

Drug Education in Schools.

What is it?

Contemporary and effective school-based drug education explores students' values, attitudes, knowledge and skills with the aim of improving their capacity to make healthier decisions about using alcohol, tobacco and other drugs.

Drug education includes primary prevention, to prevent the uptake of alcohol, tobacco and other drugs; and, secondary prevention, to prevent the harms associated with alcohol, tobacco and other drug use.

There are three types of prevention activities:

1. **Universal prevention** targets a whole population (e.g. all children at school).
2. **Selective prevention** targets a vulnerable subsection of a population (e.g. children that are at risk of using alcohol, tobacco or other drugs).
3. **Indicated prevention** targets groups showing early warning signs of the problem (e.g. children that have started to experiment with alcohol, tobacco or other drugs).

Typically delivered as part of health education, school-based alcohol, tobacco and other drug education aims to increase students' self-efficacy to refuse alcohol, tobacco and other drugs and equip them with knowledge and skills to reduce harms.^{1,2}

Schools offer both the structure and the social learning environment to deliver curriculum-based drug education and reduce risk factors for alcohol, tobacco and other drug use.

Contemporary school-based drug education has moved a long way from its origins. The aim in the 1960s and 1970s was to impart knowledge about drugs (mainly illicit), often using scare tactics to arouse fear.

By the 1980s, the aim had shifted to enhancing students' ability to refuse alcohol, tobacco and other drugs, with the introduction of the 'just say no' approach and by focusing on personal development strategies including strengthening self-esteem and clarifying values.

By the 1990s, school drug education was drawing on social learning and social modelling theories to build student awareness of the influences of peers, family and the media and enhance social skills and competencies.

Aims of contemporary school-based alcohol, tobacco and other drug education:

1. Prevent alcohol, tobacco and other drug use.
2. Delay uptake of alcohol, tobacco and other drugs.
3. Reduce harms associated with alcohol, tobacco and other drug use.

Why is it important?

Exposure to alcohol and tobacco, and to a lesser extent other drugs, is inevitable during adolescence and/or adulthood.

Adolescence and young adulthood (the latter being the peak period for alcohol, tobacco and other drug use), are high risk times for physical and emotional harms associated with use.

School is an ideal place to reduce the risk factors and increase the protective factors for alcohol, tobacco and other drug use and related problems.

Developmentally appropriate school-based drug education right through school, from primary to high school, attempts to arm young people with accurate knowledge and skills, so that when they are exposed to alcohol, tobacco or other drugs (either during adolescence or later in life) they will be considered in deciding whether and how to use them.

Exposure to alcohol, tobacco and other drugs

Children are exposed to a range of images and messages about alcohol, tobacco and other drugs through sport, television, news and social media. School based drug education attempts to provide students with more measured and realistic information about alcohol, tobacco and other drugs to offset the sometimes sensationalised images they are exposed to.

An important goal of school drug education is to normalise not using alcohol, tobacco and other drugs and to assist young people to think critically about related media messages.

Drug use in adolescence

Adolescence is a period of rapid change and identity development, with shifting social, emotional and educational challenges.³ It can be a time of experimentation and risk taking,⁴ and reduced self-control.⁵ It is a time when young people are at increased risk of exposure to alcohol, tobacco and other drug use by media, social media and popular culture.⁶⁻⁸

Surveys on the use of tobacco, alcohol, over-the-counter pharmaceuticals for non-medicinal purposes, and other drugs conducted among Australian public and private school students aged 12–17 years show that **a minority of school students use alcohol, tobacco or illicit drugs, and most use irregularly during this experimental period.**

Harms

Early use of alcohol, tobacco and other drugs is a predictor of long-term use and chronic problems.⁹ Among people who develop an alcohol and other drug use disorder, three in four will have developed problems before leaving school.¹⁰

School is an ideal place to influence risk and protective factors for alcohol, tobacco and other drug use and related problems. School-based alcohol, tobacco and other drug education aims to reduce risk factors and increase protective factors.

