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Cannabis use prevention methods in Australian schools

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Key points

- **Cannabis is the most commonly used illicit substance among Australian secondary school students**
- **The federal and state governments have produced specific competence-enhancement resources for cannabis prevention in primary and secondary schools**
- **Evidence suggests that a generic approach to substance use prevention is useful up to Year 8, but a more cannabis-specific approach is required with older students**
- **Effective programs are those that are interactive in design and delivery, and are endorsed by teachers who are provided high-quality training and practical support**

Introduction

Schools are often regarded as an ideal setting for communicating health messages to young people. Schools have a broad reach and are considered to be a credible source of health education messages.[1] As such, drug education is primarily delivered as part of the health curriculum across all Australian states and territories. Lessons covering cannabis have been part of these drug education programs for many years. They have typically been introduced in the early secondary school years, following the introduction of tobacco prevention in primary school.

The purpose of this brief review is to identify what we currently know about best-practice school-based cannabis prevention and the barriers to it being delivered effectively.

The prevalence of cannabis use among Australian secondary school students

The 2005 Australian Secondary Students' Alcohol and Drug Survey (ASSAD)[2] revealed that cannabis was the most commonly used illicit substance among secondary school students in 2005: 18% of all secondary school students aged between 12 and 17 years reported having used cannabis at some time in their lives. Lifetime cannabis use among these young people increased with age, from 5% of 12-year-olds to 32% of 17-year-olds. In the month prior to the survey, 7% of all students had used cannabis; 4% had used it within the week before the survey. Weekly use increased with age, from 1% of 12-year-olds to 6% of 17-year-olds, and was more common among males than females. Between 1996 and 2005 the proportion of students reporting having used cannabis decreased by half (from 36% to 18%).

Brief history of school-based prevention methods

Historically, it appears that Australia has based its school-based drug education on programs developed in the United States.[3] The major prevention approaches adopted since the 1960s have included: information dissemination and fear arousal; affective education; alternatives programming; social resistance skills; and competence enhancement. Each of these approaches, their foci and methods, are outlined in Table 1.

Table 1

Australian approaches to drug education since the 1960s

Approach	Focus	Methods
Information dissemination and fear arousal – Popular during 1960s; the most common approach to prevention	Increase knowledge of drugs and consequences of use; promote anti-drug use attitudes	Didactic instruction, discussion, audio/video presentations, displays of substances, posters, pamphlets, school assembly programs
Affective education – Introduced during 1970s	Increase self-esteem, responsible decision-making, interpersonal growth; generally includes little or no information about drugs	Didactic instruction, discussion, experiential activities, group problem-solving exercises
Alternatives programming – Popular during 1970s	Increase self-esteem, self-reliance; provide viable alternatives to drug use; reduce boredom and sense of alienation	Organisation of youth centres, recreational activities; participation in community service projects; vocational training
Social resistance skills – Commenced during 1980s; along with competence enhancement model continues to dominate school-based prevention programs	Increase awareness of social influence to smoke, drink or use other drugs; develop skills for resisting substance use influences; increase knowledge of immediate negative consequences; establish non-substance use norms	Class discussion; resistance skills training; behavioural rehearsal; extended practice via behavioural "homework"; use of same-age or older peer leaders
Competence enhancement – Commenced during 1980s; along with social resistance skills model continues to dominate school-based prevention programs	Increase decision-making, personal behaviour change, anxiety reduction, communication, social and assertive skills; application of generic skills to resist substance use influences	Class discussion; cognitive behavioural skills training (instruction, demonstration, practice, feedback, reinforcement)

Adapted from Botvin and Griffin.[4]

Current Australian school-based cannabis prevention resources and activity

The National School Drug Education Strategy (NSDES) has enabled funding of the development of the REDI (Resilience Education and Drug Information) package and the *"Cannabis and Consequences"* education resource for schools. These national drug education initiatives aim to develop primary and secondary students' skills, knowledge, attitudes and values in dealing with drugs and drug-related issues and in promoting resilience in students.

