The Role of Schools in Alcohol Education

Final Report to the:

Australian Government Department of Education, Employment & Workplace Relations

National Centre for Education and Training on Addiction (NCETA)

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FINAL REPORT

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Executive Summary

The National Centre for Education and Training on Addiction (NCETA) at Flinders University was commissioned by the Australian Government Department of Education, Employment and Workplace Relations to examine the role of schools in relation to young people and alcohol. The formal title of the project is the 'Youth Binge Drinking Scoping Project'. The project was undertaken between November 2008 and August 2009.

This report outlines the strategies undertaken by NCETA in executing the project and details the key findings from each strategy, together with recommendations for future action in this area.

The strategies employed in the project were:

- a comprehensive review of the literature on educational programs and interventions (see Chapter 3)
- consultations with government, catholic and independent schools in all states and territories that involved interviews and/or group discussions with principals, teachers and/or students (total N's =113 teachers and 214 students) (see **Chapter 4**).
- an on-line survey (N=275) (see **Chapter 6**)
- a call for submissions (N's 12 plus 14) (see **Chapter 7**).

While a diverse range of sources were used to inform this review, we note that it did not involve a random sample and findings should be interpreted with this limitation in mind.

Ethics Approval

Ethics approval for this project was obtained from Flinders University Social and Behavioural Research Committee (SBREC #4389). Ethics approval was subsequently sought and obtained from all government, catholic and independent school sectors in each state and territory as well as written approval from the principal of each school who participated in the school consultation components of the project.

Review of educational programs and interventions

A comprehensive, descriptive literature review was undertaken that examined the evidence base relating to school-, family, and community based programs, as well as combined programs and other programs and tools. All potentially relevant papers and reports were collated in an Endnote library that comprised approximately 600 citations.

The literature review assessed universal primary prevention programs that addressed alcohol use and aimed to prevent, deter or reduce alcohol use. Programs that targeted specific subgroups or focused on individuals with identified problematic use of alcohol were excluded as these were seen as treatment rather than prevention programs.

Over 64 alcohol education and (and related) programs were reviewed, assessed and rated in five different categories. See Tables 3.8, 3.11, 3.15, 3.18 and 3.19 for ratings (described in Table 3.2; A (highest) to E (lowest)) allocated to each program.

The literature review examined a wide range of potentially relevant programs that included school-, family- and community-based and combined programs. Features of effective programs and those with no- or mixed-effects are shown below.

Features of effective programs

Key features	Item
Approach	Social influence
	Normative approach
	Theory driven
Implementation process	Program fidelity
Timing	Introducing alcohol education
Program elements	Comprehensive
	Socio-culturally relevant
	Positive relationships
	Needs of target group
Content	Single substance focus
	Materials
	Media literacy
Mode of delivery	Interactive and activity oriented
	Peer interaction
	Varied teaching methods
Outcome evaluation	
Support	Supportive school policies and culture
	Teacher training and skills

In contrast, program components that had no evidence, mixed results or insufficient evidence of effectiveness for changing young people's alcohol-related behaviour are shown below.

Program components which have no evidence, mixed results or insufficient evidence of effectiveness

Key features	Item
No evidence of effect	Alcohol knowledge
	Self-esteem enhancement.
	Psychological wellbeing enhancement
	Scare tactics
	Intensity of program
Mixed results	Length of program
	Booster sessions
	Universal programs
	Developmental stage of students
Insufficient evidence (not adequately evaluated)	Expert presentations
Evidence of negative effects	Social competence training
	Sports participation
	Resistance skills training

The review identified that the most successful programs tend to:

1. use a social influence approach (rather than a competence-enhancement or informational approach) as a key part of the program
2. include wider community and parental involvement
3. address the whole school environment – i.e., promoting positive relationships and behaviours, reducing victimisation and bullying, increasing social connectedness etc (see the Gatehouse project for example).

Consultations with Schools

Consultations were undertaken with a total of 36 schools (5 in SA, NSW, TAS and VIC, 4 in ACT, Qld, NT and WA). Of these, 19 were government, 10 independent and 7 catholic schools. A total of 8 focus groups with teachers (N=25), 23 focus groups with students (N=214), 88 interviews with teachers and 25 interviews with students were conducted.

While input was received from 113 teachers and 239 students across Australia this was not a representative sample, and hence any generalisations must be made with caution. Key issues and themes emerging from the consultations are presented in the report under the following five themes:

1. Beyond the classroom (Chapter 4.2)
2. School philosophy (Chapter 4.3)
3. Pedagogical issues (Chapter 4.4)
4. Resources, Programs and Materials (Chapter 4.5)
5. Barriers, Limitations and Facilitators (Chapter 4.6).

As part of the consultation process, an innovative technology called 'clickers' was used to collect data from students and stimulate discussion. This strategy was used in 16 of the student focus groups and was highly successful (see Chapter 5).

On-line survey

An on-line survey was conducted between late February and mid April 2009. A total of 275 useable responses were obtained. Survey respondents comprised school personnel (24%), parents (22%), health professionals and government representatives (22%), students (8%), and community representatives and other (24%). The majority were female; and 93% of survey respondents who were parents were mothers. The information from the online survey related to five key areas:

1. Young people's alcohol use – The majority of respondents recognised that binge drinking was a serious issue in Australia and that young people should be educated about sensible drinking.
2. The role of schools in alcohol education – Around 85% of respondents agreed that schools had an important role to play in educating young people about alcohol. There were differences in stakeholder opinions regarding the extent of the role and responsibility of schools in addressing young people's alcohol use.
3. Views on school-based programs – Most respondents stated that alcohol education should be offered in secondary school, mainly in Years 7-9, and preferably delivered by alcohol experts, trained student peers, and/or specially designated teachers.
4. Effectiveness of school-based programs – Just over 60% of respondents believed that school-based alcohol education programs were somewhat to moderately effective in addressing youth drinking.
5. Relative effectiveness of alternative strategies – Vis-à-vis school-based alcohol education, most respondents perceived measures such as implementing community programs to enhance social connectedness, providing alcohol-free leisure time options for young people, imposing stricter controls on alcohol advertising, imposing stiffer penalties on alcohol suppliers/sellers, and increasing police presence where young people drink, were more effective. Strategies such as increasing the price of alcohol and placing warning labels on alcohol packaging were considered less effective than alcohol education in schools.

Submissions

a. A public call for submissions yielded a total of 12 responses. In addition, Directors General in each jurisdiction (total=26) were also invited to make submissions and 14 were received.

b. Respondents were of the view that school-based alcohol education is important and should be embedded within a whole-of-community approach

c. There was consensus that the overall aim of school-based programs and policies related to young people and alcohol should be to educate young people about a) the risks associated with drinking and b) how to stay safe if they choose to drink

d. Most respondents were of the view that one-off information sessions were ineffective

e. Rethinking Drinking and SHAHRP were the most frequently mentioned resources.

Schools' Support of Alcohol Education Role

Most school personnel and community members expressed a strong view in favour of schools undertaking alcohol education. Similarly, students were also positive about and supportive of schools undertaking activities in this area.

It was noted however that teachers today deal with many more social issues now than previously and that issues such as alcohol education need to be accommodated among a range of other competing demands on the curriculum.

Alcohol in Context

Addressing the range of harms which arose from students engaging in unsafe sex, drink driving, and being subjected to sexual assaults was considered the primary concern of schools; with teachers noting that raising awareness about the link between alcohol and sexual assault was particularly pertinent for girls.

The emphasis and resources allocated by schools to the provision of alcohol education was often also influenced by how much alcohol use and abuse affected their school.

Harm Minimisation Approach

Schools almost universally reported adopting a harm minimisation approach as it was considered realistic given the deeply ingrained "acceptable drinking culture" of Australian society. Some teachers maintained that a harm minimisation approach ensured that the majority of students would be provided with balanced information about alcohol.

Location Within the Curriculum

Classroom-based alcohol education was almost always delivered by health/physical education teachers as part of the health curriculum. Content also tended to be embedded within the Health and PE curriculum, with some schools incorporating it within their Science curriculum.

Other schools included this content within their pastoral care and personal development programs, and some schools considered that alcohol was best addressed when undertaking tasks related to decision making, building resilience and coping.

Professional Development

Effective professional development and support was universally seen as essential to enable teachers to provide current and accurate information and resources. Most teachers were of the view that appropriate training, supplemented by visiting presenters provided an optimal arrangement. The use of guest speakers was supported by schools as it was perceived to be an effective strategy by which to upskill their own staff while also providing variety and interest for students.

Competing Curricula Demands

While schools may be a convenient and efficient channel for reaching the majority of adolescents, there are limitations to how much they can achieve. Two main factors impacted on the capacity of schools to deliver effective alcohol education programs: 1) time; and 2) resources.

For some teachers, the time required to implement alcohol education programs was time lost from other areas of the school curricula. Curricula crowded with high priority topics put pressure on the capacity of schools to address alcohol or other health and wellbeing issues.

Current curriculum priorities tend to focus on literacy and numeracy to the exclusion of a balanced focus on health.

The 'Appropriate' Age

Views about the appropriate age for delivering alcohol education varied according to the location of the school and the characteristics of the local community. However, most programs were delivered to Years 9 and 10 (see Table 4.2 in Chapter 4.3). There was less opportunity within senior school curricula where the principal focus was on preparing students for their post school years.

In terms of development, risk taking and sensation seeking is common behaviour in the 11-15 year age group. This may be due to the interaction between the socio-emotional and cognitive-control brain networks. As the cognitive-control network matures, the regulatory influence modulates such behaviour. Improved knowledge and understanding of these biological and neurological developmental factors have important implications for schools and school-based programs and activities.

Teacher Suitability

The relationship between teachers and students was an influential factor in the degree of student receptiveness to alcohol education. Some teachers and students believed that it was important to cultivate a positive coaching/mentoring relationship with students and engage in honest, non-judgemental communication so that trust could be established.

The perceived suitability of teachers was dependent on their relationship with students and the extent of their professional development. Teachers who had a more open, trusting and mentoring relationship with students, and younger teachers who could more easily relate to students, were considered to be better alcohol educators. The age of a teacher was perceived to influence the extent to which students related to the teacher and subject matter. Some teachers believed it was advantageous to use fairly young teachers who were more in tune with students.

Pedagogical Approaches

There was great diversity in approaches to alcohol education and the programs and resources currently utilised by schools.

While contemporary AOD education and prevention programs have shifted from information- and fear-based didactic programs, through to more comprehensive, interactive social skills and competence-enhancement programs, to more broadly based multi-level ecological approaches to health promotion, not all schools (or community members) were familiar with or embraced these changes.

The evidence base for good practice[1] in relation to school-based alcohol education is mixed and not as strong as it could be. Some schools exhibited an understanding of good practice and had implemented programs and activities that accorded with it; while other schools held views that were at odds with good practice.

Several areas of divergence from best practice were identified through the consultation process – see below.

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[1] The term 'good practice' is used here in preference to the more commonly used term 'best practice' as the evidence base to-date precludes identification of 'best practice' in this area. In addition, contemporary notions of good practice incorporates the views of teachers/practitioners, the recipients of programs or intervention and variations in cultural norms.

Programs and Resources Used

A variety of different forms of programs and resources were reported. Overall, of the schools consulted for this project a total of 43 different programs and resources (see Table 4.3) were identified (and these are likely to represent only some of the total array in actual use). The most commonly mentioned[2] programs or resources were:

- Rethinking Drinking,
- RRISK, and
- Challenges and Choices.

These programs and resources represented a range of different approaches, content, and modes of delivery. There were few common or consistent characteristics across schools. Contrary to the emphasis usually placed on program fidelity by researchers and evaluators, teachers reported selecting different elements from a range of different materials and programs in order to construct a program tailored to their students.

Many schools also reported that they used the National Health and Medical Research Council (NHMRC) guidelines for low risk drinking, as well teaching about the physiological and psychological effects of alcohol upon the bodies and brains of young people. As the NHMRC guidelines change on a regular basis (the most recent being a substantial change released in February 2009) this represented a major challenge to schools in terms of remaining accurate and up-to-date in their information and resources.

Teachers also noted that materials go out of date very quickly, which may reduce their efficacy. This has implications for the shelf life of any resources developed and highlights the need for greater attention to be directed to the continual updating of key resources and improved strategies to facilitate access to such resources.

External Speakers

The general belief was that guest speakers were more credible from the students' standpoint and provided a good opportunity to break the monotony of routine classroom lessons.

One principal noted that creating such linkages with outside agencies was *"part of the school's responsibility"* to provide information and referral advice to students who may be negatively affected either through their own, a family member, or a friend's alcohol use.

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[2] While the data derived from this consultation involved national input, it was not a comprehensive survey and findings need to be generalised with caution.

Barriers and Facilitators

> *"Schools are doing what they think is right but we are still all in the dark a little bit. There's no doubt about that."* – Teacher, independent school, Victoria.

Alcohol-related programs which employed a variety of teaching methods and focused upon skill development and enhancement were more effective than those that were information-based and didactic. Interactivity, relevance and creativity were three vital elements that were frequently utilised to maintain students' engagement and receptiveness to alcohol education. See Table 6.14 for a list of frequently notes limitations in alcohol education programs.

A fear based approach designed to shock was also commonly adopted in school-based alcohol education. While students generally enjoyed the *"gory stories"*, some teachers were doubtful about the efficacy of this approach.

Key Points

Barriers and limitations that schools encountered in relation to their role in providing alcohol education included:

- Schools are only one sector that can address alcohol use – ambivalence towards and acceptance of alcohol by parents, students and the broader community impacted upon the ability of schools to provide alcohol education
- The respective roles of schools and parents in relation to alcohol education need to be more clearly delineated
- Many schools would like to do more but were limited by an already crowded curriculum and access to and availability of funding and information technology
- Divergence of opinion about who should deliver alcohol education in the school and external settings
- A lack of appropriate and up-to-date resources; professional development, including teacher training; school support; teacher commitment.

Facilitators identified included:

- Support from the School Principal and broader school community – including the nature and philosophy of the school
- Dedicated human and other resources allocated to activities, programs and general relationship/partnership building beyond the school environment
- Embedding alcohol education within the curriculum
- Teachers building positive relationships and trust with their students
- Accessibility and relatively inexpensive cost of programs and resources.

A consistent theme that emerged from the consultations was that schools have a key role to play in the provision of alcohol education to their students. The scope for school personnel to do this was, however, influenced by a range of factors such as:

- the supportive (or otherwise) nature of the school environment
- the degree of latitude that schools and their personnel are provided with to identify, develop and implement alcohol education programs
- the availability of resources including information resources that can be used or adapted to a school-based setting
- funding, and
- information technology.

Suggestions for the future include:

- Examining the use of new or different approaches to the provision of alcohol education

- A greater focus on professional development

- Enhanced options for teachers to undertake professional development; with consideration given to flexible delivery of professional development e.g. through use of 'webinars' and videoconferencing

- Provision of enhanced funding to develop, implement and evaluate programs

- Expanding and updating the Principles of School Drug Education

- Exploring greater use of information technology

- Creation of a national clearinghouse of resources tailored to the needs of schools.

Recommendations

1. Readily accessible, relevant, up-to-date resources – ideally available via the Internet or other electronic means - are needed for most schools. It is recommended that funding be dedicated to the production of up-to-date resources designed to be accessible and deliverable using contemporary technology. For example, through a one-stop shop (e.g., an 'E-shop') with downloadable PDFs of worksheets, activity suggestions and user-friendly data sheets and information about evidence and best practice.

2. Appointment of ATOD advisors in all jurisdictions (such as those that currently exist in some jurisdictions) accessible by all school sectors.

3. Information about relevant characteristics of available programs needs to be made available in various formats (e.g., hard copy and electronic / on-line format) to guide choices made by schools/principals/teachers.

4. As teachers 'pick and choose' resources that best suit them and their students, there is a need for schools to have scope to rebrand materials and thereby create a form of ownership of resources (while mindful of 'program fidelity' issues).

5. The literature review highlighted the lack of rigorous high quality research on which to base or plan program or interventions. Very little research is Australian, most emanates from the USA. High quality, large scale, long term research is required to determine with a greater degree of confidence the strategies that can be most effectively employed by schools in relation to alcohol.

6. A clearer synthesis and better dissemination of the current evidence base (as limited as it is) is required for all schools and jurisdictions to be able to make more informed decisions and choices in regard to alcohol education programs and activities.

7. Moves were noted toward 'peer led' approaches. Professional development resources were identified as needed to support such strategies. While the efficacy of peer led approaches is yet to be fully determined they nonetheless offer an opportunity to hear the authentic student voice and warrant closer consideration.

8. Processes are needed to help schools determine which approaches will fit best with their priorities/demographics/location/budget/human resources/school climate and so on. Such that, rather than attempting to implement a particular program, schools could follow a recognised diagnostic process to assist their decision-making about best options to suit their particular circumstances. To-date, however, no such tool has been developed to assist schools and teachers. There is a clear need for a tool of this type to be developed. Such a tool could also be incorporated within the website and online resources outlined under # 1 above.

9. Most schools are likely to need a combination of both universal and targeted programs; the former would address the needs of the large majority of students, while the latter would tackle more complex issues confronting the relatively smaller number of students engaged in risky behaviours, including drinking.

Part A:

Introduction

& Literature Review

This section contains:

Introduction

Patterns of Use

Review of Programs

Chapter 1 Introduction

The issue of youth binge drinking has received increased attention in recent years. Concern has grown in regard to real or potential harms associated with young people's drinking levels and patterns. Particular concern has been generated around the issue of 'binge drinking'.[3] Various options have been explored as possible means by which to address this issue of concern, not least of which is the question of the role of the schools.

This report was commissioned to explore the various options that exist for schools in addressing young people and alcohol. In making this examination, we have placed considerable emphasis on the role schools might play in the traditional areas of formal classroom based 'alcohol education'; but, we have also extended this examination to include a wider range of possible areas for involvement by schools. In expanding this focus, we have folded in consideration of related issues and areas of concern (e.g., the development of pro-social behaviours, mental health and wellbeing overall, and concepts of resilience and social connectedness).

No assumptions have been made about the role that schools *'should'* play in regard to young people and alcohol; rather, this report takes an independent and objective stance which allowed us to seek input from all key players including teachers, principals, parents, community members and most importantly the students themselves. It also afforded an opportunity to explore both what is currently underway across Australian schools and to gauge 'on the ground perspectives' of the appropriateness and success of such initiatives.

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[3] **Binge drinking**

'Binge drinking' has often been portrayed as a recent phenomenon unique to the current generation of youth. In reality, heavy drinking has been widespread in Australian society across many generations and is an established part of the Australian culture (Roche et al., 2008). In addition, there are arbitrary cut-off levels for what determines binge drinking and this may significantly influence prevalence data. While the meaning has changed over time, generally binge drinking refers to consuming 'excessive' quantities of alcohol in a relatively short space of time. However, there is no consensus on the parameters of quantity and time (Herring, Berridge, & Thom, 2008a; Herring, Berridge, & Thom, 2008b). Young people themselves describe binge drinking in terms of its effects, rather than quantities of alcohol consumed, and the intention to get drunk, socialise and have fun (Guise & Gill, 2007). Thus, the term 'binge drinking' lacks clear definition, contains substantial variability in what is meant by the term (sustained drinking over several days vs a single episode of acute intoxication) and there are numerous erroneous assumptions about it (e.g.,that it is a recent phenomenon and that only young people binge drink) (Herring et al., 2008b; Jefferis, Power, & Manor, 2005). Alternative terms include heavy episodic drinking, risky single-occasion drinking and extreme drinking (Herring et al., 2008b). The key concerns about this pattern of drinking relate to the short-term harms that arise from episodes of drunkenness (e.g., accidents, falls, violence), rather than the long-term consequences of drinking more than the recommended daily/weekly levels (Herring et al., 2008b).

Finally, we have incorporated findings from the peer reviewed literature across the domains of school-based alcohol education programs and resources,[4] family-based approaches and community-based approaches to assess the evidence of various forms of interventions and to determine their salience for the school setting. By combining our findings from these diverse sources of information and data we have been able to ascertain a set of practical, realistic, and evidence-based recommendations.

In undertaking this project we were also mindful that Australia has invested considerable resources into the question of the role of schools in relation to alcohol. This report is predicated on an understanding and appreciation of the work that has preceded it; including the development of teaching resources, substantial professional development opportunities, the establishment of the *Principles for school drug education*, as well as some important research initiatives. This project also forms an extension of earlier work undertaken through initiatives such as the National School Drug Education Strategy where states and territories were assisted to develop early intervention strategies for students at risk and to complement the preventive strategies that formed part of school drug education programs and policies.

1.1 What's the Issue

The high prevalence of risky drinking among young Australians (see Chapter 2 for further detail) has generated increased concern, and in this regard school-based alcohol and drug education programs can play an important role. Research shows that rates of drinking at harmful levels by 12–17 year olds have increased in the past two decades (White & Hayman, 2007).

However, qualitative studies report that young people's drinking varies depending on their motives for drinking (Kuntsche, Stewart, & Cooper, 2008) and the context in which they drink

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[4] **Alcohol education programs, resources, approaches and tools**

For the purposes of this review, alcohol education programs are any programs, strategies or interventions that consist of activities, services or policies directed at deterring, reducing or delaying initiation of alcohol use, and reducing alcohol-related problems in young people aged 12-18 years by influencing their knowledge of, attitudes toward, and behaviours related to alcohol consumption. A resource is a set of activities and materials that may be tailored to the needs of a specific population and tools are specific materials that assist educators to deliver alcohol education messages (e.g., 'beer goggles'). Programs may be structured and implemented as a complete package, or they may be used as a resource. Program fidelity becomes problematic where programs are used partially or as a resource. An approach is an overarching ideology (e.g., social and emotional learning) or mode of delivery (e.g., peer-led program). Programs that focus on treatment for individuals with diagnosed alcohol and/or drug problems or rehabilitation programs for those recovering from alcohol or drug problems are not included in this review.

(Herring et al., 2008b). In addition, they manage their drinking by using specific strategies to reduce harm (e.g.,pacing their drinking; organising designated driver). Nonetheless, frequency of drinking, regular drunkenness, binge drinking, and being drunk before the age of 13 years, are all indicators of an unhealthy pattern of alcohol misuse that is becoming more common (Lancet, 2008).

It has also been long recognised and acknowledged that schools have an important role in identifying and supporting students for whom alcohol (or other drugs) may be a problem. However, to-date there is no definitive view about how schools might be most appropriately engaged to address this issue of growing social concern, and an informed examination of these issues is required. For young people, alcohol education must compete with a plethora of conflicting messages from advertisers, parents, peers and the media as well as the developmental changes that occur during adolescence. Like many other student health and wellbeing issues, problematic alcohol use is a complex area and the appropriate prevention and intervention responses required are complex and multi-faceted. This endeavour is of heightened importance given the drinking culture among Australian's at large, including adults, that embraces alcohol consumption at risky levels. There is a clear need to also address these aspects of our cultural that contribute to youth binge drinking.

As part of the Australian Government's "National Binge Drinking Strategy", the *Role of Schools in Alcohol Education* project aimed to undertake a thorough investigation of existing research and school-based programs in the area of alcohol and youth binge drinking. The project aims were to:

1. Investigate existing research on alcohol education programs aimed at deterring and reducing alcohol use in secondary school students
2. Consult with experts and key stakeholders (e.g.,school staff and students, parents of school students) about their experience with school-based alcohol education programs
3. Provide practical recommendations to DEEWR.

Education pertaining to alcohol consumption is an important preventive tool and one of a number of elements employed to minimise alcohol-related harms that might be experienced by young people. Alcohol education can occur in a wide range of formats, including:

- Mass media campaigns – to raise awareness about alcohol issues
- School-based education programs – to minimise risks for young people
- Targeted programs – to reduce harms in particular at-risk groups or focus on specific problem behaviours (e.g.,"binge drinking", drink driving)
- Product warning labels – to inform consumers of alcohol content and potential harms

- Primary health care – to provide patient-specific information about alcohol consumption in certain medical conditions or with medications.

The list of alcohol-related negative outcomes for young people is extensive and spans all aspects of their lives, including problems related to physical and mental health, academic/educational performance, and family and social relationships (see Table 1.1).

Table 1.1 Potential physical, psychological, and social harms arising from alcohol use

Physical	Psychological	Social
Assault	Alcoholic psychosis	Academic performance
Injury and death (inc. drowning, fire, motor vehicle accidents)	Depression and other mental health issues	Effect on relationships
Alcoholic beverage poisoning	Self-harm, suicide	Legal ramifications
Chronic diseases (inc. cancer, heart failure, liver cirrhosis, hypertension, pancreatitis, stroke)	Impaired brain development	Workplace reduced performance and absenteeism
Sexual assault	Later risky drinking and dependence	Unemployment
Smoking and illicit drug use		Homelessness
Unprotected sexual intercourse		

NB: Table sourced from (Brown & Tapert, 2004; City of Sydney, 2003; Grant & Dawson, 1997; McGue, Iacono, Legrand, Malone, & Elkins, 2001; Pidd, Berry, Harrison et al., 2006; Pidd, Shtangey, & Roche, 2008; Ridolfo & Stevenson, 2001; Roche, Bywood, Borlagdan et al., 2007; Spear, 2000; Stueve & O'Donnell, 2005; Yu & Williford, 1992)

The greatest alcohol-related risk involving death or injury to young people is due to traffic accidents (passengers and pedestrians), falls and injuries. Other serious risks include unprotected sexual activity, violence (assaults and rapes), depression and self-harm. While some consequences are short-term, others are lifelong and exact substantial costs for the individual, their family, community and society as a whole. Adolescent problem behaviours also have a tendency to cluster together (Ellickson, Saner, & McGuigan, 1997).

Evidence of long-term neurobiological effects of alcohol use on the adolescent brain is also growing (Spano, 2003; Spear, 2000; Squeglia, Jacobus, & Tapert, 2009; White, 2003). Abnormalities in brain structure and functioning is noticeable in young people within 1-2 years of drinking more than 4-5 drinks per occasion and/or 20 drinks per month (Squeglia et al., 2009). Heightened vulnerability to the negative effects of alcohol consumption during adolescence may be attributed partly to neurologic, cognitive and social changes that occur at this time (Brown, McGue, Maggs et al., 2008).

Consumption of alcohol in Australia is culturally embedded and this is no different for young people (Roche, Bywood, Borlagdan et al., 2008). Drinking plays a significant role in the 'rites of passage' that young people often engage in as they transit from childhood through adolescence and into adulthood; and from school to university or work. Experimenting with alcohol (and also drugs) is one way in which young people establish their social identity and their independence from parents. Young people's risk-taking behaviour is maximised in the presence of peers and minimised when alone, suggesting that risk-taking may serve a social function during adolescence (Brown et al., 2008).

Young people's attitudes towards alcohol reflect a drinking culture that accepts intoxication as socially acceptable. For example, in a national survey in New Zealand, 59% of 12-17 year olds believed it was acceptable to get drunk compared to 39% of those over 18 years (De Bonnaire et al., 2004 in Clark, 2007). However, daily drinking was seen as problematic for both adults and young people, with most concern reserved for alcohol dependence and drink driving.

1.2   Risk and protective factors

Adolescents are not a homogeneous group. Their behaviours and attitudes towards alcohol use vary substantially from abstinence to regular heavy consumption. Research has identified a number of factors associated with increased risk of drinking at levels that cause harm (risk factors); and factors associated with reduced risk of drinking (protective factors) (Hawkins, Catalano, & Miller, 1992). There is an extensive literature pertaining to the risk factors and consequences of adolescent alcohol use (Best, Manning, Gossop, Gross, & Strang, 2006; Hingson, Edwards, Heeren, & Rosenbloom, 2009; NIAAA, 2004). While most attention in regard to risk and protective factors has been directed to individuals to this point in time, it is nonetheless important to note that risk and protective factors pertain not only to an individual but they also operate at the level of the society and community at large.

1.2.1   Risk factors

Young people who are male, young, socially disadvantaged and socially disconnected from others are at significantly greater risk for problematic alcohol use (Loxley et al., 2004). In addition, young people who grow up in families that lack the following elements are at increased risk for alcohol-related problems:

- no clear rules about AOD use
- low parental attachment

- minimal parental monitoring
- low self-esteem
- unstructured home environment (Schinke, Schwinn, & Cole, 2006).

Other risk factors for early and problem drinking include:
- associating with AOD using peers (Blum, Beuhring, Shew et al., 2000)
- perceived normality of heavy drinking among peers
- expendable income
- buying own alcohol or supplied by peers and older siblings
- family history of alcoholism.

A recent study of UK youth (15-16 years old) reported that binge drinking and frequent drinking were strongly related to expendable income, buying their own alcohol and getting alcohol supplied by friends and older siblings. In contrast, parental supply was associated with less bingeing; and membership in a youth group was also generally protective (but also associated with some bingeing).

A cross-sectional survey of over 3,000 11-12 year old students in 86 Melbourne primary schools showed that the key predictors for alcohol used differed between boys and girls. For girls, predictors were smoking (OR, 4.2[5]), parents' drinking (OR, 3.9) and friends' drinking (OR, 3.8); whereas for boys, predictors were friends' drinking (OR, 3.3), smoking (OR, 2.8) and poor literacy (OR, 2.6) (Hawthorne, 1996).

A more recent study of over 2000 students across 24 schools in Melbourne (Shortt et al., 2007) found that the biggest risk factors for students' alcohol use were:
- tobacco use
- number of school friends
- school friends' tobacco and alcohol use
- parents' tobacco and alcohol use
- parents allowing student's alcohol use
- parent-rated student hyperactivity symptoms.

These findings are comparable to previous research (eg, Hawthorne, 1996, which also found poor literacy was a risk factor for male students).

Evidence, primarily from the US and Western Europe, indicates a strong association between the age at which a young person starts to drink alcohol and later risky drinking (DeWit, Adlaf,

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[5] Odds Ratio is a measure of the degree of association. In this case, the odds of a smoker drinking alcohol were 4.2 times higher compared with the odds of a non-smoker drinking alcohol.

Offord, & Ogborne, 2000; Grant, Stinson, & Harford, 2001; Pitkanen, Lyyra, & Pulkkinen, 2005; Young, Hansen, Gibson, & Ryan, 2006) and alcohol dependence (Grant et al., 2001; Grucza, Norberg, Bucholz, & Bierut, 2008; Hingson, Heeren, & Winter, 2006). Hingson et al. (2006) found individuals who started drinking before the age of 14 were 1.8 times more likely to develop alcohol dependence in later life compared to individuals who started drinking at or after 21. Family history of early-onset alcoholism or drug use (before 15 years of age) has also been identified as a major risk factor for heavy alcohol use (Kumpfer, 1987).

The school environment itself may also influence alcohol use. For example, low perceived school satisfaction and dislike of school has been found to be associated with increased alcohol use (Andersen, Holstein, & Due, 2007). Similarly, students' perception of 'alienation' from school is associated with smoking and alcohol use in 11-16 year olds (Nutbeam, Smith, Moore, & Bauman, 1993).

Drunkenness in school students has also been found to be differentially associated with socioeconomic status (Andersen et al., 2007). Drunkenness was more likely in:

- high SE girls with poor school satisfaction
- high SE boys with high autonomy in decision-making
- intermediate SE boys with poor school satisfaction
- low SE boys who disliked school and had weak parental support in school-related matters.

1.2.2   Protective factors

Five key family factors have been identified that protect against adolescent alcohol use (Bry, Catalano, Kumpfer, Lochman, & Szapocznik, 1998). These include: supportive parent-child relationship, positive discipline, monitoring and supervision, family advocacy and seeking information and support for children. For example, family activities, such as dining together and attending religious services, and receiving parental praise are associated with reduced risk of adolescent alcohol use (Schinke et al., 2006).

Resiliency, or the ability to recover quickly from change or adversity and adapt positively to stressful situations, is a protective factor for preventing substance-related problems in young people (Dishion & Connell, 2006; Greenberg, 2006; Kumpfer & Bluth, 2004; Kumpfer & Summerhays, 2006). Parenting strategies that nurture resilience in children are important to maintain their natural inclination to resilience (Roche, 2006).

The strongest protective factors in Shortt et al.'s (2007) study of Melbourne school children were:

- student and parental school commitment
- parents attending brief alcohol education
- having two biological parents
- parental tertiary education
- parent-rated student prosocial behaviour
- parent-rated student peer problems
- being bullied
- being born outside of Australia.

The risk and protective factors associated with young people's alcohol use are summarised in Table 1.2 below.

Table 1.2 Summary of individual and social risk and protective factors associated with young people's alcohol use.

	Risk factors	Protective factors
Individual	• No clear rules about AOD use • Low parental attachment • Minimal parental monitoring • Low self-esteem • Expendable income • Buying own alcohol or supplied by peers and older siblings • Family history of alcoholism • Poor literacy • Tobacco use • Parents allowing student's alcohol use • Parent-rated student hyperactivity symptoms • Earlier age of initiation of alcohol consumption • Family history of early-onset alcoholism or drug use	• Supportive parent-child relationship • Positive discipline • Monitoring and supervision • Receiving parental praise • Resilience • Parents attending brief alcohol education • Having two biological parents • Parent-rated student prosocial behaviour • Being bullied • Being born outside of Australia
Social	• Unstructured home environment • Perceived normality of heavy drinking among peers • Number of school friends • School friends' tobacco and alcohol use • parents' tobacco and alcohol use • Dislike of school / alienation at school	• School satisfaction • Parent-rated student peer problems • Family advocacy and seeking information and support for children • Family activities, such as dining together and attending religious services • Parental tertiary education • Student and parental school commitment

Evidence indicates that adolescents with more risk factors and fewer protective factors are more likely to drink at levels that increase their risk for harm (Loxley et al., 2004). Nonetheless, the 'prevention paradox' exists for alcohol use in that while the majority of children drink at low levels most of the time a substantial proportion also drink from time to time at levels that places them at risk for harm. Thus, Loxley et al. suggest that universal alcohol prevention strategies are needed that are relevant to young people in general.

1.3 Issues of concern for adolescents

Irrespective of whether young people are drinking more or less, it is increasingly evident that they are starting to drink at an earlier age. Recent NCETA secondary analyses of the National Drug Strategy Household Survey indicates that they average age of initiation into drinking in Australia is 15 years for both males and females. In addition, young Australians are routinely exposed to:

- a culture of drinking that suggests drinking is a normal and expected behaviour in many social situations
- sophisticated marketing and advertising techniques that focus on image and social identity
- a constantly changing array of new (and youth-oriented) alcohol products.

Thus, education and prevention programs may need to be regularly updated and revised to ensure they are relevant and credible to the changing contexts of cohorts of young people. Part of this changing context includes the predominance of the imperatives around consumption. Young people are often the target of corporations that seek to build on consumer culture's values of excess, hedonism, materialism and individualism. Marketing and advertising agencies also hold up young people as a cultural ideal who embody these meanings. In doing so, the notion of 'youth culture' is commodified as a lifestyle that requires young people to actively distinguish themselves from others according to symbolic meanings constructed through consumer objects and services. This process of inclusion and exclusion has significant impact upon how young people build their identities and engage with the differences that are often emphasised in the formative years.

Although this is part of the everyday context that young people are forced to negotiate, it is arguable that young people do not have the adequate resources to deal with the issues pertaining to a heavily consumer driven society. Since the concept of 'youth' is such a valued commodity in our society, the education system has a large stake in helping young people critically understand themselves in this light.

1.4 Alcohol education and prevention

Alcohol education and prevention programs aim to reduce risk factors and enhance protective factors that delay initial use and reduce rates of heavy drinking. Primary prevention programs may target different sectors of the population (Botvin & Griffin, 2007). For example:

1. Universal programs focus on general population and aim to deter or delay initial use (e.g.,all school students in years 8-12)
2. Selective programs target subsets of a population that are at greater risk due to their membership in a particular group
3. Indicated programs focus on individuals identified as 'at risk' or engaging in risky behaviours.

1.4.1 Implications of different approaches

The universal approach does not single out a particular group as needing 'special' attention. While the selective approach carries the risk of labelling subsets of the population and augmenting potential problem (e.g., problematising a transient behaviour). Further to this, at-risk students targeted through 'Indicated' programs may already be difficult to reach, especially if they drop out early or there are high truancy levels. In these instances there is a need to provide adequate avenue for intervention/treatment etc if needed, as well as a need to ensure program is sufficiently 'sophisticated' to appeal to students who are already experienced in AOD use.

1.5 Rationale for alcohol education programs in schools

While most adolescents reduce their alcohol use after a short period of experimentation, a small proportion may progress to problematic use. The rationale for alcohol education programs in schools is that interventions or prevention programs that target young people at the beginning or before initial experimental use have the potential to deter use or discourage escalation of use.

Some studies suggest that the age at which alcohol is first used is a significant predictor of future alcohol use, especially problematic use (Lloyd, Joyce, Hurry, & Ashton, 2000). Thus, early education and prevention programs aimed at deterring young people's initial use of alcohol and tobacco may prevent or reduce their future drinking behaviour. One view is that alcohol and drug education programs should begin in primary school, as many children have already started using (at least in the case of smoking) by the time they reach high school (Lloyd et al., 2000). Lloyd (2000) for example argues for introducing programs into primary school to ensure they receive information and develop requisite skills before AOD experimentation begins.

McBride (McBride, 2003) described three phases of timing:

- *Inoculation phase*: programs delivered prior to initial experimentation when knowledge about AOD issues begins
- *Early relevancy phase*: programs delivered during period of initial exposure when AOD information and skills can be applied
- *Later relevancy phase*: programs delivered when use increases and context of use changes, such as exposure to older groups of drinking friends; and decisions about drinking and driving.

In terms of development, risk taking and sensation seeking is common behaviour in the 11-15 year age group. This may be due to the interaction between the socio-emotional and cognitive-control brain networks (Steinberg, 2007). While the socio-emotional network, which comprises the reward processing pathway, is engaged abruptly during puberty, the cognitive-control network, which entails self-regulation and planning, develops slowly during adolescence and matures in adulthood. In early adolescence, the socio-emotional network dominates and young people are more inclined to impulsivity and risk taking. As the cognitive-control network matures, the regulatory influence modulates such behaviour. Improved knowledge and understanding of these biological and neurological developmental factors have important implications for schools and school-based programs and activities that hitherto have not been comprehensively addressed.

1.5.1   The role of schools

Schools are well-situated to access young people less than 18 years of age. They provide a relatively efficient means of reaching large numbers of young people in the period during which they are likely to begin experimenting with alcohol, tobacco and other drugs (Botvin, 2000). Therefore, school-based drug and alcohol education programs are a common prevention strategy. The accessibility and relative stability of schools facilitate the introduction of prevention programs across multiple grades and time points (e.g.,booster sessions). However, students who drop out of school or are frequently absent are often those at greater risk of developing alcohol-related problems; and this at-risk group may miss out on classroom-based alcohol education programs.

School is an important social and learning environment that has the potential to influence children's academic future as well as their present and future health and wellbeing. Children who are not engaged with learning and have poor relationships with teachers and peers are more likely to use alcohol and other drugs, develop anxiety/depression, and fail to complete school (Bond, Butler, Thomas et al., 2007; Bond, Patton, Glover et al., 2004).

Increasingly it is recognised that parental, peer, community and cultural influences also impact on young people's alcohol and drug use. The school is not only a potential site for delivery of alcohol education, but also a social setting that, in itself, may influence adolescent alcohol and

drug use. For example, students are exposed to behavioural models, people with alternative views and expectations concerning alcohol use and, in some cases, access to alcohol (Evans-Whipp, Beyers, Lloyd et al., 2004).

School culture also plays an important role. School culture refers to the "set of values, attitudes and behaviours characteristic of a school" (Bisset, Markham, & Aveyard, 2007). While schools may be a convenient and efficient channel for reaching the majority of adolescents, there are some limitations to how much they can be reasonably expected to achieve. There are two main factors that impact on the capacity of schools to deliver effective alcohol education programs: 1) time; and 2) resources. Time required for implementing alcohol education and prevention programs is time lost from other areas of the school curricula. Curricula crowded with high priority topics will put pressure on a school's capacity to address alcohol or other health and wellbeing issues (Lloyd et al., 2000; Mathews, Werch, Michniewicz, & Bian, 2007). Similarly, poor funding may preclude some schools, particularly those with greatest need, from adopting additional programs.

1.5.2 Health Promoting Schools Framework

The Health Promoting Schools (HPS) Framework is seen by many as constituting best practice in relation to dealing with complex student health and wellbeing needs, and it provides a model for schools to plan and implement comprehensive strategies. A fundamental tenet of the HPS approach was the importance of linking classroom health and drug education to supportive school environments and to the family and the community overall to achieve maximum effectiveness and impact. Over the past decade, considerable attention has been directed towards facilitating the development of effective partnerships needed for comprehensive strategies to be implemented.

1.6 Types of alcohol education and prevention programs

All alcohol prevention programs are based on assumptions regarding what 'causes' or influences alcohol use among adolescents. In some programs, those underlying assumptions are made explicit (and may be based on social scientific theory relating to learning, risk taking, social processes and personality development, for instance), whereas in other programs they are merely implied. Over time, there have been a number of trends in the main risk factors and/or protective factors that school-based alcohol education seeks to address.