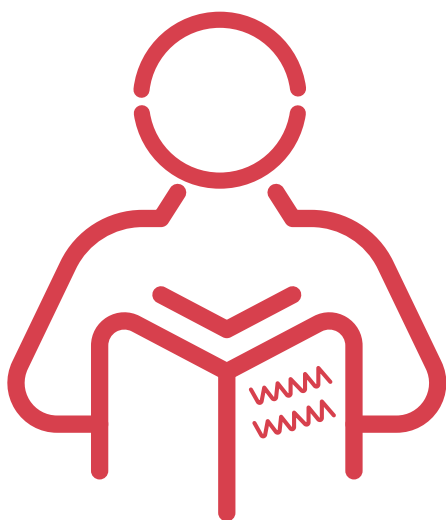
Effective and ineffective program features

The United Nations Office on Drugs and Crime (UNODC)¹¹ notes that, overall, school-based alcohol and other drug programs that are more likely to be effective:

- use interactive methods rather than didactic presentations
- are delivered by trained facilitators
- are delivered through a series of structured sessions and often with refresher sessions
- normalise the non-use of alcohol, tobacco and other drugs
- change perceptions of risk associated with alcohol and other drug use
- provide opportunities to practise and learn personal and social skills.

School-based alcohol and other drug programs that are more likely to be ineffective:

- use non-interactive methods like lecturing
- are information-only sessions, particularly if they are based on fear
- are based on unstructured chat sessions
- focus only on building self-esteem and emotional education
- address only ethical or moral decision-making or values
- use ex-drug users as testimonials
- use police officers to deliver the program.



Effective and ineffective program approaches

A review¹² of 51 studies of universal school-based prevention programs for illicit drugs, examined four types of program:

1. **Knowledge-focused programs** that give information about drugs, assuming that information alone will lead to changes in behaviour.
2. **Social competence programs**, based on the belief that children are drawn to drug use through modelling, imitation and reinforcement, influenced by the child's pro-drug beliefs, attitudes and skills. These programs use instruction, demonstration, rehearsal, feedback and reinforcement, etc. They teach generic self-management personal and social skills, such as goal-setting, problem-solving and decision-making, as well as cognitive skills to resist media and interpersonal influences to enhance self-esteem, to cope with stress and anxiety, to increase assertiveness and to interact with others.
3. **Social influence approaches**, which use normative education methods and anti-drugs resistance skills training. These include correcting adolescents' overestimates of the drug use rates of adults and adolescents, helping them recognise high-risk situations, increasing awareness of media, peer and family influences, and teaching and practising refusal skills.
4. **Combined methods** that draw on knowledge-focused, social competence and social influence approaches together.

Overall, programs based on a combination of social competence and social influence approaches showed small but consistent protective effects in preventing drug use. Some programs based on the social competence approach also showed protective effects for some outcomes. It was not clear which components worked or in which configuration, and which were responsible for the positive results.

Two thirds of the initial 158 trials identified were rejected because they were of such poor quality, and the authors noted that even among the 51 included studies, many were theoretically unsophisticated and poorly designed. Knowledge programs increased knowledge but did not affect behaviour.

Effective and ineffective programs

The Cochrane Review of illicit drug programs, found two high profile programs showed increased use of cannabis (*Project SMART*, a social skills program), and other illicit drugs (*Project ALERT*). Three programs consistently reduced drug use. Two of these, *Life Skills Training* and the European program *Unplugged*, utilised a social learning methodology. The third program, the *Good Behaviour Game*, is a behavioural intervention in primary schools that helps students avoid distractions to concentrate on lessons. It has produced long lasting reductions in drug use.

A review of alcohol education programs by Australian researchers examined 39 programs across the world.¹³ Of those, 29 had inconclusive results, two showed negative outcomes, four showed some evidence of positive effect, and one had little or no evidence of positive effect. Only three showed acceptable evidence of positive effect such as lower drinking levels and lower alcohol related harms.

A third review examined 53 trials of education programs for students aged 5–18 years. Eleven studies focused on alcohol alone while 39 addressed alcohol, tobacco and other drugs, and three focused on alcohol and cannabis.² The authors found poor quality studies, variable measures and outcomes, and small effects,² making comparisons difficult. The most commonly observed positive effects on the use of alcohol from both alcohol-specific and generic drug education programs was a reduction in risky drinking and drunkenness.

Timing of program delivery

In the Australian curriculum, drug education is delivered across all school years, but content and timing may differ from school to school.