While NSDES resources aim to provide up-to-date and evidence-based information on drugs and drug issues, they focus on the promotion of resilience in young people and assist schools to gain an understanding of current research and practice in the area of resilience and drug education. The emphasis on the development of connectedness, resilience and relationship skills is seen to be consistent with both the spirit of the current state and territory approaches to drug education and the research literature on effective drug education practices.

The REDI resources include an online component exploring issues of drug use and emphasising the development of resilience, and a skills development component covering decision-making, critical literacy, evaluation and judgement, finding information, being assertive, forming and maintaining relationships, independent thinking, developing a sense of identity, communication, and developing coping strategies.

Several cannabis-specific education resources have been developed for use in Australian schools. The *"Candidly Cannabis"* national resource,[5] the first of its kind, was aimed at encouraging students to reject or delay cannabis use, and avoid harms posed by others' cannabis use. However, the National Drug Research Institute (NDRI)[3] has questioned the relevance of this resource for students already using cannabis.

In 2003, *"Candidly Cannabis"* was revised and updated by the (then) Australian Government Department of Education, Science and Training.[6] The revised national resource, *"Cannabis and Consequences"*, which was distributed to all Australian secondary schools, encourages active exploration of the issues associated with cannabis use, and takes a competence enhancement approach incorporating information dissemination and skills development.

The only state to have developed their own cannabis-specific resource is New South Wales. The *"Cannabis: Know the risks!"* education resource[7] is for years 7-10 and has been developed to provide young people with "knowledge, skills and attitudes to establish and maintain a healthy lifestyle free of the problems associated with cannabis use." (p. 5).

In their extensive report on cannabis education in Australian schools, NDRI[3] noted that, despite Australia's current harm reduction approach, some cannabis education in Australian schools has been reduced to the provision of information on the harms associated with use. NDRI argued, however, that it is important that drug education is not regarded by students as mere propaganda, and that programs must therefore acknowledge the direct or indirect experience of students, and the likelihood that they have found some drug use to be enjoyable. NDRI indicated that well-received drug education programs deal openly with both sides of the decision-making equation.

Effectiveness of prevention methods

Findings from recent drug education program reviews are fairly consistent in identifying that a mix of program components or types of programs is most effective in changing drug use behaviour.[3]

The NSW Department of Education and Training,[7] in their review of school-based cannabis drug education activities, concluded that social influence and multiple component programs incorporating social influence strategies are more successful than either information-based or affective education approaches. Further, they reported that programs based on social learning principles have demonstrated beneficial long-term outcomes in terms of students' drug use, with effects being stronger if booster sessions are added to the base program, if school activity is supplemented with a parenting component, and if messages are reinforced at a community level.

In 1999 Tobler, Lessard, Marshall, Ochshorn, and Roona[8] undertook a review of 37 well-conducted drug education programs (following on from a meta-analysis of 120 programs in 1997)[9] and found that the programs that successfully achieved a reduction in cannabis use achieved similar results in tobacco and alcohol use, indicating that drug education does not need to be compartmentalised by drug type.

A generic approach incorporating alcohol and tobacco prevention can be used up to Year 8 although findings from senior high school programs suggest that a more differentiated approach is required with older students. It is suggested by the authors that any cannabis program should be an integrated component of a generic drug education program up until Year 8. In Years 9 to 12, a separate program or well-differentiated program components should be offered.

Tobler et al.[8] also found that the "most effective education programs for cannabis should contain certain essential information, they should be small in scale, or managed in a way that generates ownership among those involved, they should be implemented as intended and they should be interactive." (p. 105). Table 2 provides further detail from the review about the effective and ineffective features of cannabis and other drug prevention programs.