One of the most enduring features of alcohol education for adolescents is an emphasis on informing about the negative consequences of consumption. Although so-called information approaches have their place, the evidence suggests they are not particularly effective at prompting behavioural change, particularly if delivered in a didactic and non-interactive manner. In addition to 'lack of knowledge of consequences', other assumed risk factors include, inter alia, vulnerability to persuasive alcohol advertising and inappropriate role-modelling, positive 'expectancies' relating to alcohol use, low self-esteem and self-efficacy, limited decision-making and 'refusal' skills, inaccurate perceptions of peer alcohol use, and poor stress management skills. Thus, school-based alcohol education programs and approaches in Australia and elsewhere have been characterised by great diversity, stemming at least partially from the diversity of risk and/or protective factors they are seeking to address.

Some alcohol education programs concentrate on media literacy and seek to enhance adolescents' capacity to understand and resist alcohol advertising and other mass media messages about the desirability of drinking. Others (such as Life Skills Training) are more generally focused on competence enhancement (through teaching generic social and self-management skills, including skills in decision-making, problem-solving, goal setting ,and assertiveness) or improving individuals' self-esteem.

Some of the more recent approaches have focused on social processes, rather than individual/psychological factors, and have emphasised the need to promote and strengthen protective factors rather simply modify risk factors. These programs vary greatly according to a) the extent to which their underlying assumptions are explicitly stated and based on academic research; and b) the quality of the evidence pertaining to their effectiveness, either in a general sense or with particular target groups.

This scoping study has sought to create a picture of the 'lie of the land' relating to alcohol education in Australia. It seeks to unite two important kinds of information - 'what is known' about effective (and less than effective) approaches, drawn from various fields of academic literature, and 'what is being done' in terms of classroom-based and other forms of alcohol education, in secondary schools around the country. In doing so it, it will help inform policy development so that time, money, and energy can be more confidently directed to those alcohol education programs/approaches which hold the most promise for reducing alcohol-related harm among young people.

1.7 Aims and Research Questions

To examine these issues in detail, NCETA has undertaken a comprehensive examination of a wide range of factors of relevance to the role of schools in alcohol education. The principal aims of this scoping project were to evaluate the effectiveness of alcohol education programs and the implications of their use in Australian secondary schools.

The main research questions were:
1. what alcohol education programs have been used in secondary schools?
2. what alternative community- and family-based programs have been implemented to address alcohol-related issues for adolescents?
3. what are the perceptions of school personnel regarding the effectiveness of these programs for:
   a. deterring or delaying initiation of alcohol use
   b. reducing or eliminating alcohol consumption in those already drinking (both occasional and frequent drinkers)
   c. reducing or eliminating high-risk alcohol-related behaviour, such as drink-driving, unprotected and/or unintentional sex, violent or aggressive behaviour
   d. providing information about responsible drinking
   e. protecting young people from alcohol-related harms?
4. what are the experiences of key stakeholders with respect to alcohol education programs?

The next chapter in this report begins by mapping out the patterns and prevalence of alcohol use among young people aged 12-17 and identifies some of the risks and harms that can be associated with alcohol consumption among young age groups. After identifying some of the potential harms associated with particular patterns of alcohol use the following chapter presents the findings from a comprehensive literature review that examined the evidence base for interventions and programs that might be carried out in the classroom or the school in general, and family-based and community-based programs plus interventions that combine a variety of different strategies.

The subsequent sections of this report then present a series of chapters that provide details of the findings from the various data collections strategies undertaken specifically for this project.

The last chapter of the report pulls together key findings from each of the preceding sections and provides a summary overview and outlines a set of practical recommendations upon which further work in this area might be based.

Chapter 2 Patterns of Alcohol Use

The life course of alcohol use indicates that the proportion of young people who drink increases with age, peaks during late adolescence/early adulthood, then decreases in adulthood as responsibilities begin to accrue (Botvin & Griffin, 2007) (see Table 2.1). Embedded within this normative alcohol use trajectory are more specific pathways, such as the age of initiation, which has reduced over time; frequency and intensity of drinking (Maggs & Schulenberg, 2004).

Individuals who start drinking before 15 years of age are four times more likely to develop alcohol problems later compared with those who delay drinking until they are 21 (Grant & Dawson, 1997; Spear, 2000). Moreover, for each year that drinking is delayed beyond 15, likelihood of dependence reduces by 14 per cent. These statistics are particularly pertinent when it is considered that although the legal age for purchasing alcohol in Australia is 18 years, 43% of 12-17 year olds reported consuming alcohol at least once in the past month (White & Hayman, 2006). Age of initiation of alcohol consumption is also associated with a range of negative or risky outcomes in later life, including greater likelihood of: driving under the influence of alcohol (Haemmerlie, Montgomery, & Saling, 1994; Hingson, Heeren, Levenson, Jamanka, & Voas, 2002) alcohol-related motor vehicle accidents (Hingson et al., 2002); tobacco and marijuana use (Yu & Williford, 1992); unprotected sexual intercourse (Stueve & O'Donnell, 2005); lower educational achievement (McGue et al., 2001); depression, suicidal ideations, and suicide attempts (Swahn, Bossarte, & Sullivent, 2008); and violent behaviours (Swahn et al., 2008).

In Australia, recent analysis of the prevalence and trends in risky alcohol consumption in young people has shown mixed results (Livingston, 2008). For example, survey data of risky drinking patterns in 16-17 year-olds (National Drug Strategy Household Survey, Australian Secondary Students' Alcohol and Drug Survey, Victorian Youth Alcohol and Drug Survey) shows a significant increase between 1984 and 1993 (from 15% to 21%), with relatively stable proportions between 1993 and 2005. In contrast, data on alcohol-related harms (Victorian hospital admissions and emergency department presentations) showed little change in prevalence for 12-15 year olds, but a substantial increase in 16-17 years olds for 'acute intoxication', most notably in young women.

Factors that contribute to contrasting results from different types of data include:
- changes in recording practices (alcohol-related harms data) across this time span

- increased consumption which may occur in a small number of heavy drinkers not captured by the survey sampling frame (e.g.,left school early, live in house with no phone, homeless etc).
- Data from the two major alcohol datasets in Australia, the National Drug Strategy Household Survey (NDSHS), and the Australian Secondary Students' Alcohol and Drug (ASSAD) survey, are presented below.

2.1   Secondary Analysis of Data

Data presented here from the NDSHS are the results of secondary analyses conducted by NCETA on the 2007 survey, and, where noted, the 2001 and 2004 surveys. All NDSHS secondary analyses presented here were analysed in Stata 10.1. The analyses took into account the complex sampling strategy used by the NDSHS. The data for all analyses were weighted according to age, gender and geographical location.

It is important to keep in mind that the NDSHS may underestimate alcohol consumption (Stockwell, Donath, Cooper-Stanbury et al., 2004). Stockwell et al.'s (2004) analysis of the 2001 data found that the graduated frequency method, used to calculate the prevalence of short- and long-term risky alcohol consumption in the 2004 NDSHS, accounted for only 58% of alcohol sales in Australia. Potential reasons for this under-reporting may be under-representation of high risk drinkers, or respondents' poor recall or inaccurate understanding of what constitutes a standard drink. Hence, the prevalence rates for risky consumption presented in this report may be underestimates of actual prevalence in the Australian population.

2.1.1   Prevalence of risky drinking

Table 2.1 indicates the prevalence of low risk and higher risk drinking, according to the 2009 NHMRC guidelines for short term harm.

Table 2.1 Prevalence of 'Low Risk' and 'Higher risk' drinking (according to 2009 NHMRC guidelines for short term harms) at least monthly in the Australian population, by age (data from 2007 NDSHS)

	12-13	14-17	18-20	21-24	25-29	30-39	40-49	50-59	60+	Total
Non-drinkers	88.5%	37.9%	12.2%	13.8%	11.6%	12.2%	12.4%	14.0%	24.6%	19.3%
Low risk	11.1%	43.1%	38.3%	38.6%	46.9%	57.5%	61.1%	66.1%	65.2%	55.6%
Higher risk	0.5%	18.9%	49.5%	47.6%	41.5%	30.4%	26.5%	19.9%	10.2%	25.1%

Note. Non-drinkers = have not had a drink of alcohol in the last 12 months,
Low risk = exceeding 2009 NHMRC guidelines for low risk drinking for short-term harm (> 4 drinks) less than monthly,
Higher risk = exceeding guidelines for low risk drinking for short-term harm (> 4 harm) at least monthly.

Table 2.2 shows the prevalence of consuming more than 4 standard drinks on one occasion at least monthly. This cut off is derived from the 2009 NHMRC guidelines for levels of alcohol consumption associated with increased risk (Roche, 2009). Age categories were further refined to examine young people aged 12-19 years old in more detail. The analyses indicate that the proportion of young people aged 16-17 and 18-19 drinking at this level of risk has decreased from 2001 to 2007 (age categorisations based on Australian Institute of Health and Welfare, 2008). For 12-15 year olds, the proportion has been stable.

Table 2.2 Prevalence of consuming more than 4 standard drinks on one occasion at least monthly (data from 2007 NDSHS)

	12-15	16-17	18-19
Males			
2001	N/A[1]	40%	63%
2004	5%	38%	58%
2007	3%	32%	51%
Females			
2001	N/A[1]	38%	51%
2004	5%	30%	47%
2007	6%	26%	46%
Total			
2001	N/A[1]	39%	57%
2004	5%	34%	53%
2007	5%	29%	48%

[1]12-13 year olds were not surveyed in 2001, so percentages would only reflect 14-15 year olds, and hence are not comparable. Values for the 14-15 year olds in 2001 were: Males – 26%, Female – 19%, Total – 23%.

Table 2.3 shows the prevalence of alcohol consumption for 12-17 year olds, and changes from 1999 to 2005 from the Australian Secondary Students' Alcohol and Drug Survey. While lifetime use, use in the last month, and use in the last week has decreased over this time period, the percentage of secondary school students drinking at harmful levels,

and the average number of standard drinks being consumed per week, has remained constant.

Table 2.3. Changes in prevalence of drinking and harmful drinking amongst 12-17 year old secondary school students, from the Australian Secondary Students' Alcohol and Drug Survey (reproduced from White & Hayman, 2006)

	Gender	1999	2002	2005
Lifetime use	Male	90**	90**	87
	Female	87	87	85
	Both	89**	88**	86
Use in last month	Male	51**	52**	45
	Female	47**	47**	42
	Both	49**	49**	43
Use in last week	Male	36**	37**	30
	Female	32**	31**	27
	Both	35**	34**	29
Harmful drinking	Male	10	10	9
	Female	10	10	9
	Both	9	10	9
Average number of standard drinks per week	Male	7.5	6.8	7.6
	Female	5.4	5.4	5.5
	Both	6.5	6.1	6.5

** significantly different from 2005 at $p<.01$. Means are based on unweighted data. Harmful drinking for males defined as consuming more than 6 drinks on any day in the week before the survey and for females, consuming more than 4 drinks on any day in the past week.

Chapter 3 Review of programs/resources

A wide range of prevention programs and resources have been developed that aim to deter use, delay initial use, or reduce harm associated with alcohol and other drug (AOD) use in young people. Most of these programs are designed to be implemented in schools, which provide relatively easy and convenient access to a large proportion of children up to 18 years of age. For schools, however, the bewildering array of available programs makes the task of determining which program/s are optimal for their student population challenging.

The first step in this project was to examine the available evidence of effectiveness of alcohol education programs that targeted adolescents at secondary school. To do this we conducted a literature review.

This chapter provides a summary of the existing evidence of the effectiveness of a range of different approaches to alcohol education for secondary school students. Here we describe the types of programs and resources[6] that are available in Australia and internationally, the evidence of their effectiveness for reducing alcohol-related harms, and a summary of the key elements that contribute to effective programs. The chapter is structured as follows:

- Literature review methods
- Evidence base – a brief description of the available research evidence
- School-based programs and resources – description and evidence of effectiveness of alcohol education programs implemented in secondary schools, both within the classroom and across the whole school environment
- Family-based programs – description and evidence of effectiveness of alcohol education programs for adolescents that involve parental influences and family management
- Community-based programs – description and evidence of effectiveness of alcohol education programs for adolescents that incorporate a wider range of community influences that impact on young people's alcohol-related behaviour
- Combined programs – description and evidence of effectiveness of alcohol education programs that include combinations of school, family and community elements
- Other programs and tools – description and evidence of effectiveness of alternative programs, components of programs or tools that may be used to influence young people's behaviours related to alcohol use
- Summary and conclusions.

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[6] Programs, approaches, resources and tools are defined in more detail in Chapter 1.

3.1 Literature Review - Methods

Literature pertaining to alcohol (and other drugs) education and prevention programs for school-aged children is extensive. Due to time constraints, it was not feasible to conduct a systematic search and evaluation of the literature. Instead a comprehensive descriptive literature review was undertaken. Database searches were limited to the period from 1998 to May 2009. However, older studies frequently cited in more recent relevant studies, were also included where they contributed important findings to the evidence base. Studies conducted more than 10 years ago have been evaluated in existing systematic literature reviews (included in this review), often had poor research methodology (as noted by McBride, 2003) and were likely to be less relevant to current practice and policies in schools. Overall, studies were selected for inclusion on the basis of quality and relevance.

The evidence base for this review was collected from the following sources (Table 3.1):

- Electronic databases (1998 – March 2009)
- Scanning recent peer-reviewed journals (2008 – March 2009)
- Relevant websites and Grey literature (published and unpublished articles and reports)
- Project Reference Group members
- Reference lists of relevant identified papers.

Table 3.1 Recent peer-reviewed journals and databases searched

Peer-reviewed journals	Electronic databases
Drugs: education, prevention & policy	PubMed
Drug & Alcohol Review	PsycInfo
Health Education Research	Web of science
Journal of Adolescent Health	Cochrane library
Journal of Alcohol & Drug Education	CINAHL
Journal of Drug Education	ERIC
Journal of Studies on Alcohol	Current contents
Journal of Studies on Alcohol & Drugs	Science citations
Preventive Medicine	Social science citations
Substance Use and Misuse	

3.1.1 Scope of the review

Articles were selected for review on the basis of the following criteria:

- *Type of intervention or resource*: education or prevention program or materials that addressed alcohol use and alcohol-related issues.
- *Target population*: secondary school students. Programs that specifically targeted primary school, university (college) students or the general public were excluded.
- *Outcomes of interest*: Alcohol consumption (e.g., initiation drinking, quantity and frequency of drinking) and alcohol-related behaviours; other indirect measures associated with alcohol use, such as truancy, fighting, aggression and reduced academic performance. Programs that included only measures of tobacco use, illicit drug use, or other risky behaviours (e.g., sexual activity) were excluded. Studies that only reported client satisfaction survey data on programs were excluded as they provide no evidence of effectiveness.

The search strategy for electronic databases entailed the use of a combination of search terms (textwords and MeSH terms), including: (alcohol*; drinking; substance*; drug*) AND (education; prevention; program*) AND (school; child*; adolescent*; student*).

All potentially relevant papers and reports were collated in an Endnote library and comprised over 600 citations.

Studies that evaluated the effectiveness of alcohol education programs and resources were critically appraised according to the dimensions of evidence defined by the National Health and Medical Research Council (NHMRC, 2000). The NHMRC dimensions of evidence include the strength of the evidence (level and quality of evidence and statistical precision), size of the effect and the relevance of the evidence. Studies that provided a higher level of evidence, such as randomised controlled trials (RCTs) or systematic reviews of RCTs, were given greater credence in evaluating the effectiveness of programs as study design was used as an indicator of the degree to which bias had been eliminated by the design. Well-designed studies that minimised biases by following good quality research practices, such as including appropriate control groups, baseline measures, concealment of allocation, blinding, intention-to-treat principles and complete follow-up of participants, were considered more likely to yield robust and reliable findings.

Quality of evidence criteria developed by the Cochrane Effective Practice and Organisation of Care (EPOC) review group (EPOC, 2002) were used to evaluate study quality. In addition, findings from good quality studies that provided longer-term follow-up data and/or were tested independently in multiple settings were considered more reliable. Where possible, we also examined process outcomes to determine the extent to which the programs had been implemented within schools (compliance) according to the program principles (fidelity). The effectiveness of a particular program may be compromised if implemented sporadically and/or in part only (e.g., selected components delivered to Year 12 students one year but not the next).

Based on the dimensions of evidence described above (level, quality, statistical precision, effect size, relevance), we examined how well the available evidence supported the implementation of each program. For this purpose, we developed grades of recommendation that were modified from those developed by the Joanna Briggs Institute (2004) (http://www.joannabriggs.edu.au). The grades of recommendation are listed in Table 3.2.

Table 3.2 Grades of recommendation

Grade	Effectiveness	Based on
A	Established to a degree that merits application	Robust positive outcomes from multiple independently evaluated RCTs or meta-analyses or independently evaluated controlled studies
B	Established to a degree that warrants consideration	Overall positive outcomes from independently evaluated controlled studies
C	Established to a limited degree	Some positive outcomes from at least one controlled study
D	Not conclusively established	Non-significant results; or program not formally evaluated
E	May not be effective	Evidence of ineffectiveness and/or negative outcomes (harm)

Identified programs were categorised into five main approaches:

1. School-based (classroom or whole-of-school)
2. Family-based
3. Community-based
4. Combined (combinations of 1-3)
5. Other.

Each program is described briefly, evidence of effectiveness is summarised in accompanying tables and the strengths and limitations of programs outlined.

3.1.2 Limitations of the review

There are several limitations of the current review. First, this was not a systematic review and it is possible that some alcohol education programs were not identified and/or relevant studies evaluating program effectiveness were not located. Second, evidence suggests that studies demonstrating statistically significant effects are more likely to be published (McCambridge, 2008; Sridharan & Greenland, 2009). This is most common for commercial entities that have no incentive to publish negative or non-significant findings and no tradition of doing so. Such publication bias masks the true number of program evaluations, which may include non-significant or negative findings, and may lead to an overestimate of intervention effects. Third, most studies evaluating the effectiveness of

school alcohol education programs had a similar and relatively narrow focus. That is, most studies were based on:

- US experience – the focus is on abstinence and the cultural context differs from the Australian setting
- White middle class populations – not necessarily generalisable to other populations
- Programs developed by research organisations – overlooks activities that may occur at the community level, or programs developed and tailored for specific school populations.

3.2 Evidence Base

A scoping search of the literature generated over 600 citations associated with alcohol education and prevention programs for young people. A major challenge in evaluating this research was the wide variety in approaches. Studies varied substantially across settings, target populations, study design and quality, program components, targeted substances, measures of effect, and length of follow-up. Studies were conducted predominantly in the US and differ in their legislative and ideological basis compared to Australia. For example, the legal age for purchasing alcohol is 21 years compared to 18 years in Australia; and US alcohol policy is based on an abstinence model, compared to the harm minimisation approach used in Australia. These are key areas of difference that impact strongly on young people's alcohol use. Therefore, these factors must be taken into account when interpreting results from US studies. While other countries, such as New Zealand and UK, also differ from Australia in some respects, they are more closely aligned to the Australian setting.

Contemporary alcohol education and prevention programs have largely shifted over time from traditional information- and fear-based didactic programs, through more comprehensive, interactive social skills and competence-enhancement programs, to more broadly based multi-level ecological approaches to health promotion.

3.2.1 Methodological issues and quality of research

Numerous AOD prevention programs have been developed and many of these were proclaimed as effective, often in the absence of good quality evaluation research (Gandhi, Murphy-Graham, Petrosino, Chrismer, & Weiss, 2007). Criteria used to measure the effectiveness of programs that commonly appear on US lists of "exemplary" and "model" programs and the findings from studies on which these lists are based have been called to question (Gorman, Conde, & Huber, 2007).

The US has been at the forefront of developing alcohol and drug prevention programs for schools and in an effort to encourage schools to adopt best practice, the US Department of Education developed a set of principles[7] of effectiveness for substance use programs. Since the first *List of Exemplary and Promising Prevention Programs* was released in 2001, another six lists have been produced that identify 'scientifically proven substance prevention programs[8,]' (Gandhi et al., 2007, p23). However, researchers argue that the criteria for determining effectiveness were weak and inconsistently applied across programs (Gandhi et al., 2007; Skager, 2007). Moreover, US schools use these lists to select a suitable program and if the basis on which programs are designated as effective is flawed, the mere presence of a program on such a list lends it a degree of certainty and credibility that may not be warranted.

A variety of weaknesses were apparent in the available research, ranging from poor study design to inappropriate measures and data analyses. In addition, many programs were evaluated by the program developers. In the absence of independent evaluation, potential negative or non-significant effects are rarely reported.

We found similar shortcomings in the evidence evaluated for the current review. Some limitations of the studies included poor study design, inadequate measures of effect, inappropriate data analyses, insufficient follow-up period; and poor reporting of results.

3.2.1.1   Study design

Ideally, direct evaluation of the effectiveness of school-based alcohol prevention programs would entail a rigorously controlled longitudinal study that tracks participants for 10 to 20 years. However, numerous ethical, design, resource and implementation challenges preclude conducting such a study.

Few studies identified in the literature were considered good quality. Few studies took adequate steps to protect against bias (e.g., random allocation to groups); use adequate control groups (e.g., equivalent or matched controls); provide sufficient baseline information; minimise attrition rates; or conduct long-term follow-up. Consistent with findings from other reviews (Foxcroft, Lister-Sharp, & Lowe, 1997; Tobler, 1997; White &

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[7] Principles incorporated into the 'No Child Left Behind' Act; and 'qualifying programs funded by the US Department of Education (Safe and Drug Free Schools (SDFSC)) state grants.
[8] Programs were rated as "effective", "model" or "promising".

Pitts, 1998), more recent studies in the current review were of higher quality as they tended to apply more appropriate methodologies for evaluating programs.

Most studies did not use an intervention control, a practice which is likely to produce positive results in the intervention group – 'something is better than nothing'. For example, advocates of the DARE program (discussed in more detail below in 3.3.8) accurately report that most children who have received the program do not develop AOD-related problems. However, even without any intervention, most children do not engage in problematic AOD use (Lynam, Milich, Zimmerman et al., 1999). Hence a claim that such a predictable outcome is due to a specific program is misleading. It is only where one intervention has been compared to another that the efficacy of a particular program can be determined. Results from studies comparing two interventions showed a greater likelihood of small or non-significant differences between interventions.

3.2.1.2 Measures of effect

One of the most important challenges for evaluating any alcohol education program is the selection of appropriate measures of effectiveness. If the overall aim[9] of a program is to prevent alcohol-related harm in adolescents, then researchers must find suitable ways to assess potential changes. Often it is not ethical or feasible to measure behaviour directly through observation or collect biological samples for testing. Therefore, intermediate or proxy measures of effectiveness are commonly used to infer future outcomes, such as social benefits derived from reduced alcohol consumption. Intermediate measures include knowledge about alcohol, attitudes towards alcohol use, or intentions to use alcohol; and proxy measures include self-esteem, resilience and psychological wellbeing.

The majority of studies relied on self-report information, which may be subject to systematic bias (e.g., social desirability bias) that may distort assessment of effectiveness. Measures of effect varied substantially between studies and were commonly based on measures of attitude, knowledge and intentions or psychological variables rather than measures of behaviour. That is, programs were more effective at changing attitudes or knowledge than behaviours related to alcohol use.

In addition, some programs were based on the notion that individual deficit underlies adolescent alcohol use. The underlying assumption is that teaching young people the

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[9] The issue of what the explicit aim of any alcohol education program is warrants close consideration and is discussed further in section 3.8.

requisite skills, such as resistance to pressure to drink, general life skills and social competence, will lead them to choose not to drink. Evaluations of such programs that have used increase in skills and competencies as evidence of effectiveness are flawed by circular reasoning. It is not surprising that adolescents skills in these areas improve after training, but it does not necessarily translate to a change in their alcohol-related behaviour, or reduction in harms (for details on negative effects of skills training, see Ashton, 1999).

Other studies have used a suite of different measures (e.g., daily, weekly, monthly, yearly and lifetime consumption) or collapsed continuous measures, which were not significant, into less sensitive dichotomous measures, which showed statistically significant differences between groups (Gorman, 2003). This type of adjustment in measures suggests that findings are measurement-dependent, rather than demonstrating the effectiveness of an intervention. Some studies conducted a large number of outcome measures (e.g., multiple substance use measures) and reported a small number of statistically significant results. For example, two of 100 measures were statistically significant in the Project ALERT intervention compared to controls.

In addition, some studies included measures of items that only students in the intervention group received (e.g., resistance skills), which is likely to bias outcomes in favour of the intervention group.

3.2.1.3 Data analysis

In some cases, researchers conducted multiple statistical analyses of selected sub-groups and post hoc sample refinement. For example, sub-group analyses of different intervention groups that yield significant differences only in 'high fidelity' groups or participants with a particular level of use (e.g., frequent users, experimenters) strongly bias results in favour of the intervention and mask negative factors about the intervention, such as how acceptable it is to participants. Researchers also re-selected from the sample, and used one-tailed tests of significance (Gorman & Conde, 2009). One-tailed tests of significance should be reserved for situations where there is robust prior evidence indicating only positive outcomes; and no likelihood of negative outcomes.

Another common flaw was that some studies that used 'schools' as the initial unit of allocation then used 'students' as the unit of analysis. However, students were not allocated randomly to schools and a variety of factors, including parental level of education, family income and size, school size and geographical location, school culture

and teaching style may influence outcomes such as academic achievement and social behaviour. A 'clustering effect' occurs in groups, whereby individuals within the group are more alike than similar individuals outside the group and, therefore, should not be analysed as if they were independent of each other. Using individual students as the unit of analysis when groups of students are allocated results in overly narrow confidence intervals and an overestimation of the effect size. Multi-level statistical analyses are required to account for clustering effects, yet most studies failed to do this when it would have been appropriate to do so.

In contrast, studies that randomised and analysed by individual may be subject to the problem of contamination as interventions are typically delivered to groups (e.g., class, school, community) rather than individuals.

3.2.1.4   Follow-up of participants

Another common problem for studies was the high rates of attrition, particularly for those that involved family or community participation and those with longer follow-up. Attrition of study participants between pre-test and post-test/follow-up potentially reduces the power and validity of a study. Intention-to-treat (ITT) analysis was typically absent in these studies, favouring positive outcomes that are not reliable. ITT is an important factor to consider when evaluating the effectiveness of interventions. In the real world, a proportion of those targeted for intervention will not receive it for a variety of reasons (refusal, dropouts, loss to follow-up). If results are extrapolated to the whole population, then they must include the proportion who fail to receive the intervention, not just the subset who were motivated enough to remain in a study.

Follow-up was typically less than two years after program implementation. Decay of effects was evident in those measuring longer-term outcomes.

3.2.1.5   Reporting

Poor reporting of methods was also common across the research literature. The main shortcomings in reporting were:
- Description of the intervention and/or control group was unclear
- Baseline characteristics were not reported
- Outcome measures were not well defined
- Level of exposure to the program was not reported
- Person delivering the intervention was not identified
- Consent and/or attrition rates were not reported

- Period of follow-up was not clear.

Determining the quality of research studies and interpreting results was limited in studies that failed to report such information.

Overall, there is a clear need for evaluation studies that employ rigorous methodologies, incorporating appropriate methods of randomisation, control groups (including alternative intervention controls), outcome measures (including process and impact outcomes), suitable long-term follow-up, statistical analyses that account for clustering effects and that are related to hypotheses (i.e., not applied in post hoc evaluations). Without such rigour, program effectiveness cannot be adequately determined. Where randomised controlled trials are not feasible, well-designed interrupted time series design may be appropriate.

3.2.2 Overview of existing reviews

Several reviews (systematic and non-systematic) were identified that evaluated prevention and education programs for alcohol (and other drugs). To avoid unnecessary duplication of effort, studies that had been assessed in existing systematic reviews were not re-assessed for the current review. This section summarises the results from the 12 systematic reviews and 13 other relevant reviews listed in Table 3.3.

Overall, reviews on the effectiveness of alcohol education programs showed mixed results. Some programs showed statistically significant improvements in reducing alcohol-related harms; many showed mixed effects, with improvements in some measures, but not others; others showed no significant effect; and some were associated with significant increase in alcohol use or other risky behaviour (Cahill, 2007).

An advantage of exploring existing reviews is that, while primary research studies typically evaluate one program against a control, or alternative programs, reviews often isolate the particular program elements that may, or may not, contribute to their success. Table 3.4 provides a list of key features that may contribute to a program's effectiveness. These features have been extracted from a range of different programs and approaches that have varying levels of evidence to support them. More details on individual programs and their evidence of effectiveness is provided in summary tables at the end of sections 3.3, 3.4, 3.5, 3.6 and 3.7. Summary tables also include grades of recommendation as described earlier (see Table 3.2).

Additional features of programs that had no evidence of effect, mixed results, insufficient evidence and negative effects are also provided in Table 3.5.

Table 3.3 Systematic reviews on education and prevention programs for alcohol and other drug use, by intervention setting (1997-2008)

Title	Focus	Intervention setting	Reference
School effects on young people's drug use	AOD	School	(Fletcher, Bonell, & Hargreaves, 2008)
School-based prevention for illicit drugs use	Illicit drugs	School	(Faggiano et al., 2005; Faggiano, Vigna-Taglianti et al., 2008)
A systematic review of school drug education	AOD	School	(McBride, 2003)
Characteristics of effective school-based substance use prevention	AOD	School	(Gottfredson & Wilson, 2003)
Effective ingredients of school-based drug prevention programs	AOD	School	(Cuijpers, 2002)
Meta-analysis of adolescent drug prevention programs	AOD	School	(Tobler, 1997)
Parenting programs for preventing tobacco, alcohol or drugs misuse in children <18	AOD	Family	(Petrie, Bunn & Byrne, 2007)
Primary prevention for alcohol misuse in young people	Alcohol	School Family	(Foxcroft, Ireland, Lister-Sharp, Lowe & Breen, 2002, 2003; Foxcroft et al., 1997)
Interventions for prevention of drug use by young people delivered in non-school settings	Drugs	Family Community	(Gates, McCambridge, Smith, & Foxcroft, 2006)
Effectiveness of health-promoting media literacy education	AOD	School Community	(Bergsma & Carney, 2008)
A systematic review of school-based studies involving alcohol and the community	Alcohol	School Community	(Wood, Shakeshaft, Gilmour, & Sanson-Fisher, 2006)
Educating young people about drugs	AOD	Schools and colleges Community Family General practice Mass media	(White & Pitts, 1998)

Other relevant reviews (non-systematic)	Focus	Intervention setting	Reference
Challenges in adopting evidence-based school drug education programmes	AOD	School	(Cahill, 2007)
Literature review: Best practices in school-based drug education for grades 7-9	AOD	School	(Roberts, 2006)
A review of 25 long-term adolescent tobacco and other drug use prevention program evaluations	AOD	School	(Skara & Sussman, 2003)
Family-based interventions for substance use and misuse prevention	Alcohol	Family	(Kumpfer, Alvarado, & Whiteside, 2003)
The role of the family in preventing and intervening with substance use and misuse: a comprehensive review of family interventions, with a focus on young people	AOD	Family	(Velleman, Templeton, & Copello, 2005)
Approaching alcohol problems through local environmental interventions	Alcohol	Community	(Treno & Lee, 2002)
Interventions to reduce harm associated with adolescent substance use	AOD	School Family	(Toumbourou, Stockwell, Neighbors et al., 2007)
A synthesis review of exemplary drug abuse prevention programs in the United States	AOD	School Family Community	(Winters, Fawkes, Fahnhorst, Botzet, & August, 2007)
Preventing substance use problems among youth	AOD	School Family Community Mass media	(Paglia & Room, 1999)
The prevention of substance use, risk and harm in Australia: A review of the evidence	AOD	School Community	(Loxley et al., 2004)
Research on alcohol education for young people: a critical review of the literature	Alcohol	School College Community	(May, 1991)
Preventing heavy episodic drinking among youth and young adults	Alcohol	School College Community	(Fluet-Howrish, 2005)
Principles of effective prevention programs	AOD Other risky behaviours	School Family Peers Community	(Nation et al., 2003)

3.2.3 Program elements

Most programs and resources have been evaluated to some degree and we have described the evidence for many of these in later sections. In addition, however, it is important to identify the individual elements of programs that may have contributed to a program's effects. In the absence of good quality evidence of program effectiveness and in situations where schools prefer a more flexible approach to alcohol education, programs and resources may be selected (or developed) based on the presence of key features that have shown positive effects.

While school-based AOD prevention programs varied substantially in their approach, components, targets and measures, there was also some consistency across reviews in terms of which features of programs they deemed to be effective, ineffective or lacking evidence of effectiveness. Table 3.4 shows features of effective programs that were identified in existing reviews.

Table 3.4 Features of effective programs

Key features	Item	Details
Approach	Social influence	Include skills training related to harm minimisation rather than resistance skills (Cuijpers, 2002; McBride, Farringdon, Midford, Meuleners & Phillips, 2004) (see 3.3.19 for more detail).
	Normative approach	Provide feedback on peers' AOD use, social acceptability, normative expectations and friends' reactions to AOD use (Cuijpers, 2002).
	Theory driven	Include a theoretical and conceptual justification, based on accurate information and supported by empirical research (Nation et al., 2003; Wagner, Tubman & Gil, 2004). Interventions based on theory explain development of adolescent behaviour and how such developmental pathways can be interrupted (Wagner, Tubman, & Gil, 2004).
Implementation process	Program fidelity	Effectiveness is often predicated on the fidelity of program implementation and the delivery of core components in the way they were originally intended (Wagner et al., 2004) (see summary for further discussion on fidelity vs flexibility).
Timing	Introducing alcohol education	Initiate programs early enough to have an impact on the development of potential problem behaviours and be sensitive to the developmental needs of participants (Nation, Crusto, Wandersman et al., 2003). Evidence suggests that programs delivered in late primary and early secondary school are more effective than those implemented in early primary or late secondary (Loxley et al., 2004).

Table 3.4 Features of effective programs (cont.)

Key features	Item	Details
Program elements	Comprehensive	Include multi-component interventions that address critical domains (e.g., family, peers, community) and influence the development and perpetuation of the behaviours to be prevented (Cuijpers, 2002; Flay, 2000; McBride, 2003; Nation et al., 2003).
	Socio-culturally relevant	Tailor to the community and cultural norms of the participants; and include the target group in program planning and implementation (Nation et al., 2003).
	Positive relationships	Provide exposure to adults and peers in a way that promotes strong relationships, such as parent-child communication, and supports positive outcomes (Cuijpers, 2002; Nation et al., 2003).
	Needs of target group	Engage students' interest and enthusiasm by using developmentally appropriate material that is based on the experiences of young people (McBride, 2003).
Content	Single substance focus	Focus on one substance (e.g., alcohol, tobacco, cannabis) compared to addressing multiple substances in one program (Tobler, 1997).
	Materials	Use relevant up-to-date materials that engage and empower students interactively compared to traditional didactic teaching materials (Wagner et al., 2004).
	Media literacy	Include a media literacy component that teaches children about how media messages differ from reality; their use of persuasive language and techniques; how media messages are embedded with values, stereotypes, and idealised lifestyles; and that their purpose is to gain profit or power, increased children's understanding of the persuasive intent in media messages, reduced their desire to be like the images portrayed, and reduced their expectation of positive consequences of drinking (Bergsma & Carney, 2008).
Mode of delivery	Interactive and activity oriented	Encourage students to exchange ideas and experiences and practice new skills (Cuijpers, 2002; Tobler, 1997; Tobler et al., 2000).
	Peer interaction	Provide opportunities for peer interaction (Tobler, 1992 in McBride, 2003). Comparison of programs led by teachers alone, peers alone and peers with teachers showed the highest positive benefit for programs run by peers alone. However, the positive benefit of peer-led programs disappeared when teachers were also involved (Cuijpers, 2002; Gottfredson & Wilson, 2003).
	Varied teaching methods	Use diverse teaching methods that focus on increasing awareness and understanding of the problem behaviours and on acquiring or enhancing skills (Nation et al., 2003).
Outcome evaluation		Provide clear goals and objectives and make an effort to systematically document their results relative to the goals (Nation et al., 2003).

Table 3.4 Features of effective programs (cont.)

Key features	Item	Details
Support	Supportive school policies and culture	A whole-of-school approach that enhances resilience and school/social connectedness was protective against a range different risk behaviours (Ostaszewski & Zimmerman, 2006; Resnick et al., 1997).
	Teacher training and skills	Include a teacher training component, provided by the program developers, to ensure that staff implementing the program is confident and enthusiastic about their role (McBride, 2003; Nation et al., 2003).

In contrast, Table 3.5 shows program components that had no evidence, mixed results or insufficient evidence of effectiveness for changing young people's alcohol-related behaviour.

Table 3.5 Program components which have no evidence, mixed results or insufficient evidence of effectiveness

Key features	Item	Details
No evidence of effect	Alcohol knowledge	While adolescents need to know about alcohol and potential consequences of drinking, knowledge alone is insufficient to change behaviour and information-only programs have not reduced alcohol consumption or alcohol-related harms in young people (Foxcroft, Ireland, Lister-Sharp, Lowe, & Breen, 2003; Tobler, Roona, Ochshorn et al., 2000; White & Pitts, 1998).
	Self-esteem enhancement.	Not protective against risky alcohol use (Cuijpers, 2002; Tobler, 1997).
	Psychological wellbeing enhancement	Not protective against risky alcohol use (Cuijpers, 2002).
	Scare tactics	Showing students scenarios or the serious harms that may happen to them from risky use of alcohol did not deter them or result in decreased use (Midford, 2000; Tobler, 1997). See below for more detail.
	Intensity of program	Programs with many contact hours (e.g., >10) were not more effective than brief programs (Cuijpers, 2002).
Mixed results	Length of program	While some reviews report that longitudinal programs were more effective (McBride, 2003); others showed no evidence that programs delivered over a long period of time were more effective than brief interventions once other program features were controlled for (Gottfredson & Wilson, 2003).
	Booster sessions	Additional sessions that reinforce and extend alcohol education throughout the school years (McBride, 2003; White & Pitts, 1998). Results were mixed, as one study showed booster sessions were effective in a peer-led program, but showed worse outcomes for a teacher-led program (Botvin et al., 1990 in Cuijpers, 2002). Therefore, booster sessions may be effective, but may depend on other features of the program.

Table 3.5 Program components which have no evidence, mixed results or insufficient evidence of effectiveness (cont.)

Key features	Item	Details
Mixed results	Universal programs	Universal programs had mixed results; with less effect demonstrated for at-risk students who responded better to a targeted approach; however, the evidence was weak as the number of studies was small (Gottfredson & Wilson, 2003).
	Developmental stage of students	Intuitively, it makes sense that school-based programs should be developmentally appropriate. Although it is commonly recommended in the literature, few studies have adequately tested this premise. There was no significant difference in outcomes for programs implemented in elementary (primary), middle or high school (Gottfredson & Wilson, 2003). However, the level of evidence is relatively poor and outcome measures may not have been appropriate.
Insufficient evidence (not adequately evaluated)	Expert presentations	One-off presentations delivered by experts; or personal experiences of individuals affected by alcohol (e.g., individuals injured in drink-driving incidents) have not been evaluated formally. Anecdotal evidence (see findings from school consultations) indicates that students and teachers like these scenarios, but there is no evidence to suggest that they influence young people's alcohol-related behaviour.
Evidence of negative effects	Social competence training	Enhancing children's social competence was associated with increased alcohol use (Ashton, 1999; Scheier, Botvin, Griffin, & Diaz, 1999); no evidence of effect (Cuijpers, 2002).
	Sports participation	Increased sports participation was associated with more alcohol use (Eitle, Turner, & Eitle, 2003).
	Resistance skills training	Enhancing resistance skills without normative education increased estimates of alcohol offers; and increased alcohol use in high-risk students (Werch & Owen, 2002); no evidence of effect (Cuijpers, 2002).

3.2.3.1   Scare tactics

There is mixed evidence concerning the effectiveness of scare tactics in health promotion. The 'Grim Reaper' AIDS campaign in the 1980s is frequently held up as proof of the efficacy of the approach (Harcourt, Edwards & Philpot, 1988; Morlet, Guinan, Diefenthaler & Gold, 1988; Rigby, Brown, Anagnostou, Ross & Rosser, 1989; Taylor, 1998). The issue is extremely complex. Research indicates that fear-arousing campaigns are often effective in raising awareness and changing attitudes, but only some campaigns show an improvement in the targeted behaviour (Hastings, Stead, & Webb, 2004). However, this behavioural change may only occur in certain populations or individuals, or under certain circumstances. Furthermore, as is the case in school-based alcohol education, the dearth of well-designed and conducted evaluations of such campaigns further complicates the task of assessing the use of fear in health promotion.

There is some evidence that over time, people can become 'immune' to the effect of fear appeals. For instance, research into smokers' reactions to warnings on cigarette packs indicated that 'smokers become inured to pack warnings over time and are adept at screening them out' (Devlin, Eadie, Hastings, & Anderson, 2002). People also 'process' scare tactics in complex ways, and some may have 'maladaptive responses' to the message - for example by 'acknowledging a threat as relevant (e.g., "lung cancer is a risk because I smoke") without accepting their own susceptibility (e.g., "I will not contract lung cancer because neither my mother or grandfather have it and both have smoked all their lives")' (Ruiter, Abraham, & Kok, 2001).

Other maladaptive responses to scare tactics include avoiding or tuning out the message, and counter-argumentation (which challenges the authenticity or accuracy of the message) (Hastings et al., 2004). This can equally apply to youth drinking. For example, an adolescent can know and accept that binge drinking causes brain damage, but may simultaneously hold the view that they will not suffer brain damage because their older siblings and friends drink heavily and "are okay". Alternatively, they may choose to focus on how 'other people' drink more or take other drugs, which may diminish their own sense of vulnerability and motivation to change their behaviour.