Alcohol, tobacco and other drug prevention in schools needs to be delivered at the developmentally appropriate time to be effective.^{14–16} The onset of alcohol and other drug use can vary in different populations and for different substances, so the timing of interventions may also need to take into account local prevalence data for alcohol, tobacco and other drugs.¹⁴

The three periods in students' development when drug education is considered likely to be of benefit:¹⁷

- **before experimentation with alcohol, tobacco and other drugs has occurred. This is the 'inoculation phase' – when knowledge, attitudes and behaviours are being shaped**
- **at the time when most students are first becoming exposed to substances. This is the 'early relevancy phase' – when information and skills are most likely to be meaningful and have practical application in young people's lives**
- **at the time when older students may be drinking, smoking tobacco or experimenting with other drugs. This is the 'later relevancy stage' – when young people need new knowledge and skills to suit specific situations such as drinking and driving.**

Refresher or 'booster' sessions in subsequent school years improves the effectiveness of drug education, particularly when important messages and skills are reinforced.

Educating parents

Parents have an important role in helping adolescents to foster attitudes and develop skills consistent with health-enhancing behaviours. Good family communication and support, including about alcohol, tobacco and other drug use, are protective factors that enhance non drug use. Parents are also in a strong position to influence young people's interpretation of alcohol and drug related stories presented in the media, including the fact that most young people do not use alcohol, tobacco and other drugs, and fewer are drinking alcohol and smoking tobacco than in previous years.

Parents, however, may not be well educated themselves on the issues related to alcohol, tobacco and other drug use among adolescents, or have the confidence to talk to young people about alcohol, tobacco and other drugs.

Drug Education Programs for Australian Schools

A review of Australian school-based drug education programs found that few of the programs that are commonly used in Australian schools were effective.¹

Ineffective programs

Schools continue to use programs that show little or no evidence of benefit. Although programs that adopt harm reduction goals have been shown to prevent and reduce alcohol and other drug use,¹ some alcohol and other drug education programs continue to seek to deter drug use by providing negative information about illicit drugs and their effects and by encouraging students to be fearful of illicit drugs. These types of programs are not likely to succeed and may increase interest in illicit drugs among students.

Recommended programs

Three drug education programs are recommended by the Australian Government-funded *Positive Choices* website, but their uptake is limited in Australian schools.

1. Secondary Health and Alcohol Harm Reduction Program

SHAHRP is a classroom-based, universal prevention program that aims to reduce alcohol-related harm and prevent high risk drinking among students in Year 7–8, and Year 9–10, which research suggests is a vulnerable period for alcohol experimentation. The program takes a harm reduction approach, with an emphasis on building interactive skills and individual and group decision making skills. *SHAHRP* is based on the social influence approach which understands that young people begin to use drugs due to psychological and social pressures from peers, family and the media.

2. Climate Schools

Climate Schools is a universal prevention program that was initially developed for 13–14 year olds. It is based on harm reduction and social influence approaches, and is designed to be implemented within the school health curriculum. It comprises 12 × 40 minute lessons which address use of alcohol and related problems.

A six lesson psychostimulants and cannabis module for Year 9–10 is also available. In each lesson students view a cartoon style story of teenagers grappling with real life situations, which is then followed by classroom discussions and students' interaction.

Climate Schools has been shown to increase alcohol knowledge, decrease positive expectancies about alcohol and reduce alcohol consumption. At 12 months' follow up, a reduction in weekly alcohol consumption and in the frequency of excessive drinking was recorded.¹⁸ *Climate Schools* also has a module that combines education on alcohol with cannabis education which was found to have reduced alcohol consumption, frequency of binge drinking and frequency of cannabis use. At the same time, it increased resistance to peer pressure and reduced psychological distress and truancy.^{19,20}

3. Preventure

Developed in Canada and adapted for the Australian classroom, *Preventure* is a school-based, selective prevention program that aims to reduce alcohol and other drug use among selected students in Year 7–8 and Year 9–10.

Students identified through a screening questionnaire as 'at-risk' are invited to participate in two 90-minute groups delivered by a trained facilitator and co-facilitator in a classroom setting (training is now being offered in Australia). The workshops are designed to encourage an understanding of how a student's personality style can influence their emotions and behaviour. Four different workshops are on offer, each focused on the development of coping skills relevant to sensation seeking, impulsivity, anxiety sensitivity and negative thinking.

Summary

Drug education has a chequered history and some programs have been shown to lead to increased drug use.

