired students is recognized, identified and served, the NCLB goal can never be achieved. The reauthorization of NCLB is an opportunity to recognize and address the problems in America’s school system related to and caused by substance use.

There are significant numbers of students in America’s schools with great potential who are underperforming. They are drug users. In 2006, a Monitoring the Future survey showed nearly half (48 percent) of the students graduating from high school in this country admitted to using illicit drugs before graduation.1 In the same year, on an average day, over 630,000 students used alcohol and over 586,000 used marijuana according to the Substance Abuse and Mental Health Services Administration.2 Drug use impacts individual students, fellow students and a school’s performance. Drug use impairs learning, memory, abstract thinking and problem solving, and it can lead to poor attendance, dropping out of school, delinquency, and behavioral problems. These students are currently being left behind.

There is a clear correlation between drug use and declining academic performance. Drug-impaired students undermine our country’s ability to compete on the world stage. Unfortunately, compared with many of our international competitors, the U.S. is performing at a handicap because too many of our youth, indeed our citizens, are abusing drugs. America represents four percent of the world’s population, yet it consumes two-thirds of the world’s illegal drugs.

There needs to be a clarion call to recognize the impact of drug use and develop an enhanced national strategy to address the problem. Recognition of the impact of drug use within the reauthorization of the NCLB Act can be the beginning of such a call.

Educating Voices, Inc. (EVI), a national not-for-profit organization educating about the dangers of drugs, proposes that the No Child Left Behind Act specifically measure the progress of a proposed new sub-population of students impacted by illegal drugs, and to that end each local education agency include a drug usage assessment tool in its planning processes. (The proposed language is shown in the Policy Prescriptions Moving Forward section.)

The very fabric of America’s future is threatened when a significant sub-population of drug-impaired students is allowed to go unnoticed and uneducated.
Introduction

"The age at which children begin to smoke, drink, and use marijuana has dropped below thirteen years."\(^3\)

"Despite some decline since 2002, illegal drug use by twelve- to seventeen-year-olds climbed from its quarter-century low of 1.1 million in 1992 to 2.6 million in 2005."\(^4\)

"From its low point during the last quarter century of 8.5 million in 1992, the number of Americans twelve and older who use illicit drugs more than doubled to 19.7 million in 2005."\(^5\)

"... for more than a decade, twelve- to seventeen-year-olds responding to an open-ended question in the annual back-to-school survey ... have named drugs as the number one problem they face."\(^6\)

On January 8, 2002, the No Child Left Behind Act (NCLB) was signed into law by President George W. Bush. The President said, "There's no greater challenge than to make sure that every child ... every single child, regardless of where they live, how they're raised, the income level of their family, every child receive a first-class education in America."\(^7\)

However, after six years, the goals of the NCLB are becoming increasingly difficult to achieve and more urgent. It is true that achievement gains—some even spectacular—have occurred all over the country. But these gains represent the "low hanging fruit." We still lack the means to reach the more plentiful, longer-lasting "high hanging fruit."

Scores of eminently qualified education experts have debated and chronicled the shortcomings of the current Act and are now constructing both simple and complex solutions to the myriad of problems encountered by educators, schools, and states in their efforts to comply with NCLB. Unfortunately, these experts have overlooked the most universal and pervasive obstacle to student achievement: use of alcohol and drug use, as well as the problems associated with children of alcoholics and drug dependent individuals.

Most educators and others looking toward reform are not aware of the significant impact that addressing alcohol and drug use among students would have on changing school performance, student "proficiency" attainment and teacher skills. **Unless student drug use is recognized and addressed by the reauthorization of NCLB Act, the problems in America's school system related to and caused by substance use will undermine even our best efforts in leaving no child behind.**

A 2006 Monitoring the Future report showed nearly half (48 percent) of the students graduating from high school in this country admitted to using illicit drugs before graduation.\(^8\) Also in 2006, the Substance Abuse and Mental Health Services Administration, *A Day in the Life of American Adolescents*, reported that on an average day, over 630,000 students used alcohol and over 586,000 used marijuana.\(^9\) Drug use impacts individual students, fellow students and a school's performance. Drug use impairs learning, memory, abstract thinking and problem solving, and it can lead to poor attendance, dropping out of school, delinquency, and behavioral problems. Every day, drugs are compromising academic success and children ARE being left behind. Much remains to be done if all children are to be proficient in reading and mathematics by 2014.
Anatomy of the No Child Left Behind Act

All children in America will be minimally proficient in reading and math by the year 2014.

Gary M. Fields, Ph.D. asks the questions: Is this a commendable goal? Absolutely. Is it the right thing to do? Without a doubt. Under current conditions, is this goal possible? No way—not if ALL truly means ALL. There is a hidden population of school-age youth in the No Child Left Behind (NCLB) mandate whose needs are being neglected. These are the children and youth who have their academic achievement compromised by drug use every day.