Separate to the issue of whether or not scare tactics 'work' is the issue of whether they can have negative unintended consequences. There is some evidence that the anxiety resulting from seeing graphic and emotionally confronting images may lead some individuals to engage in risky behaviours such as smoking or overeating, "as coping mechanisms to (temporarily) relieve the negative emotion" (Mayne, 1999). A recent article by Jessop and Wade (2008) warned that:

> *"health promotion campaigns which focus on the mortality-related risks of performing a health detrimental behaviour might paradoxically precipitate increased willingness to perform the behaviour among those the campaign is most probably aimed at"* (Jessop & Wade, 2008).

In short, there is mixed evidence of the effectiveness scare tactics in health promotion, and some evidence that their use can inadvertently cause harm. Furthermore, they run the risk of being dismissed as unrealistic and therefore irrelevant, or 'demonising' the people who engage in the targeted behaviours. Some commentators regard such fear appeals as fundamentally unethical, since they deliberately foster anxiety in an effort to manipulate human behaviour (Hastings et al., 2004) and may further disempower the least empowered segments of society.

While children may find horrific stories memorable, it does not mean they will automatically change their behaviour. Moreover, scare tactics may inadvertently glamorise risky behaviour, enhancing the 'hero' status of individuals who survived negative consequences of risky drinking, and increasing the appeal of engaging in risky behaviour (Cahill, 2007).

3.2.4   Sphere of influence

It is well recognised that the sphere of influence on children extends beyond the classroom and some reviews examined the effects of approaches that included whole-of-school, family and community influences.

The whole-of-school approach, which includes a range of school-level factors (e.g., policies, practice, culture, environment) that may influence young people's use of AOD, was examined in four high quality studies included in a recent systematic review (Fletcher et al., 2008). The programs were the two US-based programs: the Aban Aya youth project (Flay, 2000) and D.A.R.E. Plus (Perry et al., 2003); the Australian Gatehouse project (Bond et al., 2004); and The Netherlands' Healthy School and Drugs project (Cuijpers, Jonkers, De Weerdt, & De Jong, 2002)[10]. Evidence indicated that schools that take a whole-of-school approach by promoting positive school connectedness and reducing students' disaffection may be more likely to reduce alcohol-related harms and other risky behaviours.

The influence of family and parenting programs on young people's use of alcohol was explored in four systematic reviews (Foxcroft et al., 2003; Petrie, Bunn & Byrne, 2007; White & Pitts, 1998; Wood et al., 2006) and several non-systematic reviews (Kumpfer et al., 2003; Loxley et al., 2004; Velleman et al., 2005). Programs that included school and parental involvement demonstrated small effect sizes, with minimal reduction in alcohol use. However, the evidence base was limited and there were few good quality studies available for evaluation. Low recruitment and high attrition rates beset most of the available studies. Nevertheless, reviewers generally agreed that programs containing a parenting/family component were 'promising'.

School-based alcohol education interventions that included community involvement were also evaluated in a recent systematic review of 16 studies (Wood et al., 2006). Approximately 94% of programs included classroom-based education; 56% involved

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[10] DARE Plus and the Gatehouse Project are discussed in more detail below (3.3.8 and 3.3.3).

parents; 50% included other student activities; 38% involved the local community; and 25% included a peer education component. Additional components were involvement with: alcohol retailers; media; and community services organisations. Wood et al. reported that a small number of studies that included community involvement (e.g., media, alcohol retailers, community services) showed promise.

In the following sections, alcohol education programs are organised into five areas that are listed in Table 3.6.

Table 3.6 Alcohol education programs and resources reviewed

Focus of delivery	Program/Resource	Page
	Get REDI	58
	MindMatters	59
	Gatehouse	61
	CLIMATE	62
	Social Norms approach	63
	Social & Emotional learning	65
	Rethinking Drinking	67
	DARE	68
	Alcohol Misuse Prevention	70
	EU-Dap	71
	Keepin' it REAL	72
3.3 School-based	Life Education Centres	73
	Life Skills Training	74
	Life Skills Program (LSP ISPY)	76
	Project ALERT	76
	Project PRIDE	78
	Protecting You/ Protecting Me	78
	RRISK	79
	SHAHRP	80
	Skills for Adolescence	81
	Keep a Clear Mind	102
	Personality Risk Factors	82
	Other school-based	
	PACE	96
	Strengthening Families	96
	Families in Action	96
3.4 Family-based	Family Matters	96
	Orebro prevention	
	Parents Under Pressure (PUP)	
	Other family-based	

Table 3.6 Alcohol education programs and resources reviewed (cont.)

Focus of delivery	Program/Resource	Page
	Midwestern Prevention Project	113
	Start Taking Alcohol Risks Seriously	114
	Project Northland	115
	Community Trials Project	116
	Youth Access to Alcohol	118
	Trelleborg Project	119
3.5 Community-based	Village	120
	Thinking Not Drinking	121
	Xperience	122
	Party Safe	84
	Save-A-Mate	84
	Road Ready	84
	Good Sports Program	122
	SFP + LST	
	Pathways to Prevention	128
	DARE Plus	131
3.6 Combined	Blueprint	131
	Adolescent Transitions Program	128
	Communities Mobilizing for Change	133
	School-based parental education program	128
	Illawarra Drug Education Program	135
	Universal media messages	140
3.7 Other approaches	Internet	140
	Peer-led approach	
	Fatal Vision Goggles	143

The following sections examine the available evidence of the effectiveness of these different approaches. Where possible, we have identified common areas of consensus in reviews and primary research to indicate programs and program elements that showed evidence of effectiveness and those that failed to demonstrate effectiveness. In addition, we have identified programs and elements requiring further research where there was inconsistency or insufficient evidence available.

The following sections briefly describe the programs and present evidence of their effectiveness for deterring and reducing alcohol use in young people and preventing alcohol-related problems. Comparison tables are provided at the end of each section.

3.3 School-based Approaches

This section of the report addresses school-based approaches to alcohol education, and includes both classroom-based and whole-of-school programs and interventions. It aims to provide a broad overview of the main projects/programs and resources both in Australia and overseas and also presents brief details about the current evidence base for each approach.

Early classroom-based approaches to alcohol use prevention were grounded in learning theory, which assumes that students are rational information-seekers and decision-makers and that once they receive the appropriate information, their behaviour will simply follow. These early programs were developed to disseminate information about alcohol, warn students of the negative consequences of alcohol use, and suggest healthy alternative behaviours. While these types of programs have reported some success in changing knowledge, attitudes or beliefs, there is little evidence to support changes in alcohol-related behaviour (Botvin, 2000; Botvin & Griffin, 2007; White & Pitts, 1998). Moreover, there is some evidence to suggest that fear warnings about the mortality risks associated with alcohol use inadvertently "precipitate the very behaviours which they aim to deter" (Jessop & Wade, 2008).

Despite wide acknowledgement of the shortcomings of the informational approach, it remains relatively widespread, and many classroom-based programs are either based on it or retain elements of it. However, many of the more recent approaches place less emphasis on knowledge acquisition and more emphasis on skill development (including resistance skills and harm minimisation) and also focus on social influences to locate alcohol use within a wider social context. Programs with a peer-led component (see 3.7.3 for more detail) are also increasingly popular and many, which are not actually delivered by students, are still broadly grounded in a philosophy of 'youth empowerment' (Adams, Evans, Shreffler, & Beam, 2006; Cahill, 2007; Valente, Ritt-Olson, Stacy et al., 2007).

The school environment and culture may also influence individual AOD use. Interventions that encourage a positive school ethos (e.g., connectedness) and reduce student dissatisfaction may complement AOD-specific interventions that address knowledge, skills, and normative behaviour (Fletcher et al., 2008).

Whole-of-school interventions, which go further than individual classroom-based programs, include changes to school organisation, policy, practices, culture and environment (physical and social) in order to promote healthy behaviour and

deter/reduce AOD use. The behaviours of teachers and other school staff, students' sense of connectedness or bonding to the school and their perceptions of the social attitudes towards substance use may influence attitudes, normative beliefs, intentions and behaviours (Flay, 2000). A growing body of evidence suggests that students who have poor relationships at school (i.e., with peers and teachers) and are not engaged with learning are more likely to have negative school experiences, poor psychosocial health, use AOD and engage in disruptive or antisocial behaviour (Bond et al., 2007). A survey of Year 8 students in Victoria reported that low school connectedness and high social connectedness during early secondary school predicted substance use 2-4 years later (Bond et al., 2007). Similarly, there is increasing evidence that high resilience equips young people with the skills to cope with adversity. Thus, enhancing resilience in adolescents may be protective against AOD-related harms (Ahern, Ark & Byers, 2008; Kumpfer & Summerhays, 2006). These factors have been included in several programs and are discussed in more detail below.

The 22 school-based alcohol education programs and resources are listed below. They have been grouped into programs and resources that are implemented at the level of the whole school (3.3.1 to 3.3.6); and within the classroom context (3.3.7 to 3.3.21). Programs and resources that have been developed in Australia are marked with an asterisk (*).

Section	Program/resource	Effectiveness**
3.3.1	Get REDI*	D
3.3.2	MindMatters*	B
3.3.3	Gatehouse Project *	A
3.3.4	CLIMATE schools*	B
3.3.5	Social Norms approach	C
3.3.6	Social and Emotional Learning (SEL)	C
3.3.7	Rethinking Drinking*	D
3.3.8	DARE Program	E
3.3.9	Alcohol Misuse Prevention Study (AMPS)	D
3.3.10	Unplugged (EU Dap)	B
3.3.11	Keeping it REAL	D
3.3.12	Life Education Centres (LEC) *	D
3.3.13	Life Skills Training (LST) Program	E
3.3.14	Life Skills Program (LSP ISPY)	B
3.3.15	Project ALERT	D
3.3.16	Project PRIDE	D
3.3.17	Protecting You/Protecting Me (PY/PM)	D
3.3.18	RRISK	D
3.3.19	SHAHRP Program *	B
3.3.20	Skills for Adolescence (SFA)	D
3.3.21	Personality Risk Factors Approach	C
3.3.22	Other School-based approaches	

**Effectiveness based on the following grades of recommendation (see Table 3.2 for more detail)

Grade A: Effectiveness established to a degree that merits application

Grade B: Effectiveness established to a degree that warrants consideration

Grade C: Effectiveness established to a limited degree

Grade D: Effectiveness not conclusively established

Grade E: May not be effective.

3.3.1 Get REDI – Resilience Education and Drug Information*

Get REDI is part of a suite of AOD educational resources developed by the Australian Government Department of Education, Employment and Workplace Relations (DEEWR, 2006a, 2006b). The most recently developed resource is All REDI, which is targeted at the early years of learning from kindergarten (K-2). Taking a whole-of-school approach, these resources focus primarily on building resilience and fostering wellbeing in young people to enable them to cope with challenges more effectively.

Resilience refers to the psychological process that allows individuals to adapt to challenges and distressing situations in positive ways. It has been characterised as "a dynamic process among factors that may mediate between an individual, his or her environment, and an outcome" (Ahern, Ark, & Byers, 2008). Research indicates that children who are positively connected to their school, family and community are less likely to engage in risky behaviours and are more likely to be resilient when exposed to adverse experiences (Dishion & Connell, 2006; Greenberg, 2006; Kumpfer & Summerhays, 2006).

Activities to enhance resilience and provide AOD education are incorporated in school policies, the school curriculum, the school environment and collaborations with community organisations. Activities focus on making and maintaining social connections, accepting changes, goal-setting, problem-solving, developing good communication skills and being physically active, motivated and optimistic.

Get REDI provides lesson plans, videos and other tools for educators to use in the school setting. The program includes materials for training teachers to implement lessons on resilience and connectedness, drug and alcohol effects, reducing risks and association between alcohol use and other factors such as mental health and sexual activity.

The effectiveness of this resource has yet to be determined in a formal evaluation process.

3.3.2 MindMatters

MindMatters, which was developed in 1998 by a consortium of researchers and educators in the faculties of education (Sydney, Melbourne and Deakin Universities) and the Australian Council of Health, Physical Education and Recreation, aims to promote young Australians' psychosocial health and wellbeing (Hazell, 2005). It comprises two components: 1) a kit of resources (booklets and video); and 2) a professional development program. MindMatters, which focuses primarily on protecting the mental health of school students and staff, uses a whole-of-school approach that incorporates evidence from resilience, bullying and suicide research using an experiential and interactive approach (Wyn, Cahill, Holdsworth, Rowling, & Carson, 2000). There are three main booklets:

1. *School Matters*: provides tools for schools to develop structures, strategies and programs to foster good mental health and wellbeing in the school community
2. *Educating for Life*: outlines polices and practices to support suicide prevention and assist teachers in dealing with discussions pertaining to suicide
3. *Community Matters*: examines the social and cultural issues that potentially marginalise some groups of students and provides strategies for working in partnership with the community.

Five other resource materials include: *Enhancing Resilience*; *Bullying and Harassment*; *Loss and Grief*; and *Understanding Mental Illness*.

MindMatters recognises that the school is an opportune place to build children's resilience, connectedness and sense of belonging as it is an environment that affects young people's wellbeing (Wyn et al., 2000). The program also focuses on strengthening teachers' confidence and skills in their professional practice and developing partnerships with the community.

An independent evaluation reported that MindMatters was not delivered as a standardised program, but rather had substantial flexibility to be adapted to different school systems and needs[11], thus increasing relevance and participation (Hazell, 2005). Therefore, since the program and resources were utilised by schools in unique ways, evaluation using controlled studies or matching schools was not feasible.

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[11] Schools made different decisions about implementing aspects of MindMatters depending on their situation. Type A schools already had policies, structures and a culture that supported student wellbeing, but lacked a curriculum to implement changes; Type B schools were oriented towards supporting student wellbeing, but had identified a need for greater commitment to structural changes; Type C schools identified substantial problems and a need to focus on increasing support for student wellbeing at the structural level.

Qualitative interviews with school staff and students in schools across Australia were conducted three years after MindMatters had been implemented (Hazell, 2005). Respondents in reported improvements in several areas including:

- Greater level of support for students through pastoral care systems; increased teacher awareness and understanding of student wellbeing; counselling/welfare staff appointed; improved timetabling; greater flexibility in learning
- Some decline in bullying incidents and/or management of such incidents
- Improved students' willingness to seek help from teachers/counsellors for themselves or their friends
- Decrease in disruptive behaviour and/or improvement in schools' management of such behaviour
- Improved attendance and/or decreased suspensions and expulsions
- Increased knowledge and understanding of bullying (reasons for it and strategies to respond to it), mental health problems, and types of help available; greater empathy in students' attitudes towards others with mental illness
- Improved resilience (e.g., emotional literacy, self-esteem, school attachment, caring relationships, participation and leadership)
- Increased staff confidence (to discuss mental health issues with students) and job satisfaction.

In terms of alcohol use, students reported small, though non-significant, reductions in overall use in alcohol.

These findings cannot be generalised beyond the schools that participated in the evaluation. Nevertheless, the feedback provides some insight into staff and students perceptions and acceptance of the resources. Hazell (2005) identified several factors that helped and hindered implementation of MindMatters in schools.

Table 3.7. Barriers and facilitators to implementation of MindMatters (Hazell, 2005)

Facilitating implementation	Barriers to implementation
Strong level of support across school for student wellbeing	Competition for staff time from other curriculum and departmental demands
Active support and involvement of school executive	Staff turnover
Recognition that program supports/is consistent with school ethos	Industrial issues related to staff workload and roles that undermine willingness to implement program
Adequate professional development for all staff implementing program	Large school size may inhibit communication and quality of implementation
Allocation of resources to implement program (kits, time for planning & training)	
Structural recognition of program in formal curriculum and policies	
Accountability mechanisms to monitor and review program implementation	

3.3.3   Gatehouse Project*

The Gatehouse Project was a primary prevention program that included both institutionally and individually focused components to promote the emotional and behavioural wellbeing of young people in secondary schools. It was an Australian program that ran from 1995-2002. Gatehouse was designed for high school students, with the curriculum focus being on grade 8. Each participating school was provided with its own social climate profile. School social climate profiles were developed using questionnaire data from students. Strategies adopted by individual schools varied greatly but included small group work, class discussion and interactive teaching strategies.

The project involved a whole-of-school strategy to build the capacity of school communities to promote a sense of wellbeing, and sought to 'make changes in the school's social and learning environments, introduce relevant and important skills through the curriculum and strengthen the structures within each school which promote links between the school and its community' (Patton, Glover, Bond et al., 2000 p. 589). It was a collaborative project between school-based adolescent youth health teams, class teachers, and Gatehouse Project staff from the Centre for Adolescent Health.

The process comprised four key elements (Patton, Bond, Carlin et al., 2006):
1. *Student survey*: Feedback from students about security (students' sense of safety); communication with teachers; participation in school activities
2. *Action team*: Recruitment of staff for administration, student welfare and curriculum to focus on school policies based on social profile developed from student survey
3. *Consultation and training*: Prioritise specific interventions and professional development of teachers
4. *Curriculum*: Focus on problem-solving in emotionally difficult situations relevant to adolescents.

Despite the evaluation challenges presented by the 'individually tailored' nature of the approach, there was a good quality evidence base for Gatehouse. A cluster randomised controlled design involving 26 schools was conducted to evaluate the program. Measures were collected for: mental health status, social relations, victimisation, school engagement, family measures and health risk behaviours, such as substance use. Comparison of intervention and control groups for substance use and friends' substance use for data collection waves 2 to 4 showed a comparatively consistent 3% to 5% risk difference between the two groups in any drinking, any smoking and regular smoking and friends' alcohol and tobacco use. According to the authors, 'the lower rates of substance use in the intervention school students appear consistent with a true intervention effect, achieved through a multilevel intervention with a focus not on drugs nor on refusal skills, but on changing social processes underlying these activities (Bond et al., 2004).

Notable features of the Gatehouse project included its focus on addressing the 'social climate' of schools, the incorporation of local adolescent health teams, and the level of tailoring to the individual school situation/climate issues rather than being a standardised program, and the strong emphasis on teacher professional development. Furthermore, the ongoing involvement of the University team may have helped to keep the program 'on track' and maintain commitment (Bond et al., 2007; Bond et al., 2004; Fletcher et al., 2008; Patton et al., 2000). At 4-year follow-up, a statistically significant protective effect was maintained (Patton et al., 2006).

3.3.4 CLIMATE Schools*

The CLIMATE schools program, which uses a social influence approach, provides a range of computer-delivered health education courses for school students. Developed by researchers and practitioners at the Clinical Research unit for Anxiety and Depression, St Vincent's hospital, Sydney, the alcohol module, which is based on a harm minimisation approach, aims to empower students to make healthy choices to optimise their health and wellbeing. The alcohol module comprises six interactive lessons, each consisting of an interactive computer-based lesson and various small group classroom-based activities (Vogl, Teesson, Andrews et al., 2009). Course content for CLIMATE Schools included: drinking and the law; standard drinks; alcohol guidelines; alcohol-related risks and harms; strategies to avoid risks and keep safe; alcohol advertising tactics; decision-making and refusal skills; alcohol-free activities; and what to do in case of emergency. The course is computer-based to ensure that all components of the program are presented, without inappropriate adaptation.

A cluster randomised controlled trial was conducted nationally (8 CLIMATE schools; 8 Control schools; 1466 Students) to evaluate the effectiveness of the CLIMATE Schools program in six outcomes:

1) Knowledge (adapted from SHAHRP's "knowledge of alcohol") (McBride, Farringdon, Midford, Meuleners, & Phillips, 2003)
2) Alcohol consumption (based on SHAHRP's patterns of alcohol questionnaire)
3) Alcohol-related harms (SHAHRP's Harm survey)
4) Alcohol-related expectancies (based on scale 2 or Alcohol Expectancy Questionnaire) (Brown, Christiansen, & Goldman, 1987)
5) Program evaluation (student- and teacher-rated evaluation of program acceptance)
6) Program delivery (teacher-rated evaluation of program implementation).

Control schools delivered classroom-based alcohol education curricula based on information from a variety of resources, including:

- How will you feel tomorrow? (education resource kit containing book, video, posters for 13-17 year-olds; National Drug Strategy)
- Rethinking Drinking (see 3.3.7 for further information)
- The Fine Line (SHAHRP – see 3.3.19 for further information)
- What's your poison – Alcohol? (ABC video).

Compared to control schools, students attending CLIMATE schools had increased alcohol-related knowledge ($p < 0.0001$) and decreased positive social expectancies ($p < 0.0001$) post-intervention. However, these effects diminished over time (12 months post-intervention). Alcohol consumption remained constant in female students from CLIMATE schools, while those in control schools reported increased average consumption at 12 months post-intervention ($p = 0.012$). Similarly, compared to the intervention group, girls' frequency of drinking increased significantly in the control group ($p < 0.008$). There was no significant difference in boys' alcohol consumption or frequency of use between groups.

Both students and teachers rated the CLIMATE schools program positively; and there was a very high level of program implementation (approximately 95% of program delivered). Attrition rates were higher for males and at-risk students (e.g., higher average alcohol consumption; higher frequency of heavy drinking episodes; higher expectations of positive alcohol-related outcomes). The higher attrition rates for males and at-risk students may limit the external validity of findings and result in an overestimation of program effects. That is, statistical analyses did not include students who were potentially most resistant to the program and/or likely to be in greatest need. Nonetheless, the mode of delivery achieved a relatively high level of program fidelity and was well-received by both teachers and students.

3.3.5   Social Norms approach

The social norms approach aims to change incorrect perceptions about peers' drinking behaviours and attitudes. The social norms approach is underpinned by social scientific literature that demonstrates the influence of the perceptions of what others think and do (see for example Berkowitz, 2005). It represents a departure from much 'standard' alcohol prevention work with young people that focus on educating them about the risks and consequences of consumption. Social norms interventions seek to identify and correct any misperceptions that exist among the target group, so that the social environment can become more supportive of safe (and non-) consumption of alcohol. The approach involves, inter alia, the repeated administration of an anonymous survey at the target sites at multiple time points, and the dissemination of data-based, positive 'key

messages' to the target group, with the intention of correcting misperceptions and affirming 'healthy behaviours'.

The social norms approach has been implemented in the US, UK and Europe; and in schools in Tasmania, Australia (Social Norms Analysis Project, SNAP). The early US-based work was mostly conducted with college-age students (Haines & Spear, 1996; Wechsler et al., 2003) but high school interventions are rapidly growing in popularity. One review reported that the social norming approach had no significant effect on alcohol consumption in college students (Wechsler, Nelson, Lee et al., 2003). However, this review has been criticised for failing to distinguish between schools that implement social norms appropriately and those that fail to do so (Perkins & Linkenbach, 2003). More recently a number of social norms projects have been conducted in the UK and Europe (Lintonen & Konu, 2004; McAlaney & McMahon, 2007; Page, Ihasz, Hantiu, Simonek & Klarova, 2008).

A systematic review of 22 studies evaluated the social norms approach (Moreira, Smith, & Foxcroft, 2009). Results demonstrated significant reduction in alcohol-related problems, drinking frequency and quantity, binge drinking and perceived drinking norms in participants who received web/computer feedback compared to controls. However, the mode of delivering feedback may be important as studies that used mailed, face-to-face, or group feedback reported non significant outcomes in several of these measures.

The Social Norms Analysis Project (SNAP) was a prevention program delivered in four intervention high schools (and one control school) in Tasmania during 2006 and 2007 (Hughes, 2008; Hughes, Julian, Richman, Mason, & Long, 2008a, 2008b). It was based on the social norms model of health promotion developed in the US during the mid 1980s and early 1990s (Perkins, 2003; Perkins & Berkowitz, 1986), and was the first major Australian trial of the social norms approach. Evaluation is an integral part of conducting a social norms intervention, and the approach has been extensively evaluated (Berkowitz, 2003; Glider, Midyett, Mills-Novoa, Johannessen, & Collins, 2001; Johannessen, Collins, Mills-Novoa, & Glider, 1999).

The SNAP target groups for the Tasmanian study were high school students aged between 12 and 16 years. SNAP was more of a school-based than a classroom based approach (in that it did not include any lessons or activities in the class setting) and included both parent and community components. Broadly speaking it fits within the social influence model.

SNAP involved student surveys at baseline [T1], mid-intervention [T2] and post-intervention [T3]. Data-based media campaigns were conducted on the basis of the survey results following the T1 and T2 rounds of data collection at the trial schools (but not at the control school).

SNAP evaluation results demonstrated statistically significant misperception between actual and perceived drinking and drunkenness among the target group. Students underestimated the proportion of those who drank once a month or less, while they overestimated the proportion drinking once or twice a week or more (Hughes et al., 2008a). Similar misperceptions were observed in relation to drunkenness. Comparison of survey results over time revealed a downward trend across a range of measures at the trial schools (but not the control school) following the first media campaign (Hughes et al., 2008b). In some cases, there was a subsequent increase at T3 – i.e., the effect was not sustained. However, the reliability of the evaluation results are potentially called into question by the suitability of the control school (in that its baseline measures differed from the intervention schools), the relatively small number of research participants, and the fact that the evaluation was conducted by the project team rather than independent researchers.

Notable features of SNAP and the social norms approach more generally include the timely use of relevant, local data, the positive key messages that did not include 'scare tactics' or a focus on improving alcohol-related knowledge per se, the 'whole-of-school' nature of the project, and the potential for student involvement in message dissemination, such as through poster competitions or other design work. Unlike many other approaches to alcohol education, the approach does not seek to modify individual risk factors but instead seeks to harness social processes to alter the 'social climate' within which alcohol consumption occurs.

3.3.6 Social and Emotional Learning (SEL)

Social and Emotional Learning (SEL) was first introduced as a conceptual framework to enhance children's positive psychosocial development (Kress & Elias, 2006). In contrast to the fragmented approach that focuses on specific issues, such as drug education, violence prevention, sex education, and social competence skills training, SEL is a broad approach that aims to address the underlying causes of problem behaviours as well as nurture academic achievement. Proponents of this approach suggest that SEL instruction should begin early (i.e., at pre-school), continue throughout high school and engage parents and the community (Kress & Elias, 2006).

SEL incorporates a wide range of classroom-based programs that aim to "enhance children's capacities to recognize and manage their emotions, appreciate the perspective of others, establish prosocial goals and solve problems, and use interpersonal skills to effectively and ethically handle developmentally relevant tasks" (Payton, Wardlaw, Graczyk et al., 2000 p. 179).

SEL is a key component of KidsMatter, the Australian primary schools mental health initiative[12]. KidsMatter, which has compiled a resource guide for SEL (KidsMatter Programs Guide), has incorporated SEL into the curriculum for all students and provides students with ongoing opportunities to practise and generalise their SEL skills (Australian Government Department of Health and Ageing, 2007).

A number of programs for school-based teaching of SEL skills have been developed in Australia and internationally. To help educators choose quality programs, the Collaborative for Academic, Social and Emotional Learning (CASEL) developed a framework of key SEL competencies. The competencies include 17 skills and attitudes organised into four groups: awareness of self and others; positive attitudes and values; responsible decision making; and social interaction skills (Payton et al., 2000).

The CASEL review identified the following features of quality SEL programs (Payton et al., 2000):

- *Program design*:
    - Program objectives and learning activities are based on a clearly articulated conceptual framework
    - Teachers have sufficient instructions to enable them to implement a variety of interactive learning strategies that draw on their previous experience; provide them with opportunities to practice their skills and receive feedback; and utilise diverse learning styles
    - Structures are developed to assist teachers integrate SEL instruction across different areas of the school curriculum
    - Lesson plans are well-organised and easy-to-follow; have clear objectives and learning activities; are underpinned by sound principles; and include student assessment tools
    - Tools area available for monitoring program implementation, including guidance on the use of tools and data to improve program delivery

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[12] Other components of the initiative are: a positive school community, parenting support and education and early intervention for students experiencing mental health difficulties.

- *Program coordination*: School-wide initiatives and school-family and school-community partnerships are developed to reinforce and extend SEL instruction beyond the classroom
- *Educator preparation and support*: Quality SEL programs provide training to encourage teachers' acceptance of, and enthusiasm for, the program
- *Program evaluation*: In addition to impact measures of appropriate SEL-related outcomes, well-designed evaluation includes process measures of the integrity of program implementation.

Interventions that have included a SEL component have shown promising results with respect to reductions in risky behaviours (Hawkins, Catalano, Kosterman, Abbott & Hill, 1999; Hawkins, Kosterman, Catalano, Hill & Abbott, 2008; Webster-Stratton, Reid & Stoolmiller, 2008). For example, a controlled trial that implemented a comprehensive intervention (to Grade 5 students) comprising developmentally appropriate social competence training, teacher training and parenting classes resulted in fewer reported cases of violent delinquent acts (p=0.04), heavy drinking (p=0.04), sexual intercourse (p=0.02) and having multiple sexual partners (p=0.04) by 18 years (6 years follow-up) (Hawkins, Catalano, Kosterman, Abbott, & Hill, 1999). In addition, intervention students reported more commitment (p=0.03) and attachment (p=0.006) to school, better academic results (p=0.01) and less disruptive behaviour (p=0.02) compared to control group students (no intervention). At 15 years follow-up, the intervention group had significantly better educational achievement and mental and sexual health (Hawkins, Kosterman, Catalano, Hill, & Abbott, 2008). However, there was no significant difference between groups in terms of substance use and crime activities.

While findings from these studies show promising results, the use of multiple (and variable) components makes it difficult to determine which features of the interventions were essential. Furthermore, the effectiveness of this approach would be more appropriately evaluated against an alternative intervention or 'usual practice' control group (e.g., standard prevention program) rather than 'no intervention' controls.

3.3.7 Rethinking Drinking – You're in Control*

The Rethinking Drinking program is a classroom-based alcohol education resource providing materials and student workbooks for secondary school students (years 8-10). Originally developed in 1997 at the University of Melbourne with funding from AERF and the Australian Brewers' Foundation, the program has been redeveloped (2004) to update the materials and be more relevant to Indigenous students. The program comprises 12

lesson topics that cover alcohol information (harms, effects, risks, standard drinks) as well as enhancing decision-making skills, building resiliency and providing guides to safe partying and avoiding risks. Students are encouraged to participate in open discussions and communications, using video-based scenarios and role play.

The effectiveness of this program for influencing young people's attitudes or behaviours associated with alcohol use is unknown as rigorous evaluation of the program has not been conducted. Two reports have been prepared on the dissemination of the program and its acceptability to parents, teachers and students (Fitzclarence, Linford, McTaggart & Walker, 1997; Quantum Market Research, 2007). Following an alcohol information evening for students and teachers, attendees were contacted to complete a survey to assess their views and satisfaction with the material provided (Quantum Market Research, 2007). The evaluation also included computer assisted telephone interviews (random) in areas where alcohol information evenings were presented.

Findings showed that, while over 90% of attendees (N=26; 9 students; 15 parents; 1 teacher; 1 other) at information nights reported increased awareness and knowledge about alcohol issues and overall satisfaction with the information provided on the evening, there was no evidence of change in children's alcohol-related behaviours. Parents who attended the information evenings were more likely than non-attendees to report monitoring their children's alcohol use and using strategies to reduce alcohol-related harm. After attending the information evening, they also reported witnessing improvements in their children's alcohol-related behaviour. However, this may be due to surveillance bias. That is, improved behaviour in children of the intervention group may be detected because parents monitored their behaviour more closely, not necessarily because their children's behaviour differed from those not receiving the intervention.

Overall, while the evaluation reported positive changes in attendees' awareness and knowledge, and changes in parents' behaviour, there was insufficient evidence to indicate long-term changes in alcohol-related behaviours.

3.3.8 Drug Abuse Resistance Education (DARE) program[13]

DARE (Drug Abuse Resistance Education (D.A.R.E)) is the most popular and widely used school-based AOD prevention program in the US and is used increasingly in the UK and in Australia. It was one of the first national programs in the US promoting zero

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[13] The DARE program was also extended and modified to include a community-based component as discussed below (see 3.6.3).

tolerance. DARE is a non-profit organisation, founded in Los Angeles in 1983 by the chief of the Los Angeles Police Department. The program involves a series of weekly classroom-based lessons (17 lessons of around 45-50 minutes), delivered by specially trained police officers. The target groups are students aged between 5 and 12 years. The program has a range of elements covering information on AOD use, life skills training (especially drug resistance skills), self-esteem building, and decision-making skills (Lloyd et al., 2000).

DARE has been formally evaluated but there is not a solid evidence base for its efficacy. Some studies have shown short-term effects, including increases in knowledge, but little or no effect on behavioural outcomes (Lloyd et al., 2000; Perry et al., 2003; West & O'Neal, 2004). Unfortunately many of the early evaluation studies were poorly designed. For example, The more recent evaluations have been more rigorously designed - and they mostly indicate limited program effect (Botvin, 2000) and no evidence of sustained effects over time (Ennett, Tobler, Ringwalt & Flewelling, 1994; Lynam et al., 1999). Instead, there was evidence that social competence training was related to a sharper rise in the uptake of drinking (Hansen & McNeal, 1997). Consistent with this result is the finding that refusal ability declined more rapidly and alcohol use increased more rapidly in socially competent adolescents compared to those with low social competence (Scheier et al., 1999). These findings suggest that more socially competent adolescents had a more active social life, were faced with increased opportunities for risk-taking and gained more confidence in their decision-making. That is, while they could have refused drinks that were offered, they chose not to (Ashton, 1999).

Whilst some commentators have concluded that the evaluations of DARE 'have left important questions unanswered' (Rosenbaum *et al.*, 1994), others have firmly deemed the program to be 'ineffective in deterring or reducing substance use' (Ennett, Tobler, Ringwalt, & Flewelling, 1994). In 2001, the Surgeon General of the United States placed the DARE program in the category of "Does not Work". The US General Accountability Office concluded in 2003 that DARE was counterproductive in some populations, with some of those who graduate from DARE later having *higher* rates of drug use (a boomerang effect) (Ennett et al., 1994). In March 2007, the journal, *Perspectives on Psychological Science,* placed the DARE program on a list of treatments that have the potential to cause harm (Lilienfield 2007, *Perspectives on Psychological Science,* 2 pp 53-70).

In response to the many critiques of the program, the DARE prevention model was substantially revamped in 2001. The new version was privileged with federal funding in

the development stage and launched as *Take Charge of Your Life (TCYL)* (Skager, 2007). TCYL places more emphasis on the personal, social and legal risks and consequences of AOD use and attempts to dispel adolescents' beliefs that "everybody does it" (normative beliefs). In addition, TCYL uses an active learning approach, whereby students compare their existing beliefs and values with their actual experiences related to the health, social and legal consequences of AOD use. They do this through interactive discussions, problem-solving and role-playing. TCYL was evaluated in 83 schools in the US and results showed negative program effects for alcohol use (including binge drinking and getting drunk) in intervention group students, particularly for males ($p < 0.05$) (Sloboda, Stephens, Stephens et al., 2009). In addition, compared to controls, a significantly higher proportion of intervention group children, who were non-drinkers at baseline (Grade 7), reported using alcohol, binge drank, and got drunk in Grade 11 ($p < 0.03$). Positive effects were demonstrated only for smoking in females ($p = 0.001$) and for cannabis in those reported using at baseline ($p = 0.02$) (Sloboda et al., 2009). To explain these contradictory findings, the authors suggest that the mediators of AOD-related beliefs and behaviours may account for the beneficial effect on baseline cannabis users, but that external factors in the intervention schools enabled students use of alcohol and cigarettes (Teasdale, Stephens, Sloboda, Grey, & Stephens, 2009).

Some shortcomings of the DARE program may be a function of program design – in that the delivery method is typically not interactive, and the use of an authority figure (police) may reduce students' engagement with the program. However, even with less didactic methods of delivery, such as in the TCYL version and more 'neutral' instructors, the program would still be based on a flawed set of assumptions about AOD use arising from information deficits and weaknesses in decision-making skills and/or self-esteem.

Ashton (1999) outlined the contradictions inherent in this type of education program that aims to "*limit* young people's autonomy in their choice of friends and substances by *extending* their autonomy in decision-making; to *encourage* conformity to non-drug use values by *discouraging* conformity to other young people; to *develop* team work and social solidarity while *limiting* the extent to which youngsters express this by going along with their peers" (Ashton, 1999, p23).

3.3.9   Alcohol Misuse Prevention Study (AMPS)

Similar to DARE, AMPS is a US program that takes a social competency approach to teach young people skills to resist and refuse offers of AOD. The main objective of the program is to reduce the rate of increase of alcohol use that occurs normally with age by

reducing susceptibility to peer pressure, increasing individual's self-esteem and internal health locus of control, and providing children with the skills and strategies to resist peer pressure to use alcohol (Shope, Copeland, Maharg, Dielman, & Butchart, 1993). The program begins in Grades 5 and 6 with four sessions that focus on: effects of alcohol; risks of misuse; and social pressures to drink (Dielman, Shope, Butchart, & Campanelli, 1986). The program uses role-play to teach resistance strategies to children. Grades 7 and 8 students receive seven lessons and results from a randomised controlled trial showed that AMPS reduced the rate of increase of alcohol (mis)use depending on the prior drinking experience of adolescents (Maggs & Schulenberg, 1998). That is, only AMPS students with experience drinking in unsupervised situations reported a slower rate of increase in drinking, whereas trajectories of drinking in other students with less prior drinking experience (abstainers, supervised drinkers) were equivalent to controls. In addition, while younger students expressed reasons not to drink, those in the AMPS program were more likely to maintain reasons not to drink compared to those in control schools.

Grade 10 students received a booster session to reinforce the earlier messages plus an additional component that emphasised issues related to drinking and driving (Shope et al., 1993). Grade 10 students' refusal skills were assessed by self-report questionnaire and authors reported that students with better refusal skills had higher levels of knowledge related to resisting offers of alcohol compared to those with poor refusal skills. However, it was not clear how effective the intervention was as control students' outcomes were not assessed.

Follow-up of students after receiving a drivers' licence (average 7.6 years) showed that AMPS had small positive effects on alcohol-related driving behaviour in students who reported drinking less than once per week compared to students who drank more often, but this effect was not maintained after 12 months (Shope, Elliott, Raghunathan, & Waller, 2001).

Overall, there was little evidence to support the AMP intervention for reducing the rate of increase of alcohol use in young people.

3.3.10   Unplugged (EU-Dap study)

The EU Dap study was designed in order to evaluate the effectiveness of a school-based program for substance use prevention in junior high schools in Europe. The program, named *Unplugged*, targeted students aged 12-14 years and was designed to tackle both

experimental and regular use of alcohol, tobacco and illicit drugs. The *Unplugged* curriculum consists of 12 one-hour units taught once a week by class teachers who previously attended a 2.5 day training course.

The *Unplugged* curriculum is based on a comprehensive social-influence approach, incorporating components of critical thinking, decision-making, problem-solving, creative thinking, effective communication, interpersonal relationship skills, self-awareness empathy, coping with emotions and stress, normative beliefs, and knowledge about the harmful health effects of drugs. The program can be delivered in three formats: basic curriculum alone (basic arm), or with the addition of peers (peer arm) or parents (parent arm).

EU-Dap was a large multi-site cluster randomised trial of *Unplugged*, involving schools in seven European countries (Faggiano, Galanti, Bohrn et al., 2008). The program was found to be effective in reducing the frequency of drunkenness in 12-14 year-olds, and also delayed the onset of use of tobacco and cannabis. However it was not effective in getting current smokers to quit. Two possible weaknesses of the evaluation include:

- a baseline imbalance in the prevalence of substance use with controls showing consistently higher prevalence than intervention, and
- a short length of follow-up.

Nonetheless, the program integrates principles associated with the more effective 'social influence' approaches to ATOD education (including attention to normative processes) and locates the issues within a holistic framework. It is also flexible, with the option to include different 'arms' to engage different sub-populations.

3.3.11   Keepin' it REAL

The *Keepin' it REAL* curriculum is a communication-based intervention developed in the late 1980s as part of the Drug Resistance Strategies (DRS) project in the US. *Keepin' it REAL* was underpinned by communication competence theory (Hecht, Graham, & Elek, 2006).

REAL is an acronym which refers to four strategies for resistance: **R**efuse (simple no), **E**xplain (no with an explanation), **A**void (avoid the offer or the situation), and **L**eave. The program was originally developed for students in Phoenix Arizona, with the program replicated in other parts of the United States and Mexico. The main target groups were middle school students (although a revised curriculum includes materials for 5th grade

students). Three different versions of the curriculum were developed, including one oriented toward Mexican-American culture; one oriented toward White and African-American cultures; and a multicultural version that combined the other two curricula (Hecht et al., 2006).

The *Keepin' it REAL* curriculum consisted of 10 classroom-based lessons for Grade 7 students that focused on skills in drug refusal, decision making, and risk assessment; supported conservative drug norms; and presented alternative activities and responses (Hecht et al., 2006). A range of activities included: worksheets, interactive techniques such as role plays and games, making videos and other media, such as posters and bumper stickers.

Teachers received a detailed teaching manual, were trained to implement the intervention, and were supported by project staff. The four resistance strategies were reinforced through television and radio public service announcements, billboards, and a students were reminded about decision-making, risk assessment and drug norms in a follow-up 6-month booster session (Hecht et al., 2006).

Keepin' it REAL has been formally evaluated. In one evaluation, 35 participating metropolitan Phoenix schools were stratified according to enrolment and ethnicity (percentage Hispanic) and assigned to one of four conditions (Mexican and Mexican-American version, White and African-American version, multicultural version, or control, 2,044 students). Students completed pre- and post-intervention questionnaires and also follow up questionnaires at approximately two, eight and 14 months after curriculum implementation (Hecht et al., 2006).

