Putting the Brakes on Marijuana Use

The number of high school students who try marijuana appears to be rising slightly, but more concerning is how few see regular marijuana use as harmful. That number is at the lowest level since the late 1970s, according to a national survey (Johnston 2014, p. 11–12).

Sixty percent of high school seniors say they believe regular marijuana use is not a “great risk,” according to the survey of 41,700 students in grades 8, 10, and 12. The survey, called Monitoring the Future, also showed that 35% of seniors used marijuana in the past year. About 55% of sophomores said regular use is not harmful, with about 30% of sophomores reporting use in the past year.

Overall, about 7% of youth ages 12 to 17 currently use marijuana regularly, according to another national survey (SAMHSA 2013, p. 2).

With medical marijuana use legal in 20 states and the District of Columbia and recreational use legal in Colorado and Washington for residents 21 and older, it’s no wonder why teens’ view of the drug has changed.

“The acceptance of medical marijuana in multiple states leads to the sense that it can’t be harmful,” National Institute on Drug Abuse (NIDA) Director Nora Volkow told a reporter (O’Connor 2013). But marijuana’s effects among teens, whose brains are still developing, are clear, she said.

“We know that the use of marijuana interferes with learning and memory,” Volkow said during a teleconference in December (NIDA 2013). “These kids at school are going to be unable to properly learn if they are using marijuana regularly.”

Marijuana’s long-term effects among adults, however, are still unclear. “Although the general impression supported by many studies is that cannabis causes cognitive decline, particularly with long-term usage, some research suggests that this may not be the case,” according to a meta-study on the subject (Shrivastava, Johnston, and Tsuang 2011, p. 1). There are still many unanswered questions about the potential long-term effects of the various chemicals found in marijuana.

Classroom activity

Studies have shown that marijuana use impairs one’s ability to drive (Dillow 2013). To get students to think critically about measurable consequences of marijuana use, you could assign a 500-word essay on how they would design a study to determine whether there is a safe level of marijuana’s psychoactive chemical delta-9-tetrahydrocannabinol (THC) in the bloodstream for adult drivers. Students should do internet research then make recommendations regarding:

- Demographics of test subjects
- How marijuana and/or THC would be administered to test subjects
- Areas of focus, such as how THC might affect reaction time, memory, peripheral vision, hand-eye coordination, balance, perception of time, etc.
- How simulators and/or courses would be structured
- Safety and legal precautions for participants and researchers

Emphasize that this is an exercise in experiment design and not a “try it at home” activity. Students might hypothesize that there is no safe level of THC for drivers.

Note: Your students can register to question top scientists researching drug abuse and addiction during a live, online chat in January 2015 (see “On the web”).

References


Substance Abuse and Mental Health Services Administration (SAMHSA). 2013. Results from the 2012 national survey on drug use and health: Summary of national findings. Rockville, MD: SAMHSA. http://1.usa.gov/1eQDnsE

On the web


Drug Facts Chat Day: Jan. 15, 2015, 8 a.m.–6 p.m. EST. NIDA. http://1.usa.gov/1ngELHL

Early-Onset, Regular Cannabis Use Is Linked to IQ Decline, article and video: NIDA. http://1.usa.gov/1k13BtW


Website for teens. Teens.DrugAbuse.gov

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