Dr. Fields, a retired superintendent, notes that for nearly six years now, schools have been required to disaggregate their students into sub-populations and to ensure that each of these groups is making adequate yearly progress (AYP) towards proficiency. Many believe this is America's new civil right.

The "old school" method of one aggregate test score describing an entire school was grossly inadequate and allowed some educators to ignore the educational needs of our most needy students. This is no longer possible. Yet, there clearly is a group of students whose educational needs are not being met. Primarily of high school age, they cross all of the sub-populations. These are students who are compromising their achievement because of drug use. Depending upon the community, the range of its high school students impacted on a daily basis is anywhere from 10 to 30 percent. The significance of this issue, Fields insists, cannot be denied or avoided.

America's position in the world is being compromised by a decline in proficiency levels of its students in the basic academic areas. Academic progress from elementary school through college is being compromised by drug use, including alcohol. The statistics, which follow, speak for themselves. Unless this "hidden population" of children being left behind is recognized and protected against underage drinking and drug use, this population will continue to grow and the United States will be left behind on the world stage.

An Economic Handicap

The world belongs to the educated. An impetus for NCLB was economic globalization and the need to have the American educational system produce well-prepared graduates capable of competing in an international environment. Academic compromise resulting from student drug use is making it harder for the United States to compete globally.

Unfortunately, compared with many of our international competitors, the U.S. is operating at a handicap because too many of our youth, indeed our citizens, are abusing drugs. This undermines our future economic productivity. America represents four percent of the world's population, yet it consumes two-thirds of the world's illegal drugs.¹⁰

Compared to other nations, the U.S. is academically average. And more troubling are two recent and widely respected comparisons of international student performance indicating American student performance is declining. The Program for International Student Achievement (PISA) shows that America's fifteen-year-olds are performing below the international average in mathematics literacy and problem-solving.¹¹ The 2003 Trends in International Mathematics and Science Study (TIMSS) found that fourth graders in 11 countries scored higher in mathematics than American fourth-grade students, while in 1995 only seven countries scored ahead of American fourth graders. Eighth graders in 13 different countries scored higher in mathematics than U.S. students.¹²
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The U.S. is also losing its competitive edge at the higher education level. The most recent census numbers estimate that 19 percent, almost one in five, of adults ages 25-34 fall into the category of “some college, no degree.” Advances in telecommunications have enabled the outsourcing of jobs in areas such as computer programming, claims processing, accounting, and medical diagnostics to countries with a growing pool of English-speaking college graduates.15

The participation by U.S. students in science, technology, engineering and math is declining. As the number of our science and engineering students declines, our dependence upon foreign students grows. According to the National Science Foundation’s Science and Engineering Indicators (2002), the percentage of foreign-born scientists and engineers in the U.S. is growing at all degree levels in all sectors and in most fields. Foreign-born individuals account for 45 percent of engineers, 43 percent in computer sciences and 30 percent in mathematics.16

Reports from the Organization of Economic Cooperation and Development indicate the U.S. no longer retains its first-place position in the world in terms of students enrolling in college. Nor
does America continue to be ranked first in terms of 25- to 34-year-olds receiving a four-year
degree. **Significantly, every country surveyed with the exception of one has made great
strides in increasing college attainment rates; the U.S. was the one country that had made
no progress.**

In an economy fueled by innovation, the capabilities developed through education are America’s
most valuable economic asset. This asset is be being depleted.

**Our Literacy Challenge**

Literacy is more important in the 21st century than ever before, and literacy requirements will
become even more rigorous. Marijuana and alcohol use impede learning, memory, abstract
thinking and problem solving. Any difficulties with reading, mathematics or other educational skills
will severely limit the professional opportunities available to American children as well as the
ability to compete globally.

**As students progress from grade 4 to grade 12, fewer and fewer exhibit “basic” and
“proficient” mastery of mathematics.** (2007 data not available for 12th graders.)

“Basic” — denotes partial mastery of the knowledge and skills that are fundamental for proficient
work at a given grade.

“Proficient” — represents solid academic performance.

“Advanced” — signifies superior performance.

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| **6th Graders** | **Basic** | **Proficient** | **Advanced** |
| 2005 Nation’s Report Card | 69% at or above | 30% at or above | 6% |
| 2007 Nation’s Report Card | 71% at or above | 32% at or above | 7% |

| **12th Graders** | **Basic** | **Proficient** | **Advanced** |
| 2005 Nation’s Report Card | 61% at or above | 31% at or above | 2% |
The reading performance of students in grade 12 declined significantly from 1992 to 2005. In 1992*, the percentage performing at or above the “Basic” level was 80 percent compared to 73 percent in 2005, and those performing at or above the “Proficient” level dropped from 40 percent to 35 percent. (2007 data not available for 12th graders.)