Evaluation results indicated that the intervention slowed the usual developmental increase in students reported substance. Overall, the multicultural version of the program was most effective for reducing alcohol and cannabis use (Hecht et al., 2006). Despite apparent benefits, this program may not be as well received by Australian students who may have different cultural orientations to alcohol and be less receptive to abstinence-based messages.

3.3.12   Life Education Centres (LEC)*

Life Education Centres, which began in Australia in 1979, are mobile AOD education units that deliver on-site AOD education to students in primary and secondary schools (Lloyd et al., 2000). Now used internationally, LEC employs a variety of audio-visual aids,

such as puppets (including "Healthy Harold") and models of body systems and organs, to teach students about the physiological effects of AOD use, decision-making skills and self-esteem enhancement skills. The instructors are Life Education Australia educators employed by Life Education Australia.

The evaluation evidence for the efficacy of LEC work is mixed. The most rigorous evaluation has been criticised for not having random selection of schools to receive LEC and for relying on multivariate statistical techniques to control for differences between LEC and comparison schools (Hawthorne, Garrard, & Dunt, 1992). A number of studies have examined outcomes more directly, but these studies also had methodological flaws (Quine, Stephenson, Macaskill & Pierce, 1992; Stephenson, Quine, Macaskill & Pierce, 1988; Tudor-Smith, Frankland, Playle & Moore, 1995). Two process evaluations of LECs have demonstrated the popularity of LEC with the large majority of teachers involved who, in both studies, referred to the apparent positive effect on the students (Stephenson, Quine, Macaskill, & Pierce, 1988; Tudor-Smith, Frankland, Playle, & Moore, 1995). However, one critique of LEC by Hawthorne et al. (1992) states that while the program conformed to most of the published Australian/Victorian principles for teaching drug education (Hawthorne et al., 1992) and curriculum advice available at the time, it has its origins in the knowledge/attitude and values/decision making drug education models of the late 1970s, which have generally failed to deliver sustained behavioural effects.

Overall, the evaluation evidence does not decisively answer the question of efficacy of the LEC approach, as the very nature of the LEC model makes it difficult to subject to formal evaluation, since teachers cannot be made to follow up or apply Life Education's resources in any particular way (Erebus International, 2006). The main strength of this approach is the use of interactive learning aids, which are a popular format for young children. However, there is little evidence of its impact on adolescents' alcohol use.

3.3.13   Life Skills Training (LST) Program

LST is a classroom-based program developed in the US, which combines the social influence and competence enhancement approaches. There are three major program components – drug resistance skills, personal self-management skills, and general social skills. It comprises around 10-15 initial sessions plus a series of booster sessions (Botvin, Baker, Dusenbury, Botvin, & Diaz, 1995; Botvin & Griffin, 2007; Botvin, Griffin, Diaz, & Ifill-Williams, 2001). The sessions are delivered by classroom teachers to elementary

school and high school students (MacKillop, Ryabchenko, & Lisman, 2006; Spoth, Randall, Trudeau, Shin, & Redmond, 2008; Spoth, Redmond, Trudeau, & Shin, 2002).

The LST Program has been evaluated, but the evidence is patchy and contested. On the basis of an evaluation involving 36 rural schools, Spoth and colleagues (2002) reported reductions in ATOD use and cannabis initiation among the trial schools. However this evaluation has been subject to many criticisms. For instance, Gorman and colleagues (2007; Gorman, 2002, 2005) have critiqued the early evaluations, based on their own analyses (NB they did not have access to the raw data). They contend that the results reported by Spoth and colleagues are not as robust as they would suggest, and that other analyses would support the null hypothesis of no program effect. They further noted that there was evidence to indicate that the LST program had negative effects under some implementation conditions. For example, Botvin and colleagues found that the program (with booster sessions) had negative effects on alcohol and cigarette use when delivered by teachers (Botvin et al., 1990).

A more recent study evaluated a community implementation of LST to replicate post-test outcomes typically reported by Botvin and colleagues (MacKillop et al., 2006). The research design was limited to an uncontrolled pre-test/post-test design in two Upstate New York school districts. Statistically significant increases were reported for all three knowledge domains and self-reported use of assertiveness and anxiety-reduction skills. Unexpected results included a statistically significant increase in perceived peer substance use, and a significant decrease in self-reported drug refusal skills in one of the school districts.

LST appears on the US lists of effective programs as an "exemplary" or "model" program. This type of list guides schools in selecting optimal programs, yet the evidence of effectiveness is based on evaluations from one research group, which is also the developer of the program (Gandhi et al., 2007).

According to the original designers, LST addresses "a broad range of empirically supported family- school-, and peer-related etiological factors for substance initiation" (Spoth et al., 2002, p129). Certainly, the LST program is complex and must be implemented precisely, so adequate training for teachers is strongly recommended. Brown's (2001) analysis of the data from another LST study suggests that the program can have negative effects if delivered with insufficient fidelity. Regardless of program fidelity issues, the approach is fundamentally based on the questionable assumption that adolescent AOD use is due to a lack of coping strategies, decision-making skills, and

self-esteem and that children initiate use due to peer pressure. This ignores the fact that children who drink tend to have friends who drink and that it may be affiliation rather than pressure that underlies drinking behaviour. Moreover, resistance training itself has no significant impact on alcohol initiation (Hansen & Graham, 1991).

3.3.14 Life Skills Program (LSP ISPY)

LSP ISPY (Information + Psychosocial competence = Protection) was developed in Germany and is based on a combined social influences and competency enhancement approach. It is similar to LST in that the underlying assumption is that problem behaviour can be avoided by enhancing individuals' general life and social skills, such as communication skills, assertiveness, problem-solving, decision-making, emotion and stress management, critical thinking and relationship building (Wenzel, Weichold, & Silbereisen, 2009). Based on a growing body of research that shows an association between adolescent AOD use and school bonding (Bryant, Schulenberg, O'Malley, Bachman, & Johnston, 2003; Henry, Swaim, & Slater, 2005; Maddox & Prinz, 2003), LSP ISPY includes lessons that explicitly focus on students' experiences and attitudes towards school and encourage students' participation in school-related activities.

Results from a large-scale longitudinal controlled trial in German high schools demonstrated significantly lower increase in alcohol consumption in intervention schools compared to controls (p<0.01); and higher levels of school bonding[14] compared to controls (P<0.001). Multiple regression analyses also revealed that the program effects on alcohol use were partially mediated by the positive influence of school bonding.

While this program requires further evaluation in different settings, results are promising.

3.3.15 Project ALERT

Project ALERT is a US developed, school-based prevention program for middle or junior high school students that focuses on alcohol, tobacco, and cannabis use. Based on the social influence model of prevention, the program is designed to help motivate young people to avoid using drugs and to teach them the skills they need to understand and resist pro-drug social influences. The curriculum comprises 11 lessons in the first year and 3 lessons in the second year. Lessons involve small-group activities, question-and-

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[14] Differences were measured in terms of means on a school bonding instrument. That is, students in the intervention group had higher means and lower rates of decline in school bonding compared to controls.

answer sessions, role-playing, and the rehearsal of new skills to stimulate students' interest and participation. The content focuses on helping students understand the consequences of drug use, recognise the benefits of non-use, build norms against use, and identify and resist pro-drug pressures (Ellickson, McCaffrey, Ghosh-Dastidar, & Longshore, 2003).

Project ALERT has been recognised as an "exemplary" program by the US Department of Education and as a "model" program by the Centre for Substance Abuse Prevention. Ellikson et al., (2003) evaluated the revised Project ALERT drug prevention program across a variety of Midwestern schools and communities. Students assigned to the ALERT schools had significantly lower overall alcohol misuse scores than did those in the control schools. They were also significantly less likely to engage in drinking that resulted in negative consequences and marginally less likely to engage in multiple forms of high-risk drinking.

A further study by Ghosh-Dastidar et al. (2004) was designed to test the revised curriculum that included three lessons in Grade 5, 11 lessons in Grade 7and five booster sessions in Grades 9 and 10. The high school component is called ALERT Plus. Forty-eight school clusters in South Dakota were randomly assigned to one of three conditions: ALERT, ALERT Plus, or control. However, the experimental comparison was ALERT versus control (Ellickson et al., 2003; Ghosh-Dastidar, Longshore, Ellickson, & McCaffrey, 2004; Orlando, Ellickson, McCaffrey, & Longshore, 2005). Ghosh-Dastidar et al. (2004) reported that the strongest effects were for normative beliefs with consistent results across the three target drugs (alcohol, tobacco, cannabis). The program successfully reduced the ALERT students' estimates of how many students used each target drug. The program effects on resistance self-efficacy and expectations of future use were higher for cigarettes and cannabis than alcohol. The program did not have a significant effect on alcohol use intentions.

Results from a mediation analysis by Orlando et al. (2005) showed that positive beliefs about the consequences of drinking significantly mediated the relationship between the intervention program and (mis)use of alcohol through intentions to use and perceptions of peers' use. These results add to the growing body of evidence indicating that perceived peer norms and attitudes may play a role in influencing adolescent AOD use.

3.3.16   Project PRIDE

First used in the US school system in 1969, Project PRIDE is a 12-week school-based AOD prevention program (LoSciuto & Steinman, 2004). Implemented in small groups of eight to 12 students, counsellors use a flexible approach to respond to students' concerns. The rationale underpinning this program is that negative behaviour in adolescents reflects negative influences of family, peers, school and the media. Moreover, these negative influences can be attenuated by providing children with a combination of education and skills in their early adolescence.

More recently, the PRIDE program has evolved into a more structured version that can be delivered by teachers, with specific modules for resistance skills training (similar to LST) and cognitive units related to education, peer norms and media skills. Twelve modules address positive communication and social competence, self-control and resistance skills, specific drug education, normative education, advertising pressure education and stress management.

The flexible and interactive nature of the early versions of the program has made it difficult to evaluate across settings and populations. One evaluation of the program (Ellickson et al., 2003) (after 3 months) showed significantly greater understanding of the influence of media and greater knowledge about the deleterious effects of AOD use. The authors state that students' attitudes and knowledge about AOD improved, as did their intentions to experiment with drugs (Ellickson et al., 2003). However, this evaluation and its conclusions may be questioned as knowledge, attitudes and intentions do not necessarily translate into changes in behaviour.

3.3.17   Protecting You/Protecting Me (PY/PM)

Protecting You/Protecting Me (PY/PM) was developed by Mothers Against Drunk Driving in the US, and is one of the first alcohol prevention and vehicle safety programs to target children in elementary school, beginning in first grade. The goal of the classroom-based program is to prevent the injury and death of children and youth from underage alcohol use and riding in vehicles with impaired drivers. The PY/PM curriculum, which is designed to be led by high school students and teachers, consists of 40 lessons (1 lesson per week for 8 weeks each in Grades 1-5) and an equal number of "ownership activities" (Bell, Kelley-Baker, Rider, & Ringwalt, 2005). Each year's curriculum reinforces the one taught the previous year and the lessons are designed to be integrated into a school's core curriculum.

The program focuses on three key areas in lessons and activities. Topics include: 1) the brain - brain function, brain development in childhood and adolescence, physiological effects of alcohol on the developing brain, and the importance of protecting the brain; 2) vehicle safety – advice on what to do if children are in a car with an impaired driver; and 3) life skills - decision making, stress management, and media literacy (Bell et al., 2005). Other program components also include structured discussion, role play, exploring real life topics and issues and parental involvement.

Compared to students from matched schools, PY/PM students increased their knowledge of alcohol's effect on development; gained decision-making, stress-management, and vehicle safety skills; and demonstrated changes in attitudes toward underage alcohol use and its harm. Further, students retained lessons learned in previous years and their scores improved with increased exposure to PY/PM.

A notable feature of PY/PM is its early intervention focus on young children. The project appeared to improve young children's knowledge regarding alcohol and their developing brains, teach them skills to protect themselves in dangerous situations, increase already high anti-alcohol attitudes, and change perceptions of alcohol's harmfulness. However the question of whether these effects are sustained and/or whether alcohol use behaviours are affected remains unanswered.

3.3.18   RRISK*

The RRISK program, which was developed for Year 11 students in Northern NSW, aimed to offer students the opportunity to develop the knowledge, attitudes and skills required to reduce risk-taking behaviour associated with alcohol and drug use, driving and celebrating. The aim of the program was to assist students to make informed decisions that would reduce potential harm or injury (Zask, van Beurden, Brooks, & Dight, 2006). The program involved seminars delivered by outside experts, peer delivery of workshops, and a range of complementary in-school activities. Seminar topics included the latest research on adolescent risk-taking and AOD use; safe celebrations (i.e., protective and harmful behaviours, friends looking after each other); safe driving (e.g., buying and maintaining a safe vehicle); simulated crash scenario (e.g., re-enactment of decision-making leading up to car crash); and a personal presentation from a young man permanently injured in drink-driving accident.

RRISK has been formally, although not extensively evaluated. In 2002, the Motor Accident Authority funded Health Promotion, North Coast Area Health Service to conduct

a comprehensive evaluation of RRISK. Pre- and post-intervention written surveys were administered in 21 intervention and 19 comparison schools in Northern New South Wales during March 2003 and 2004. Zask et al. concluded that students' participation in the seminars resulted in increased knowledge and improved attitudes and behavioural intentions. It was difficult to evaluate the school activity component since each school made different decisions about what they were going to do.

Overall, the RRISK program requires more rigorous evaluation to determine its effectiveness for changing young people's alcohol-related behaviours.

3.3.19 SHAHRP Program*

SHAHRP (School Health and Alcohol Harm Reduction Project), which was delivered in high schools in Perth, Western Australia was a classroom-based intervention implemented over a two year period. The first phase of the program was delivered to 12-13 year-old students in their first year of secondary school and the second phase was delivered in the following year (14 years old). SHAHRP was delivered by classroom teachers using a variety of interactive approaches (McBride et al., 2003; McBride, Farringdon, Midford, Meuleners, & Phillips, 2004; McBride, Farringdon, & Kennedy, 2007).

The program consisted of eight activity-based lessons in the first year, followed by five booster lessons in the second year. Each lesson was delivered using techniques to optimise interaction between students. Control students received approximately 10 weeks of alcohol education that was based on the following resources: Western Australian K-10 health education materials, 'Rethinking Drinking', 'How Will You Feel Tomorrow' and School Drug Education Project pilot lessons (McBride et al., 2003). Teachers were assisted with training, a teacher manual, student workbooks and videos (McBride et al., 2003).

In a quasi-experimental study (McBride et al., 2004), participants (1111 intervention and 1232 control students) were drawn from fourteen schools in the Perth metropolitan area. Compared to controls, students in the SHAHRP intervention group reported significant increase in alcohol-related knowledge, lower alcohol consumption, safer attitudes and less harm associated with their own use of alcohol (all p<0.05) at three months follow-up, and for the duration of the study. In addition, SHAHRP students reported significantly less risky patterns of drinking at three months follow-up (McBride et al., 2003).

Notable features of SHAHRP include the range of supporting materials used, the ongoing nature of the program and use of booster sessions, maximising interactive learning opportunities, and the attention given to professional development and support for teaching staff. Importantly, the evaluation results indicate "early initiation of alcohol use results in a high level of consumption and harm for at least 3 years after initial unsupervised consumption" and the SHAHRP program appeared to attenuate these outcomes (McBride et al., 2003, p275).

3.3.20 Skills for Adolescence (SFA)

Lions-Quest *Skills for Adolescence* (SFA) is a youth development and prevention program designed for school-wide and classroom implementation in Grades six through eight (10 to 14 years old). It was originally developed in the US, and is now used in more than 33 countries including Australia. SFA has a five-component structure: classroom curriculum; parent and family involvement; positive school climate; community involvement; and professional development. The learning model employs inquiry, presentation, discussion, group work, guided practice, service-learning and reflection. Teachers and other school staff are trained as "implementers" in a 2- or 3-day workshop.

SFA seeks to unite teachers, parents, and community members in developing the following skills and competencies in young adolescents: essential social and emotional competencies; good citizenship skills; strong positive character; skills and attitudes consistent with a drug-free lifestyle; and an ethic of service to others within a caring and consistent environment (Eisen, Zellman, Massett & Murray, 2002; Eisen, Zellman & Murray, 2003).

SFA has been extensively evaluated in more than 50 studies worldwide. Most significant was a longitudinal study conducted for the US Department of Health and Human Services National Institute on Drug Abuse (NIDA) (Eisen, Zellman, & Murray, 2003). This study aimed to determine whether the SFA program was effective for: 1) preventing or delaying initial use of alcohol, tobacco and cannabis; 2) reducing the amount or frequency of substance use among those who do initiate use; and 3) preventing or delaying the progression to more "advanced" substance use (e.g., heavy drinking, regular smoking/cannabis use) or to more harmful illicit drug use, compared to control schools' usual education program (Eisen et al., 2003).

In a cluster randomised controlled trial involving 34 middle schools, Grade 6 students in 17 intervention schools received SFA, while the control schools received their usual drug education program (Eisen et al., 2003). Results showed that SFA increased self-efficacy

around drug refusal skills, but had no effect on behavioural intentions, perceptions of harm, or perceived peer norms.

SFA is noteworthy in that it is one of the few large-scale, evaluated implementations of a theory-based prevention program. In that respect it bridges an important 'research to practice' gap in the literature (e.g., Botvin et al., 1995; Pentz, Dwyer, MacKinnon et al., 1989; Perry, Kelder, Murray, & Klepp, 1992).

3.3.21 Personality risk factors approach

A series of interventions have been developed that target specific personality risk factors that are thought to underlie risky drinking behaviours in adolescents (Conrod, Stewart, Comeau, & Maclean, 2006). Risk factors such as sensation-seeking, anxiety sensitivity and hopelessness in adolescents have been associated with alcohol-related problems (Jackson & Sher, 2003 in Conrod et al., 2006).

This approach used a battery of personality and alcohol use questionnaires to assess levels of anxiety, sensation-seeking and hopelessness as well as drinking behaviours. This was followed by implementation of two 90-minute brief intervention sessions that included: 1) psychoeducation about specific personality variables and motivational interviewing related to coping with that particular personality; 2) behavioural coping skills training to learn about dealing with anxiety from the perspective of a particular personality dimension; and 3) cognitive coping skills training that focused on ways of coping with automatic thoughts and countering such thoughts.

Four months after intervention, Canadian high school students that received the personality-targeted interventions showed lower rates of binge drinking and problem drinking compared to no-intervention controls, but had no significant effect on frequency of drinking (Conrod et al., 2006). This program identified high-risk youth and tailored the program to their needs. Analysis of the number needed to treat indicated that five personality-specific interventions provided to high-risk students were needed to prevent one case of alcohol-related problems. This approach is promising for reducing some problematic drinking behaviours. However, it may depend on the outcomes under investigation. While young people may not stop drinking, they may learn more about managing different aspects of their personality and develop strategies for low-risk drinking.

The limitations of this approach include:

- Multiple personality risk factors: some young people may have more than one personality risk factor that requires an intervention targeting more than one factor
- Sustainability of changes beyond four months follow-up is unknown
- Participation was voluntary and some at-risk youth may lack motivation to participate (e.g., those with depression or anxiety disorders)
- It was unclear how much training is needed for school counsellors to conduct the initial tests, evaluate the personality risk factors and implement the personality-specific interventions.

3.3.22 Other school-based approaches

Other programs, resources or approaches that have been implemented in schools do not specifically focus on addressing alcohol use in high school students, but may still have an impact on adolescents' current or future use.

3.3.22.1 The Good Behaviour Game

One program that has had promising results is the Good Behavior Game that was implemented in primary schools in the US (Kellam, Brown, Poduska et al., 2008). The game involved rewarding students for complying with good behaviour rules (e.g., not talking out of turn, asking permission to leave). At first, teachers announced the beginning of 10-minute game periods, which occurred randomly three times per week and rewards were given immediately after the game finished. The game periods increased in length throughout the year and start/finish times were not announced, with rewards delayed to the end of the week. Fourteen years after the first group of students participated in the Good Behavior Game, 75% were surveyed on a range of outcomes, including AOD use, mental health problems, and aggressive behaviour and compared to students who did not participate in the game. Results showed significantly lower prevalence of problematic alcohol and drug use (particularly among males), and lower rates of antisocial behaviour for both genders in the intervention group. Results were most effective for males who exhibited aggressive and disruptive behaviour in primary school. There were four key strengths in this program: 1) as there was no specific subject content to deliver, it did not expend valuable curriculum time; 2) the unpredictable nature of the game periods meant that students' behaviour became habitual and was likely to extend beyond the classroom to their family and other social relationships; 3) limiting the follow-up measures to problematic AOD use acknowledged that experimentation is common among young people and does not automatically predict alcohol-related problems; and 4) the program demonstrated long-term impact in a 'real world' setting.

3.3.22.2 PartySafe*

PartySafe is an initiative utilised by a number of police jurisdictions across Australia. Its aim is to reduce antisocial behaviour associated with alcohol use. Although PartySafe is not a program per se, it is a valuable resource that provides information for parents and young people about a wide range of factors to consider when organising a house party. It encourages people to register a party with the local police and take precautions to minimise risks of problems occurring, such as managing gatecrashers and intoxicated guests.

Similar programs include Party Smart and I Party; and these resources have not been formally evaluated.

3.3.22.3 Save-a-Mate (SAM)

SAM is program developed by the Red Cross to promote health and wellbeing for young people. SAM is "run by young people for young people" (http://www.saveamate.org.au/), aiming to enhance their skills and confidence to look after themselves and their friends, especially where alcohol is involved. SAM offers training courses on first aid and managing AOD-related emergencies for high schools and others in contact with youth (e.g., youth and community groups, pub staff).
While anecdotal information in the form of testimonials has been very positive, no formal evaluation of this program has been conducted.

3.3.22.4 Road Ready

Road Ready is an ACT State Government program that is delivered for free to year 10 students at secondary schools in the ACT. The program addresses a wide range of issues related to safe road use and employs interactive sessions on problem-solving and decision-making. Alcohol-related issues are included in this program.
No formal evaluation of the program is available.

Other jurisdictions have similar programs delivered in high schools.

3.3.23 Summary of school-based programs/resources

School-based programs and resources that were examined in this review varied substantially in their approach, the settings in which they were implemented, the

outcomes measured and the extent to which they have been formally evaluated. The key features, outcomes, strengths and limitations of each program are provided in Table 3.8 below. While there was an extensive literature pertaining to alcohol education programs, the strength of the evidence of effectiveness was highly variable both in terms of the quality of evaluation studies (overall poor-to-average) and the number of times a program had been evaluated (not formally evaluated to multiple studies). Nevertheless, several programs and program elements were identified that warrant consideration. The programs listed in Table 3.8 have also been graded using a rating scale (A-D), which is described in more detail in section Table 3.2[15].

There were two Australian programs that merited higher grades of recommendation (A and B). These were the Victorian Gatehouse project and the West Australian SHAHRP program. Another promising approach, which has been used widely in Australia and internationally, is Social and Emotional Learning (SEL). SEL is a whole-of-school approach that focuses on school connectedness and attachment. Four other programs/resources that were graded B included MindMatters and CLIMATE Schools (Australia); Eu-Dap (Europe); and Life Skills (US).

Consistent with the features of effective programs identified in Table 3.4, the key elements of the highly rated programs were:

- Highly interactive mode of delivery
- Flexibility to tailor program to needs of the school population
- Professional development to support teachers
- Focus on building resilience and connectedness to school and community.

In contrast, there were some elements of programs that were identified as being ineffective, or having potential negative effects, including:

- Alcohol knowledge only programs
- Drug resistance training
- Social competence enhancement
- Scare tactics.

The use of scare tactics has moral appeal, is memorable and students indicate their preference for this type of information (see findings from school consultations) However, evidence does not support such an approach for reducing adolescent alcohol-related harms (Cahill, 2007; Midford, 2000). The assumption underlying this approach is that young people make poor choices because they are not aware of what could happen; and

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[15] Some programs that demonstrated positive outcomes overall were rated as average (C) as they had only been evaluated in one good quality study. In contrast, others that had multiple evaluations were rated lower due to the poor quality of the studies, which made the findings less reliable.

that telling them about the serious consequences of drinking will guide them to choose safety over risk-taking. In general, the more serious and tragic consequences of drinking are inconsistent with young people's own experience and what they see happening when friends and family consume alcohol. Thus, while scare tactics are compelling to watch, adolescents may still fail to make the connection between their own risky behaviour and the potential for such dire consequences. Moreover, the use of scare tactics subverts the normative approach, which aims to dispel the myth that all young people consume alcohol in a risky manner (Cahill, 2007).

Some researchers suggest that it is unrealistic to expect alcohol education programs to have an effect beyond the period in which they are implemented (McBride et al., 2004). While some evidence suggests that the period of effect may be extended with regular developmentally appropriate booster sessions, overall booster sessions have shown mixed results and effects may depend on the presence of other elements, such as interactivity and/or peer involvement (McBride, 2003; Shope et al., 2001; White & Pitts, 1998; Williams, Perry, Farbakhsh, & Veblen-Mortenson, 1999).

Teachers also vary substantially in their ability to deliver good quality alcohol education to students. A study of AOD education in US schools showed inconsistency between teachers in their ability, knowledge and understanding of AOD-related issues as well as differential emphasis on aspects of AOD (Hansen & McNeal, 1999) (Loxley et al., 2004). Ongoing professional development and teacher support may contribute to maintaining high quality delivery of education programs.

Another pedagogical issue relates to teaching methods that empower students to be advocates for their own behaviour. That is, instead of teachers presenting a moral argument about alcohol use and providing answers to their own questions, they simply frame the questions and allow the students to develop their own solutions and strategies to avoid risk (Cahill, 2007). In this way students take ownership of their learning and develop their skills in negotiating and solving problems that may be applied across a range of different situations and other risky behaviours.

Dissemination and implementation of specific programs also varied across settings. Thus, while studies may show significant effects under ideal conditions, changes to the program (e.g., content, mode of delivery, expertise of teachers, additional support for the program) are likely to lead to attenuation of effects (McBride, 2003). Moreover, research shows that teachers are more likely to deliver less effective knowledge-based components of a program and leave out the more effective interactive features

(Dusenbury & Falco, 1995). Typically, a tension exists between maintaining the fidelity of a program and implementing it in the way it was designed by researchers versus the flexibility that teachers value highly and tailoring programs to the needs of the local target students (see findings from school consultations).

This research-to-practice gap is also germane to evaluation research as the effectiveness of a particular program is more difficult to determine if the program has not been appropriately implemented in practice. Results from an investigation of program delivery reported that almost two-thirds of program providers delivered effective program content, but less than 18% used an effective method of program delivery (Ennett, Ringwalt, Thorne et al., 2003). The most effective implementation of effective programs occurred with teachers who had recent relevant AOD prevention training and were comfortable with using interactive teaching methods.

Authors of one good quality systematic review of school-based alcohol education programs (Foxcroft et al., 1997) suggest that program developers should provide potential users with evidence of effectiveness of their programs. That is, schools need to know whether a program has been evaluated and, if so, whether it has achieved positive effects. Programs that have been evaluated and shown no evidence of effectiveness should be unavailable to schools until they have been modified and re-evaluated. In the absence of such guidance for best practice, ineffective programs will continue to be used and continue to fail to minimise alcohol-related harms in young people. For example, the DARE program continues to have widespread use despite showing no evidence of effectiveness (Ennett et al., 1994; McBride, 2003).

Young people's alcohol-related behaviours may be shaped by interactions between a number of different influences, including developmental, environmental, social and cultural factors. Their decisions and alcohol-related behaviours generally occur in social contexts that are integral to managing their social relationships. Therefore, it may be useful to consider relevant theories of behaviour change both in the development of programs and in the evaluation of their effectiveness. For example, some more successful programs have incorporated elements of resilience theory (Dishion & Connell, 2006; Toumbourou & Gregg, 2002; Wyn, Cahill, Holdsworth, Rowling & Carson, 2000).

Adolescent drinking, which is most likely to occur in students' leisure time outside of school hours, may also be influenced by other contexts and social interactions. Programs and resources that are based on family and parental interactions are examined in the next section (3.4).

Table 3.8 Overview of school-based approaches to alcohol education

Project/ Program	Australian/International	Key features	Key Outcomes	Strengths/Limitations	Grade of Recommendations*
Get REDI	Australia - National	Build resilience Foster wellbeing Goal-setting Problem-solving Integrated into school policy, curriculum		Not formally evaluated	D
MindMatters	Australia - National Qualitative interviews	Build resilience Foster good mental health	Increased student support Decline in bullying/ better management of bullying Decrease in disruptive behaviour/ better management of disruptive behaviour Increase in students' willingness to seek help Improved attendance Decreased suspensions/expulsions Increased understanding of mental illness Improved staff confidence in dealing with mental health issues.	Flexibility of framework to adapt to school population, needs, available resources and structure.	B
Gatehouse Project *	Australia - Victoria Cluster RCT	Enhance social climate of school Enhance school connectedness Professional development	Compared to control schools: 3-5% risk difference in drinking and friends using alcohol	Program was tailored to the needs and culture of the school Strong emphasis on professional development for teachers Protective effect maintained at 4-year follow-up	A

Table 3.8 Overview of school-based approaches to alcohol education (cont.)

Project/ Program	Australian/International	Key features	Key Outcomes	Strengths/Limitations	Grade of Recommendations*
CLIMATE schools	Australia – National Cluster RCT	Social influence approach Alcohol knowledge (law; standard drinks; alcohol guidelines; risks and harms) Strategies to avoid risks Alcohol advertising Decision-making Refusal skills	Compared to control schools: Increased alcohol-related knowledge Reduced positive alcohol-related expectancies No increase in alcohol consumption or frequency of consumption in females (NS in males)	Decay in effects over time High attrition rate for males and at-risk students limits external validity of results	B
Social Norms approach	Australia – Tasmania Non-RCT	Social influence approach Normative beliefs	Compared to control schools: Decrease in perceived drinking and drunkenness at 1st follow-up; but effect was not sustained over time	Initial decrease in students perceptions of peers' drinking was not sustained Behaviour change was not significantly different to controls	C
Social and Emotional learning	US Non-RCT	Enhance children's capacities to recognise and manage their emotions & appreciate the perspective of others Establish prosocial goals Problem-solving	Compared to control schools: Decrease in violence; heavy drinking; sexual intercourse; disruptive behaviour Improved school commitment; attachment; academic results 15 years follow-up showed better academic achievement and better mental health; but NS difference in AOD use or criminal activities	Long-term follow-up showed maintenance of some positive outcomes Lacks appropriate control group	C

Table 3.8 Overview of school-based approaches to alcohol education (cont.)

Project/ Program	Australian/International	Key features	Key Outcomes	Strengths/Limitations	Grade of Recommendations*
Rethinking Drinking	Australia - National Cross-sectional survey	Alcohol knowledge (harms, effects, risks, standard drinks) Decision-making Building resilience Guides to safe partying and avoiding risks	Teachers/students reported increased awareness, knowledge, satisfaction	Changes in children's behaviour unknown	D
DARE Program Revised: TCYL	US RCT	Alcohol knowledge Drug resistance skills Self-esteem building Decision-making skills	Small increase in alcohol-related knowledge NS change in alcohol-related behaviour Some evidence of increased drug use in males TCYL: increased alcohol use in males	Negative effects resulted in higher alcohol use in some intervention students	E
Alcohol Misuse Prevention Study	US RCT	Alcohol knowledge Resistance skills Self-esteem	NS effect on alcohol use		D
Keeping it REAL	US Non-RCT	Refuse, Explain, Avoid, Leave Drug refusal Decision making Risk assessment	Some evidence of reduced alcohol use	Limited evaluation No long-term follow-up	D
Project ALERT	US Non-RCT	Social influence Alcohol knowledge (risks, harms) Resistance skills	Reduced perceptions of peers drinking NS effect on alcohol use		D

Table 3.8 Overview of school-based approaches to alcohol education (cont.)

Project/ Program	Australian/International	Key features	Key Outcomes	Strengths/Limitations	Grade of Recommendations*
EU-Dap	Europe – 5 countries Cluster RCT	Social influence approach Critical thinking Decision-making Problem-solving Creative thinking Effective communication Interpersonal relationship skills Self-awareness empathy Coping with emotions and stress Normative beliefs Alcohol knowledge (risks and harms)	Reduced frequency of drunkenness	Baseline differences not accounted for Short-term follow-up Flexible program with provision for peer and parental influence.	B
Life Education Centres (LEC) *	Australia – National Non-RCT	Alcohol knowledge (physiological effects) Decision-making Self-esteem enhancement	NS effects	High variability in implementation across schools	D
Life Skills Training (LST) Program	US Uncontrolled before-and-after study	Social influence/ competence enhancement Drug resistance skills Personal self-management skills General social skills.	Increased knowledge Increased assertiveness Decreased anxiety Increase in perceived peer substance use Decrease in drug refusal	Negative effects when booster sessions delivered by teachers	E

Table 3.8 Overview of school-based approaches to alcohol education (cont.)

Project/ Program	Australian/International	Key features	Key Outcomes	Strengths/Limitations	Grade of Recommendations*
Life Skills Program	Germany Cluster RCT	Social influence/ competency enhancement Drug resistance skills Personal self-management skills General social skills School bonding.	Compared to control schools: Slower increase in alcohol consumption Higher level of school bonding		B
Skills for Adolescence (SFA)	US Cluster RCT	Social and emotional competencies Skills and attitudes consistent with a drug-free lifestyle	Compared to controls: Increased self-efficacy for drug refusal NS effect on behavioural intentions, perceptions of harm, or perceived peer norms	Theory-based program	D
Project PRIDE	US Cluster RCT	Alcohol knowledge Normative beliefs Media literacy Communication skills Social competence Self-control Resistance skills Stress management.	Alcohol-related behaviour not evaluated		D
Protecting You/Protecting Me (PY/PM)	US Non-RCT	Alcohol knowledge (brain function & development, physiological effects) Vehicle safety (impaired driving) Life skills (decision making, stress management, and media literacy)	Increase in knowledge about alcohol and vehicle safety with impaired drivers Alcohol-related behaviour not evaluated		D

Table 3.8 Overview of school-based approaches to alcohol education (cont.)

Project/ Program	Australian/International	Key features	Key Outcomes	Strengths/Limitations	Grade of Recommendations*
RRISK	Australia – NSW Controlled before-and-after study	Alcohol knowledge (adolescent risk-taking and AOD use) Safe celebrations Safe driving Simulated crash scenario	Significant improvement in knowledge, attitudes and behavioural intentions related to alcohol use, safe celebrations, safe driving	Not all elements were implemented Some contamination occurred in control schools	D
SHAHRP Program *	Australia – Perth Non-RCT	Alcohol knowledge from a variety of sources, with highly interactive mode of delivery	Compared to controls: Increase in alcohol-related knowledge Decreased alcohol consumption Safer attitudes Decreased alcohol-related harm	Flexible and interactive	B
Personality risk factors approach	Canada RCT	Psychoeducation about specific personality variables Motivational interviewing Behavioural coping skills for anxiety Cognitive coping skills training to counter automatic thoughts	Compared to no-intervention controls: Reduced rates of binge drinking and problem drinking NS difference in frequency of drinking	Helps young people to manage aspects of their personality and develop strategies for low-risk drinking Does not address multiple personality risk factors in one individual Not clear how much training teachers need to implement personality risk assessment Long-term effects unknown	C

*Grades of recommendation

Grade A: Effectiveness established to a degree that merits application

Grade B: Effectiveness established to a degree that warrants consideration

Grade C: Effectiveness established to a limited degree

Grade D: Effectiveness not conclusively established

Grade E: May not be effective.

3.4 Family-based Approaches

It is often argued that it is unreasonable to expect schools alone to influence adolescents' attitudes and behaviours regarding substance use when young people are exposed to a wide variety of influences outside the school environment (Homonoff, Martin, Rimpas, & Henderson, 1994).

This section examines the programs that focus primarily on the role of parenting and family management for dealing with adolescent alcohol use. They are included because of their relevance in relation to the role of schools. Programs that incorporate both school-based and family-based components are examined below in Section 3.6 Combined Approaches.

While prevalence of alcohol use in adolescents is generally low (i.e., more than 80% of adolescents aged 12-17 years do not drink, or drink at low levels of risk (see Table 2.1 in Patterns of Alcohol Use section), research on adolescent alcohol use is often viewed from the perspective of problematic behaviour and the factors that underpin it. It is evident that adolescent problem behaviour is determined by a multiplicity of factors and research increasingly shows that family factors are key contributors to the development of problem behaviour from early childhood through to early adolescence (see Dishion & Patterson, 2006 in Connell, Dishion, Yasui, & Kavanagh, 2007).

Some research suggests that families exert most influence over the development of adolescent attitudes and behaviours related to alcohol and drug use (Ennett, Bauman, Pemberton et al., 2001). This may occur through family attributes, such as supervision, monitoring and attachment and through specific substance use characteristics, such as parental use and tolerance of alcohol and drugs (Andrews, Hops, Ary, Tildesley, & Harris, 1993).

Family-based approaches may also be more cost-effective compared to individual programs as they may address a range of risky behaviours and problems, including substance use, aggression and bullying, teenage pregnancy, HIV/AIDS, healthy eating and suicide.

A list of family programs for the 'prevention of delinquency' was collated and evaluated by the US Office of Juvenile Justice and Delinquency Prevention (OJJDP, 1999) (see http://www.strengtheningfamilies.org/ for details). These programs were

rated on 13 dimensions (theory, fidelity of interventions, sampling strategy and implementation, attrition, measures, data collection, missing data, analysis, other plausible threats to validity, replications, dissemination capability, cultural and age appropriateness, integrity and utility) and categorised as:

- Exemplary I & II Programs (well-implemented, rigorously evaluated, consistently positive outcomes)
- Model Programs (evidence primarily from good-average quality controlled studies)
- Promising Programs (mixed results, but evidence from at least one good-average quality controlled study).

Table 3.9 lists the primary prevention programs[16] that were evaluated by the OJJDP (Strengthening America's families).

Table 3.9 Family-based programs for alcohol education and prevention in schoolchildren

Program	Program type	Age group
Exemplary I Programs		
The incredible years: parents and children training series	Comprehensive	3-10 yrs
Families that care: Guiding good choices (formerly - Preparing for the drug free years)	Parent training	8-14 yrs
Strengthening families program	Family skills training	6-12 yrs
Exemplary II Programs		
Raising a thinking child: I can problem solve program for families	Parent training	4-7 yrs
Strengthening families program: for parents and youth 10-14	Family skills training	10-14 yrs
Model Programs		
Creating lasting family connections	Parent training	9-17 yrs
DARE to be you program	Comprehensive	2-5 yrs
Families and schools together	Comprehensive	3-14 yrs
Home instruction for parents of preschool youngsters (HIPPY)	In-home support	3-5 yrs
NICASA parent project	Parent training	0-18 yrs
Parents as teachers	Parent training	0-5 yrs
Parents who care	Family skills training	12-16 yrs
Promising programs		
Make parenting a pleasure	Parent training	0-8 yrs
Strengthening multi-ethnic families and communities	Parent training	3-18 yrs

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[16] Several other programs that were evaluated by the Strengthening America's Families group included treatment programs and programs tailored to at-risk groups (e.g., low income, single parent, economically disadvantaged families). These programs are not included in this review. They are listed in Table 3.10 at the end of this section.

A review of family and parenting approaches to substance use prevention reported that cognitive/behavioural family-based programs had larger effect sizes and longer-lasting effects compared to school-based education programs (e.g., average universal child-only approaches effect size = 0.10 vs 0.96 for average family interventions) (Kumpfer, 1999; Kumpfer et al., 2003). Effective programs were defined as those demonstrating statistically significant improvementS in children's behaviours in at least three independently evaluated, good quality controlled trials that used reliable, validated measures. Other approaches, including parent education and parent support programs, which are used commonly in the US, showed insufficient evidence of effectiveness[17] (Kumpfer et al., 2003).

Although family-based approaches target different ages and stages of childhood development, effective programs share several core elements, including:

- Interactive methods for behaviour change, rather than increasing knowledge alone
- Engaging and retaining families that are difficult to reach by providing support, such as meals, transport and child care facilities
- Program content focuses on strengthening protective factors, including family attachment, family supervision and discipline and communication of family values.

Eight family-based approaches are listed below. Programs developed in Australia are marked with an asterisk (*).

Section	Program/resource
3.4.1	Parenting Adolescents a Creative Experience (PACE)*
3.4.2	Strengthening Families Program (SFP)
3.4.3	Preparing for the Drug-Free Years (PDFY)
3.4.5	Families in Action
3.4.6	Family Matters
3.4.7	Keep a Clear Mind (KACM)
3.4.8	Örebro Prevention Program
3.4.9	Parents Under Pressure
3.4.9	Other family-based programs

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[17] Effectiveness of these programs has not been adequately evaluated. Client satisfaction surveys are not reliable evidence of effectiveness.

3.4.1 Parenting Adolescents a Creative Experience (PACE) program*

PACE is an Australian family-based program that focuses on parent-adolescent communication, conflict resolution and adolescent development (Toumbourou & Gregg, 2002). The program, which aims to enhance parenting skills and social/emotional competencies in families and to reduce suicide risks in youth, comprises 10 sessions for parents to help them develop strategies that enhance their children's self-esteem and problem-solving skills.