Table 2

Cannabis and other drug prevention: content and delivery features

What works	What doesn't work
Content: Knowledge	
Short-term effects of drug use	Omission of short-term consequences
Long-term health consequences of drug use	
Content: Attitude about drug use	
Feedback from school surveys of peer drug use	Omission of perceptions of peer drug use
Analysis of media and social influences that promote pro-drug activities	Omission of media influences on pro-drug attitudes
	Ethical or moral decision-making
Content: Drug refusal-based interpersonal skills	
Perception adjustment of universal peer substance use	Values teaching
Drug refusal skills	Omission of interpersonal skills, particularly drug refusal skills
Assertiveness skills	
Communication skills	
Content: Intrapersonal skills	
Safety skills	Problematic if solely interpersonal focus
Coping skills	Problematic if solely self-esteem building exercises
Stress reduction skills	
Goal setting	
Decision-making/problem solving	
Delivery	
Everyone actively involved	Passive participation
Participation between peers	Lectures
Student-generated role plays	Teacher-centred class discussions
Supportive comments from peers	Unstructured dialogue sessions
Rehearsal of drug refusal skills	Effective classroom management techniques without an accompanying drug program
Sufficient practice time	
Peer modelling of appropriate behaviour	
Developmentally appropriate activities to promote bonding between younger adolescents	

Taken from Tobler et al.[8]

Barriers and challenges

A recent Australian paper by Cahill examining the challenges of implementing school drug education programs has found that although the most successful and effective programs are those that incorporate interactive learning strategies, it is this interactive component that teachers are most likely to find difficult to adopt.[10]

Cahill notes that program integrity commonly breaks down at school or classroom level after dissemination of a standardised program, resulting in considerable variations in delivery. This breakdown is "most likely to occur in relation to deployment of the interactive components of the program. Thus, a multi-modal program may become a knowledge-based program at the point of delivery, and consequently lose the key features associated with positive changes in health behaviours or attitudes." (p. 674).

The author concluded that there are both philosophical and practical factors that can lead to modifications of content or delivery, ultimately resulting in major distortions of program design. These factors include:

- epistemological assumptions about what constitutes effective education
- conflicting ideological messages about whether and how to engage in drug education
- assumptions that provision of information alone is sufficient
- ignorance of the evidence-base about effective practice
- the seductive nature and appeal of the scare tactics approach
- the challenge of maintaining a normative approach
- lack of confidence about managing group work in the classroom
- unfamiliarity with the process of collaborative work
- certain classroom environments not being conducive to collaborative learning tasks
- the covert curriculum subverting the overt curriculum (e.g. targeted, at risk, students absorb messages and become labelled as a result of being targeted for drug education intervention – they are assigned a 'deviant' identity and the likelihood of engaging in risk behaviour escalates)

NDRI[3] has provided another explanation for modifications to program content that sees multi-modal programs reduced to information-only programs. It has reported that it is "easy for critics to represent any deviation from an abstentionist message as condoning or even encouraging drug use and, understandably, schools do not wish to defend their drug education program in these terms. This has meant that when cannabis education in Australia has gone beyond abstentionist messages, it has tended to focus on providing information, because such an approach can be easily defended as useful and even-handed." (p. 24).

Many of these challenges appear to have been minimised or eliminated, however, where teachers have been provided with high-quality training and practical support to deliver all elements of intended programs. Cahill[10] also stresses the importance of professional support for teachers to maintain program integrity, assist sustainability, and, essentially, to act as a significant part of the intervention itself, as "the teacher, rather than simply the package of lesson plans… [becomes] the key resource in the classroom." (p. 678).

Recommendations

Based on the findings of this review, particularly those of Tobler et al.,[8] Cahill[10] and the National Drug Research Institute,[3] it is recommended that:

1 Programs should be evidence-based and consistent with Australia's national approach to harm minimisation

2 Programs should be interactive in design and delivery, with a mix of program components or types of activities

3 Consideration should be given, where appropriate, to supplementing school activity with a parent and community component

4 Cannabis drug education programs should be an integrated component of a generic drug education program up until Year 8

5 In Years 9 to 12 a separate program or well-differentiated program components should be offered

6 Programs should be small in scale, or managed in a way that generates ownership among those involved

7 Professional training and practical follow-up support should be offered to teachers to assist delivery of programs without modification and minimise the likelihood of program breakdown

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