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| **8th Graders** | **Basic** | **Proficient** | **Advanced** |
| 2005 Nation’s Report Card | 73% at or above | 31% at or above | 3% |
| 2007 Nation’s Report Card | 74% at or above | 31% at or above | 3% |

| **12th Graders** | **Basic** | **Proficient** | **Advanced** |
| 1992* Nation’s Report Card | 80% at or above | 40% at or above |
| 2005 Nation’s Report Card | 73% at or above | 33% at or above | 8% |

The Pervasiveness of Drugs in Schools

One of the best hidden causes of academic compromise is the underground behavior of adolescent drug and alcohol use. Students who use alcohol, marijuana and other drugs experience problems and aren’t able to realize their potential. Drug use can impair learning, memory, abstract thinking and problem solving, and it can lead to poor attendance, dropping out of school, delinquency, and behavioral problems.

Poor Grades

Alcohol – The 2002 National Survey on Drug Use and Health (NSDUH) reported that alcohol and drug use can negatively affect a student’s success in school. The relationship between increasing
drug use and decreasing academic performance is clear. For example, among students admitting past month substance abuse:

- 6 percent of students had an A average
- 13 percent of students had a B average
- 20 percent of students had a C average
- 36 percent of students had a D average

Moreover, students who enjoyed going to school felt their assigned school work was meaningful or thought what they learned in school was going to be important later in life and were less likely to have used illicit drugs compared to young people who did not have these positive attitudes towards school.\(^{30}\)

*Alcohol abuse can impair learning, memory, abstract thinking, problem-solving and perceptual motor skills (such as eye-hand coordination).*\(^{31}\)

**Marijuana** — In 2005, nearly 15 million Americans age 12 or older used marijuana at least once in the month prior to being surveyed. In 2005, about 6,000 people a day used marijuana for the first time, which equates to 2.1 million people a year. Of these, 59 percent were under age 18.\(^{32}\)

The *majority of students who smoke marijuana earn lower grades.* Marijuana compromises the ability to learn and retain information. Learning becomes more problematic the more marijuana a student uses and they get farther behind.\(^{33}\) More than one out of 20 students in grades 9-12 (nearly six percent) smoke marijuana on school property.\(^{34}\)

The National Institute on Drug Abuse (NIDA) looked at how marijuana use affects school performance. "...Research has shown that marijuana's adverse impact on memory and learning can last for days or weeks after the acute effects of the drug wear off... A study of 129 college students found that among heavy users of marijuana — those who smoked the drug at least 27 of the preceding 30 days — critical skills related to attention, memory, and learning were significantly impaired, even after they had not used the drug for at least 24 hours. Someone who smokes marijuana once daily may be functioning at a reduced intellectual level all of the time."\(^{35}\)

The NIDA report also found that students using marijuana lacked problem-solving and emotional skills. "Another study produced additional evidence that marijuana's effects on the brain can cause cumulative deterioration of critical life skills in the long run. Researchers gave students a battery of tests measuring problem-solving and emotional skills in 8th grade and again in 12th grade. The results showed that the students who were already drinking alcohol plus smoking marijuana in 8th grade started off slightly behind their peers, but that the distance separating these two groups grew significantly by their senior year in high school."\(^{36}\)

**School dropouts**

*Based upon a longitudinal survey of 1,392 adolescents, ages 16 to 18, marijuana use was positively related to dropping out of high school.* Marijuana users' odds of dropping out were about 2.3 times that of non-users.\(^{37}\)

According to a Mount Sinai School of Medicine study, "Early adolescent marijuana use increased the risk of not graduating from high school; delinquency; having multiple sexual partners; not always using condoms; perceiving drugs as not harmful; having problems with cigarettes, alcohol, and marijuana; and having more friends who exhibit deviant behavior."\(^{38}\)

"Students who never complete high school spend more than twice as many years in poverty than do high school graduates... They are twice as likely to rely on public assistance for health care and four times as likely to be incarcerated."\(^{39}\) In Illinois, students who did not complete high school made an average annual income of $15,650 in 2005 compared
with $22,940 for those who graduated from high school and $50,220 for college graduates. Women who dropped out of high school struggled more than men, earning an average of $8,472 per year compared with $21,421 for men.  

School attendance

Other reports confirm the positive correlation between marijuana use and dropping out of school and truancy. Marijuana users are more likely to be school dropouts and skip more school days than non-marijuana users. Weekly or more frequent marijuana use (chronic) has a larger positive marginal effect on school attendance than less than weekly marijuana use (non-chronic). However, all levels of marijuana use were associated with increased truancy and dropout rates.

Behavioral problems

About two percent (280,000) of all high school students attend alternative schools. These schools typically serve a student population that has difficulty functioning in regular high schools because of behavioral problems that can involve violence and substance use. Students in alternative high schools are at increased risk for serious alcohol problems in particular. In 2000, a survey of 12th grade students from a nationally representative sample of alternative schools showed 74 percent of boys and 60 percent of girls reported consuming alcohol in the previous 30 days. Just over fifty-five percent of the boys and 43 percent of the girls reported consuming five or more drinks in a row during the previous 30 days. These rates of alcohol use are considerably higher than that for teens in regular high schools.