The PACE program was implemented in 14 schools across Australia, with another 14 matched control schools. Twelve weeks after completing the program, PACE parents reported reduced family conflict and their Year 8 children reported lower rates of delinquent behaviour, less poly-drug use and increased maternal care compared to matched controls (Toumbourou & Gregg, 2002). However, recruitment to the intervention group was poor (10% of those approached); parents recruited to the PACE program were more likely to be from high risk groups, such as sole parents; and their children reported higher family conflict and polydrug use at baseline compared to controls (Loxley et al., 2004).

Therefore, these findings must be interpreted with caution as parents self-selected to groups and it is not known how enduring the improvements were as the follow-up was relatively short. However, if positive results are achieved with these groups it could be speculated (with caution) that it may extrapolate to other less at-risk groups.

Toumbourou and colleagues incorporated the PACE program into another, more comprehensive intervention – *Resilient Families* (Shortt, Toumbourou, Chapman & Power, 2006; Shortt, Hutchinson, Chapman & Toumbourou, 2007), which was implemented in secondary schools in Melbourne. Twenty-four schools were randomly assigned to PACE or control groups.

The *Resilient Families* intervention comprises five components:

1. 10-week curriculum for students (relationship problem-solving; communication; emotional awareness; peer resistance skills; conflict resolution)
2. 2-hour educational quiz night for parents (Parenting Adolescents)
3. 8-week PACE program for parents
4. Referral for family counselling where appropriate
5. Building community of parents in the school (to empower parents to support one another).

As with the earlier PACE program (Toumbourou & Gregg, 2002) and other family-based interventions (Spoth, Redmond & Lepper, 1999; Toumbourou & Gregg, 2002), recruiting and engaging parents to the revised more comprehensive program (Shortt et al., 2006; Shortt et al., 2007) was challenging, with only 10% agreeing to participate. At 12 months follow-up, there were no significant differences in student alcohol use. However, students in the intervention group demonstrated improved problem-solving skills, increased family attachment, and less school absence, which are good proxy measures for lower likelihood of risky drinking. Moreover, this positive outcome may have wider implications on other aspects of adolescent risk-taking behaviour. The few parents (<10%) who attended extended parent education activities (quiz evenings; PACE sessions) reported increased family-school connectedness compared to non-attendees (Shortt, Toumbourou, Chapman, & Power, 2006). It is also possible that further intervention effects may become apparent after a longer follow-up period.

Thus far, while promising, evaluation results for the Resilient Families program are inconclusive as longer-term follow-up and a strategy to increase parental participation is required.

3.4.2 Strengthening Families Program (SFP)

Originally designed to help drug-using parents improve their parenting by focusing on the parent-child relationship, the Strengthening Families Program (SFP) was adapted for use as a universal preventive program (Kumpfer et al., 2003). It is based on the premise that substance use is a "family disease" of lifestyle, which is "influenced by family environmental and genetic risk factors" (Kumpfer et al., 2003, p1761).

The SFP10-14 is a variation of the original SFP (developed by Kumpfer et al. 1989) and is directed at children aged 10-14 years and their parents (Allen, Coombes & Foxcroft, 2007; Kumpfer, Pinyuchon, Teixeira de Melo & Whiteside, 2008). This video-based program, which involves parents and children learning together, is underpinned by several theoretical models, including the biopsychosocial vulnerability model, a resiliency model and a family process model.
SFP comprises a 14 session multi-component family skills training program (with booster sessions at 6 and 12 months). There are three main parts with reported positive impacts on parents, children and the family as a unit (Kumpfer, Alvarado, Tait & Turner, 2002; Kumpfer et al., 2003):

- **Parent skills training**: Outcomes included increased parenting skills, efficacy and confidence; reduced depression, stress and substance abuse
- **Children skills training**: Outcomes included increased social skills and competencies; reduced conduct disorders, shyness, aggression and substance use
- **Family life training**: Outcomes included reduced family conflict; increased organisation; positive communication and family bonding.

A systematic review of alcohol primary prevention programs reported that the SFP "showed promise as an effective prevention intervention" over the long term (> 3 years) (Foxcroft et al., 2003, p 397). Analysis revealed that the SFP influenced children's alcohol use, alcohol use without permission and first drunkenness[18]. The number needed to treat over four years was nine, indicating that for every nine children receiving the program, one less child will report ever using alcohol, using alcohol without permission, or getting drunk four years later.

However, a more recent evaluation of the SFP suggests that the reported statistically significant positive outcomes were isolated effects that were derived from "questionable data analysis practices, such as multiple subgroup analysis, post hoc sample refinement and use of one-tailed significance tests" (Gorman et al., 2007, p 586). These criticisms are important as the use of such practices substantially reduces the rigour of the analysis, favouring positive effects in the intervention group that may be misleading. Overall, due to the flawed evidence base, the effectiveness of the SFP has yet to be determined.

A similar intervention was developed for impoverished African American youth living in rural areas in the US. The Strong African American Families (SAAF) program consists of seven sessions run concurrently for students and parents, followed by a joint session in which they practiced the skills they learned (Brody, Kogan, Chen & Murry, 2008; Brody et al., 2006). The program aimed to reduce AOD use and associated behaviour problems in African-American youth and included a strong focus on instilling pride in being African American. Results from a long-term cluster randomised controlled trial showed significantly lower initiation to alcohol use ($p<0.05$) and slower rate of increase in alcohol use ($p<0.05$) in the intervention group compared to controls two years after the intervention (Brody, Murry, Kogan et al., 2006) and this was sustained after six years

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[18] Measures used in a RCT evaluating the SFP (Spoth, Redmond, & Shin, 2001).

(Brody, Kogan, Chen, & Murry, 2008). Other benefits included statistically significant reduction in caregiver depression and decreased likelihood of behaviour problems in the intervention group compared to control (Brody et al., 2008). Overall, outcomes from this targeted program were promising.

The family-based SFP and school-based Life Skills Training (LST) have also been combined into a joint program that is discussed below (see 3.6.1).

3.4.3   Preparing for the Drug-Free Years (PDFY)

Based on the social development model, the PDFY program aims to address risk and protective factors for adolescent AOD use through skills training for both parents and children (Park et al., 2000). PDFY comprises five 2-hour skills training sessions for parents:

1. *Getting started: How to prevent drug abuse in your family.* Overview of risk and protective factors for AOD use
2. *Setting clear family expectations on drugs and alcohol.* Focuses on reducing risk factors, establishing family norms and expectations related to AOD use, developing strategies for compliance and enforcing consequences of non-compliance
3. *Avoiding trouble.* Focuses on risk factors, peers' AOD use, resisting peer influences
4. *Managing family conflict.* Focuses on reducing family conflict and developing positive parental modelling
5. *Strengthening family bonds.* Focuses on providing opportunities for family activities and developing supportive parental networks.

Results from a randomised controlled trial (22 schools; 424 families) showed significantly less growth in alcohol use in PDFY schools compared to controls (Park et al., 2000). While the effect size was small (0.22), reduced use persisted at 3.5 years follow-up.

Compared to other studies of family-based programs, follow-up was relatively high, with 85% completing post-test and 70% completing the assessments after 3.5 years. However, the external validity of this study is questionable. The study population may have been a highly motivated group. Less than 50% of families approached agreed to participate in the study and over 90% of families recruited to the study were intact and described as well-functioning. A similar pattern emerged in another study, which reported higher education level in families agreeing to participate in the study (Guyll, Spoth, Chao, Wickrama & Russell, 2004; Spoth et al., 2001). Thus, while quite successful with long-term sustained results for those exposed to the program, it is not clear how effective or acceptable the program was for less functional, more at-risk families.

3.4.4 Families in Action

The Families in Action program (US) is based on the premise that various adolescent behaviours, including substance use, may be explained by a social development model, which focuses on the roles of family, school and peers during adolescent development (Abbey, Pilgrim, Hendrickson, & Buresh, 2000). This program emphasises family cohesion, school and peer attachment, self-esteem and attitudes towards use of alcohol and tobacco. The program aims to increase resiliency and protective factors and increase adolescents' attachment to their school, family and peers. Program modules include parent-child communication, behaviour management, family fun and leisure activities, strategies for enhancing adolescent interpersonal relationships, self-esteem and academic success, and discussions related to alcohol and tobacco use.

One year after implementing the program, analysis of the difference between follow-up and baseline surveys showed significant improvement in the participant group compared to controls across seven measures. Students participating in the program reported increased family cohesion, school attachment and self-esteem; and reduced family fighting compared to control students. Parents participating in the program became more opposed to minors' alcohol use. In addition, control parents and students believed that use of alcohol could start at a younger age compared to parents and students who participated in the program.

However, interpretation and generalisability of findings are limited for several reasons: 1) measure of attitudes does not necessarily indicate change in behaviour; 2) the sample size was small; 3) the study was conducted in a small rural school; and 4) while differences in baseline characteristics between families that participated in the intervention compared to non-participants (control) were controlled for in the analyses, families self-selection to the groups is likely to have influenced their motivation for change. That is, the families most in need of change may have opted for the program.

Therefore, there is insufficient evidence to support this program as it has not been rigorously evaluated.

3.4.5 Family Matters

Family matters is a universal family-directed program (US) that aims to reduce the prevalence of smoking and drinking among adolescents (Bauman et al., 2000, 2002; Bauman et al., 2001; Ennett et al., 2001). The program involves four mail-outs to families with 12-14 year-old children, followed by telephone discussions by health educators and a range of family activities with the children. The mail-out series focuses on:

- *Motivating families to participate*: informs parents and children of the negative consequences of substance use
- *General family characteristics that influence substance use*: supervision, support, communication skills, attachment, time spent together, educational achievement and conflict resolution
- *Tobacco and alcohol variables*: factors that influence children's use; rules and ways to monitor use
- *External variables*: resisting peer and media pressure.

Evaluation of the program showed mixed results. Bauman et al. reported a significant reduction in the prevalence of drinking (p=0.02) (effect sizes were 0.32 and 0.12 at 3 and 12 months, respectively) (Bauman, Ennett, Foshee et al., 2002). However, no significant program effects were reported in cessation rates or reduction of use in adolescents who were already using alcohol (Bauman et al., 2000; Bauman et al., 2001).

3.4.6 Keep a Clear Mind (KACM)

Developed by the Substance Abuse and Mental Health Services Administration (SAMHSA) in the US, KACM is a US drug education program for children aged 8 to 12 years that aims to prevent AOD use by educating children and their parents about the negative consequences of substance use and help students to develop strategies to resist AOD use (Jowers, Bradshaw & Gately, 2007; Werch et al., 1991). The program entails four lessons on alcohol, tobacco, cannabis and tools to resist substance use that are completed by the child and parent at home. A series of 10 additional newsletters with information about risk factors and how to discuss substance use with their children are mailed out to parents.

The effectiveness of this program has not been independently evaluated.

3.4.7 Örebro Prevention Program

The Örebro prevention program (Sweden) aims to encourage parents to have strict attitudes against underage alcohol use and encourage their children to participate in organised activities, such as sports, hobbies, music and theatre (Koutakis, Stattin, & Kerr, 2008). The program, which was implemented across grades 7-9, involved an initial meeting at the beginning of each semester, followed by a series of three mailouts per semester. Meetings and mailouts focused on ways to communicate with adolescents and establish family rules about alcohol, as well as promoting a range of leisure activities for adolescents. Compared to matched control schools, intervention schools reported stricter parental attitudes towards underage drinking and lower rates of adolescent drunkenness and delinquency. There was no significant difference in youth participation in leisure activities.

These findings have not been replicated and the program has not been evaluated independently by other research groups, but the program shows potential.

3.4.8 Parents Under Pressure*

The Parents Under Pressure program, developed by Associate Professor Sharon Dawe (Griffith University) and Dr Paul Harnett (University of Queensland), is an intensive, multi-component, family-focused intervention designed to improve child behaviour, decrease parental stress and improve family functioning (Harnett, Dawe, & Rendalls, 2004). To date, PUP has been used to help high risk multi-problem families (e.g., parental substance use and/or child protection issues) by targeting affect regulation, mood, views of self as a parent, alcohol and drug use and parenting skills. It has been evaluated in a series of case studies and a large randomised controlled trial on families with maternal substance abuse, with women leaving prison, and in families with child neglect and abuse (Dawe & Harnett, 2007; Dawe & Harnett, 2008; Harnett, 2003; Harnett & Dawe, 2006; Harnett & Dawe, 2008; Harnett et al., 2004).

The Parents Under Pressure program comprises 10 units that focus on a range of parental challenges, delivered over 12 sessions of about 1.5 hours duration each. The program is delivered by psychologists in families' homes. The initial part of the program addresses the parents' view of themselves and encourages them to acknowledge their strengths and to notice and comment on positive child behaviours. In contrast to a parenting deficit model, PUP helps parents to identify the many

factors that make parenting difficult and devise goals and strategies to overcome them. Daily child-focused playtimes are scheduled to build a positive parent-child relationship and there is a focus on helping parents to improve their mood. The program also helps parents acquire and consistently employ non-punitive methods to control child behaviour. Finally, the program aims to extend social networks by helping families reconnect with their local community. A number of practical and critical aspects of successful family life, such as childcare, school involvement and social support, are also addressed through the program. (Accessed: 9 June 2009 - http://www.griffith.edu.au/centre/gphrc/Research/pup.html).

Results from a randomised controlled trial showed that parents receiving PUP had significant reductions in child abuse potential, parenting stress and disruptive child behaviour compared to control families, which received a brief intervention and treatment as usual[19] (Dawe & Harnett, 2007). Similarly, an uncontrolled before-and-after study reported a significant improvement in measures of parent functioning, child functioning, parent-child relationships and social contextual measures (problems with others, intensity of daily hassles) in parents from 10 families who were referred for treatment by Social Services (Harnett & Dawe, 2008).

Although the available evidence was largely focussed on at-risk families, the ecological perspective of this program has potential to be implemented more generally.

3.4.9 Other family-based programs

Other family-based programs have been identified in the literature as addressing alcohol-related behaviour in young people (see Table 3.10), but not included for assessment here as they target specific ethnic groups, focus on illicit drugs or apply to situations that are less relevant to the Australian setting.

Table 3.10 Other family-based programs

Program	Population/setting	Reference
Functional Family Therapy	Family therapy program for acting out youth (6-18 years)	(OJJDP, 1999)
Multi-systemic Therapy program (MST)	Comprehensive program for at-risk youth (10-18 years)	(OJJDP, 1999)
Brief Strategic Family Therapy	Family therapy program for at-risk children (0-18 years)	(OJJDP, 1999)
Parenting Wisely	Parent training program for at-risk children (6-18 years)	(OJJDP, 1999)

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[19] Treatment as usual for methadone-maintained parents included methadone prescription and case management to assist with accommodation and other issues.

Effective Black Parenting	Parent training for African-American families (2-18 years)	(OJJDP, 1999)
HOMEBUILDERS	Comprehensive program (0-18 years)	(OJJDP, 1999)
The Nurturing Parenting Program	Family skills training (1-18 years)	(OJJDP, 1999)
The NICASA Parent Project	Parent training (0-18 years)	(OJJDP, 1999)
Parents Who Care	Family skills training (12-16 years)	(OJJDP, 1999)
Project SEEK – Services to enable and empower kids	Comprehensive (0-18 years)	(OJJDP, 1999)
Bethesda Day Treatment	Comprehensive (10-18 years)	(OJJDP, 1999)
Parents Anonymous	Comprehensive (0-18 years)	(OJJDP, 1999)

3.4.10 Summary of family-based programs

Family-based programs evaluated in this review had a strong focus on parent-child communication, family management and enhancing family relationships and bonding. Table 3.11 provides a summary of the key features, outcomes, strengths and limitations of the family-based approaches examined in this review. Good quality evaluation of family-based prevention programs was lacking and, therefore, the grades of recommendation for these programs are relatively low.

While implementing family-based programs was generally hindered by low recruitment and high attrition rates, most programs had positive effects across a range of different variables. Specifically, there was significant improvement in family relationships, reduction in school absences, slower rate of increase in alcohol use, and reduction in reported drunkenness and delinquency. Poor recruitment of families and low attendance rate at organised information evenings was also noted by several teachers interviewed during school visits (see findings from school consultations).

While there is insufficient research to reach firm conclusions about their overall effectiveness, family-based interventions may hold some promise and further well-designed research is needed in this area.

Table 3.11 Summary of family-based programs

Program	Australian/ International	Key features	Key outcomes	Strengths/Limitations	Grade of Recommendations
PACE program	Australia - National	Parent-adolescent communication Conflict resolution Adolescent development Problem-solving Build self-esteem	Compared to control schools: Reduced family conflict Lower rates of delinquent behaviour Less poly-drug use Increased maternal care	Low recruitment of families Short follow-up period	C
Strengthening Families Program	US	Parent skills training (communication, discipline, substance use education, problem solving, and limit setting) Children skills training (communication, understanding feelings, coping with anger and criticism, stress management, social skills, problem-solving, resisting peer pressure, compliance with parental rules) Family life training (child play, family meetings, communication skills, reinforcing positive behaviours, family activities)	Compared to control families: Parents: Increased parenting skills, efficacy & confidence Reduced depression, stress & substance use Children: Increased social skills & competencies Reduced conduct disorders, aggression & substance use Family: Reduced conflict Increased organisation Improved communication & bonding	Inappropriate data analyses Inadequate follow-up Low recruitment of families	C
Strong African American Families (SAAF)	US Cluster RCT	As for SFP, but tailored for impoverished African American youth in rural areas	Compared to control families: Reduced initiation to alcohol use Lower rate of increase in drinking Reduced depression in care-givers	Positive outcomes sustained for 6 years follow-up	C

Table 3.11 Summary of family-based programs (cont.)

Program	Australian/International	Key features	Key outcomes	Strengths/Limitations	Grade of Recommendations
Preparing for the Drug-Free years	US RCT	Family norms for behaviour Family communication Parent-child activities Family conflict Resistance skills	Compared to control families: Lower rate of growth in adolescent alcohol use	Families recruited to the study were generally intact and well-functioning	C
Families in Action	US Controlled before- and after study	Parent-child communication Build resiliency Behaviour management Family fun & leisure Enhance adolescent relationships Build self-esteem Academic success	Compared to controls: Increased family cohesion Increased school attachment & self-esteem Reduced family fighting	Self-selection to group leads to over-estimate of positive effects Small sample size limits generalisability	C
Family Matters	US RCT	Alcohol education for parents & children Communication skills Conflict resolution Academic achievement Resistance skills (peers & media)	Reduced prevalence of drinking NS effect on cessation rates or reduction in use in those already drinking	Limited evaluation studies available	D
Keep a Clear Mind	US	Alcohol knowledge Resistance skills		Not formally evaluated	D
Orebro prevention program	Sweden Non-RCT	Parent-child communication Establish family rules about alcohol Organised leisure activities	Compared to matched controls: Stricter attitudes towards underage drinking Less drunkenness Less delinquency	The program was low cost to implement Minimal training required (2 days) Potential unit of analysis error	C

Table 3.11 Summary of family-based programs (cont.)

Program	Australian/ International	Key features	Key outcomes	Strengths/Limitations	Grade of Recommendations
Parenting Under Pressure (PUP)*	Australia RCT	Parenting skills Build parent-child relationship Focus on positive child behaviours Child-focused play times	Compared to controls: Reduced child abuse potential' Reduced parenting stress Reduced disruptive child behaviour Improved parental functioning Improved parent-child relationships Reduced problems with others	Focussed on at-risk families Not formally evaluated as a universal program	D

*Grades of recommendations

Grade A: Effectiveness established to a degree that merits application

Grade B: Effectiveness established to a degree that warrants consideration

Grade C: Effectiveness established to a limited degree

Grade D: Effectiveness not conclusively established

Grade E: May not be effective.

3.5 Community-based Approaches

This section addresses alcohol education programs that are delivered at the level of the community and target broader social, environmental, political and legislative factors that may impact on adolescents' use of alcohol. They are examined in light of the contribution they might make to the issue of young people and alcohol, and also to assess the scope that exists for schools to be able to be able to work with or relate to these programs.

Community-based approaches to alcohol date back to the 1800s during the Temperance Movement, when a group of concerned citizens rallied to address alcohol problems at the local level (Aguirre-Molina & Gorman, 1996). Prohibition of alcohol was mandated in the US from 1919 to 1933. During this time, the sale, manufacture and transportation of alcohol was banned. For the next 40 years, the focus was directed towards the individual and the pathology of alcohol problems, which involved addressing deficits in genetics, knowledge and skills at the level of the individual. Over the past four decades, the emphasis has slowly shifted back towards the wider social context.

The rationale for employing a community-based prevention approach is that problems associated with alcohol use are generally widespread in a community and not restricted to a particular subgroup; they are often culturally-embedded; and environmental factors that facilitate alcohol-related problems can be addressed at the community level.

Two broad approaches are used to achieve change at the community level. The *personal-individual* approach involves getting 'the message' out to the largest number of people whose behaviour warrants change. The *social-political* approach involves changing community attitudes towards broader issues associated with alcohol use (e.g., marketing activities, liquor licensing laws).

Community norms for alcohol consumption and the regulations and enforcement of controls within a community may influence young people's attitudes, beliefs and practices associated with alcohol use. Today's young people have unprecedented access to global media and marketing networks. Alcohol marketing and advertising has a strong youth-oriented focus and typically co-opts youth culture to sell an

idealised image and lifestyle (Roche et al., 2008). Given that young people have a very high level of exposure to alcohol marketing and drinking culture, the capacity of schools alone to support children's safe navigation through adolescence may be unrealistic. While the existing social, economic and cultural structures remain unchanged, Holder (2000) suggests that interventions targeting specific groups will have limited effectiveness and that it is necessary to change the environment and community structure in which drinking occurs (Holder, 2000). Examples of such changes include:

- Access and availability of alcohol (e.g., enforcement of laws to prevent alcohol sales to underage or intoxicated individuals; responsible service training)
- Price and policies (e.g., alcohol taxes)
- Marketing and promotional activities
- Family management, communication and conflict
- Local neighbourhood (e.g., control of outlet location and density; improved cleanliness, lighting and public transport systems)
- Community attitude and support (e.g., police support managing alcohol-related problematic behaviour).

In addition, community participation to address environmental and social factors has the potential to empower the community and facilitate sustained changes. Community action programs focus on community ownership of problems and solutions, rather than placing the responsibility on individuals and their families (Hodgson & Davidson, 2008), or on specific institutions such as schools. Their main aim is to change the policies, systems and structures in the community that contribute to alcohol-related harms. Such programs empower communities to foster well-being and minimise problems resulting from intoxicated and disruptive behaviour and irresponsible alcohol sales and service (e.g., responsible beverage service, underage alcohol sales and drinking, drink-driving, licensing of outlets, violence/crimes at taxi ranks, train stations, and on buses).

A systematic review of 12 community-based programs evaluated the most effective programs against four value criteria (Table 3.12) (Cheon, 2008). The 'strengths perspective' was identified as important, but lacking in most programs. The strengths perspective focuses on positive values, such as children's sense of belonging, being

valued, connectedness, and participation in healthy activities at school and in the wider community; and deemphasises the negative consequences, or pathology of alcohol-related behaviours (Cheon, 2008).

Table 3.12 Value criteria for evaluating adolescent AOD prevention programs (Cheon, 2008)

Value criterion	Details
Ecological understanding of functioning	Program considers personal, cultural and community-based elements of the population. Examples include best practice of community settings; structured alternative activities; family involvement; community mobilisation; media advocacy
Client-centred perspective	Focus is on services that are relevant primarily to children and their families. Examples include clearly articulated goals; targeting at-risk youth; age and developmental appropriateness; social-behavioural education; life skill development; peer leadership; mentoring
Strengths perspective	All consumers are assumed to have positive capabilities and the capacity to succeed. Programs offer opportunities for personal growth. Examples include clearly articulated goals and structured alternative activities
Respect for diversity and difference	Program is sensitive to age, gender, race, sexual orientation and urban/rural differences. Examples include developmentally appropriate intervention; media advocacy.

Cheon (2008) evaluated the programs and rated them as strongly effective (i.e., intervention participants had statistically significant reductions in substance use between baseline and follow-up compared to controls; long follow-up), moderately effective or having small effects. Table 3.13 lists nine[20] of the programs evaluated in the systematic review, with a brief description of the target population, drug, program components and outcomes. These are all US-based programs and some have been developed for specific populations, which may not be applicable in the Australian setting. Therefore, only the better-known programs (DARE Plus, Project Northland) have been examined separately for this review.

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[20] Other programs reviewed but not included in this table focussed on tobacco or specific ethnic groups.

Table 3.13 Systematic review of 12 community-based programs in US (Cheon, 2008)

Program	Target population	Target drug	Components	Outcomes
Strongly effective programs				
Woodrock youth development project	6-14 year olds Attrition: 12.6%	AOD	School sessions, family, community support, peer mentoring, activities	Significant reduction in AOD use Improved race relations
Project towards no drug	14-19 year olds 49% Hispanic Attrition: 29-57%	AOD	Classroom program, school-as-community program, newsletters	Significant long-term reduction in AOD use
Across age	12 year olds Attrition: 22-25%	AOD	Mentoring, community service, classroom life skills, parents workshops	Improved knowledge, attitudes, behaviour and life skills
Project Northland	6th grade Attrition: 19%	Alcohol	Parental involvement/ education, behavioural curricula, community task force activities	Reduced onset and prevalence of alcohol use
Moderately effective programs				
Project towards no drug	14-19 year olds 37% White Attrition: 43%	AOD	Classroom program, school-as-community program, newsletters	Preventive effects for AOD
Aban Aya Youth project	11-14 year olds African-American	AOD	Social development class, parental support, community components	Significant reduction in substance-related behaviours (boys); NS for girls
Small effects				
DARE Plus	7th grade Attrition: 16%	AOD	Classroom session, extracurricular activities, neighbourhood action	Reduction in use of tobacco, alcohol and multidrug use; reduced victimisation (boys) NS for girls
Healthy for life	11-15 year olds Attrition: 8-14%	AOD	Age appropriate education sessions, community participation	Small reduction in cannabis and tobacco use
Native American project	10 year olds Native American Attrition: 14.1%	AOD	Skills training, emphasis on cultural tradition, media, mural painting	Lower rates of substance use

From our searches of the electronic databases, journals and grey literature, we identified 10 community-based approaches (including Project Northland that was included in the Cheon review) that are relevant to adolescent alcohol use. These are listed below and described in the following sections. Programs developed in Australia are marked with an asterisk (*).

Section	Program/resource
3.5.1	Midwestern Prevention Project (MPP)
3.5.2	STAR Program
3.5.3	Project Northland
3.5.4	Community Trials Project
3.5.5	Youth Access to Alcohol (YATA)
3.5.6	Trelleborg Project
3.5.7	Village (It takes a village to raise a child)
3.5.8	Thinking Not Drinking
3.5.9	Xperience
3.5.10	Good Sports Program*

3.5.1 Midwestern Prevention Project (MPP)

The MPP, which is based on social influence theory, is a US program that comprises five components, implemented sequentially (Aguirre-Molina & Gorman, 1996):

- Mass media
- School-based skills training
- Parent program
- Community organisation
- Health policy change.

While school, family and media components addressed demand reduction, community and policy addressed supply reduction. Early program evaluation studies showed reduction in use of alcohol, tobacco and cannabis in intervention groups compared with controls and less positive attitudes towards drug and alcohol use (MacKinnon, Johnson, Pentz et al., 1991). However, these early studies had weak study design (non-random allocation), multiple subset analyses and incomplete reporting of the program outcomes (Aguirre-Molina & Gorman, 1996; Ashton, 2003; Pentz et al., 1989). Positive outcomes may be partly due to the enthusiasm of the schools implementing the program and the support structure (e.g., well-organised process for mobilising schools and community; and evaluating outcomes) that facilitated it (Ashton, 2003). Full implementation of the program is expensive and may be prohibitive for communities in greatest need.

Another more recent good quality randomised controlled trial found that MPP students who admitted to drinking at baseline significantly reduced their self-reported alcohol use; and the program effects were maintained for up to 1.5 years (Chou, Montgomery, Pentz, Rohrbach, & et al., 1998).

The program changed participants' perceptions about positive consequences of AOD use, intentions not to use and communication skills, but had no significant impact on students' beliefs about negative consequences of use, beliefs about external influences on drug use, resistance skills and perceived peer norms (Ghosh-Dastidar et al., 2004)

3.5.2 Start Taking Alcohol Risks Seriously (STARS) Program

The MPP was adapted and implemented in Kansas and Indianapolis as the Start Taking Alcohol Risks Seriously (STARS) program (Ashton, 2003). The primary objective of the program is to deter youth alcohol use.

The program comprises three strategies (https://casat.unr.edu/bestpractices/):

- *Health care consultation for youth*: A health care provider (nurse or doctor) delivers a 20 minute brief intervention (at the usual time of alcohol initiation) on prevention messages about alcohol and how to avoid alcohol use
- *Key facts postcards*: Ten key facts postcards are mailed to parents, with focus on communicating with children about alcohol and helping them to avoid alcohol use
- *Family take home lessons*: Four prevention activities for parents to complete with their children, including an alcohol avoidance contract for children to sign.

Compared to controls in a randomised controlled trial, significantly fewer STARS students planned to drink in the next six months ($p=0.001$) (Werch, Owen, Carlson et al., 2003). STARS students also had significantly greater motivation to avoid drinking ($p<0.05$) and less alcohol risk ($p<0.05$). However, this study did not report on how the program influenced alcohol-related behaviour.

Other studies reported that the proportion of students drinking in the previous month was around 7% for both control and STARS schools at baseline. Twelve months later, proportions rose to 16% in control schools and 12% in STARS schools (Ashton, 2003). However, in a three year follow-up study, there was no significant impact on drinking.

Overall, results from the STARS program were inconsistent and unreliable as data were not analysed by intention-to-treat procedures[21].

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[21] Lack of intention-to-treat analyses ignores families who were lost to follow-up or withdrew from the study and may overestimate intervention effects.

3.5.3 Project Northland

Project Northland is similar to the MPP and STARS programs. It comprises three parts:

- Parent program (student activity book)
- Peer-led program (resistance skills training)
- Community program (alcohol access, availability, marketing, policies).

Project Northland incorporates aspects of social and emotional learning (SEL, see 3.3.6) across all levels of the program.

Project Northland has been implemented and evaluated in several countries and findings have been compared across countries. While some studies reported fewer students in the intervention schools using alcohol compared to control schools after three years implementation (24 school districts in Minnesota) (Komro et al., 2008; Komro et al., 2001; Perry et al., 1996), longer term follow-up (4 years) showed no significant improvements in the intervention group compared to controls (Foxcroft et al., 2003).

Similarly, no significant effects were shown for perceived consequences of drink driving, access to alcohol, social skills, self-esteem, or psychological wellbeing (Ghosh-Dastidar et al., 2004; Komro et al., 2001).

Mediation analysis[22] of risk and protective factors showed that the important mediators of effects on alcohol use were:

- Peer influence (social norms)
- Functional meanings of alcohol use
- Attitudes and behaviours associated with alcohol (e.g., stimulus seeking, rule violations, poor judgement)
- Parent-child communication about alcohol use.

For adolescents who had not started drinking at baseline, self-efficacy to refuse offers to drink also mediated effects on alcohol use. However, other aspects of the program have been analysed more recently. Compared to delayed intervention controls, intervention communities had lower rates of growth in family problems and less tendency to AOD use (Perry, Lee, Stigler et al., 2007). Analysis also showed

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[22] Mediation analysis assesses the extent to which a prevention program changes the mediator (intermediate variable), which influences outcomes (Komro, Perry, Veblen-Mortenson et al., 2008).

differential effects according to grade and different components of the program. When the program was implemented in Croatia, it was more effective for changing attitudes in the lower grade Croatian students (Grade 6 and 7) compared to Grade 8 (West, Abatemarco, Ohman-Strickland et al., 2008); and the strongest effects were reported for the program that included extra-curricular activities and parent components; moderate effects for classroom curricula; and no effects associated with community activism in US students (Stigler, Perry, Komro, Cudeck, & Williams, 2006).

Inconsistencies in findings from studies evaluating the effectiveness of Project Northland make it difficult to reach firm conclusions about this intervention. There are several factors that may contribute to the mixed findings. First, since there are mixed multiple components in Project Northland, a multi-site randomised controlled study using a block design is needed to adequately assess the effectiveness of the separate components of the intervention. Second, program implementation and fidelity needs to be assessed using appropriate process outcome measures.

3.5.4 Community Trials Project

The US community trials project aimed to reduce alcohol use and alcohol-related risky behaviours in the community using a public health approach to prevention (Holder, Saltz, Grube et al., 1997). The project focused on helping the community to make long-term structural changes to minimise alcohol-related injuries and death, rather than attempt to change drinking patterns at the level of the individual.

The project identified a number of factors known to lead to alcohol-related problems (e.g., alcohol intoxication and impairment, retail alcohol availability) in both adults and adolescents and comprised five components that targeted these factors for prevention interventions. The five components were:

- *Community mobilisation*: to develop community organisation and support and increase public awareness
- *Responsible beverage service*: to train bar staff and management in responsible drinking practice in on-premise outlets in order to reduce the number of intoxicated and/or underage patrons
- *Alcohol access*: to improve implementation of local ordinances about alcohol accessibility (e.g., zoning, licensing) to limit outlet number and density and reduce alcohol availability

- *Underage drinking*: to reduce alcohol availability to minors through retail outlets
- *Drinking and driving*: to enforce laws pertaining to driving under the influence and educate community about the risks and likelihood of detection.

Figure 3.1 illustrates a model of the five components (bold) of the Community Trials Project and the various community factors that impact on alcohol-related traffic and non-traffic trauma (Holder et al., 1997).
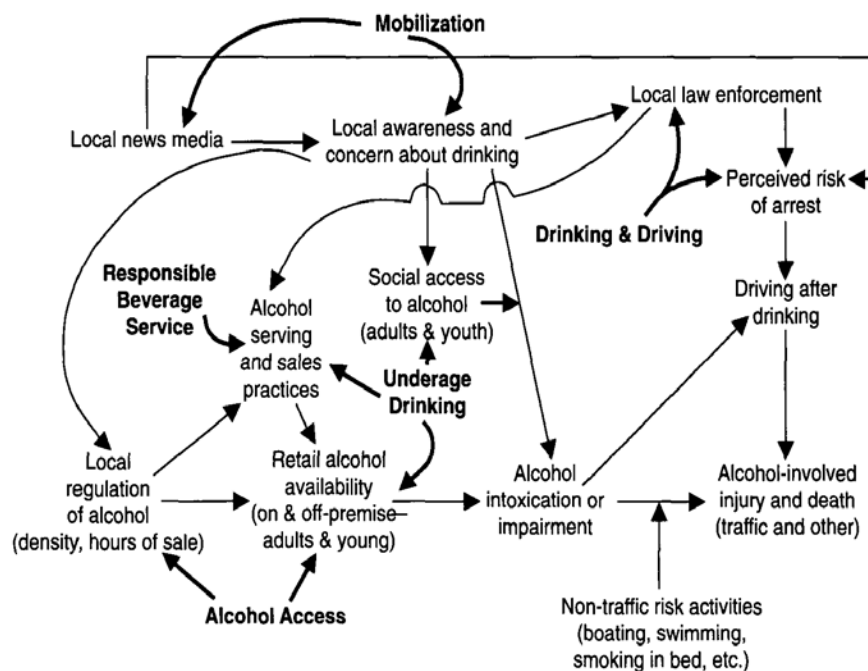
Figure 3.1 Alcohol-related trauma at the community level (Holder, Saltz, Grube, Voas et al., 1997)

Results from this trial showed that, compared to control communities, intervention communities had 10% fewer alcohol-related traffic incidents; approximately half as many alcohol sales to minors; increased compliance with responsible beverage service policies; and reduction in alcohol outlet density at 12 months follow-up (Holder & Reynolds, 1997; Holder, Saltz, Grube, Treno et al., 1997).

The program was well-resourced and supported by the community in which it was implemented (Midford, Stockwell, & Gray, 2002). However, the overall cost in a four-year period was substantial (US$360,000) and may be prohibitive over the long-term, particularly for small at-risk communities in low socioeconomic areas.

3.5.5 Youth Access to Alcohol (YATA)

YATA was a New Zealand community action project that aimed to reduce the supply of alcohol to adolescents (Clark, 2007). The program involved coordinating teams that comprised individuals from various organisations, including the health sector, local councils, youth workers, alcohol and drug treatment services and police. Each community developed strategies specific to their needs, using a variety of resources (e.g., *Strengthening Community Action on Alcohol* manual, Collie 2002, ALAC), regular workshops and communication strategies. While strategies differed between communities, the three primary goals for YATA were:

- Reduce alcohol-related harm in young people by reducing the supply of alcohol by adults
- Ensure that alcohol is only supplied to under 18-year olds by their own parents, in limited quantities, for consumption in a safe supervised environment
- Increase the knowledge and understanding of laws[23] concerning the supply of alcohol to those less than 18 years.

Since supply of alcohol by parents to those under 18 years is legal in NZ, the program employed a range of strategies for parents, such as parent evenings at local schools and public meetings, resource materials on the legal aspects of alcohol, tips on how to manage safe events for young people. The project aimed to:

- Encourage parents to limit the per occasion quantity of alcohol supplied to their children and supervise their drinking
- Communicate with their children about alcohol consumption.

The program also targeted alcohol retail outlets to stop selling alcohol to minors, by providing training seminars for responsible service of alcohol, information on laws and host responsibility.

Other activities included local media and social marketing strategies to advise other adults about the laws concerning supply of alcohol to minors, to support the enforcement of such laws, to provide alternative alcohol-free entertainment initiatives and to survey young people to determine their needs for entertainment. Young

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[23] Sale of Liquor Act 1989 governs the sale and supply of alcohol in NZ. While there is no minimum age for consumption, the minimum age for purchase is 18 years. Alcohol purchased by a parent may be legally consumed by their children under 18 years. It is illegal to sell alcohol to young people under 18 years and/or for anyone other than parents to supply it.

people were also encouraged to participate in community decision-making processes.

Surveys conducted after campaigns were implemented showed a small, but significant decrease in the proportion of minors being supplied with alcohol (Kypri & Dean, 2002 IN Clark, 2007), as well as decreased sales to minors from alcohol retail outlets (from 50% to less than 26%[24]) (Clark, 2007).

3.5.6 Trelleborg Project

Trelleborg is a municipality in southern Sweden. The Trelleborg project was a community-based intervention (1999-2002) that targeted adolescent alcohol consumption (Stafstrom, Ostergren, Larsson, Lindgren, & Lundborg, 2006). The main objectives of the Trelleborg project were:

- To focus on AOD consumption prevention in children and adolescents
- To decrease "heavy episodic drinking" in Trelleborg
- To delay the age of onset for drinking alcohol
- To achieve changes in behaviour and attitudes towards alcohol in the adult population
- Five action groups were established to address different focal areas, including:
- The workplace (improve and implement AOD consumption prevention policies in small and medium-sized businesses in Trelleborg)
- Child and youth (design and implement an AOD education program in schools)
- Parents (design and implement a parent education program)
- Access (reduce illicit trading of imported tobacco and alcohol through convenience stores in Trelleborg)
- Networking (create parental networks).

These groups, which comprised a wide variety of stakeholders, designed and planned the interventions. Seven intervention components were implemented:

- City council policy and action plan on AOD management
- School policy and action plan on AOD management
- Police and city administration developed a cross-sectoral approach to monitoring grocery and convenience stores for black market alcohol
- Comprehensive, evidence-based AOD education program for all primary and secondary schools

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[24] Controlled purchase operations involved supervised volunteers aged less than 18 years attempting to purchase alcohol.

- Education program for parents of 7th-9th grade students
- Leaflet with information for parents of 7th grade students on how to promote AOD-free environment for their children
- Survey on adolescent AOD use in the community.

Outcomes were surveyed every 12 months after program implementation in 1999 until 2003. Survey results showed substantial reduction in the proportion of 15-16 year olds who consumed alcohol from 82% at baseline to 67% in post-measurement (2003); and reduction on the proportion of adolescents with very heavy drinking patterns (from 37% to 24%) (Stafstrom et al., 2006). However, these are cross-sectional data only, with no comparator and must be interpreted with caution.

A follow-up to this study examined the effect of the Trelleborg project on alcohol-related accidents and violence (Stafstrom & Ostergren, 2008). Using logistic regression analyses on the cross-sectional data, results showed significantly lower alcohol-related accidents in 2003 compared to baseline (OR, 0.5 95% CI [0.27-0.76]); and reduction in self-reported alcohol-related violence (OR, 0.7 [0.43-1.01]).

3.5.7 Village

The US Village program borrows from an old African proverb "It takes a village to raise a child", with the idea that the whole community takes responsibility for the welfare of children (Homonoff et al., 1994). This program involved a 'train-the-trainer' approach, thereby creating a 'domino effect', whereby AOD prevention educators taught local community members, who, in turn, provided alcohol prevention education and parenting workshops for other community members. The key goals of the Village curriculum were to increase parent-child communication and involvement, establish family rules, encourage positive role models for children and teach children social skills. The goals were presented in nine interactive modules:

- Module 1: Teaches parents and other adults about how to prevent children from getting into trouble with AOD
- Module 2: Provides answers to children's questions about AOD and helps parents identify relevant resources
- Module 3: Focuses on how family and community members can be positive role models for children and establish appropriate ground rules
- Module 4: Lists warning signs of AOD-related problems and early intervention steps

- Modules 5-8: Helps parents and other caretakers develop children's skills to resist AOD use (e.g., stress reduction, decision-making, communication, self-esteem)
- Module 9: Focuses on the notion of "It takes a village to raise a child", with emphasis on adults' capacity to prevent their children (and others) from getting into trouble with AOD, and reviews their knowledge and attitudes towards AOD.