In public health terms, drug education, at its best, can prevent some drug use by young people, or delay or reduce drug use, and reduce alcohol and other drug-related harms. Any positive impact of drug education on individual students' drug use is generally small, and its impact on a population scale is unknown.

Schools can reduce the likelihood of drug use through the promotion of protective factors and reduction of risk factors through a whole of school approach, and by ensuring they implement programs that have been shown to be effective.

ADF position

- School-based drug education is one component of prevention of alcohol, tobacco and other drug use and harms.
- Drug education in schools should be implemented with care because there is a risk that it can increase interest in experimenting with alcohol, tobacco and other drugs among students.
- Schools should be resourced and supported to deliver best practice drug education that utilises the broad social influence methods exemplified in the *Climate Schools* and *SHAHRP* approaches.
- Schools can reduce risk factors for drug use and promote protective factors which lower the attraction of alcohol, tobacco and other drugs when they develop a whole of school health promoting ethos.
- It is unrealistic to expect school-based drug education to eliminate alcohol, tobacco and other drug use or related problems.

References

1. Teesson M, Newton NC, Barrett EL. *Australian school-based prevention programs for alcohol and other drugs: A systematic review*. Drug and Alcohol Review. 2012;31(6):731–6.
2. Foxcroft DR, Tsertsvadze A. *Universal multi-component prevention programs for alcohol misuse in young people*. Cochrane Database of Systematic Reviews. 2011(9).
3. Simmons RG. *Moving into adolescence: The impact of pubertal change and school context*. Routledge; 2017.
4. Steinberg L. *Cognitive and affective development in adolescence*. Trends in cognitive sciences. 2005;9(2):69–74.
5. Casey B. *Beyond simple models of self-control to circuit-based accounts of adolescent behavior*. Annual review of psychology. 2015;66:295–319.
6. Dal Cin S, Worth KA, Dalton MA, Sargent JD. *Youth exposure to alcohol use and brand appearances in popular contemporary movies*. Addiction (Abingdon, England). 2008;103(12):1925–32.
7. Christenson P, Roberts DF, Bjork N. *Booze, drugs, and pop music: Trends in substance portrayals in the Billboard top 100: 1968–2008*. Substance use & misuse. 2012;47(2):121–9.
8. Stern SR. *Messages from teens on the big screen: Smoking, drinking, and drug use in teen-centered films*. Journal of Health Communication. 2005;10(4):331–46.
9. Jordan CJ, Andersen SL. *Sensitive periods of substance abuse: early risk for the transition to dependence*. Developmental Cognitive Neuroscience. 2017;25:29–44.
10. Ritter A, King T, Hamilton M. *Drug Use in Australian Society*. Oxford University Press; 2013.
11. United Nations Office on Drugs and Crime. *International standards on drug use prevention*. Vienna; 2015.
12. Faggiano F, Minozzi S, Versino E, Buscemi D. *Universal school-based prevention for illicit drug use*. Cochrane Database of Systematic Reviews. 2014(12).
13. Lee N, Cameron J, Battam S, Roche A. *Alcohol education for Australian schools: A review of the evidence*. Adelaide: National Centre for Education and Training on Addiction. 2014.
14. Meyer L. *Principles for School Drug Education*. ERIC; 2004.
15. Berkowitz MW, Begun AL. *Designing prevention programs: The developmental perspective*. Handbook of drug abuse prevention: Springer; 2006. p. 327–48.
16. Spoth R, Trudeau L, Redmond C, Shin C. *Replication RCT of early universal prevention effects on young adult substance misuse*. Journal of Consulting and Clinical Psychology. 2014;82(6):949.
17. McBride N. *A systematic review of school drug education*. Health education research. 2003;18(6):729–42.
18. Vogl L, Teesson M, Andrews G, Bird K, Steadman B, Dillon P. *A computerised harm minimisation prevention program for alcohol misuse and related harms: randomized controlled trial*. Addiction (Abingdon, England). 2009;104(4):564–75.
19. Champion KE, Newton NC, Teesson M. *Prevention of alcohol and other drug use and related harm in the digital age: what does the evidence tell us?* Current opinion in psychiatry. 2016;29(4):242–9.
20. Newton NC, Andrews G, Champion KE, Teesson M. *Universal Internet-based prevention for alcohol and cannabis use reduces truancy, psychological distress and moral disengagement: a cluster randomised controlled trial*. Preventive medicine. 2014;65:109–15.