Teenagers who use drugs are more likely to engage in violent and delinquent behavior and to join gangs. Teens using drugs are twice as likely to commit violent acts as those who do not use drugs. The more drugs teenagers use, the more likely they are to engage in violent behavior. They are more likely to steal and use other illicit drugs and alcohol than non-users.

Early use of marijuana is a warning sign for later gang involvement. The Department of Justice’s longitudinal study, Early Precursors of Gang Membership: Study of Seattle Youth, found youth in fifth and sixth grades from neighborhoods where marijuana was most available were 3.6 times more likely to join a gang between ages 13 and 18 compared with other youth. More teens use marijuana than any other illegal drug.

Anatomy of a Drug-Impaired Classroom

Gary L. Anderson, nationally recognized consultant and Student Assistance Program trainer since 1976, describes a hypothetical classroom based upon national averages and his more than 30 years experience as an educator.

Consider Mr. Anderson’s 12th grade English class. Mr. Anderson would like to be teaching writing or literature—things for which he has commitment, passion, and personal dedication. His love of teaching and desire to make a difference in the lives of kids led him to choose teaching as a career.

Lately, though, he has been spending much of his time doing something else. Many of his students don’t share his enthusiasm for language arts, much less a desire to be in his class or even in school. Something is going on. Mr. Anderson doesn’t know it, but he is dealing with a serious alcohol/drug problem.

Unbeknownst to him, two of his 30 students (5 percent of his class) are chemically dependent—addicted to alcohol or other major mood-altering drugs. Their illness is chronic and progressive;
the illness, along with the behavior it causes, will only worsen without treatment. They were intoxicated the night before, and probably the night before that, and may even still have drugs in their systems as they sit in class. Their brains struggle more with the toxicity of chronic alcohol/drug abuse than with his subject matter. These students may sit in the back of the room (physically or emotionally). Rarely do they do their work; they attend sporadically and have little or no interest in the subject matter, and are often disruptive to the students around them. Mr. Anderson spends a lot of class time dealing with these students, pausing to regain classroom focus and order. Outside of class he is filling out referral forms, calling parents, conferring with counselors and principals and attending meetings on assertive discipline, student study teams, alternatives to suspension, etc.

Another four students (15 percent) are “problem users.” They are not chemically dependent, but their drug use is causing problems in their daily lives. Rather than being occupied with learning, they are preoccupied with drugs—obtaining them, using them, planning to get high, and fantasizing about what it will be like when they can get high. Though impaired to a lesser degree than the chemically dependent, they, too, have problems in the classroom. Their cognitive capacities, memory function, and ability to pay attention are impaired. Mr. Anderson has to periodically interrupt his class to deal with these students.

Finally, six of his students (25 percent) awake each day in a chemically-dependent family, where the stress of living with an alcohol/drug dependent adult, usually a parent, will have lasting consequences on their development. Some of these students do well in class while others are quiet and compliant, doing minimal work, preoccupied with what went on in their family the night before or with what will occur when they get home. Of these students in a chemically-dependent family, some start abusing alcohol and other drugs themselves and start acting out their anger with disruptive behavior in class.

Altogether, 10 to 12 of his 30 students (30 to 40 percent of his class) are exhibiting behavioral problems in class and/or experiencing problems with learning, caused or aggravated by alcohol and other drug abuse. Mr. Anderson has to stop repeatedly to deal with misbehavior or outright resistance. He has noticed that his students aren’t doing as well in class as they used to. He has a vague sense that today kids are different. He is unaware that he has gradually and subtly lowered his expectations of students and has adapted his teaching to these ever-lowering expectations. Lately, he has been attributing his waning interest in education and his flat morale to being a “bad” teacher or to his students being “bad” kids.

**Mr. Anderson thinks he is dealing with a discipline or a motivational problem. What he doesn’t know is that he is dealing with a drug problem.**

If he spends just five minutes out of a 50-minute class period maintaining order and coping with these 10-12 students, 10 percent of his teaching time is wasted each day in dealing with alcohol and drug problems, problems he was not trained to identify or cope with successfully. That 10 percent translates to 18 days out of a typical 180-day school year, or 1.2 years out of a 12-year school career—time that could be better spent on reading, writing, and arithmetic.

**Learning environment**

Drug use compromises the learning environment. A rigorous and relevant curriculum encourages learning and allows students to apply what they are learning to the real world. Drugs disrupt and interfere with this application. No matter what is being taught, it is difficult for a teacher to reach or teach a child who is using drugs. Youth with problems of comprehension and fluency may act out to mask deficiencies, as they would often rather be considered bad than be embarrassed. Other students using drugs are wasting their potential and are performing at a mediocre level rather than at the higher level they are capable of attaining.
Anatomy of a Drug-Impaired Classroom

Dr. Gary Fields, senior consultant for the International Center for Leadership in Education, finds that teachers are universally working hard. Administrators are focusing like never before on academic achievement for our most challenged learners. Despite public perception, it is likely that educators as a group in America have never worked harder on behalf of ALL students. More than ever, teachers are being held accountable like never before for student achievement, and most are trying very hard.