While program participants have been very positive about the workshops, objective evaluations have not been conducted to date.

3.5.8 Thinking Not Drinking: A SODAS[25] City Adventure

This US approach, which was based on social learning and problem behaviour theories, comprised 10 45-minute sessions and two booster sessions (Schinke, Schwinn & Cole, 2006; Schinke et al., 2005). Sessions were copied to a CD-ROM and included the following components:

- Norm correcting
- Media literacy
- Refusal skills
- Goal setting
- Decision-making
- Positive functioning skills (coping, assertiveness, effective communication).

An additional family component comprised a 30-minute videotape, which contained the same material as the CD-ROM for youth, as well as information on how to help their children avoid alcohol-related problems and make good decisions about alcohol, and explained the value of having rules and participating in family activities. Parents also received two booster sessions.

Young people were recruited from US community-based agencies and randomly allocated by agency to one of three study arms: 1) computer only; 2) computer plus family intervention; and 3) control. Self-report questionnaires were given every 12 months for four years after implementation.

While alcohol use increased across all study arms, the rate of increase was smaller in the intervention arms compared to controls at the four year follow-up (92% follow-

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[25] Stop, Options, Decide, Act, and Self-praise (Schinke, Schwinn, & Ozanian, 2005).

up). Analysis of the variables mediating behaviour showed that adolescents' capacity to solve problems and their ability to weigh up options before acting was better in the CD-ROM plus family intervention group compared to controls. With respect to peer influence, young people in the intervention group had fewer best friends who drank or got drunk compared to controls. Authors suggest that the intervention discouraged youth from associating with peers who drank.

The strengths of this study include the low attrition rate, high fidelity to the intervention, and long follow-up, which indicates durability. However, significance of differences between groups is not clear, as there was a potential unit of analysis error (unit of allocation was by agency, unit of analysis was by individual) and the number of community agencies recruited to the study was not reported. In addition, authors state that parental involvement was "disappointing", but they do not report the attrition rate for parents.

Overall, the program appears promising, but requires more robust evaluation to determine its effectiveness.

3.5.9 Xperience

Xperience is a multi-level, community-based US AOD prevention program that used social marketing and branding techniques to promote a substance-free lifestyle to young people aged 14-20 years (Diamond et al., 2009). The program, which focused on strengthening protective factors and reducing risk factors for AOD use, aimed to build recognition of Xperience as a popular part of youth culture. A series of branded AOD-free entertainment shows, which were hosted by young artists performing poetry and music with AOD prevention taglines, have been developed.

This program has been piloted on urban minority groups and outcomes are not yet available.

3.5.10 Good Sports Program*

Young people are attracted to sports as participants in their school or local community and also as spectators. However, sports and alcohol have a strong association in Australia. The Good Sports Program (Duff & Munro, 2007) focuses on managing alcohol use in sports clubs, with particular emphasis on the following actions:

- Change the culture of the club to promote low-risk drinking
- Deter drink-driving
- Reduce the level of consumption of alcohol products and provide non-alcoholic drink alternatives
- Improve compliance with liquor licensing laws and train staff in responsible service
- Reduce underage drinking
- Change members' attitudes towards drunken behaviour.

Two years after implementation in Victoria, the Good Sports Program was evaluated by the Australian Institute of Primary Care (AIPC) at La Trobe University in 2003 (Duff & Munro, 2007). Based on qualitative interviews, the AIPC concluded that the program contributed to reduced alcohol-related harms in clubs, reduced binge drinking and reduced alcohol-related road trauma. However, to date there have not been any controlled studies evaluating the program's effectiveness and no data are available on the impact of the program on adolescent alcohol use.

3.5.11 Other Community-based programs

3.5.11.1 Community Mobilisation for the Prevention of Alcohol-Related Injury (COMPARI)*

COMPARI was a West Australian project that aimed to mobilise the whole community to actively change environmental factors and individual drinking behaviour that underlie alcohol-related harms (Midford et al., 2002). The project comprised 22 key activities including, community development, local networking and support, provision of alternative alcohol-free activities, health education and marketing, and policy changes (Midford & Boots, 1999). While the project did not focus specifically on *adolescent* drinking, desirable outcomes in the general population, such as reductions in drinking and driving, environmental and policy changes, and overall focus on drinking culture and attitudes to drinking was likely to impact on adolescent drinking behaviour. Evaluation of the project indicated that the approach was well accepted by the community.

Table 3.14. Additional community-based programs

Program	Population/setting	Reference
Families and Schools Together (FAST)	Comprehensive program (3-14 years)	(OJJDP, 1999)
Creating Lasting Family Connections	Community-based: Parent training program (9-17 years)	(OJJDP, 1999)

3.5.12 Summary of community-based approaches

Community-based programs have the potential to reduce adolescent alcohol-related harms by addressing the local environmental, political, legal and cultural factors that impact on young adolescent behaviour.

The community-based programs examined in this review demonstrated mixed results overall. Unfortunately, those showing the greatest promise have not been adequately evaluated and, therefore, the grades of recommendations in Table 3.15 are relatively low. There were several elements of community-based programs that demonstrated positive outcomes. These primarily addressed issues of sales and supply of alcohol to minors, including:

- Training staff in responsible service of alcohol
- Limiting alcohol access through zoning and licensing
- Enforcing laws related to alcohol retail sales to minors

Other promising approaches included provision of alcohol-free entertainment and drinking and driving education for adolescents.

Community-based programs may be especially relevant in areas where environmental factors, such as economic deprivation, social dislocation, and easy availability of inexpensive drugs, prevail (Aguirre-Molina & Gorman, 1996). Individual factors, such as low self-esteem and poor decision-making skills, may have less impact in such an environment.

Design and implementation of a diverse set of program elements and evaluation of program activities is difficult in community-based programs, especially as AOD research is conceptually grounded in models that attribute AOD use to individual factors.

The programs described in this report all address different aspects of community (e.g., alcohol access, supply, marketing, alcohol-free activities) and each has its advantages and disadvantages. There is growing consensus that successful community-based approaches require a high level of collaboration, long-term support and resources, including funding for an individual or team to coordinate community activities (Casswell, 2000; Midford et al., 2002). Social change and changing norms associated with alcohol use and alcohol-related harm may be facilitated by community action. However, change may take time and long-term commitment is needed to sustain community involvement.

Table 3.15 Summary of community-based programs

Program	Australian/ International	Key features	Key outcomes	Strengths/Limitations	Grades of recommendation*
MPP	US Non-RCT & RCT	Mass media School-based kills training Parent program Community organisation Health policy change	Compared to control groups: Reduced alcohol use Less positive attitudes towards alcohol	Inappropriate data analyses in non-RCT	D
STARS Program	US RCT	Key facts postcards for families Parent-child interaction & communication Health consultation Family take-home activities	Compared to controls: NS effect on drinking Reduced intention to drink	High risk of contamination between control and intervention groups	D
Project Northland	US	Parent program: student activity book Peer-led program: resistance skills training Community program: alcohol access, availability, marketing, policies	NS effect on drinking	Inadequate follow-up Intention-to-treat analysis unclear	D
Community Trials Project	US	Community mobilisation Responsible beverage service Alcohol access: (zoning, licensing) Underage drinking Drinking and driving	Compared to control communities: Fewer alcohol-related traffic incidents Reduced alcohol sales to minors Increased compliance with responsible beverage service policies Reduced alcohol outlet density	Substantial community support for project Costly to implement Limited evaluation available	C

Table 3.15 Summary of community-based programs (cont.)

Program	Australian/ International	Key features	Key outcomes	Strengths/Limitations	Grades of recommendation*
Youth Access to Alcohol	NZ	Parental program to limit alcohol use in children & improve parent-child communication Alcohol retail outlets to stop selling alcohol to minors Media & social marketing strategies about laws concerning supply of alcohol to minors, supporting enforcement of laws, providing alternative alcohol-free entertainment Engaging young people in community decision-making processes	Decrease in number of minors supplied with alcohol Decrease in sales to minors	Cross-sectional data only Needs controlled study	C
Trelleborg Project	Sweden	City council policy and action plan on AOD management School policy and action plan on AOD management Police and city administration cross-sectoral approach to monitoring black market alcohol Comprehensive, evidence-based AOD education program for primary and secondary schools Education program for parents of 7th-9th grade students Leaflet with information for parents on promoting AOD-free environment for children Survey on adolescent AOD use in the community	Reduced self-reported drinking Reduced very heavy drinking	Cross-sectional data only Needs controlled study	C
Village	US	Parent training on preventing children from getting into trouble with AOD; resistance skills for children Children AOD education Family and community positive role models for children & role of community in protecting children List of warning signs of AOD-related problems and early intervention steps	Positive feedback from participants	No formal evaluation	D
Xperience	US	Social marketing Branding techniques to promote a substance-free lifestyle to young people Strengthen protective factors Reduce risk factors Branded AOD-free entertainment shows	Pilot study underway	Not formally evaluated	D

Table 3.15 Summary of community-based programs (cont.)

Program	Australian/ International	Key features	Key outcomes	Strengths/Limitations	Grades of recommendation*
Thinking Not Drinking	US	Norm correcting Media literacy Refusal skills Goal setting Decision-making Positive functioning skills (coping, assertiveness, effective communication).	Compared to controls: Rate of increase in drinking was smaller Improved capacity to solve problems and weigh up options before acting Fewer best friends who drank or got drunk	Low attrition rate High fidelity to the intervention Long follow-up (4 yrs) Potential unit of analysis error Number of community agencies recruited to the study was not reported Recruitment was poor	D
Good Sports	Australia	Promote low-risk drinking in sports clubs Drink-driving education Provide non-alcoholic drink alternatives Improve compliance with liquor licensing laws Train staff in responsible service Address underage drinking Change attitudes towards drunken behaviour	Reduced alcohol-related harms in clubs Reduced binge drinking Reduced alcohol-related road trauma	No formal evaluation	D

*Grades of recommendations

Grade A: Effectiveness established to a degree that merits application

Grade B: Effectiveness established to a degree that warrants consideration

Grade C: Effectiveness established to a limited degree

Grade D: Effectiveness not conclusively established

Grade E: May not be effective.

3.6 Combined Approaches

More recently, there has been a movement towards combining single focussed education programs that target individual behaviour into a comprehensive multiple component approach (Aguirre-Molina & Gorman, 1996; Flay, 2000; Stigler et al., 2006). Ecological approaches to prevention take into account the multiple spheres of social influence on young people, including family, school, peers and community. Using a classroom-based program as a base, adolescents' social environment is addressed, including whole of school programs, family programs, mass media and community interventions. Social cognitive theory suggests that young people are more likely to adopt healthy behaviours when they are exposed to positive role models; their environment facilitates healthy behaviours and inhibits unhealthy practices; and there are opportunities for them to engage in healthy prosocial activities (Bandura, 1989).

Combined approaches include school and community-based interventions, school and family-based interventions and a combination of all three.

Eight combined approaches that are relevant to adolescent alcohol use are listed below and described in the following sections. Programs developed in Australia are marked with an asterisk (*).

Section	Program/resource
3.6.1	SFP + LST
3.6.2	Pathways to Prevention*
3.6.3	DARE Plus
3.6.4	Blueprint
3.6.5	Adolescent Transitions Program (ATP)
3.6.6	Communities Mobilizing for Change on Alcohol (CMCA)
3.6.7	School-based parental education program
3.6.8	Illawarra Drug Education Program (IDEP)

3.6.1 Strengthening Families Program plus Life Skills Training (SFP/LST)

More recently, two of the most widely used and recommended US programs, the LST and an updated version of the SFP (parents and youth 10-14 years) were combined into a school and family-based program (SFP/LST) (Gorman et al., 2007).

An evaluation of this combined program was conducted in a study of 36 US high schools (Grade 7) (Spoth, Randall, Shin, & Redmond, 2005; Spoth et al., 2002). Twelve sets of three schools were randomly assigned to one of three groups: 1) SFP/LST; 2) LST only; and 3) no intervention control. Programs were delivered concurrently and while LST was delivered as intended, approximately 20% of those randomised to SFP received more than 50% of the intended program (Spoth et al., 2005). While evaluation studies indicated positive outcomes, reports of effectiveness were based on questionable data analyses, such as the use of one-tailed significance tests, a less conservative 0.10 alpha level (rather than the more stringent and commonly used 0.05 level), post-test data as baseline and post-hoc sample refinement.

Thus, findings are not reliable or generalisable. In a five and a half year follow-up study, authors reported positive outcomes for at-risk students (Spoth et al., 2008). However, such post-hoc sample refinement leads to spurious conclusions about the effectiveness of the program. Re-analysis of findings using appropriate statistical analyses demonstrated no significant effects of the program on adolescent alcohol use or drunkenness (Gorman et al., 2007).

3.6.2 Pathways to Prevention*

Pathways to Prevention, an initiative of the National Crime Prevention (National Crime Prevention, 1999), was a large project that examined a range of approaches that aimed to prevent adolescent antisocial behaviour and later adult offending[26]. A whole-of-community model was proposed in which different programs were implemented simultaneously in the contexts of family, school and community; and these programs targeted developmental transitions (e.g., home-to-school; primary-to-secondary school).

The project involved collaboration between the Key Centre for Ethics, Law, Justice and Governance (Griffith University) and Mission Australia. It had the support of the Queensland government and engaged local schools and community groups as partners. The first phase of the *Pathways* project was implemented in 2002. A key aim of the project was to bring together systems of support to enhance the wellbeing

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[26] For further details of the project and approaches, the full report can be downloaded from the Mission Australia website (http://www.missionaustralia.com.au/document-downloads/doc_details/11-pathways-to-prevention-project). A brief description and results from an evaluation of the program and its relevance to adolescent risk factors for alcohol-related harms is presented here.

of children and families living in a disadvantaged multicultural urban area of Brisbane (Homel, Freiberg, Lamb, Leech, Batchelor et al., 2006; Homel, Freiberg, Lamb, Leech, Carr et al., 2006). The goals of the program were to:

- Promote child competencies related to school success

- Promote family capacity to nurture child development

- Promote equitable relationships between families and schools (Frieberg et al., 2005; Homel, Freiberg, Lamb, Leech, Batchelor et al., 2006; Homel, Freiberg, Lamb, Leech, Carr et al., 2006).

One component of the *Pathways to Prevention* project was the Preschool Intervention Program (PIP), which promoted communication and social skills related to school success and targeted 4-6 year-olds (N=4 intervention schools; 3 comparison schools; n=510 pre-school children). Families with children aged 4-6 years also participated in the Family Independence Program (FIP) (parent training, facilitated playgroups, support groups, etc), which promoted family capacity to foster child development. Its overarching goal was to create opportunities for positive development for children and their families, and to promote their full participation as citizens. The project recognised that this was particularly important in a community where there was a high level of economic and social hardship and an associated risk of family stress and engagement in antisocial behaviour by young people (Frieberg et al., 2005; Homel, Freiberg, Lamb, Leech, Batchelor et al., 2006; Homel, Freiberg, Lamb, Leech, Carr et al., 2006).

Analysis of pre- and post-intervention data from PIP and control schools showed that language skills were significantly better in PIP students (p<0.05); behaviour difficulties were lower in PIP boys (p<0.001); and school readiness was higher in PIP boys (p<0.01) compared to children from control schools (Homel, Freiberg, Lamb, Leech, Batchelor et al., 2006; Homel, Freiberg, Lamb, Leech, Carr et al., 2006). From qualitative interviews, families in the FIP intervention reported improved relationships between the family and school; improved communication and relationships between the parents and children; increased community attachment and sense of community belonging; and stronger community networks and family relationships. While these were not direct measures of alcohol use or alcohol-related harms, they are strong protective factors associated with later alcohol-related issues.

This approach warrants closer attention and consideration of wider application.

3.6.3 DARE Plus

The school-based DARE program was expanded to a multi-component program that included school "youth action teams" to organise extracurricular activities and provide peer-led training in social skills for students and parents. DARE Plus also included neighbourhood action teams to address local issues related to AOD use (Perry et al., 2003).

DARE Plus schools reported significantly lower increase in alcohol use in boys compared to control schools, but no significant difference compared to the standard DARE program. There were no significant differences for girls who received Dare Plus (Perry et al., 2003). However, results from this study must be treated with caution as there was a potential unit of analysis error in the data analyses[27].

3.6.4 Blueprint

Blueprint was a multi-component UK AOD education program that combined school-based education (including training teachers in the specifically designed curriculum) with parental involvement, media, community action and health policy (Stead, Stradling, MacKintosh et al., 2007; Stead, Stradling, MacNeil, MacKintosh, & Minty, 2007).

The program was implemented in 23 schools across England (2003-2005) with six schools used as comparators. The school curriculum had a strong emphasis on social and normative influences, development of resistance and assertiveness skills, and perceptions of AOD use among young people. Students also received information about AOD and their effects; risks of using AOD; developed strategies for minimising risks; enhanced decision-making; and focused on social interaction and relationships.

The parent component comprised a series of parenting skills workshops, which covered a range of topics including bullying, communication, talking about sex, relationships and drugs, stress, and problem behaviours. Parents also received an AOD booklet; workbooks with activities that parents could do with their children; and an opportunity to attend a Blueprint lesson.

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[27] Studies that use the school as a unit of allocation and students as the unit of analyses ignore the clustering effect or similarity of students in a group (see 3.2.1.3 for more detail).

The media component aimed to raise awareness of the Blueprint program and encourage participation. Roadshows were staged in public areas, providing information about AOD and inviting people to complete surveys and enter prize draws.

The health policy component focused on alcohol retailer education and training, proof-of-age checking, test purchasing (using underage volunteers for controlled alcohol product purchase), compliance with alcohol policies and prosecutions for underage sale of alcohol.

Despite intentions to incorporate a community component, no specific activities were undertaken. To-date the program has been evaluated on process outcomes only, such as the quality and delivery of teacher training, fidelity of curriculum delivered.

Time was an important factor as teachers reported difficulty covering the content adequately in the time allocated. While lessons were generally delivered with high fidelity (65-82%), some teachers did not fully understand the rationale behind particular messages or activities, which may have impacted on students' learning. School Drug Advisers were funded to support teachers in their delivery of the curriculum.

Students' ratings of lessons were very positive and higher than those given to equivalent lessons in control schools. Parent participation was very low – approximately 6% of parents of children at intervention schools attended initial events – and decreased over time. The impact of the Blueprint program on young people's rates of consumption and alcohol-related harms has yet to be reported.

3.6.5 Adolescent Transitions Program (ATP)

The ATP, which is delivered in schools, combines a family program (telephone consultations, feedback on children's behaviour, access to resources) with a classroom-based program for students (based on Life Skills Training) (Connell et al., 2007). This program aims to link the universal, selected and indicated approaches by modulating the intensity of the intervention to the specific needs of adolescents and their families. That is, the universal approach encourages parents to improve their supervision and family management practices and to identify and motivate parents of children at risk of problem behaviour to remain engaged in good family management. The Family Check-Up (FCU, based on motivational interviewing) is a 3-session

program for selected families identified as needing additional support and motivation to improve parenting practices and to follow up with specific family-centred interventions where indicated.

Students aged 11-17 years were allocated to control or intervention groups (self-selected to universal, selected or indicated). Compared to matched controls, students and parents in the FCU group had lower rates of increase in alcohol use between 11-17 years and lower risk for substance use problems and police arrests by 18 years (Connell et al., 2007).

3.6.6 Communities Mobilizing for Change on Alcohol (CMCA)

The CMCA program is a community intervention designed to reduce young people's access to alcohol (Wagenaar et al., 2000). City councils, schools, enforcement agencies, alcohol merchants, business associations and the media were invited to participate. Data on alcohol use were collected by surveys (young people, parents, alcohol retailers) and alcohol sales to minors was determined directly (young underage volunteers attempted to purchase alcohol).

Follow-up surveys showed that while there was no significant impact on young adolescents' alcohol use (less than 18 years), 18-20 year-olds reported a significant reduction in providing alcohol to other adolescents and were less likely to purchase alcohol or drink in a bar; there was 17% increase in the rate of age checking in the intervention communities and reduction in sales to minors (p=0.06). In addition, there were fewer arrests for drink driving in the intervention communities. However, longer-term follow-up is needed for full evaluation of this program.

In a multi-community time-series trial, a similar project (Complying with the Minimum Drinking Age) examined the effects of training retail alcohol staff about alcohol sales to minors and enforcing checks of alcohol outlets (Wagenaar, Toomey, & Erickson, 2005). Following an initial 17% reduction in alcohol sales to minors in retail outlets post-intervention, the effects disappeared within three months in off-premise outlets and reduced to 8% reduction in on-premise outlets. These results suggest that isolated individual policies are insufficient to maintain behavioural change.

3.6.7 School-based Parental Education Program

A school-based intervention with parental involvement was implemented in 20 schools in Perth (Beatty, Cross, & Shaw, 2008). Based on social cognitive theory (Bandura, 1989), the intervention targeted parents of 10-11 year-olds and focused on four parenting factors that have been associated with adolescents' initiation of AOD use. These factors are:

- Parental modelling of AOD use
- Parents' normative standards about children's AOD use
- Parental style and family management
- Parent-child communication.

These factors were incorporated into five key components that focused on the interactions between parents and children with respect to AOD issues (see Table 3.16).

Table 3.16 Intervention content and behaviours

Intervention components	Key content and behaviours
Children and drugs: the examples parents set make a difference	Role modelling is important—parents should try to set an example they are happy for their children as they get older to copy Even though role modelling is important, parents who smoke cigarettes or drink alcohol themselves and who want to try to protect their children from ATOD-related harm should talk with their children and set standards for their children regarding these drugs
Children and drugs: parents' opinions make a difference	Parents are an important influence in children's lives and can influence their decisions regarding smoking cigarettes and drinking alcohol and their peer selections Year 6 (age 10 – 11) is not too early to talk to children about these issues Talking to children about alcohol and cigarettes will not necessarily make children curious and more likely to use these drugs
Children and drugs: how parents get along with their children makes a difference	Parenting style and family management techniques are important factors in protecting children from drug-related harm Discuss family rules, limits and expectations regarding alcohol and cigarettes Discuss the consequences if family rules and limits about cigarettes and alcohol are broken
Children and drugs: how parents talk with children makes a difference	Parents should talk regularly with their children about drugs Discussions are better than lectures Check children understand what has been talked about by asking for and listening to the children's opinions
Children and drugs: what parents talk about makes a difference	Discuss alcohol and tobacco as well as illegal drugs Discuss the prevalence of smoking by children and correct the misconception that most young people smoke Discuss the short-term risks more often than long-term risks Discuss and practise practical ways children can refuse offers of cigarettes and alcohol

Schools were randomised to intervention or control groups and follow-up data were collected at 18 months. Compared to the comparison group, intervention parents

were more than twice as likely to discuss drinking with their year 6 children (OR, 2.8, p<0.001). Discussions were likely to have been more recent (p<0.001) and longer (p=0.006), with greater level of engagement (p=0.006) and more topics covered (p<0.001).

3.6.8 Illawarra Drug Education Program (IDEP)

Illawarra Drug Education Program (IDEP) was developed in NSW (Lloyd et al., 2000). IDEP, which includes information provided by teachers, group discussion, peer education and parental involvement, targets children aged 10-11 years and focuses on alcohol, tobacco and illicit drugs. Peers who had completed the program during the previous year introduce the concepts of IDEP. Six classroom sessions include information about negative consequences of AOD use, decision-making strategies, social pressures related to AOD use, assertiveness training and peer resistance skills, and alternatives to AOD use. Children work in groups to develop AOD-related materials and produce a small piece of drama, which is presented to parents at the end of the program.

Evaluation of the program demonstrated lower initial use of tobacco and cannabis, and delayed use of alcohol in the intervention group compared to controls (Lloyd et al., 2000).

3.6.9 Other Combined Approaches

A school, family and community-based intervention implemented in Canada for 6-8th grade students had no significant effect on alcohol use 18 and 30 months after implementation (Dedobbeleer & Desjardins, 2001). However, compared to controls, there were positive effects on potential mediating variables, including increased self-esteem, improved peer pressure resistance skills, improved relationship with father and greater tendency to choose substance-free leisure activities and participate in community activities.

Other programs that used combined approaches are listed in Table 3.17. These programs were not evaluated in this review as they focussed primarily on high-risk youth or drink-driving in the general community, rather than universal programs for school-aged children.

Table 3.17 Additional combined approaches

Program	Population/setting	Reference
Say Yes First	Comprehensive US program aimed at high-risk youth (9-14 years)	(Lloyd et al., 2000)
CARE	Aimed at high-risk students (9-10 years)	(Lloyd et al., 2000)
Saving Lives	Focus on drink-driving in the community – general population	(Hingson, McGovern, Howland et al., 1996)
CASASTART	Focus on high-risk youth	(Murray & Belenko, 2005)

3.6.10 Summary of combined approaches

Combined approaches varied substantially in the different components included in the intervention and it is difficult to determine how effective combined approaches are as the evidence is sparse (Table 3.18). Most programs have had limited formal evaluations or the evaluation methodology was problematic.

However, there were several positive outcomes from programs that have potential and may warrant closer consideration and further evaluation. Family communication and attachment to family and community are protective factors that were demonstrated by the Pathways to Prevention and School-based Parental Education programs. Similarly, family management in the Adolescent Transitions Program contributed to the slower growth in alcohol use compared to control groups.

While the rationale for combining school, family and community approaches to adolescent alcohol use is prudent, the practical implementation of a combined approach is challenging. The more components included in such a program; the more difficult it is to maintain fidelity and ongoing resources over the longer term. In addition, a key factor in any intervention that involves a family-based component is the difficulty in recruiting parents and maintaining their participation (Cohen & Linton, 1995; Sanders, 2000). Coordinating several approaches may require the services of a dedicated program coordinator, which adds substantially to the costs of implementation.

In the absence of strong and ongoing support from all sectors, a combined approach may revert to a less resource-intensive, single modality program, or be phased out completely.

However, there are potential benefits of a combined approach to reinforce messages across different domains and to address some of the underlying factors that enable adolescent drinking, such as access, availability and cultural influences.

Table 3.18 Summary of combined programs

Program	Australian/ International	Key features	Key outcomes	Strengths/Limitations	Grades of recommendation*
SFP + LST	US Cluster RCT		No significant effects on alcohol-related behaviours	Potential unit of analysis error Poor methodology Questionable data analyses	D
Pathways to Prevention	Australia RCT	Pre-school Intervention Program: promote communication and social skills related to school success Family Intervention Program: enhance family capacity to foster child development Parent training Facilitated playgroups Support groups	Compared to controls: Improved language skills Reduced behaviour difficulties in boys Improved school readiness in boys Qualitative outcomes: Improved relationships between the family and school Improved communication and relationships between the parents and children Increased community attachment and sense of community belonging Stronger community networks and family relationships	Limited evaluation available	C
DARE Plus	US Cluster RCT	DARE program plus: Peer-led parental involvement Youth-led extracurricular activities Community adult action teams Postcard mailings to parents	Compared to control schools: Reduced rate of increase in alcohol consumption for boys No significant difference for girls	Potential unit of analysis error	D

Table 3.18 Summary of combined programs (cont.)

Program	Australian/ International	Key features	Key outcomes	Strengths/Limitations	Grades of recommendation*
Blueprint	UK	School: Resistance and assertiveness skills Normative perceptions of AOD use Education on AOD effects & risks Strategies for minimising risks Decision-making Social interaction and relationships Parents: Parenting skills on bullying, communication, sex, relationships, stress, and problem behaviours AOD activities workbooks Media: Awareness Blueprint Roadshows about AOD Health policy: Alcohol retailer education and training Proof-of-age checking Compliance with alcohol policies Prosecutions for underage sale of alcohol	Positive acceptance by students Poor parental participation	Not formally evaluated	D
Adolescent Transitions Program	US Non-RCT	3-tiered intervention: Supervision and family management Family Check-up (motivational interviewing) Family-centred intervention	Compared to matched controls: Lower rates of increase in alcohol use Lower risk for substance use problems and police arrests by 18 years	Long-term follow-up Limited evaluation studies available	C

Table 3.18 Summary of combined programs (cont.)

Program	Australian/ International	Key features	Key outcomes	Strengths/Limitations	Grades of recommendation*
Communities Mobilizing for Change on Alcohol	US Cross-sectional survey	Collaboration of city councils, schools, enforcement agencies, alcohol merchants, business associations and the media	Compared to control communities: No significant effect on underage alcohol use (<18 yrs) Fewer 18-20 yr-olds provided alcohol to underage youth Increased age checking Reduced sales to minors Fewer arrests for drink driving	Limited evaluation studies available Long-term follow-up needed	D
School-based parental education program	Australia, Perth RCT	Parental modelling of AOD use Parents' normative standards about children's AOD use Parental style and family management Parent-child communication	Compared to controls: Increased parent-child communication about drinking	Limited evaluation studies available	D
Illawarra Drug Education Program	Australia, NSW	Peer-led program Education about negative consequences of AOD use Decision-making strategies Assertiveness training Peer resistance skills Alternatives to AOD use Development of AOD-related materials Drama produced by children for parents at the end of the program	Compared to control schools: Delayed use of alcohol	Limited evaluation studies available	D

*Grades of recommendations

Grade A: Effectiveness established to a degree that merits application

Grade B: Effectiveness established to a degree that suggests application

Grade C: Effectiveness established to a degree that warrants consideration of applying the findings

Grade D: Effectiveness established to a limited degree

Grade E: Effectiveness not established.

3.7 Other Approaches

A range of other approaches and tools that may also impact on adolescent alcohol use have been developed and some of these have been introduced to varying degrees in Australia.

Three other approaches and tools are listed below and described in the following sections. Programs developed in Australia are marked with an asterisk (*).

Section	Program/resource
3.7.1	Universal media messages (e.g., drink-driving, alcohol and pregnancy, parental modelling)
3.7.2	Internet-based programs
3.7.3	Peer-led approach
3.7.4	Fatal vision goggles (for drink-driving)

3.7.1 Universal media messages

There is little evidence that universal media messages alone change drinking behaviour in adolescents or adults. However, when combined with other strategies and enforcement of legislation (e.g., drink driving), they may increase awareness and knowledge about alcohol-related issues. Few studies have assessed the effects of universal media messages on adolescent alcohol use.

A UK study examined the effect of the "Sensible Drinking" campaign. After 11 years of this campaign, researchers surveyed first year female university undergraduates (who had been exposed to the campaign during their high school years). Results showed that the campaign failed to get the message across about the alcohol content of alcohol products, recommended limits etc. (Gill & O'May, 2007). Approximately 54% of undergraduates could recall information about standard drinks; and 52% did not know the alcohol content or number of standard drinks in their favourite alcoholic drink.

Effects are often cumulative and reinforce messages delivered in other contexts (e.g., school, family, community).

3.7.2 Internet

Given the ever-increasing advances in information and communication technology as well as greater acceptability of, and accessibility to, the internet, web-based information

and interactive communications systems offer some advantages over traditional health promotion delivery systems. Web-based programs have been used for diabetes management and changing other lifestyle behaviours, such as diet and exercise (Moore, Alsabeeh, Apovian et al., 2008; Verheijden, Jans, Hildebrandt, & Hopman-Rock, 2007). The anonymity inherent in this type of program may be appealing to some people as it avoids potential stigmatisation associated with poor lifestyle choices, such as may occur in face-to-face interactions with health professionals. Web-based programs and interventions can be delivered in full (i.e., high fidelity); to a large target audience (i.e., with internet access); at relatively low cost (Shabestari & Roudsari, 2009); and they can be routinely updated with little additional cost.

For example, the Australian CLIMATE schools program (see 3.3.4 for more details) is a computerised prevention program to reduce adolescent alcohol use and prevent alcohol-related harms (Vogl et al., 2009).

Several other web-based alcohol education programs have been developed for young people moving from high school to University. Examples include:

1. *College Alc* (Bersamin, Paschall, Fearnow-Kenney, & Wyrick, 2007): a US web-based alcohol harm prevention program comprises five sessions that provide participants with current research on college alcohol use; social norms; alcohol-related consequences; harm prevention; and treatment. The program uses streaming video clips, interactive assignments, personalised feedback, discussion forums, selected readings and a student-generated harm prevention plan. For students who were regular drinkers, College Alc reduced the frequency of heavy drinking, drunkenness and alcohol-related harms; however, there was no effect on alcohol-related outcomes among students who did not drink prior to college.
2. *Personalized Normative Feedback* (Lewis, Neighbors, Oster-Aaland, Kirkeby, & Larimer, 2007): US College students in the intervention group received feedback on actual norms for student drinking behaviour compared to their perceptions of typical student drinking. Compared to controls (no feedback), students receiving gender-specific feedback had lower perceptions of student drinking and reduced their own alcohol consumption.
3. *Web-based motivational intervention* (Kypri, Langley, Saunders, Cashell-Smith & Herbison, 2008): alcohol use assessment and screening and brief intervention, which includes normative feedback related to perceptions of peers' drinking norms. Australian students in the intervention group reported reductions in frequency of drinking, total consumption, heavy drinking episodes and academic problems compared to controls.

The internet is a convenient and immediate conduit for accessing information. Web-based programs are appealing to young people and readily updated and modified for different target populations. Positive outcomes from such programs are encouraging and warrant further development and evaluation, including economic analysis to determine their cost-effectiveness.

The limitations of this approach pertain to issues related to access and availability. That is, the impact of web-based programs may be limited to those with ready access and computer literacy, which may exclude some at-risk groups, such as remote Indigenous populations, homeless, lower-income and socially disadvantaged, who tend to use the Internet less than the general population (Miller & West, 2009). Therefore, such programs may reach only the 'better-connected' sections of the population that have less need for them. However, web-based delivery of alcohol education may be well-suited to the school environment.

3.7.3   Peer led approaches

Peer education is widely used within ATOD education both within Australia and overseas (Australian Drug Foundation, 2006; Cahill, Murphy, & Kane, 2005; Goren, 2006; McDonald & Grove, 2001). It is both popular and "intuitively appealing" (Bament 2001 in McDonald, Roche, Durbridge, & Skinner, 2003). The first documented use of peer education for young people about alcohol and other drug use was conducted in US schools in the late 1960s (Ward et al. 1997 in McDonald et al., 2003). During adolescence, young people shift from primarily identifying with parents and other adults to identifying with others their age. Thus, engaging young people in the design and delivery of health promotion programs can help to address the 'credibility gap' (McDonald et al., 2003). Young people may also be more inclined to speak openly and honestly to a peer about alcohol or other personal issues, than they would to an adult.

Peer education is "based on the premise that it is possible to harness the naturally occurring influence of peers on young people's knowledge, attitudes and behaviour" (McDonald et al., 2003, p9). Information, affective or psychosocial approaches to alcohol education may all include a peer education component. Some information-based approaches in schools simply replace an adult teacher with a peer educator (Baklien, 1993; Mellanby, Newcombe, Rees & Tripp, 2001) whilst other approaches utilise the peer component in a more sophisticated manner such as in theatre or other artistic endeavours (Berlin & Hornbeck, 2005; Cimini, Page, & Trujillo, 2002). Regardless, careful planning of peer-led activities is essential (Skinner & Roche, 2005).

Peer-led approaches may be effective if peer educators model behaviour and attitudes that argue against AOD use (Loxley et al., 2004). One example of a peer-led approach was the Teens Teaching Teens (TTT) program, which was rated highly by both students and teachers in school consultations. It is important, however, that peer educators engage with their peers, have good communication skills, and are credible and respected

by students engaging in risky behaviours. If it is simply the 'good' students selected as peer educators, then it is likely to be counter-productive.

In a meta-analysis, peer education programs produced similar outcomes to other interactive programs delivered by teachers (Tobler, 1997). Thus, it may be the interactive nature of the program, in which students are engaged in discussions and role-plays, that is the key success factor, rather than the use of peer educators. However, when booster sessions were included in another intervention, only the peer-led sessions showed positive results (Botvin et al., 1990 in Cuijpers, 2002). Therefore, it is likely that a peer-led approach has merit, but needs careful consideration to ensure that the selected peers are appropriate and adequately trained for the task.

3.7.4   Fatal vision goggles

Fatal vision goggles (also Beer Goggles) are designed to simulate the visual impairment that occurs with differing levels of intoxication (Hennessy, Lanni-Manley, & Maiorana, 2006). The aim is to give the wearer a sense of disturbed vision and equilibrium as may be experience when under the influence of alcohol. A range of goggles are available for different blood alcohol concentration levels and for night or daytime conditions. Typically, they are used in driving simulation tests to demonstrate to students how alcohol consumption affects reaction time, spatial awareness and judgement. One study of US college students found that the fatal vision goggles reduced some participants' intentions to drink and drive. However, effects were limited to those that commonly drank more, believed that collisions were more likely to occur when drink-driving, and those who did not drive to gain independence and autonomy. In addition, outcome measures were intentions only, which do not necessarily predict actual behaviour as demonstrated in a similar study (Jewell & Hupp, 2005).

While fatal vision goggles are used extensively in high schools across Australia in conjunction with Driver Education courses for adolescents, their impact on reducing alcohol-related harms in adolescents has not been adequately evaluated.

3.7.5   Other programs and pilot studies

There are several Australian projects underway that have yet to be evaluated in Queensland, Victoria and Western Australia.

Details for the Victorian project are as follows:

Drug Education in Victorian Schools (DEVS)

A pilot project titled *Drug Education in Victorian Schools (DEVS)* is currently being undertaken by the Victorian Department of Education and Early Childhood Development.

The project aims to develop and evaluate an evidence-based, school drug prevention intervention that comprises classroom and parent-assisted homework components. The work is being carried out over two years in three Victorian government high schools. The intervention recruited a cohort of students who commenced Year 8 in 2008, when the formative research and initial pilot intervention commenced. Follow up intervention with the same group will occur in 2009. The intention is that the project will form the basis for the future development of a comprehensive evidence-based drug education program.

Queensland and Western Australia

At this time it has not been possible to provide details about the initiatives in QLD or WA.

3.7.6 Summary of other approaches

Among the different other approaches to adolescent alcohol use, internet-based programs appear to be the most promising. While most evaluation studies on web-based programs have been conducted in US college students, there is some evidence that Australian high school students find the approach acceptable and respond positively to the messages.

Further development of such programs and evaluation of their effectiveness is warranted.

Table 3.19 Summary of other approaches

Program	Australian/ International	Key features	Key outcomes	Strengths/Limitations	Grades of recommendation*
Sensible drinking campaign	UK Cross-sectional survey	Alcohol education messages	No significant effect on young people's alcohol-related knowledge	Limited evaluation of media messages available Messages may be cumulative and reinforce other approaches	E
Internet	US RCT	College Alc Education on college alcohol use; social norms; alcohol-related consequences; harm prevention; and treatment Interactive assignments Personalised feedback Discussion forums	Compared to controls: Reduced frequency of heavy drinking Reduced drunkenness Reduced alcohol-related harms in students already drinking NS effect on students not drinking before college	Easy access to program Positive effects only on those already drinking	D
	US	Personalized Normative Feedback Normative feedback on peers' drinking	Compared to controls: Lower perceptions of student drinking Reduced alcohol consumption	Easy access to program	D
	Australia	Web-based motivational intervention Alcohol use assessment and screening Brief intervention Normative feedback	Compared to controls: Reduced frequency of drinking Reduced total consumption Reduced heavy drinking episodes Reduced academic problems	Easy access to program	C
Peer-led approaches	International and Australia Meta-analysis	Alcohol knowledge		Peer involvement tends to be very interactive, which is a key characteristic of effective programs	C
Fatal vision goggles	US Australia	Visual impairment reflecting different levels of intoxication in a simulated driving environment	Reduced intentions to drink and drive	Limited evaluation Changed intentions do not reliably predict later behaviour	E

*Grades of recommendations

Grade A: Effectiveness established to a degree that merits application
Grade B: Effectiveness established to a degree that warrants consideration
Grade C: Effectiveness established to a limited degree
Grade D: Effectiveness not conclusively established
Grade E: May not be effective.

3.8 Summary and Conclusions

The first and foremost criterion for selecting alcohol education programs should be that it has proven effects. Given that previous systematic reviews have shown that AOD education programs have little or no evidence of effect, it is important to ensure that scarce resources (time, money, effort) are not wasted on programs that do not meet this criterion.

3.8.1   Research limitations

To date, considerable effort has been directed towards researching what types of alcohol education is effective. However, most research undertaken has generally been of moderate to poor quality.

There are two key points that emerge from the findings in this review: 1) the evidence base evaluating the effectiveness of universal alcohol education programs for adolescents is methodologically flawed (see 3.2.1 for more details); and 2) the expectations of what can be achieved by such programs may be unrealistic.

Determining the effectiveness of prevention programs that were examined in this review was challenging due to the significant shortcomings in the available evaluation research. Consistent with the findings of several other researchers who have evaluated alcohol education programs in schools, multiple flaws were identified in the available research (Gandhi et al., 2007; Gorman, 2003; Midford, 2008; Skager, 2007).

As most alcohol education programs were not evaluated in multiple, large-scale, randomised controlled trials (i.e., gold standard research practice), it was not possible to identify and recommend specific programs as 'best practice'. Had we limited our review to programs that have been rigorously evaluated, the list would have been very short. Many programs that have been evaluated were examined in a single study or by a single group of researchers who were also the program developers. In addition, many programs and resources have not been evaluated; nonetheless, they are used widely.

We emphasise the need to conduct appropriate evaluations and to publish findings irrespective of the effects. This is an important point, as there was some evidence that programs had negative effects on adolescents' use of alcohol (Werch & Owen, 2002). For example, caution is needed in implementing programs that enhance social competence (Ashton, 1999; Scheier et al., 1999) or encourage participation in sports (Eitle et al., 2003).

Adolescent drinking generally occurs outside school hours when children socialise with friends and family. While the school is a convenient forum in which to access large numbers of adolescents, it may be unrealistic to expect the school alone to deliver alcohol prevention messages.

Another area of uncertainty in the literature was defining measures of a program's "success" or "effectiveness". Hundreds of different types of measures have been utilised in the literature and most were based on self-report. Measures included various forms of consumption (frequency, quantity, pattern of drinking), intentions to drink, attitudes towards drinking, beliefs about negative consequences, normative beliefs about peers' drinking and a range of other behaviours related to alcohol use, such as violence, unprotected sex, aggression, bullying and other socially unacceptable behaviours. Changes in many of the relevant outcomes may not become apparent for some time after implementation of a program, yet few studies assessed longer term outcomes. Most research in this area has been conducted in the US, where the key outcome was abstinence and other outcomes, such as those constituting harm reduction, were not measured or they did not count towards success.

Overall, there is a clear need to improve the methodology of evaluation research, establish appropriate outcome measures that predict risky alcohol use and alcohol-related harms in later life, improve reporting of study methods and analyses (e.g., attrition rates, intention-to-treat analyses) in publications and conduct well-designed economic analyses of programs that show evidence of positive effects (Foxcroft et al., 2003).

3.8.2 Barriers and limitations to alcohol education programs

The main barriers to implementing alcohol education programs in schools concerned limited resources, time and skills. While it is important to ensure that education programs contain key elements of effectiveness, even the most effective programs will be futile if they are not implemented effectively. To do this, it is crucial that teachers are equipped with sufficient resources, training and support to deliver alcohol education optimally in their specific school setting (Cahill, 2007).

There were several factors that were not adequately considered in the program evaluations. Studies generally did not conduct an economic analysis of programs that were evaluated; school resources and teacher experience and training were not clearly defined;

appropriateness of the program in different regional and cultural settings was rarely considered; and process outcomes, such as the fidelity of program implementation, acceptability of the program for teachers and students were rarely assessed. These factors may impact on a program's effectiveness, feasibility of implementation and likelihood of being maintained over time.

One of the greatest challenges in alcohol education lies in transferring research knowledge into practice. Differing ideologies and pedagogical challenges, competing curriculum demands and variable needs of students add to the complex environment in which alcohol education is implemented. It may not be feasible to implement an evidence-based standardised program across highly complex and heterogeneous school settings (Cahill, 2007).

A common theme emerging in the literature (and in the school consultations) is the tension between fidelity and flexibility. Lack of fidelity to an effective program may reduce its effectiveness and what starts as an interactive multi-modal program may turn into a knowledge-based program at the point of delivery (Cahill, 2007). At the same time, implementing standardised interventions for all schools ignores the complex and dynamic nature of the school setting.

3.8.3   Facilitators and enablers

Since the quality of studies was variable and the strength of the evidence was relatively weak at best, it was not possible to identify programs that constituted 'best practice'. However, a number of elements were identified that increased the likelihood of a program's effectiveness (Table 3.20). These elements may help to guide schools selection of programs and inform policy decisions.

Table 3.20   Key elements that increase likelihood of a program's success

Positive elements
Normative feedback
Timed to appropriate developmental stage
Comprehensive program elements
Socio-culturally relevant
Enhance positive relationships
Relevant to targe group needs
Single substance focus
Relevant up-to-date materials
Media literacy
Interactive and activity-oriented
Peer interaction
Diverse teaching style
Clear and realistic goals and objectives
Supportive school policies and culture
Ongoing teacher training and support
Parent-child communication
Family management
Family bonding and attachment
Training staff in responsible service of alcohol
Enforcing laws related to alcohol retail sales to minors
Limiting alcohol access through zoning and licensing

Including theories of health promotion or models of behavioural change in the development of programs may also help to identify relevant target behaviours for change and explain or predict behavioural change.

3.8.4   Future needs

There is a tendency to problematise youth and stereotype young people as unruly risk-takers that are vulnerable to numerous physical, psychological and social harms and likely to become either victims or perpetrators of crime. Such representations of youth in the media, advertising, film and television reinforce the idea that adolescents' risky alcohol use is inevitable and inherent in youth culture. Alcohol education that is based on the assumption that adolescents drink in risky ways also reinforces cultural norms about adolescent drinking. Thus, young people who do not drink in such ways may see themselves as abnormal (Cahill, 2007). The social norms approach (see section 3.3.5) may help counteract this.

Alcohol education programs need to have realistic and achievable objectives that reflect the relevant needs of the target group.

Given the paucity of good quality evaluation research in this area, an appropriate research framework for evaluating AOD education programs is needed. Such a framework could incorporate different levels of implementation and evaluation that would take into consideration a range of factors, including the existing body of research (to avoid duplicating research on programs that have been established as effective/not effective in other settings), the relevance of a program to the target population (e.g., abstinence vs harm minimisation approach) and the appropriateness of measurable outcomes.

Any alcohol education program is only going to be as good as the available resources and support allow, such as ongoing training for staff and accessibility to updates for resources. Economic analyses of effective programs may assist schools in determining the most efficient use of their limited financial resources. Extending supportive networks to include collaboration with families and the local community may help not only to reinforce preventive messages, but also to redistribute responsibility for addressing adolescent alcohol use and support cultural change in drinking more broadly.

Part C:

Consultations
& Data Collection

This section contains:

Consultations with Schools

Clickers

Online Survey

Submissions

Chapter 4 Consultations with Schools

Overview

36 schools were consulted nationally: 19 government, 7 catholic and 10 independent schools.

31 focus group sessions were conducted: 23 with students (total number of participants = 214) and 8 with teachers (total number of participants = 25, including 4 principals). Individual interviews were held with 88 teachers and 25 students.

4.1   Methods

To complement the literature review and other data collection (submissions and online survey), a combination of face-to-face interviews and group interviews were undertaken with principals, teachers, and students from schools across Australia. A cross-section of state/territory, catholic/independent/government, and metropolitan/non-metropolitan schools was sought. Participants were identified through consultation with the state and territory representatives from the Project Reference Group. Telephone interviews were conducted with key individuals where face-to-face interviews were not possible (e.g., isolated or rural locations).

Ethics approval was received from Flinders University's Social and Behavioural Research Ethics Committee, the ethics committees in each state and territory for government schools, and the catholic and independent school system in some jurisdictions.

Principals from selected schools were contacted, and sent information about the project inviting the school to participate. Principals who chose to participate then nominated teachers and students who consented to participate in the project. A member of the research team visited the school at a time convenient to the participants and conducted the interviews and/or focus groups. Whether the discussions took the form of interviews or focus groups was at the discretion of the school. All school policies relating to visitors were observed. In most cases, this entailed a teacher or other school personnel being present for interviews and focus groups with students. Project information sheets, letters

of introduction, and consent forms were provided to all participants before the commencement of the interview or focus group. Schools oversaw the collection of consent forms signed by parents to allow student participation.

In total, 36 schools were consulted nationally as shown in Table 4.1. Of these, 19 were government schools, 7 were catholic and 10 were from the independent sector. As part of these consultations, a total of 31 focus group sessions were conducted: 23 with students (total number of participants = 214) and 8 with teachers (total number of participants = 25, including 4 principals). Individual interviews were also held with 88 teachers and 25 students. The interviews and focus groups explored participants' perceptions, attitudes, knowledge, and expectations of the school in relation to alcohol and specifically in regard to alcohol education programs and approaches.

A semi-structured interview protocol was established to guide the discussions with key informants. A copy of the protocol is contained in Appendices 4 and 5. Respondents were also encouraged to add any further detail or information they considered applicable. Where possible, copies of the materials or resources used in the school's alcohol education programs/activities were gathered from the teachers.

When undertaking some of the focus groups with students, an innovative data collection technology in the form of handheld instant response devices or 'clickers' was used.[28] The devices can be used for data collection to generate individual responses in a group setting to provide anonymity of response, to avoid any form of consensual pressure and to allow immediate collation of responses with the group that can be visually displayed immediately. The operation of these response systems is a simple three-step process:

1. the facilitator displays or verbalizes a question or problem - previously prepared or spontaneously generated in-situ by the facilitator
2. participants key in their answers using wireless handheld keypads
3. responses are received, aggregated, and displayed on both the facilitator's computer monitor and an overhead projector screen.

The distribution of participant responses may prompt issues to be explored further. This interactive cycle can continue until both the instructor and the participants have resolved

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[28] The technology combines PowerPoint-based software and wireless keypads given to individuals in group meetings. Facilitators posed questions/statements and project a set of response choices onto a screen. Participants enter responses that can be immediately tallied and presented graphically. The system produces data equivalent to that generated by the same questions when posed in traditional confidential surveys (LaBrie, Hummer, Neighbors, & Pedersen, 2008).

ambiguities or reached closure on the topic at hand (Lowery, 2006). A total of 16 sessions were held with young people using the 'clicker' technology. The detailed findings of the clicker sessions are presented in Chapter 5.

Interviews and focus groups were audio recorded where permission was given to ensure that all information was captured and to allow reliable analysis. Stakeholders' comments were collated and examined using a 'content analysis' procedure to identify both recurring themes and distinct/unique contributions. The analysis was performed by several project members to ensure accuracy, balance, and impartiality. This involved team meetings to review notes and interview materials to identify key content and common and/or divergent views.

The following sections in this Chapter provide an overview of the five main themes that were identified during the consultation sessions. The findings outlined in these sections represent a summary of issues that emerged from discussions with principals, teachers, other school staff (e.g., school nurses/counsellors/psychologists) and students who shared their views with the project team. Areas of common agreement are highlighted together areas where there was a diversity of views expressed. In addition, areas where the practices of schools corresponded with what has been identified through the literature review as good practice as well as areas of divergence are highlighted. These issues are then explored further in the final discussion chapter of the report.

The five theme areas that are outlined below are:
> Chapter 4.2 Beyond the Classroom
> Chapter 4.3 School Philosophy
> Chapter 4.4 Pedagogical Issues
> Chapter 4.5 Resources, Programs, and Materials
> Chapter 4.6 Barriers, Limitations & Facilitators

Table 4.1 Summary of interviews, focus groups, and 'clicker' sessions

State	Sector	No	Metro	Non-Metro	No. of Teacher Focus Groups	No. of Teachers	Principal involved?	Students	No. of Students	No. of Teachers Interviewed	No. of Principals interviewed	Students	Clickers used
					Focus Groups					**Interviews**			
ACT	Cath	1	1	0	-	-	-	-	-	5	0	2	0
	Gov	2	2	0	-	-	-	-	-	7	0	4	0
	Ind	1	1	0	-	-	-	-	-	3	0	5	0
NSW	Cath	1	0	0	-	-	-	-	-	3	0	6	0
	Gov	3	1	2	1	2	N	1	5	3	0	-	0
	Ind	1	1	2	1	2	N	1	16	-	-	-	0
NT	Cath	2	2	0	-	-	-	3	31	8	0	-	3
	Gov	1	1	0	-	-	-	2	13	4	0	-	2
	Ind	1	1	0	-	-	-	-	-	3	1	-	0
QLD	Cath	1	0	1	1	4	1	1	9	1	0	-	0
	Gov	2	2	0	1	3	1	2	20	3	1	-	1
	Ind	1	1	0	1	2	N	1	19	3	0	-	1
SA	Cath	1	1	0	-	-	-	2	14	4	0	-	2
	Gov	3	2	1	-	-	-	3	28	9	1	-	1
	Ind	1	1	0	-	-	-	1	7	9	1	-	1
TAS	Cath	1	1	0	-	-	-	1	15	2	0	-	1
	Gov	3	0	3	2	6	2	3	19	2	2	-	2
	Ind	1	1	0	-	-	-	2	18	4	0	-	2
VIC	Cath	-	0	0	-	-	-	-	-	-	-	-	-
	Gov	2	0	2	-	-	-	-	-	5	1	5	0
	Ind	3	3	0	-	-	-	-	-	5	2	3	0
WA	Cath	-	0	0	-	-	-	-	-	-	-	-	0
	Gov	3	0	3	-	-	-	-	-	5	0	-	0
	Ind	1	1	0	1	6	N	-	-	-	-	-	0
Nationally	Cath	7	5	2	1	4	1	7	69	23	0	8	7
	Gov	19	8	11	4	11	3	11	85	38	5	9	5
	Ind	10	10	0	3	10	0	5	60	27	4	8	4
Nationally (All Sectors)		36	23	13	8	25	4	23	214	88	9	25	16

4.2   Beyond the Classroom

4.2.1   Section overview

This section is based on the consultations with school principals, teachers and other staff (such as school nurses). It locates the issue of school-based alcohol education within a wider social context and explores ways in which these contextual influences can support or detract from the efforts of schools to successfully engage with students, their parents, and wider communities.

4.2.2   Key points

- Alcohol education occurs within a wider cultural context in which drinking (and often underage drinking) is accepted as normal.

- Schools accept that they have a role in teaching young people about alcohol; but stressed the need for wider community (particularly parental) involvement and responsibility for addressing the issue of risky drinking among youth.

- Some schools were actively involved with local service providers and businesses in the provision of alcohol education to students – but this required dedicated resources (time, money) and particular skills for successful coordination and implementation.

- Staff members frequently expressed concern regarding perceived parental supply of alcohol, monitoring/supervision and role-modelling in relation to alcohol.

- Many schools struggled with how to effectively engage and involve their parent communities, but there was widespread commitment to providing parents with information and support.

- Events which students have organised themselves and/or which showcase their own work and achievements (rather than generic 'information evenings') presented opportunities for greater parental involvement in school-based alcohol education.

4.2.3   The wider socio-cultural context

School staff frequently commented on the accepted and even *expected* nature of alcohol consumption in the wider Australian community. One teacher from a government school noted that, for many people, alcohol use is an intrinsic aspect of *"what it means to be Australian"*, and that many family- and community-based community celebrations *"revolve around alcohol consumption".* They noted that the status of alcohol in the community was often at odds with the messages they were endeavouring to deliver in the school setting. According to one teacher from a government school:

"I think one of the biggest things in alcohol education that you're up against is the role modelling they're getting at home and in the community."

Teachers were also sensitive to the importance of particular cultural expectations of groups such as migrant populations, Indigenous people, and refugees, and the ways these expectations can influence receptiveness to particular aspects of alcohol education for young people. They stressed the need for programs and resources to be culturally appropriate, and there were frequent appeals for the need to 'change cultural norms' about alcohol, although there was not a consensus regarding how this could be achieved. There was certainly evidence of individual communities addressing the issues at a local level, for example by ensuring that no alcohol was sold at events that involved children, and that only light beer was sold at other sporting events, as well as more general promotion of alcohol-free leisure and sporting opportunities for young people.

Although schools varied in the extent to which they saw themselves as 'successful' in the area of alcohol education, they generally accepted that it was an important part of their role in equipping young people for their future and assisting them become healthy, productive and well-adjusted individuals. However, they also reinforced that *"schools can only do so much"*. One teacher from a government school said:

"I think a lot more needs to be done in the community. We can teach so much in school, but then they go and get involved in the footy clubs and that's where, you know, you hear of the under 16s and when the parents buy them a slab, to celebrate."

One catholic school also commented that the formal learning environments within which most teaching occurs may not be adequate for, or capable of, addressing the social aspects of drinking.

Some staff expressed resentment at the perceived expectation on behalf of government and the wider community that schools are responsible for 'fixing' all social problems. It was common to see schools as an important 'part of the solution' to problems associated with young peoples' drinking, but wider community responsibility was also strongly emphasised (particularly parental responsibility, which is discussed later in this section). Teachers spoke of the need for general attitudinal and behavioural change, and also suggested that legislative changes and/or stricter enforcement of existing legislation would be beneficial.

One general community issue that received attention during the school consultations was the availability of alcohol. Generally speaking, school staff were under the impression that underage

people obtained alcohol most often from older siblings or relatives, or from their friends' homes. Teachers in the Northern Territory often mentioned concerns relating to the sale of alcohol directly to minors. However, the nature of the consultation strategy on which this report is based means that this should not necessarily be taken as an indication that bottleshops, service stations and other outlets usually sell alcohol to people without checking ID. It is, nonetheless, indicative of a level of concern among school staff about possible breaches of the law relating to the sale of alcohol to minors and the need for vigilance among community members in reporting such breaches.

4.2.4 The school as part of the community

Although schools appeared to vary considerably in the extent to which they were actively involved with their communities, the school consultations revealed an array of partnerships and collaborations around the country. For some schools, their links with the community involved such activities as raising money for and assisting local charities or social justice programs, engaging external organisations to assist with teaching refugee children, contributing to local support groups, visiting aged-care facilities or shelters for the homeless, or assisting to organise community-based activities for young people in the area. For other schools, community engagement was a central part of their school ethos and some even had school staff positions dedicated to the coordination of community partnerships. Some schools had formal, ongoing programs that involved students relocating to another area for a period of time (up to an entire school term) and becoming involved in many aspects of community life, or undertaking specific project-based community work in neighbouring towns, as part of recognised courses.

Whilst some school-community linkages were general in nature, others related specifically to alcohol and other drugs and were formed as part of the schools' drug education initiatives and/or their efforts to support and assist 'at risk' students. There were many instances of school staff arranging student referrals to appropriate outside agencies for crisis intervention or other care. It also appears to be quite common for community organisations and selected professionals to be 'brought in' to assist with educating students about the risks associated with alcohol use. Teachers noted that one benefit of involving outside experts (apart from enabling access to their expertise) was that professionals often brought their own resources such as handouts and DVDs, which were regarded as more up-to-date and accurate than many of the schools' resources.

External agencies/professionals, such as police, emergency services professionals, youth workers and paramedics, are regularly engaged by schools to help raise awareness of services

that are available for people who want help, or to deliver courses/training such as Responsible Serving of Alcohol (RSA) training, Save a Mate (SAM), or driver education. Teachers in most states and territories also mentioned working with police in the area of driver education in particular. Some approaches appeared to involve skill development and made use of such resources as 'beer goggles', whilst others were mostly fear-based (such as showing students confronting images of car wrecks or recounting their experiences of removing deceased persons or body-parts from the scenes of accidents). Such issues are discussed more extensively in the section addressing pedagogical issues.

Many schools reported having held special school assemblies or evening forums /information sessions which involved a range of people including students, parents, AOD agencies, police, customs service and other community members. 'Outside agencies' also appeared to play a significant role in many schools' preparations for 'Schoolies Week' and/or the schools' end-of-year celebrations such as formals and school balls. A range of organisations delivered harm-minimisation focused 'safe partying' information sessions to senior students (mostly Years 10 through 12), ranging from one hour sessions during school time through to full-day sessions involving various facilitators and activities. In some instances, parents were also provided with additional information.

Rather than either 'referring students outside' or 'bringing external agencies in', a number of schools around the country were engaged in more enduring partnership arrangements with community-based organisations and professionals. For instance, some schools in the Northern Territory provided accommodation for the children of people who are undergoing detoxification. Other schools were working with the Tune In Not Out project which involved students researching topics, conducting and filming interviews, producing their own podcasts and uploading them to a website for viewing by other young people. There were many examples of schools working productively with other schools and a wide array of community partners, for the benefit of their students and the community more generally. For instance, in one state, a total of six schools (both government and non-government) had been working with community agencies and local businesses for a number of years to deliver a full-day harm-minimisation intervention to Year 9 students. During 2009, nearly 1000 students were expected to be involved. Admittedly, such an undertaking requires considerable time, effort and energy (including dedicated human and financial resources), and can be a fraught process due to miscommunication or incompatible priorities/values between the stakeholders. Nonetheless, it is possible, and a great deal can be learned from schools who are 'leading by example' in the area of community partnerships in

ATOD education. Greater opportunity to showcase some of these innovative initiatives is warranted and may benefit other schools and communities across the country.

4.2.5   The 'school as community' - building connectedness

Many of the school staff involved in the consultations spoke of their schools' efforts to establish and/or strengthen a 'sense of belonging and community' within the school. In some instances, this was linked to a specific school motto or set of values which were intended to guide behaviour and permeated all aspects of school life for both staff and students. Many schools offered a range of in-school and extracurricular activities and programs for students to be involved in, including sports teams and training, bands and other musical activities, art and drama, academic excellence, camps and retreats and special interest groups such as language classes. Such things were regarded by staff in one catholic school for example as helping to build relationships between students with similar interests and abilities, and helping to *"foster a good sense of caring for each other" and "school spirit"*. They were also seen to be beneficial to the relationship between staff and students. A number of schools also had a House System, which was seen to improve relationships between students in different age groups within the school, as well as providing an additional sense of pride and belonging.

'Relationship building', 'resilience' and 'self-esteem building' were all mentioned frequently during the consultations. According to one staff member in an independent school, their school was attempting to:

> *"build the model of a small country town, in the city. Running school fairs is not about making money, it's about building relationships between people."*

Several staff members regarded improving student resilience and self-esteem as one of their most important priorities, and these issues were often discussed in relation to school-based alcohol education.

Unfortunately, not all schools enjoyed a positive and vibrant school community. This is likely to be a function of social, historical, or other factors, rather than resulting from lack of effort. Some teachers recounted frustrating efforts to organise camping trips for students and having their plans *"thwarted on every level"* by complications surrounding insurance and legal issues for example. Other schools (particularly those who had recently undergone great change or upheaval) were in the midst of a period of low staff morale and/or, as stated by one teacher in a

government school, had students for whom school is *"just something they're travelling through"* and who mostly connected with their small circle of peers rather than being involved in school events. Teachers also described their efforts to engage with the 'difficult to engage' (and 'disengaged') students by supporting programs that encouraged young truants and disadvantaged children to stay in school, and in contacting parents and working with support workers to design and implement individualised plans for specific 'at risk' students and their families.

4.2.6 Engagement through peer-leadership

One strategy that was regularly mentioned during discussions of student engagement and/or alcohol education was 'peer leadership' or 'peer education'. Many teachers and school staff appeared to be particularly enthusiastic about the potential of peer education as an educative and engagement approach. According to one teacher in a government school, *"kids tend to listen to other kids"* and the approach works particularly well *"if popular kids can be influenced"* because there is a trickle-down effect. Other staff regarded health promotion messages as being *"more powerful"* if delivered by a student's own peers rather than their regular classroom teachers.

Much of the peer education mentioned during the school consultations involved the older students presenting material or organising events for the younger students at the school. For example, after a health survey revealed high-risk behaviour amongst Year 8 students at one school, the Year 10s organised an information forum for the Years 8 and 9 students in conjunction with the local drug and alcohol service. Other schools employed strategies that involved students giving presentations (such as alcohol-related drama skits) to students from other high schools around their state. Schools that use the Triple T program (Teenagers Teaching Teenagers) involved their senior students by having them prepare and deliver sessions (including activities such as role-play) relating to alcohol use, fighting, unsafe sex and other topics to the younger students. There were also a range of girls-only and boys-only self-esteem and engagement programs that included a peer leadership component.

A number of schools structured their peer engagement activities around more formal processes such as the MindMatters: Youth Empowerment Process, or by participating in peer training courses run by Kids Helpline. The former taught young people how to teach other young people, and armed them with the resources and knowledge for them to design programs to be run for the younger year age groups. Teachers enjoyed a supporting role, with students being the primary

instigators of the process. The latter has a rigorous training schedule in which student peers are educated, not to help, but to encourage the child to get help from appropriately trained professionals or other trusted adults.

4.2.7 Alcohol-related school policies

In the course of discussing their approach to school-based alcohol education, a number of school staff mentioned their school alcohol policy. These appeared to vary widely with respect to specificity and approach. Some applied to staff and/or students and others also applied to the parents of students. Many schools had a behavioural code or agreement whereby students were expected to attend school in a straight/sober state, and one teacher from a government school stated *"students that do not comply are sent home or are taken home and allowed to come back when they have sobered up"*. Schools with dormitories frequently had a 'zero tolerance' policy in regards to alcohol on school premises.

Considerable variation was identified in respect to alcohol at school events. At some schools, all school-organised events were alcohol free regardless of the venue or the age of the attendees. This was regarded as positive in that it modelled *"healthy behaviour"* to students and the wider community. In other schools, alcohol was available at school functions attended by parents and/or staff, even if students were also attending (however, it was frequently noted that the alcohol was not 'on display' for students and also that students were not permitted to drink). This variant was also regarded as positive in that it promoted moderate consumption and permitted a *"grown up"* discussion about the issue. Finally, some schools permitted students over the age of 18 to consume alcohol at school events provided their parents were present.

4.2.8 Parents, students and alcohol

Discussions with school staff about parental roles and responsibilities in relation to young people's alcohol use were among the most animated discussions that occurred during school consultations. Many teachers took care to emphasise the need for parents and communities to be *"held more accountable for underage drinking"* as stated by a teacher in government school. Staff members commented on what they regarded as deficiencies in many parents' dealings with their children, including inappropriate role-modelling of alcohol and other drug use, and a general lack of parental leadership and responsible adult guidance. One teacher from a catholic school expressed the following concern:

"I feel like we (teachers) are taking on a big parenting role more and more in society…I'm concerned at how readily parents opt out of creating any boundaries or giving any guidance. So we feel responsible for that because of our pastoral care and our ethos."

One teacher in a catholic school stressed the difficulties associated with educating students about appropriate behaviours and harm minimisation strategies in situations where *"their parents are also binge drinking"* or when parents are undermining the schools' efforts by telling their children that the risk information is incorrect and/or irrelevant. As summed up by one teacher in a government school:

"It doesn't matter what they are taught in school. Parents are the real role models for their kids. If they don't measure up then it is very difficult to make a positive impact on the kids."

There was widespread concern among school staff about issues relating to parental provision of alcohol (i.e., 'secondary supply') as well as inadequate supervision of parties (which included parties at which adult supervision was not present as well as where adults were supervising but where underage drinking was supported and condoned). Some unsupervised (and 'undersupervised' parties resulted in student injuries from accidents as well as fights) and provided a fertile source of student gossip and conversation on Monday mornings. This was regarded as a particular problem when parties were held on large rural properties, which presented challenges for adequate supervision and monitoring.

Variations in parental attitudes were also perceived to be a problem by some school staff. Sometimes these variations were due to specific cultural differences and value systems, whilst other times it was a matter of some parents not wanting *"to be told how to bring up their kids"* as stated by a teacher in an independent school. Regardless of the motivation, in the words of one teacher from an independent school:

"while some parents fight to death to prevent children from having alcohol, other parents fight to death for the right of their children to drink alcohol."

4.2.8.1   School-parent relationships

There was considerable variation regarding notions of what constituted the 'proper' role of schools with respect to educating parents. Most schools considered it appropriate for them to play a role in educating parents, or at the very least to provide them with relevant information. Many schools discussed their efforts to keep parents informed about school events and other information (such as safe partying) through a variety of mechanisms including printed and

electronic newsletters, emails and even text-messages via mobile phones. Some schools considered the schools' responsibility extended only to providing parents with information, not actually 'educating' them about alcohol-related issues. As expressed by one teacher from a government school:

> *"Educating parents is not the priority of schools. The priority of schools is to enable children so that they can make informed decisions".*

In a number of schools, the parent community was also actively involved in developing materials for other parents, in an effort to educate them about secondary supply and supervision of student parties, in order to change parental attitudes and behaviour.

4.2.8.2 'Information evenings' and the challenge of parental engagement

The school consultations indicated that many schools regarded getting parents involved as one of their greatest challenges. Many schools reported having organised alcohol-focused information evenings and other activities for parents (such as a presentation outlining the ramifications of legislative change relating to secondary supply of alcohol), with varying levels of success. Low turnout was a common frustration, to the extent that some schools had decided against inviting parents to events in the future. A variety of explanations were offered for low turnout, including competing priorities as well as 'parental apathy', which only improved if there had been an incident *"or if there is a big party they are getting anxious about"*. In addition to low numbers, staff in a government school reported being frustrated that *"only the parents who don't have a problem with their kids turn up, and you still don't get the message to the ones who really need it"*. The problem of 'the wrong parents showing up' was given an interesting twist by one teacher in an independent school, who observed that:

> *"Even if it's just the parents who care who turn up, at least they won't think they are the only ones who have to deal with the issues."*

Another teacher, in a government school, echoed this sentiment by suggesting that perhaps a Social Norms approach could be useful with parents, since the opportunity to share their problems and speak with other parents could overcome feelings of isolation and give them confidence to 'follow through' with particular parenting behaviours. Those schools who were the most positive about involving parents recommended *"tacking the session on"* to something that the parents would already be attending, rather than organising a stand-alone event. The 'trick' to parental attendance, according to several commentators, was to have the students present their

own work and achievements. That way, the students will *"do all the work"* for you by encouraging their own parents to attend. Parental pride in their children and their efforts is likely to result in a better turnout than a generic 'information session'.

4.2.9 Summary

This aspect of the consultations highlighted a multitude of broad issues of relevance to alcohol education in the secondary school setting that extended 'well beyond the classroom'. There was a sense that, for some teachers at least, they felt like they were 'swimming against the tide' in attempting to educate young people about the risks associated with alcohol, and promote safe and responsible consumption. Communities, cultural and other groups within those communities, and even individual families have their own beliefs, practices and assumptions about alcohol which may, or may not, align with schools' efforts in this area. Staff members identified particular areas in which they considered parental education was needed. This included issues such as the impact of alcohol on the adolescent brain, adequate planning and supervision of teenagers' parties, and the legal and other implications of supplying their own and/or others' children with alcohol. However, schools varied considerably in the extent to which they regarded it as 'their job' to provide parental education, just as parents vary in the extent to which they are receptive to being 'told how to raise their kids'.

It would not be reasonable to place the entire responsibility for solving 'the problem' of youth drinking on schools. There was a strong sense in which principals, teachers and other staff members saw schools as key players in this area, but they stressed the need for a concerted and coordinated effort on the part of many people and organisations. Some schools were managing to effectively partner with particular professionals and services in their local communities, but such partnerships required dedicated time, skills, knowledge and energy to be created in the first place and sustained in the longer term.

During the consultations, many examples of community engagement were discussed. Many schools had formal or informal arrangements for referring students to 'outside' experts and services. This highlighted the need for schools to have up-to-date and comprehensive information about services in the wider community, including those to which 'at risk' students can be referred. There were also many examples of schools bringing 'outside' people 'in' – such as paramedics delivering first-aid courses or ATOD workers talking to students about harm minimisation strategies. Teachers often emphasised the knowledge and expertise of such people, and the positive impact that 'a different face' had on students' levels of attention and

interest. However, in placing too much emphasis on the apparent benefits of expert involvement, there is a risk that teachers could become disempowered and lose sight of the real contribution that they are able to make in this area. Teachers, by virtue of having direct contact with students over a period of time, are uniquely positioned to share ideas and facts, improve skills, challenge taken-for-granted assumptions and have the sorts of conversations that will have a real (if not readily measurable) impact on students' alcohol-related knowledge and attitudes.

4.3   School Philosophy

4.3.1   Section Overview

This section discusses the philosophy, priority, and management of schools in relation to alcohol education. Findings were drawn from consultations with principals, teachers, and other school personnel. It reflects the view that schools are not homogenous environments, and that their priorities are shaped by multiple external stakeholders, community views and the individual needs of students.

4.3.2   Key Points

- Most schools incorporated alcohol education within a broader context of healthy lifestyles
    - Students were taught resilience, decision making and coping skills

- A harm minimisation approach was adopted with students taught about:
    - the NHMRC guidelines and standard drink sizes
    - risks associated with alcohol consumption (i.e., drink driving, sexual assault)

- Generally, schools considered teaching students about risk management was more important than teaching about alcohol
    - Assisting students who had suffered harm was considered a greater priority

- Adopting whole-of-school approaches was not considered appropriate in schools with diverse student populations
    - These schools tended to have targeted programs for students considered vulnerable and at-risk

- Alcohol education was usually compulsory in middle school years
    - It was an elective in the senior years due to greater emphasis on academic achievement
    - The elective status given to alcohol education in the senior years was unlikely to change unless the priorities of national and state curriculums shifted

4.3.3   Context of alcohol education

Alcohol education featured to some extent in the curriculum of most schools consulted. However, what was taught, the type of program adopted, and the priority given to the issue varied greatly between schools. Differences primarily reflected the age of the students; perceived need for the school to address the issue of alcohol consumption with the student body; severity, frequency, and social acceptance of drinking that took place within the local community; socio economic status of that community; and, in some instances the religious orientation of the school.

Priority was given to teaching students:

- about the 'facts' and harm associated with alcohol consumption
- how to manage risk and keep themselves safe when they were drinking, and
- to make informed and appropriate lifestyle choices.

One teacher from an independent school described the school's role in the following way:

> *"Schools need to make the students aware, first, that alcohol is a drug and that it is illegal for their age group, but also that it is a socially acceptable drug and that it is a cultural thing for everyone to have a drink, so I suppose we're trying to equip them with the best possible strategies, coping skills, decision making skills so that if they are in risky situations they can make the right sorts of decisions in regards to alcohol. So that's the ultimate thing."*

Schools recognised, however, that their ability to bring about behaviour change was limited by temporal, physical, and social considerations. Universal programs which adopted a normative and/or social influence approach tended to be delivered to students at the inoculation and early relevancy phase (see Table 3.4 Review of programs section) at many schools. Many of these schools measured changes in levels of factual knowledge, but very few schools assessed whether students' attitudes towards alcohol, or intentions to use alcohol had changed. Most schools were not confident in assessing their programs as effective. One principal at a government school was resigned to the fact that providing alcohol education would have very little impact on students' alcohol consumption because of external cultural influences, but, nonetheless, was of the view that *"doing something was better than doing nothing"*.

Some schools also implemented targeted programs; this was especially notable in schools with high proportions of remote Indigenous and at risk student populations. Targeted programs, in these schools included greater community participation (e.g., external organisations played a significant role in providing education). Schools with targeted programs tended to assess these programs as effective in changing student behaviours compared to schools offering universal programs. These schools reported that both parents and teachers had seen noticeable changes in a student's behaviour after they had participated in these programs. However, whether the effectiveness of these approaches, as assessed by schools and parents equated to improvements in drinking behaviour is unclear as most of the targeted programs undertaken by schools were aimed at achieving global changes in these students, rather than just modifying their alcohol consumption.

It was unsurprising that most schools were not able to definitely assess whether the programs they delivered improved drinking behaviours. Neither the school environment nor teachers are

the appropriate medium through which to evaluate the success or failure of a social education program. Schools are not in a position to, nor should they be expected to, provide lessons structured around the gold standard evaluation criteria as set out in the literature review section of this report which states for effective evaluation and delivery of alcohol education there would need to be:

- clearly defined objectives
- random allocation of students to control groups
- provision of baseline information
- long-term follow-up.

4.3.4 Priorities and philosophy of schools

4.3.4.1 Harm minimisation

A harm minimisation approach was adopted by most schools as it was recognised that most students were likely to consume alcohol in the future, if they were not already drinking. In adopting a harm minimisation approach most schools ensured that the majority of students would be provided with balanced information about alcohol. Many schools reported that they used the National Health and Medical Research Council (NHMRC) guidelines for low risk drinking, as well teaching about the physiological and psychological effects of alcohol upon the bodies and brains of young people. As the NHMRC guidelines change on a regular basis (the most recent being a substantial change released in February 2009) this represented a major challenge to schools in terms of remaining accurate and up-to-date in their information and resources. Content tended to be embedded within the Health and PE curriculum, with some schools incorporating it within their Science curriculum. Other schools included this content within their pastoral care and personal development programs. These schools considered that alcohol was best addressed when undertaking tasks related to decision making, building resilience and coping.

Some schools included an alcohol awareness component within classes which investigated the prevalence of alcohol use in the community, and informed students about services that were available if they or someone they knew needed to obtain help. Lessons were often formally structured with an emphasis on assessment to quantify the student's understandings. However, it was often stated by teachers that the formal structure of these lessons was inadequate to address the social aspects of alcohol consumption and harm.

Many schools provided pastoral care classes which had less formal interactions between staff and students also invited external organisations and guest speakers to give presentations.

However, in many schools pastoral care classes and presentations by external speakers were not usually focussed on the single issue of alcohol, but were implemented in a holistic fashion to address a range of risk-taking behaviours including safe driving, safe partying, and sexual relationships. In this regard, a teacher from an independent school expressed the concern that even if education about alcohol was present in a school's curriculum documentation *"the scope and sequence usually [wasn't] sufficiently developed"*.

Whether it is effective to have guest speakers visit the school, particularly when it is an ad hoc visit and not incorporated within a broader educational program, is a moot point which is discussed further in subsequent sections of this report. One school which had a high proportion of drinking students used the interaction with external agencies as a reflective exercise to demonstrate to students where risky drinking behaviours could lead. While another school thought that inviting external organisations into the school assisted teachers to identify students who were vulnerable and/or at risk. One principal noted that creating linkages with outside agencies was *"part of the school's responsibility"* to provide information and referral advice to students who may be negatively effected either through their own, a family member, or a friend's alcohol use.

4.3.4.2 *Managing risk and student safety*

Schools recognised that alcohol use was not just a health issue; alcohol was universally seen as a social problem. As such, ensuring the safety of all students was the primary objective of schools in which alcohol consumption and its effects featured prominently[29], as well as in schools where the externalities of alcohol harm were not as pronounced. It was noted by one teacher in a government school that students who drank alcohol were of secondary importance when dealing with the fallout of alcohol induced behaviours. Addressing the range of harms which arose from students engaging in unsafe sex, drink driving, and being subjected to sexual assault was considered the primary concern of schools; with teachers noting that raising awareness about the link between alcohol and sexual assault was particularly pertinent for girls. Pastoral care sessions, in these instances, tended to act as a forum in which individual development, resilience, decision making, peer pressure, relationship building, and risk taking behaviours of students could be discussed in an open, albeit confidential, manner.

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[29] In some of these schools, security was arranged for community events such as school dances and fetes.

Some schools considered the input of students into the development of programs, and the determination of discussion topics within these forums, as pivotal to the success of the program. However, other schools noted that this may turn a topic like alcohol into an opportunity for "bragging". The potential for this outcome was considered in light of comments from several schools that extolled the success of their interactive student forums and peer modelling programs. One school highlighted that these activities were organised in response to a survey they had conducted which indicated that younger students were engaging in dangerous sexual practices with older students with whom they were socialising at out-of-school parties. Another school noted that it was the older students who were procuring alcohol for, and encouraging younger students to drink. Many schools observed that in these situations it was essential to have access to external support services to assist students to restore balance to their lives as well as reconnect them to the school environment, for as one teacher in a government school stressed *"lives stop because of one event which could be avoided"*.

4.3.4.3   *Disciplinary policies*

Some schools had a strict zero tolerance policy for the consumption and possession of alcohol on school premises which also applied to the teachers. In contrast, other schools had a more permissive attitude and permitted alcohol to be consumed by staff, students 18 years old, and other adults at school events. The schools that had a strict zero tolerance policy saw this as role modelling and as an opportunity to demonstrate to students that you could still attend a social event without alcohol being present.

The disciplinary policies adopted in many schools further reinforced the harm minimisation and restorative justice approaches of the school's pastoral care program. Even though schools often exacted some form of punishment upon the student, it was done in conjunction with a pastoral care approach in which the health and wellbeing of the individual student was also considered, with appropriate systems in place to offer the student further support. However, repeated breaches of school policy could result in exclusion in some schools, because as noted by one teacher *"other children and staff are effected by the presence of problem children"*.

4.3.5   Finding time in the curriculum

The harm minimisation approach adopted by schools tended to embed the topic of alcohol in terms of choice or a lifestyle issue within either the:

- Health and PE
- Science, English, Societies Other Than English (SOSE), History or another formal subject
- Pastoral care, or
- Personal development program.

Very few schools incorporated alcohol as a topic or theme within a broader range of generic subjects throughout the curriculum, even though some teachers believed that there was considerable advantage to doing so. One teacher from a government school suggested that the difficulty of appealing to all students could be reduced by incorporating alcohol education across the curricula from arts to science, so that the message would reach a variety of students who might find some subjects more appealing/relevant than others. Some schools which had attempted to incorporate alcohol education in Science classes abandoned the idea because their science classes were "too structured" and inflexible to allow for a seamless integration of alcohol-related education. A school which had attempted to incorporate alcohol education within their English curriculum commented that it would be easier to do this if there was a drug and alcohol project officer employed by the government who compiled a list of relevant texts that was circulated to schools. The level and degree of integration of alcohol education in schools is covered later in further detail in the section dealing with age appropriateness/repetition across year levels.

4.3.6　Whole-of-school approaches vs tailored approaches

Schools which had adopted a whole-of-school approach tended to work from a top down model which established a common framework for assessment procedures and leadership structures, prescribed the messages delivered to particular year levels, and designated a person to be responsible for coordinating the implementation of alcohol education for all year levels. Whole-of-school approaches were noted as requiring staff, student, parent, police, and community group participation to be effective, and some schools indicated that enforcing the school ethos was a sufficient protective factor.

However, the considerable amount of time and effort required in such approaches was also noted. One Assistant Principal, for example, noted that he had spent 15 months developing the school's pastoral care program. That particular pastoral care program was not specifically focused upon alcohol; rather it was focused on engaging at-risk and disengaged students through delivering a flexible learning program which involved Community Based Learning and provided the students with appropriate vocational pathways.