There are an enormous number of apathetic, unmotivated students all over this country not working anywhere near their capabilities towards academic excellence. Satisfaction with mediocre learning is rampant in high school classrooms. Even many of our best and brightest students are not putting forth the effort needed in this age of globalization and emerging technology.

How can teachers motivate and teach students who are high? Based upon Fields’ more than 30 years experience as an educator, the answer is: they cannot. During the past four years, he has conducted scores of focus group interviews with students, teachers, administrators, support staff and parents and has done more than 500 different observations in teachers’ classrooms. According to Fields, it is not uncommon that teachers new to the profession, who are always idealistic and optimistic about their potential contribution, are beaten down by their inability to engage and motivate apathetic students. They do not understand the dynamics of the drug-impacted classroom. Too often, they do not ask for help and regard themselves as failures. Some studies indicate that nearly half of all teachers leave the profession during their first five years of teaching. Many leave because of their frustration with not being able to motivate students to learn.

It is Dr. Fields’ experience that teachers repeatedly report knowledge of a significant use of marijuana by students. In focus group interviews, students have acknowledged that marijuana use is common among their peers. Far too many schools are struggling to make adequate yearly progress not recognizing the impediment that student drug use presents. Teachers simply cannot motivate and engage student drug users, Fields asserts.

The Adolescent Years: Children in Harm’s Way

On an average day in 2005, among adolescents ages 12 to 17, there were 255 admissions to substance abuse treatment programs for marijuana, 72 for alcohol, and 24 for stimulants. These were primarily publicly-funded treatment facilities. In publicly- and privately-funded facilities on an average day, 76,240 clients under age 18 were in outpatient treatment, 10,300 were in non-hospital residential treatment, and more than 1,000 were in hospital inpatient treatment.46

Underage drinking

Underage drinking is a public health challenge. Approximately 5,000 young people under the age of 21 die each year as a result of underage drinking. This breaks down to 1,900 deaths from vehicle crashes, 1,600 from homicides, 300 from suicide and hundreds from other injuries such as falls, burns, and drowning — all of which are a result of drinking.47

Young people generally drink intensively, consuming four or five drinks at one time. The 2005 Monitoring the Future study identified 11 percent of 8th graders, 22 percent of 10th graders, and 29 percent of 12th graders as having engaged in heavy episodic or binge drinking within the past two weeks. Frequent binge drinkers (nearly 1 million high school students nationwide) are more
likely to engage in risky behaviors—such as using other drugs or having sex with six or more partners—and more likely to earn Ds and Fs in school.48

Brain development continues well into the twenties and during this time neurological and cognitive development may be disrupted, altered or impeded by exposure to alcohol. Adolescents who drank heavily over time scored lower on verbal and nonverbal retention.49

Furthermore, alcohol use interacts with conditions such as depression and stress that contributes to suicide. Suicide is the third leading cause of death among young people ages 14 to 25. One study revealed that 37 percent of 8th grade females who drank heavily reported attempting suicide compared to 11 percent who did not drink.50

Engaging in risky behaviors is affected by the amount of alcohol consumed. Drinking amounts of alcohol sufficient to impair judgment can result in having multiple sex partners, failing to use condoms, having unplanned sex and being raped.51

Anatomy of Children from Substance Abusing Families

Gary Anderson found that the largest group of students impacted in lifelong ways by substance abuse consists of those who live in alcohol/drug abusing families. Since the early 1980’s, studies have reported that approximately 25 percent of students in all grades have been affected by a parent’s alcoholism or dependency on other drugs.

Although the developmental consequences for most children living in these family environments are serious and lifelong, and many show up as problems in school performance, children’s behavior resulting from alcoholic or drug dependent families is not monolithic. They can exhibit a variety of stereotypic coping mechanisms that are visible in school behaviors. For example, it is Gary Anderson’s experience that a few of these students cope with family stress by doing very well in academic achievement and school behavior in an attempt to appear “normal” by being better than normal. However, most develop behavioral patterns that are more likely to impair school performance.

Children in substance-abusing families:

- Exhibit symptoms of depression and anxiety that impair concentration and focus in school;52
- Have poorer language and reasoning skills as preschoolers;53
- Are more likely to be truant, drop out of school, repeat grades, or be referred to school counselors or psychologists;54
- Have greater difficulty with abstract and conceptual reasoning, which impairs problem solving;55
- Are often preoccupied or tired because of fighting, tension, or worry at home and are less able to concentrate on school activities;56
- Work below their potential and have low self-esteem;57
- Have lower IQ, arithmetic, reading, and verbal scores;58
- Are likely to demonstrate behavioral problems in school, such as lying, stealing, fighting and truancy, and are often diagnosed as having conduct disorders;59
- Are rated by teachers as significantly more overactive and impulsive than children of non-alcoholics.60

While not all children from alcohol/drug abusing families are afflicted by all of these issues, Anderson notes that a significant number of these students do exhibit more than several of these indicators, preventing them from being fully engaged in school.
Marijuana Use

In 2006, 42 percent of all 12th graders reported some marijuana use in their lifetime, 32 percent reported some use in the past year, and 18 percent reported some use in the past month. Marijuana has been tried by nearly one in every six 8th graders (16 percent) and has been used in the prior month by about one in every 16 (6 percent). According to a National Institute on Drug Abuse Research Report Series, “When marijuana is smoked, its active ingredient, THC, travels throughout the body, including the brain, to produce its many effects. THC attaches to sites called cannabinoid receptors on nerve cells in the brain, affecting the way those cells work. Cannabinoid receptors are abundant in the parts of the brain that regulate movement, coordination, learning and memory, and higher cognitive functions such as judgment and pleasure.”

Short-term memory is critical to learning. Marijuana use impedes short-term memory. Marijuana’s damage to short-term memory seems to occur because THC alters the way in which information is processed by the hippocampus, a brain area responsible for memory formation. In one study, researchers compared marijuana smoking and nonsmoking 12th graders’ scores on standardized tests of verbal and mathematical skills. Although all of the students scored equally well in 4th grade, those who were heavy marijuana smokers, i.e., those who used marijuana seven or more times per week, scored significantly lower in 12th grade than nonsmokers.

Relationships between marijuana and mental health problems have been identified. Those who smoked marijuana before age 17 are 3.5 times as likely to attempt suicide as those who started later. Individuals who are dependent on marijuana have a higher risk than non dependent individuals of experiencing major depressive disorders and suicidal thoughts and behaviors.

Additionally, research conducted by Maastricht University and published by the British Medical Journal shows there are serious health risks associated with marijuana use, particularly for young people. Frequent marijuana use during adolescence and early adulthood raises the risk of psychotic symptoms, and individuals genetically predisposed to psychosis are more vulnerable. It is thought marijuana disrupts the balance of dopamine, the key mood chemical in the brain.

Marijuana is addictive. While not everyone who uses marijuana becomes addicted, many do become addicted and require treatment. From 1995 to 2005, the number of admissions to treatment in which marijuana was the primary drug of abuse increased more than 70 percent, from 171,344 in 1995 to 292,250 in 2005. These admissions represented 10 percent of the total drug/alcohol admissions to treatment during 1995 and nearly 16 percent of the treatment admissions in 2005. The average age of those admitted for marijuana treatment during 2005 was 24.

One study showed marijuana use by teens who have previously had serious anti-social problems can quickly become dependent on the drug.

The consequences of adolescent drug use are well established and cannot be ignored if, as President Bush noted, “Every single child is to receive a first-class education.”

Transitions

Significant change in a student’s life can be exceptionally difficult. These changes include new friends, social scene, independence, schedules, a richer academic environment, teachers and higher expectations. As children move into their teen years, their bodies and brains are developing. There is also less parental involvement. Transitioning from elementary school to middle school to high school places teens at increased risk for drug use.
• The most dramatic increase in first-time marijuana use occurs between the ages of 12 and 13 and continues to climb significantly, peaking at age 15 before leveling off.
• Lifetime marijuana use increases more than sevenfold between the ages of 12 and 14 (from 2 percent to 15 percent).
• The percentage of kids who have tried drugs doubles between 8th grade and 10th grade, from 18 percent to 36 percent. During this same grade transition, disapproval of marijuana use declines significantly between 8th and 10th grade from 82 percent to 68 percent.
• Highly stressed teens are twice as likely as teens with a low level of stress to smoke, drink, get drunk and use illegal drugs. Nearly one in three girls and one in four boys report being highly stressed.
• Research shows that nearly two-thirds of teens have close friends who use marijuana.
• More than three quarters (79 percent) of past-year marijuana users ages 12 to 17 obtained their most recently used marijuana from a friend.
• Almost 14 percent of youths who bought marijuana bought it on school property.
• Between the ages of 12 and 17, the likelihood that a teen will smoke, drink or use illegal drugs increases more than seven times and the percentage of teens with close friends who use marijuana jumps 14 times.
• Fifty-five percent of youth ages 12 to 17 reported that marijuana is fairly or very easy to obtain.66

The College Years

The vast majority of college students think that alcohol and partying are just as important as studying, that marijuana should be legalized, that Adderall and Ritalin are “brain steroids” or smart pills, and that pharmaceutical drugs are safe. Is it any wonder that “1.8 million full-time college students (nearly 23 percent) meet the medical criteria for substance abuse and dependence”?69

Using alcohol and other drugs in middle and high school establishes a behavioral pattern likely to burgeon in a college environment. Two-thirds of college students who drink alcohol began drinking in high school, and 8 percent began in middle school. Two-thirds of college students who use illicit drugs began using them in high school and seven percent began in middle school.70

Transitioning from high school to college, students often find themselves in an environment conducive to alcohol and other drug use. The college culture fosters drinking. There is little supervision, lax enforcement of underage drinking laws, a belief in the rite of passage, a social life and the Greek system. The alcoholic beverage industry is heavily involved on campus and in nearby neighborhoods. Close to 68 percent of college students report having used alcohol in the last thirty days, and nearly 19 percent report having used marijuana in the last thirty days. Forty-two percent report having 5+ drinks in a row in the past two weeks.71

A startling number of young people who enter college fail to earn a degree. Many colleges lose more than one out of every four freshmen in the first year alone. Only six out of 10 full-time freshmen who enter a four-year college get a B.A. within six years.72

Just as with middle and high school students, alcohol or other drug abuse negatively impacts the academic performance of college students. The data shows that college students using alcohol, marijuana and other drugs aren’t able to develop general education skills. They struggle with studying, critical thinking, analytic reasoning and written communication.

One study reports that the consequences of college students’ alcohol use include missing a class (34 percent), having a hangover (65 percent) and performing poorly on a test or project (24 percent).73
Another study on college drinking linked alcohol consumption to at least 1,400 student deaths and 500,000 unintentional injuries annually. It showed drinking by college students to be associated with drinking and driving, diminished academic performance, and medical and legal problems.74

Anatomy of a College Campus

Robert M. Stutman is a former DEA Special Agent in Charge New York Field Division and currently is the head of the Stutman Group which serves 1,500 clients addressing substance abuse in communities, colleges, high schools and workplaces. He has learned from his many speeches on college campuses that while students value studying they also value partying and alcohol. Marijuana falls right behind alcohol as the drug of choice, followed closely by Adderall and Ritalin.

Adderall and Ritalin used to be used mainly as a study aid, keeping one awake, but are now used as "feel good aids." A young lady explained that when she had to stay up late studying she used Adderall. "It made me feel so great. Why should I wait 'till I have to study to feel great?" she asked Stutman.

In terms of alcohol, the vast majority of college students believe that alcohol is a more harmful drug than marijuana. Students have seen everything from fights to car crashes resulting from alcohol use and not seen similar results from marijuana.

Teachers and administrators take little interest in the alcohol phenomena. Joseph Califano, the president of The National Center on Addiction and Substance Abuse (CASA) at Columbia University, captured the essence of most college presidents, when he called them "Pontius Pilate presidents." There are some involved presidents but most feel they are not in loco parentis. The bottom line: Unless there is litigation coming, they do not care about students' drug use.

Stutman has found that campus police generally feel they get no backing from administrators, so they do very little, if anything, about alcohol/drug issues. Unless it involves hard drugs (cocaine, heroin, oxycontin, etc.), campus security will generally leave it alone believing they will end up on the short end of the stick.

College towns are often a part of the problem by either passively or actively supporting alcohol use. "Searchers combing the Mississippi River ... pulled out the body of University of Wisconsin-La Crosse basketball player Luke Homan, the eighth college-age man in nine years to disappear from a city tavern and turn up dead in a river. For years, La Crosse officials have debated how to keep drunken students safe; but some say there may be no answer for a town with three colleges, three rivers and $3 pitchers of beer. The Vibe, where Homan was last seen alive, offers an all-you-can-drink special for $5 and shots at just $1. A sign in the bar's window proclaims: 'You're not drunk if you can lie on the floor without holding on.'"75

In 2006, the University of Wisconsin at Madison was named the top party school by the Princeton Review. "The city of Madison is widely considered the ultimate college town, with a senior bragging that, 'State Street compares to Bourbon Street on weekend nights.' A content math major summarizes, 'No better college atmosphere can be found anywhere than in Madison."76 This recognition is received with pride by most, Stutman says.
Policy Prescriptions Moving Forward

Universal success for those participating in our system of public education is one of America's largest and most important domestic policy issues. Success will not be realized if the needs of students impacted by drug use are not recognized and served. A substance-impaired student will not respond to the effort expended upon his or her behalf with improvement if the underlying cause is not identified and addressed.

There needs to be a clarion call to action. Experience, facts and statistics prove that children are currently being left behind because their academic success is being compromised by drug use. Recognition of the impact of drug use within the reauthorization of the NCLB Act can be the beginning of such a call.

Educating Voices, Inc. (EVI) proposes the following additions to the No Child Left Behind Act that would specifically measure the progress of a proposed new sub-population of students impacted by illegal drugs, and to that end each local education agency include a drug usage assessment tool in its planning processes.

Part A – Improving Basic Programs Operated by Local Educational Agencies

Subpart 1 – Basic Program Requirements

Sec. 1111. State Plans
(b) ACADEMIC STANDARDS, ACADEMIC ASSESSMENTS, AND ACCOUNTABILITY
(2) ACCOUNTABILITY
(c) DEFINITION – Adequate yearly progress shall be defined by the State in a manner that –
(v) includes separate measurable annual objectives for continuous and substantial improvement for each of the following:
(II) The achievement of –
(ee) students impacted by the use of illegal drugs;
(new language)

Sec. 1112. Local Education Agency Plans
(1) IN GENERAL – In order to help low-achieving children meet challenging achievement academic standards, each local education agency plan shall include —
(A) a description of high-quality student academic assessments, if any, that are in addition to the academic assessments described in the State plan under section 111(b)(3), that the local educational agency and schools served under that part will use –
(v) a drug usage assessment tool (new language)

The very fabric of America's future is threatened when a significant sub-population of drug-impaired students is allowed to go unnoticed and uneducated. "The difference between an educated and uneducated man is the same difference as between being alive and being dead (Aristotle)."
The No Child Left Behind Act

The No Child Left Behind Act is the most ambitious undertaking of educational reform ever proposed in this country. It unifies the focus of three earlier acts, each of which included components of teaching, testing and accountability, and each required qualification of teachers, yearly progress and accountability with consequences for noncompliance. All three proposals concentrated national efforts on remediation, basics and standards. The Elementary and Secondary Education Act (ESEA) of 1965, the first national education legislation, addressed remediation for the most impoverished of students. A Nation At Risk, the seminal report published in 1983, focused attention on the most basic of skills—reading. The Improve America’s Schools Act (IASA), passed in 1994, was an attempt at educational reform in the areas of challenging content, professional standards and assessment mechanisms.

Adequate Yearly Progress (AYP) for all students is the driving force behind NCLB. Accountability requires annual yearly progress to be demonstrated for all students and among populations of students in the following groups: Asian, Alaska Native, Black, Hispanic, multi-racial/multi ethnic, Native American, Pacific Islander, White, low income, and disabled. Ninety-five percent of students in a school are tested, and an average performance for each group is calculated, based on performance on standardized tests chosen by the state and compared to results at the baseline. Students may be counted in more than one group. The lowest performing group in each school is the focus for that school and each such group is tested annually. The group must demonstrate yearly progress toward the ultimate goal of having each student performing at the “proficient” level by 2014. Annual progress toward this goal is required, or the schools face sanctions.


AUTHORS

Judy Kreamer – Kreamer was a founding member of Educating Voices, Inc. (EVI) in 1999 and has served as President since its incorporation. She has been involved in prevention for more than 25 years, founding a local prevention task force and serving as its president for two years and sitting on the Board of the Illinois Drug Education Alliance (IDEA) and serving as president for eight years. She has testified before the Illinois Senate and House of Representatives and the U.S. House of Representatives. Judy was appointed by former Speaker of the House, J. Dennis Hastert, to serve on the 15-member national Parents Advisory Council on Youth Substance Abuse, advising the United States Drug Czar.

Gary M. Fields, Ph.D. – Fields, a retired superintendent, is the Vice President of Educating Voices. He has been an educator for more than 30 years, serving as a superintendent, principal or director of special education in Wisconsin, Washington State and Illinois. He is currently a senior consultant for the International Center for Leadership in Education and has visited 60 high schools in 25 states during the past four years. He has helped scores of schools and communities develop special parent partnerships and other strategies to intervene on the drug culture in many communities. Dr. Fields has been a workshop facilitator, keynote speaker and consultant in more than 30 states.

Robert M. Stutman – Stutman is on the Board of Educating Voices. He spent 25 years as a DEA Agent retiring as Special Agent in Charge of the New York Field Division, DEA’s largest office. He is the principal of The Stutman Group, a consulting firm that works with corporations and communities involving the issue of substance abuse and serves 1,500 clients. He has been the special consultant on drugs for both the CBS news division and PBS. His autobiography, Dead on Delivery, was a national bestseller. Stutman is a nationally recognized speaker delivering more than 100 presentations annually. He speaks before corporations, parent organizations, universities and school systems on the subject of substance abuse.

With Research From Members of the Educating Voices Board

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Andrea G. Barthwell, M.D., FASAM – Barthwell was nominated by President George W. Bush and confirmed by the United States Senate to serve as Deputy Director for Demand Reduction in the Office of National Drug Control Policy (ONDCP). Prior to her appointment she was a member of the National Institute on Drug Abuse (NIDA) and the Center for Substance Abuse Treatment’s (CSAT) National Advisory Councils and the Food and Drug Administration’s Drug Abuse Advisory Committee. Dr. Barthwell began her medical practice in Chicago serving as president of the Encounter Medical Group and as a consultant to the Cook County Juvenile Drug Court Program. Andrea is a former president of the American Society of Addiction Medicine. She is the founder and chief executive officer of the global health care and policy consulting firm, EMGlobal LLC.
*Educating Voices, Inc.* (EVI) is a national not-for-profit organization educating about the dangers of drugs. The EVI Board Members have a total of over 300 years of experience and expertise in drug prevention.

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