4.3.6.1   Diversity within the community

The emphasis and resources allocated by schools to the provision of alcohol education was often influenced by how much alcohol use and abuse affected their school. Teachers and principals recognised that the reasons underpinning alcohol use and abuse were complex and integrally linked to diverse factors such as:

- geographical location
- youth boredom
- socio economic status
- family violence
- sexual abuse, and
- other cultural expectations such as:
    - the high incidence of alcohol misuse in indigenous communities
    - rites of passage
    - the attitude of local sporting clubs.

Therefore, what was deemed appropriate for one school would not necessarily be relevant for another school. At one government school, the Assistant Principal considered that schools had the primary role in educating students and parents about the effects of alcohol on young people, as well as about the legal responsibilities of parents when they were hosting parties for their children. It was further noted that changes in traditional family structures and community values often meant that education outside school on such matters was lacking.

Other schools, however, considered that the school's role in educating students about alcohol was secondary to the parents' role. Receptivity (or lack thereof) of parents was cited by some schools as a limiting factor in establishing a whole-of-school approach and/or evaluating the effect of an alcohol education program. One catholic school noted that parental sensitivity hindered efforts to educate students about alcohol and societal issues as the parents regarded the students as being 'too young' to be introduced to these concepts. There was a concern that talking about these matters might send a message that such behaviour was condoned. A school nurse similarly noted that large migrant populations may not be receptive to the notion of alcohol education being included within a school or class curriculum. In this regard, some schools were reluctant to focus on alcohol as a significant topic in its own right as they were concerned that this may have a normalising effect on students and imply that most students drank, when in fact, in these schools many students did not.

Further to this, some schools indicated that age and social diversity within the student population often meant that adopting a whole-of-school approach was inappropriate for their circumstances as it:

- may miss students who were at risk and needing a targeted message, or
- exposed students who had little experience with alcohol to messages which they did not understand.

Different exposures to alcohol amongst students within the same grade was particularly notable in schools whose populations included a high proportion of remote indigenous students and/or a high proportion of disengaged, at-risk students. One teacher in a government school stated that:

"We do have some problems with some students in Year 7, but then again you've got other students (in the same Year) who are far from even thinking about having a drink. But that applies to lots of things that we teach about, like sexual health."

This predicament was also recognised by a school nurse at the same school who stated that:

"It's a problem that you have such a variety of comprehension levels within the one year level. Trying to meet the needs of each of those kids is an extreme challenge for teachers."

Some schools incorporated different approaches tailored to the needs of different student populations. For example, the school noted above focused on providing disengaged and at risk students with appropriate vocational pathways. The focus of the program was on school to work transition and incorporated drug education sessions aimed at encouraging students to take responsibility for their alcohol and other drug use.

Another school which had a large remote indigenous population commented that these students were often not equipped for the formal learning environment. This school had a program which was designed specifically for indigenous children which focused on teaching students about healthy alternatives to activities involving alcohol, rather than the harms associated with alcohol use. Teaching Indigenous students' social skills and teaching them to develop relationships without alcohol was considered the greater priority in this school. As was noted by one teacher this school was "dealing with the impact of alcohol abuse", not just its use.

4.3.7   Age appropriateness / Repetition across year levels

Schools tended to incorporate school-based learning in the middle school levels (Year 6, 7, 8, 9) opting to provide younger students with factual information, while students in later years (Year 10, 11, 12) tended to participate more in community based programs and attend presentations involving guest speakers. Part of the rationale for using guest speakers was in response to the view that senior students would see it as a "rehash" if alcohol education was delivered by teachers again.

In general, schools considered that even though students in Years 11-12 may have been "bombarded" with messages about alcohol consumption, it was still necessary for them to participate in alcohol education classes. Some schools identified that it was necesssary for them to treat the students at senior levels more like adults and get them to reflect and think critically about issues, as well as teach them strategies about how to drink responsibly. There is less opportunity within senior school curricula to address decision making, resilience, events, and sexual health because greater weight is given to more traditional, academic subjects. In Years 11 and 12, Health and PE tend to be taken as an elective subject and one school noted that even though it ran voluntary health sessions for Years 11 and 12, they often struggled to get students to attend classes that were not compulsory. The principal focus in Year 11 and 12 was on preparing students for their post school years, and obtaining technical and academic qualifications determined by agencies external to the schooling environment.

Some senior schools, however, delivered alcohol education as part of the school's Pastoral Care Program. However, in Years 11 and 12 greater emphasis was given to the relationship of drinking to sexual activity, injury, drugs, and driving. The primary aim at this age was to teach students to be responsible for their actions. However, it was also noted that teachers today deal with many more social issues now than previously. As a consequence, schools tended to deal with alcohol issues sporadically, e.g., prior to a big event, or when they were mandated by a federal or state policy. The greater achievements of alcohol education was not lost on teachers, however, in regards to Years 11 and 12. As highlighted by a boarding house coordinator at one school who considered that students in Year 11-12 caused the most grief because they had either gone beyond the stage of experimentation, or were beginning to experiment with greater amounts on a more frequent basis.

The majority of schools reported that they incorporated alcohol education into the Health and PE curriculum which was often compulsory until Year 9/10, after which time participation in such

courses was on an elective basis. Views about whether this was the appropriate age for delivering alcohol education varied according to the location of the school and the characteristics of the local community. Some schools considered that alcohol education needed to start in primary school with some teachers maintaining that "we should be catching them earlier" e.g. in Years 6-7. While other teachers noted that in their area children started drinking even earlier around the age of 10. However, other schools stated that when they extended the alcohol education program from Year 9 to Year 8, the Year 8 students were unable to understand some of the concepts discussed.

Although there was great diversity between schools, lessons were generally held at the junior/middle secondary level, weekly, were approximately 30-60 minutes in length, were included either in pastoral care or health and PE lessons, and covered the topics indicated below in Table 4.2:

Table 4.2 Overview of approaches to alcohol education taken in Australian schools

Year Level	Overview of approaches taken in Australian schools*
6	• Some schools introduce alcohol facts and consequences in Year 6. • Life Education may be delivered to these year levels if used/allowed.
7	• Students may work from a workbook. • The workbook is usually developed by teachers who select from a host of different resources. • Workbooks contain information about the effects of alcohol, and standard drink sizes for different types of alcohol. • Lessons focus on anatomical issues rather than social impacts of alcohol use.
8	• Lessons try to deepen understanding of impact of alcohol and drug misuse. Some students may be starting to experiment so lessons may incorporate discussion of de-identified scenarios, decision making, and the impact alcohol has upon the brain. The focus is often on encouraging students to make the right choices.
9	• Some schools did not introduce alcohol education until Year 9 on the assumption that most students are not drinking yet. As such, this is an introductory topic for students at these schools and tends to address the content covered at younger levels at other schools. • Schools may focus on different issues including peer leadership, development, and harm minimisation. As with previous years, scenario based, interactive discussions are incorporated. These work well with students who are not yet drinking as well as those who are. • The main focus at this Year level may be on parties (i.e., designing parties without alcohol involved, what constitutes responsible drinking, differences between liquor types).
10	• Major focus is on impacts and consequences of risk-taking behaviours. This includes consideration of wider community impact, as well as individual harm. Drink driving becomes a focus area, as do topics concerned with sexuality and sexual health, stress management techniques and the role of alcohol as a negative coping mechanism. Alcohol was also often incorporated with other health and safety topics, i.e., not specifically focused on alcohol. • Students are more self directed in their learnings and undertake their own research about risks associated with alcohol. Practical exercises around standard drink measurement and alcohol content of different beverages are also undertaken. Includes discussion on the role and extent of the role alcohol plays in their lives. Making informed decisions and adopting proactive strategies that are useful in daily life and in dealing wih stress. • There may be more parental and community involvement at this age as students begin to engage more independently within society attending parties, festivals, and concerts without parental supervision.
11-12	• Few schools addressed alcohol during these years, largely due to heavy demands on curriculum time.

* It is noted that the overview in this table represents a condensed summary of the input from the schools involved in the consultations, the advice received in the submissions, and other detail gleaned from the online survey. By necessity it may not apply equally to all school settings.

4.3.8 Summary

Teachers noted that without a national, coordinated approach for implementing and/or conducting alcohol education within classes, there would continue to be variable amounts of alcohol education incorporated into lessons as curriculum priorities constantly changed, and at

present there was a focus on literacy and numeracy to the exclusion of a more balanced focus on health. It was noted that there was considerable pressure on schools to achieve multiple outcomes through the curriculum framework. One interviewee stated that schools were often called on to fix whatever social problem of the day was considered important. Teachers speculated that conducting alcohol education classes and changing alcohol consumption would require:

- a consensus to be reached about reducing national drinking practices
  - this objective to be expressly stated and integrated throughout the curriculum, and
  - recognition that if schools were charged with trying to change the cultural norm amongst students, this may need to be done at the expense of something else
- participation in health classes to be made mandatory
- adequate funding to enable schools to:
  - access evidence based resources
  - develop the requisite infrastructure needed to provide students with greater support services.

Many schools expressed optimism that the National Curriculum Framework would provide an opportunity to integrate healthy lifestyles and alcohol education throughout all subject areas.

4.4   Pedagogical Issues

4.4.1   Section Overview

This section addresses pedagogical issues that arose from consultations with school personnel (i.e., principals, teachers, nurses), and students. The school consultations shed light on the current methods of teaching and learning practices of alcohol-related education programs that were conducted at schools. School personnel shared their knowledge, views and expectations regarding the pedagogical approaches undertaken in their schools in relation to alcohol education.

4.4.2   Scope

Alcohol education usually formed a component of a broader program that focused upon drug use, health issues or social behaviours and norms (e.g., risk-taking, partying and peer influence). Health / PE classes were generally compulsory in Years 7-10 but were electives in Years 11-12.

Some teachers believed that there was considerable advantage to incorporating alcohol education in other subjects besides health. A teacher from a government school in regional Western Australia suggested that the difficulty of appealing to all students could be reduced by incorporating alcohol education across the curricula from arts to science, so that the message would reach a variety of students who might find some subjects more appealing/significant than others.

A few schools had attempted to incorporate alcohol education in Science and English classes. For example, a government school in regional Western Australia had a science teacher who taught the chemical structure of alcohol and its biological effects on the body as part of a science lesson. Another school tried to do the same but abandoned the idea because their science classes were *"too structured"* and inflexible to allow for a seamless integration of alcohol-related education. The level of integration of alcohol education in schools is covered in further detail in the School Philosophy section above.

4.4.3   Teaching philosophy

Schools consulted almost universally adopted a harm minimisation approach as it was considered realistic given the deeply ingrained *"acceptable drinking culture"* of Australian society. A teacher from a

government, metropolitan school in Queensland highlighted the need to educate students in a manner that was consistent with their views and experience of alcohol, coupled with an emphasis on socially responsible/acceptable drinking behaviour.

Some teachers stated that implementing an abstinence or zero-tolerance approach would only cause *"kids to rebel"* and make alcohol more attractive to them. Teachers also highlighted that students did not like to be *"preached to"* or *"lectured at"* and would immediately *"tune off"*. As one teacher from an independent school noted:

"Just standing up and lecturing to kids doesn't work. You can't brainwash kids into believing something. They are going to experiment and you can't tell them not to."

4.4.4 Teachers as alcohol educators

Classroom-based alcohol education was almost always delivered by health/physical education teachers as part of the health curriculum. The relationship between teachers and students was an influential factor in the degree of student's receptiveness to alcohol education. Some teachers and students believed that it was important to cultivate a positive coaching/mentoring relationship with students and engage in honest, non-judgemental communication so that trust could be established. A government school teacher from the Northern Territory also believed that teachers needed to be willing and open to discuss certain sensitive/controversial issues with students even if it may cause some uneasiness at first. A South Australian student from an independent school remarked that teachers were the best people to educate them about alcohol as long as students trusted them and felt comfortable asking questions. It was also highlighted that teachers needed to be dedicated and passionate about educating young people about alcohol if it was to be successful.

The age of a teacher was another factor that was perceived to influence the extent to which students related to the teacher and subject matter. A teacher from an independent school in Western Australia believed that it was advantageous that their HPE department comprised a group of fairly new and young teachers who felt more in tune with students' needs and how best to relate to them. This perceived benefit of having younger teachers educate students about alcohol was also echoed by school personnel in other states and territories.

A teacher from a Queensland government school noted that teachers may not necessarily be the best people to educate students about alcohol, unless they had been trained appropriately. Teacher training

was raised as an issue in a number of schools which could not afford to send their teachers for the requisite professional training and/or had difficulty in attending training courses due to their remote locations (see Barriers, Limitations & Facilitators section below for further details).

4.4.5 Guest speakers

"Students tune in more to guest speakers." – Teacher, independent school, metropolitan WA.

The majority of schools consulted also invited the occasional guest speaker as part of their strategy to educate students about alcohol. However, some government schools noted that they could not afford to have guest speakers as part of their alcohol education program. Guest speakers ranged from experts in the field to recovering alcoholics and victims of alcohol-related accidents. Oftentimes the expert guest speakers were part of a school-based alcohol-related workshop such as RRISK, iParty, Road Ready and SAM. Police officers were also sometimes invited to demonstrate the effects of 'beer goggles' and explain the legal ramifications of alcohol consumption.

Generally, teachers thought that guest speakers were well-received by students who seemed more attentive and responsive during these sessions. One New South Wales government school teacher remarked that this was particularly the case for students in senior year levels who were less likely to have as good a relationship with their teachers compared to junior year level students. Some students commented that they tended to *"tune out"* when teachers speak:

"If you've just got a teacher telling you about it, not many people will listen."

Teachers were also appreciative of these sessions and believed that having the occasional guest speaker helped break the monotony of *"usual classroom lessons"*. They also believed that guest speakers had more credibility in the eyes of students given their authority and expertise in the subject matter. For instance, one teacher from a Northern Territory, catholic school was of the view that guest speakers needed to be a high profile person that the students could identify with. Some students had similar beliefs about credibility, as one catholic school student from South Australia remarked, *"better to get someone in who knows what they're talking about"*. Having alcohol experts as guest speakers also provided an opportunity for the teachers to obtain the latest information and resources.

The iParty program organised by a committee of police, ambulance services, AOD and youth services, and school drug education, illustrated the positive effects of external speakers on students from a government school located in a rural region of Tasmania. As one teacher stated:

> *"It excites the kids. They [the presenters] have got it down-pat. They give the kids things and they do things that we can't do as educators. Those people don't have any more information than we do, but because it's someone else's voice, and the way we prepare kids for it, like, 'We've got someone coming in. You're on your best behaviour, it's really important, it's very special', it gives it that extra bit of concentration and credibility. Our kids really do appreciate different people coming in because we don't get heaps of people, we are isolated."*

Recovering alcoholics were sometimes asked to speak to students about their personal experiences with alcohol. Some school personnel felt that this was a good strategy to *"keep it real"*. A teacher from a government school in rural Victoria noted that it was important to make the stories real and personal so that they would have an effect on the students as *"the kids become pretty blasé about those after awhile"*. However, one government school teacher from metropolitan New South Wales was of the opinion that getting *"ex-users"* might do more harm than good because students would see someone who has survived alcoholism and may think *"so what? It can't be that bad"*.

4.4.6   Teaching strategies & approaches

Most alcohol-related programs were reported not to be implemented in their entirety. Rather, teachers used their discretion and selected certain elements from programs and resources according to what they deemed to be appropriate and relevant to students. Some teachers appreciated the flexibility in being able to pick and choose aspects from different programs depending on what they thought was best for their students.

Many school personnel were also of the opinion that alcohol-related programs which employed a variety of teaching methods and focused on skill development and enhancement were more effective than those that were information-based and didactic. This view is consistent with the research evidence available to-date and accords with consensus views regarding what constitutes best practice.

Some schools placed an emphasis on building social and cognitive skills that facilitated decision-making, problem-solving, resisting peer pressure, increasing resilience and adopting positive coping mechanisms. These schools conducted alcohol education programs using this skill-building approach.

Interactivity, relevance and creativity were three crucial elements that were frequently mentioned in relation to enhancing student engagement. One teacher from a government school stated:

> *"I think if we're going to do alcohol education we need to make it relevant, we need to make it fun and interesting and engaging."*

Again, this approach corresponds closely with the available evidence regarding best practice in this area.

4.4.6.1 Interactivity

Teachers from all types of schools across the country commented that there needed to be a high level of interaction with the students to keep them engaged and interested. Interactivity was achieved in a number of ways including group discussions, role-play exercises, safe party planning, and the use of interactive tools and resources.

Some school teachers used current alcohol advertisements to stimulate media-related discussion amongst students. Other teachers got students to develop their own responsible drinking ad campaigns. A government school in the Northern Territory ran a program in which students were given the opportunity to investigate and evaluate the prevalence of alcohol use in Australian society, particularly in their region; consider a range of policies; and make recommendations on the best strategies to address these issues as a community.

Many teachers also mentioned being constantly on the lookout for new strategies of effective teaching and maintaining student engagement.

4.4.6.2 Relevance

In terms of relevance, some teachers also supplemented their lessons with discussions that revolved around recent and localised alcohol-related news and incidents that students could identify with and relate to. For instance, some school personnel used relevant articles from the daily newspapers or brought in the latest '60 Minutes' episode for students to read/watch and discuss during classes. The main aim was to keep it as realistic, relevant, and topical as possible.

4.4.6.3   Creativity

Some students who were interviewed raised concerns about learning and doing the same things repeatedly and undertaking boring assignments like writing essays on "What is a drug?". One student from an independent school complained:

> *"Every year they did the same health class, over and over, and I used to say 'they're going to drive me into drugs', cos I was so sick of hearing it."*

Most school personnel realised that creative alcohol education programs that were *"out of the ordinary"* were extremely useful in engaging students. For example, government school students in rural Victoria participated in the *GV Passport Program* (100 minutes in duration) where each student would be given a booklet of questions that needed to be completed after listening to presentations by the police, ambulance, state emergency services, etc. at each 'station'. After each presentation, students would have 10 minutes to complete a related set of questions/exercises in the booklet before moving on to the next station. To signal students to move on to the next station, the lights would dim and the music would be turned up. A school-based nurse exclaimed:

> *"Tell you what, they remember! It's short, sharp, and to-the-point information. They really get excited and engaged and they really want to listen."*

One Victorian government teacher cautioned that there was a need to maintain a careful balance between activities that were engaging and *"fun"*, which could run the risk of students missing the point or trivialising the issue. The use of 'beer goggles', for example, was very popular with students but raised concerns among some school personnel who perceived it to be too much like a game that made fun of alcohol. Nevertheless, some other schools believed that the goggles were a very useful and creative tool that could stimulate discussions and keep students interested. As one independent school teacher from Tasmania observed:

> *"The kids loved it. It was great. It wasn't just the run-of-the-mill stuff that the kids usually get. That's why sometimes you need to go beyond the norm, so the kids sit up and think, 'Well this is different'. It's not the usual 'don't drink' message that they get."*

Unfortunately, the research evidence on techniques such as 'beer goggles' is not available, as an adequate evaluation has yet to be undertaken of this teaching strategy/resource.

Youth-savvy techniques such as texting and e-mails were also utilised in one Victorian government school in order to get the message across. As a principal of a government school in Tasmania

remarked, *"our kids are now electronic beings"* so it was considered important to use the latest technology as a way of engaging students. A Tasmanian government school teacher commented about the potential to develop electronic, interactive resources for alcohol education that were similar to 'Mathletics', where students learn and gain valuable skills while having fun.

An important issue to emerge from the above concerns the extent to which a 'memorable' educational session also equated to improvements in knowledge and/or attitudes, and more importantly does it contribute to the ultimate goal of long term behaviour change.

4.4.6.4 Modes of delivery

Face-to-face classroom-style teaching was the most frequently reported method of delivery for alcohol education. Some students were also given computer-based exercises to complete (e.g., NDARC's online activity modules on alcohol) and some school teachers used podcasts, vidcasts, DVDs and relevant documentaries to supplement their classroom lessons and increase student engagement. In some schools, the powerful influence of peer engagement was utilised to conduct some alcohol education programs (see the Beyond the Classroom section for further details). Other alcohol-related programs that extended beyond the classroom, such as the GV Passport program, were more creative and flexible in approach (see subsection above on Creativity).

4.4.6.5 Scare tactics

A fear based approach was still commonly used in some alcohol-education programs, particularly those that focused upon the dangers of drink driving. In these programs, the often gruesome images of victims of alcohol-related driving accidents were shown in an attempt to deliver the "Don't drink and drive" message. Some teachers seemed to equate getting students' attention with having a positive behavioural impact on the students. As one teacher from a government school in Tasmania observed:

> *"The graphic approach must be pretty effective because the Government is spending a heap of money on the graphic stuff - like the 'ice' ads and the cigarette stuff."*

Another teacher from a Northern Territory government school also voiced support and commented that *"gory stories"* and current advertising were effective in that they explicitly illustrated the negative consequences of binge drinking, particularly since young people are often oblivious to everything when they are intoxicated.

It appears that students enjoyed listening to *"gory stories"* and that, not unexpectedly it raised much discussion amongst them. As one catholic school student from rural New South Wales noted:

"You need to be scared to be aware of it, I reckon."

Students wanted to get more horror stories and scenarios of bad outcomes that result from the overconsumption of alcohol. However, a few school personnel expressed doubt about whether fear tactics made much of a positive impact on students' drinking behaviours. One teacher from a catholic school in Tasmania questioned its efficacy:

"We don't know whether that shock stuff really works or not."

Occasionally, students were also taken to rehabilitation centres so that they could witness the repercussions of alcohol misuse firsthand. For example, boarding house coordinators from a catholic, rural school in the Northern Territory had taken some of their students who had committed alcohol offences to CAAPS (the Council for Aboriginal Alcohol Program Services) and FORWAARD (a hostel that accommodates Indigenous people from drug and alcohol rehabilitation programs). In these places, the students met people with alcohol-related problems and listened to personal accounts of the impacts of excessive drinking. Teachers reported that some students were clearly affected by this experience to the extent that they ceased drinking after these visits.

4.4.7   Gender differences

"Girls like narrative. Boys want facts." – Teacher, catholic school, metropolitan SA.

A few schools took gender differences into consideration when teaching students about alcohol. Consultations with a Northern Territory, rural, catholic school revealed a preference to keep the boys and girls separate because there was a tendency to *"muck around more"* when they were together.

Some school personnel also believed that there were different underlying reasons for boys and girls to drink and that they might find themselves in different situations. For instance, a government school teacher from rural Victoria felt that it was important to raise awareness about the link between alcohol and sexual risks, particularly for girls. The Northern Territory catholic school mentioned above

organised programs for girls that centred round self-esteem issues whereas the boys participated in programs that were more leadership-oriented and outdoor activity-focused.

Some alcohol-related programs were solely for male students such as the DARE program that was delivered by police to Year 8 male students in an ACT metropolitan, government school. There were plans in progress at that school, however, to deliver a similar program to at-risk, female students.

4.4.8   Summary

This section provided an account of the main pedagogical issues that were raised during school consultations. Teachers were almost always the main facilitators of alcohol education to school students. The education was most often delivered in a face-to-face, lesson-based manner. The perceived suitability of teachers as alcohol educators was dependent primarily on their relationship with students and the extent of their professional development. The common conception was that teachers who had a more open, trusting and mentoring relationship with students, and younger teachers who could more easily relate to students, were better alcohol educators. Teacher training was an issue of concern for certain schools that did not have sufficient funds to send teachers for further training or had difficulty accessing training opportunities due to their remote locations.

The occasional guest speaker (e.g., alcohol specialist consultants, police, nurses and recovering alcoholics) were also invited to deliver workshops/presentations to students. The general belief was that guest speakers were more credible from the students' standpoint and provided a good opportunity to break the monotony of routine classroom lessons. Nevertheless, there were mixed views about the appropriateness of having recovering alcoholics as guest speakers.

The majority of school personnel consulted were of the view that alcohol-related programs which employed a variety of teaching methods and focused upon skill development and enhancement were more effective than those that were information-based and didactic. Interactivity, relevance and creativity were three vital elements that were frequently utilised to maintain students' engagement and receptiveness to alcohol education. A fear based approach designed to shock was also commonly adopted in school-based alcohol education. While students generally enjoyed the *"gory stories"*, some teachers were doubtful as to whether or not this approach was effective. A few schools also took gender differences into consideration by way of customising alcohol education for boys and girls separately.

4.5   Resources, Programs, and Materials

4.5.1   Section Overview

This section describes the programs and resources used by the schools who participated in the consultation process. The selection process for these programs and resources, the appropriateness of the resources, and issues of professional development and program fidelity, and the ability to evaluate impact and effectiveness are then discussed.

4.5.2   Key Points

- A wide variety of programs and resources were used, representing a range of different approaches, content, and modes of alcohol education delivery

- Resources go out of date very quickly, sharply reducing their efficacy over time

- The selection process for programs and resources tended to be ad hoc rather than evaluative and considered

- A lack of funding and backfill (i.e., employing relief teachers) were often cited as barriers to accessing professional development for alcohol

- Teachers would pick and choose different elements from a range of different materials and programs in order to construct a tailored program to deliver to their students

- Teachers had little means of evaluating the impact of their alcohol education programs, usually having to rely on student's informal feedback. This is problematic because what students like may not correspond to what is most effective

- In general, teachers had modest expectations for what alcohol education delivered through schools could achieve

4.5.3   Types of programs used

One of the most striking findings of the school consultations was the variety of programs and resources available to and used by schools to conduct alcohol education. The wide range of different alcohol education or alcohol-related programs mentioned as currently being used by schools is listed in Table 4.3 below, and are shown in decreasing order of prevalence.

A variety of different forms of programs and resources were reported. Overall, of the schools consulted for this project a total of 43 different programs and resources were identified (and these are likely to represent only some of the total array in actual use). Programs and resources used included workbooks (e.g., Challenges and Choices), guest speakers (e.g., RRISK, Paul Dillon, Michael Carr-Greg, Encounter Youth), DVDs (e.g., Alcohol: What's Your Poison?, Alcohol and Adolescents), and online modules (e.g., NDARC's 'Alcohol' and 'Alcohol and Cannabis' modules). As Table 4.3 shows, the most commonly mentioned[30] programs or resources were:

- Rethinking Drinking,
- RRISK, and
- Challenges and Choices.

The programs and resources identified as commonly used by schools represent a range of different approaches to alcohol education, and include materials to address risk taking (eg, RRISK, Don't Die Young), safe partying (eg, Safe Partying, iParty, Party Safe, Towards Safer Partying), knowledge about the effects of alcohol (eg, 'beer goggles', Alcohol: What's Your Poison? DVD), first aid (eg, Save-A-Mate) and holistic materials including alcohol (eg, Mind Matters, Crossroads, Challenges and Choices). Resilience or self-esteem focused school initiatives without a specific alcohol focus are covered in Beyond the Classroom.

The majority of these programs were targeted at the general student population, while some specifically targeted at-risk students (e.g., the Pathways and Daisy programs). Some schools also noted driver education programs such as Road Ready, Keys Please, Road Risk Reduction, and U-Turn the Wheel that included a drink driving component, but these have not been included in the table below.

There were also innovative activities that did not come under the banner of established programs or resources. One example was a school in South Australia which involved Year 12 Drama students conducting a mock motor vehicle accident and courtroom proceedings. This was used to prompt discussion and debate amongst the senior school students. However, time and resources prohibited the school from conducting the activity on a yearly basis. Less intensive activities mentioned by other schools included essay and poster competitions, and the production of short movies focusing on alcohol. In the absence of evaluation, the benefits and impact of these more unique approaches are unknown.

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[30] While the data derived from this consultation involved national input, it was not a comprehensive survey and findings need to be generalised with caution.

Table 4.3 Alcohol education or alcohol-related programs and resources mentioned as currently being used by schools (numbers in brackets indicate the number of times the program/resource was mentioned if it was more than once)

Rethinking Drinking (14)	Life Education (2)	Drug Use in Society
RRISK (Reduce Risk- Increase Student Knowledge) / Paul Dillon (7)	DARE (Drug Abuse Resistance Education) (2)	Party Smart
Challenges and Choices (5)	Party Safe (2)	Looking After Myself
Mind Matters (4)	Pathways (2)	NDARC 'Alcohol' module
Safe Partying (ADF) (4)	Oasis (Salvation Army)	NDARC 'Alcohol & Cannabis' module
Encounter Youth (SA) (3)	LEAD (Leading Education About Drugs)	Waverley Action Youth Services (WAYS) workshop (NSW)
Michael Carr-Greg (presenter) (3)	GV Passport (Shepparton)	CLIMATE Schools
Get REDI (Resilience Education and Drug Information) (3)	Don't Die Young	Alcoholics Anonymous presenters
Theatre Performances (3) – in particular, Brainstorm Productions (2)	Drug Education R-12 Teacher Support Package (SA – DECS)	Step to the Future
Don't Let a Night Out Turn into a Nightmare (3)	The Good, The Bad, and The Ugly	Betty Ford Clinic presenters (NT)
Beer Goggles (3)	Making A Choice	Ted Noffs presenter (NSW)
SHAHRP (School Health and Alcohol Harm Reduction Project) (3)	DVD 'Alcohol: What's Your Poison?'	Daisy (NT)
Red Cross SAM (Save-A-Mate) (3)	Towards Safer Partying	On the Edge
iParty (3)	'Alcohol and Adolescents' DVD	Tune In Not Out
Crossroads (2)	6 Mates, 6 Stories	Changes and Choices (1)

Note. Resilience, self-esteem, and similar programs with no alcohol-specific content have not been included. Teachers may not have recalled or mentioned all relevant programs.

4.5.4 Appropriateness of resources

4.5.4.1 Dated resources

A common concern raised by teachers was that resources used in alcohol education date very quickly. This can be in terms of the information, which can date with the release of new information or guidelines (such as the most recent 2009 NHMRC alcohol guidelines) as illustrated in the following quote from a teacher in a government school:

> *"Your standard drink stuff always varies, like your consumption, your safe levels of consumption, what binge drinking's considered to be, that's constantly - that's fairly dynamic".*

One New South Wales teacher noted that the school's drug consultant was a valuable source of up-to-date information to counter this barrier. A Northern Territory teacher suggested that it

would be helpful if resources could be updated and made available for download. Remote schools also commented that their remoteness was a barrier to accessing up-to-date resources.

Additionally, some teachers perceived some resources to lack cultural relevance if the resource was old or dated, and this was also considered problematic. One Victorian teacher commented that the Rethinking Drinking video "uses a VHS video where the kids still have mullets[31]", and other schools mentioned that they used Rethinking Drinking resources, but not the video any more because it was dated. The lack of up-to-date contemporary content and 'look' was seen to directly impact on the effectiveness of resources. Teachers argued that students did not respond positively to or engage with material that they considered out-of-date or not relevant. A teacher from a government school in New South Wales noted:

> *"You put on those old resources, you know, and the kids take the piss out of it."*

To counterbalance resources that may not be current, some schools used recent documentaries, such as Four Corners episodes, or alcohol-related news events, such as the recent debate over 'alcopop' taxation, in order to make the content of the course timely and relevant to students. Schools would often also respond to local alcohol-related events as part of their alcohol education, such as drink driving motor vehicle accidents. One government ACT school argued that such "stimulus material" worked better in promoting discussion and learning around alcohol than set lessons. Extending this view even further, a Northern Territory teacher believed that a formal learning environment is inadequate to address the social aspects of alcohol.

Another shortcoming of out-of-date materials was the inability of the resources to address concerns teachers expressed about new developments such as *"mobbing"* or *"swarming"* – when mobile and SMS technology facilitates large crowds of uninvited young people gatecrashing parties, or spontaneous 'gatherings'. This was a concern raised by several teachers around the country, and is a recent phenomenon that older resources may not address.

4.5.4.2 *Cultural appropriateness.*

Several schools who participated in the consultation process had a substantial proportion of Indigenous students. When asked about the cultural appropriateness of programs and resources, schools were generally positive. While one New South Wales teacher mentioned some tokenism

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[31] Mullets were a distinctive hair cut typical of the 1980s.

in resources (for example, resources featuring a single Indigenous young person, a single Asian young person etc), he believed that the appropriateness of resources is generally better than it was 15 years ago.

This view was not consitent across all resources however. A Northern Territory teacher believed that MindMatters, for example, was not culturally appropriate for Indigneous students. While another Northern Territory teacher noted that pictorial resources were more appropriate for Indigenous students.

4.5.5   Selecting programs/resources

As Table 4.3 highlights, and as discussed in the literature review, there is a wide and potentially confusing range of available programs and resources that schools can draw upon to deliver alcohol education. However, for most schools, time limitations, competing priorities, and lack of support resulted in an unplanned and opportunistic approach to the selection of programs and resources for alcohol education. Decisions were often made on resources or flyers posted to the school, or emails promoting new resources, that the staff would assess for appropriateness. Some teachers reported a desire to avoid *"grab-bagging"* and using resources just because they're available, but often did not manage to achieve this because of time limitations and lack of support. A school nurse in a government school reported:

> *"The teachers are just so overburdened with their workloads. It's just so hard for them to find out what's out there."*

When asked how resources were selected one teacher from a government school said:

> *"Randomly (laughs). Quality. If you've trialled something yourself and you know it works, and you can develop a unit around it, you tend to continually use it…. You wouldn't base a unit of work on alcohol around one good resource. You have a collection of favourite things that you know work, and you can team them up with other things and activities."*

The pick and choose approach to selecting different resources highlighted here was common, and is discussed further in the section on Implementation of Programs.

There were exceptions to this approach. For example, in some New South Wales schools, teachers reported positive working relationships with drug consultants who provided support in selecting and learning about new programs and resources. One New South Wales teacher reported sitting down and going through all of the available

resources with the drug consultant. The teacher then presented the resources they wanted to use back to the rest of the staff, and found this to be a very beneficial strategy. The teacher noted that the support of drug consultants and awareness raising courses were critical in the implementation of any resources, as schools receive a lot of unsolicited resources in the mail. Without a drug consultant or a professional development course, the resource would likely just sit on the shelf and no-one would examine them.

Another approach used by a New South Wales government school was to undertake a survey of staff, parents, community health representatives and other agencies (for a variety of issues, not just alcohol). The school then used this feedback to design and select resources. In addition, the school had a drug consultant available to them who provided support. Other exceptions were when a school was approached to participate in a trial of a program or resource, such as CLIMATE schools in Tasmania or a peer-led alcohol education initiative in South Australia. Schools were positive about these experiences and typically were enthusiastic about being part of a new initiative.

4.5.6 Professional development for programs/resources

Several schools noted the need for teachers to receive professional development in alcohol education generally, or for specific programs or resources, in order to have the skills and confidence to successfully deliver alcohol education. One Northern Territory teacher also believed it was important for teachers to receive professional development to ensure teachers were delivering a consistent message about alcohol. Some schools were able to access this type of training, for example through organisations such as the Australian Health Promoting Schools Association (AHPSA), while other schools were not. The availability and barriers to access to professional development warrant further investigation. For example, several schools noted that the need to schedule relief teachers to allow teachers to go to professional development events acted as a barrier to accessing training. The cost of hiring casual relief teachers was cited as a common barrier.

4.5.7 Implementation of programs

As illustrated in the quote above from the Tasmanian teacher, the vast majority of schools selectively pick and choose aspects of programs or resources to include in their

alcohol education. This selective use and application of elements of programs and resources has implications for research and evaluation of alcohol education. For researchers and evaluators, emphasis is placed on "program fidelity", where implementation of the program should match the prescribed content and delivery format as closely as possible. This allows evaluators to establish a general measure of efficacy of a standardised program, with the logic that this program could then be implemented, with fidelity, in schools that wish to achieve the outcomes the program or resource has been demonstrated to be able to attain. For researchers, program fidelity is usually seen as a pre-requisite for effective programs (see for example Wagner et al., 2004)).

However, for teachers, their priorities were more heavily focussed on the need to tailor material to the local setting, the curriculum, and the needs of their students. As discussed elsewhere, there is only a limited amount of time available in the curriculum to devote to alcohol education. Hence, teachers will often select only the most relevant and appropriate sections of available programs or resources in order to efficiently use that limited time. To illustrate this process, a New South Wales teacher noted a resource that provided a DVD and six to eight lessons, from which she chose the best one or two to deliver to her students. Similarly, a South Australian school described how their alcohol education programs drew on selected materials from REDI, SHAHRP, and Rethinking Drinking, among others.

A further factor mentioned by a teacher from a Victorian independent school was feeling a sense of ownership of the material:

> *"The things that come out from government tend to arrive whether you want them or not, and because of that, there's not a huge amount of ownership."*

This issue did not apply to education provided by external organisations, such as workshops, events, or guest speakers. There were also some exceptions to the tailoring and selective use of materials at some schools with certain resources. One Tasmanian school's account of their use of the Changes and Choices workbook demonstrated high program fidelity, with students working through the entire book and activities. The reason for this degree of fidelity was noted by a teacher from an independent school as:

> *"For the Year 7's it's brilliant, because they love to have their own little workbook to work from, and colour in - and seeing it all contained and organised."*

4.5.8 Ability to evaluate impact and effectiveness

"Schools are doing what they think is right but we are still all in the dark a little bit. There's no doubt about that." – Teacher, independent school, Victoria.

Teachers reported that once a program or resource was implemented, there were not many opportunities or resources available to schools to evaluate whether the program or resource has been effective. Some schools expressed keenness to conduct a more rigorous evaluation of their alcohol education, but noted that time and funding were barriers. As indicated in the literature review, there was also insufficient evidence to be able to judge the effectiveness of most established programs and resources.

Often teachers were able to report on whether students liked or disliked a program or guest speaker, or how they reacted to a resource. Teachers found this feedback and insight valuable, and took it into account when deciding whether or not to use a resource or program the next time, or whether or not to rebook a guest speaker. This is summed up in the following quote, where a teacher from a government school commented that they considered that something 'works':

"If the kids enjoy them and are genuinely interested and will readily engage with them."

However, the shortcoming of using student feedback in isolation is that what the students like may not correspond to what constitutes effective education. While some aspects of education, such as interaction and relevance, are likely to lead to greater positive feedback and effectiveness, consultations with students (discussed in the following chapter) suggested that what students desired did not always accord with best practice. One example of this was the common finding, discussed in the earlier section on Pedagogical Issues that students wanted to be scared, and wanted gory stories of alcohol-related harms. However, as noted, scare tactics have been found to be ineffective in deterring alcohol use (Midford, 2000; Tobler, 1997), and may glamourise risky drinking. Some teachers as mentioned previously were also concerned that resources such as the 'beer goggles' may be well received by students; the activity was too much fun and may lead to greater likelihood of drinking.

Other anecdotal information teachers were able to collect included school attendance, incidents of inappropriate behaviour reported, and hearing that students looked after their intoxicated friends. While these were based on impressions rather than data, they formed a valuable aspect of the information teachers used to gauge the effectiveness of alcohol education programs.

Some guest speakers or external providers conducted their own evaluations, largely based on student questionnaires. This information was then used to advertise their services to other schools. However, such evaluations, while they may be useful in improving the service delivered by that individual or organisation, can not be relied upon as a source of information about the overall effectiveness of alcohol education.

Perhaps as a result of this absence of concrete evaluations, teachers in general were cautious about the benefits they expected from alcohol education. When discussing potential effectiveness, teachers were likely to mention modest impacts on knowledge and decision-making. One teacher stated:

> *"I think once you've sown the seed of that kind of information it will be there, and then it comes down to that individual having experiences and making their own decisions. But they need to have that information…. They put some things into place, like having a designated driver or getting someone to collect them at a certain time. Whereas before they would have just gone out and gotten drunk, and then worried about a designated driver when it's all too late."*

In general, teachers hoped to "plant the seed" and provide students with information, and skills to allow them to make informed decisions. The barriers and limitations that reduced these expectations are discussed in the next section.

4.5.9   Summary

In summary, this section highlighted the wide variety of programs and resources that were reported by schools. These programs and resources represented a range of different approaches, content, and modes of delivery of alcohol education. There were few common or consistent characteristics across schools. One concern teachers raised about programs and resources was that materials go out of date very quickly, which may reduce their efficacy sharply over time. This has implications for the shelf life of any resources developed. Contrary to the emphasis usually placed on program fidelity by researchers and evaluators, teachers reported selecting different elements from a range

of different materials and programs in order to construct a program tailored to their students.

The range of available programs and resources has the potential to be confusing and difficult to navigate for teachers. Often, the selection process for programs and resources tended to be ad hoc, "grab bagging", rather than a considered, evaluative approach to what's available. The barriers to a more considered approach included time constraints, competing priorities, and lack of support. This highlights scope for the provision of support to teachers to aid in this selection process. Similarly, the need for professional development for alcohol education generally, and for specific, chosen programs or resources, was raised as a substantial issue by many schools. However, a lack of funding and available backfill (i.e., employing relief teachers to cover classes) remained barriers for many schools.

Teachers had little means of evaluating the impact of their alcohol education, usually having to rely on student's informal feedback. A limitation of this approach is that what students like may not correspond to what constitutes effective alcohol education. However, little other data or evidence is available to teachers to support their selection of programs and resources. In general, teachers had modest expectations of what alcohol education delivered through schools could achieve. The barriers and limitations that reduced these expectations are discussed in the next section.

4.6 Barriers, Limitations & Facilitators

4.6.1 Section Overview

This section is based on the consultations that occurred with school principals, teachers and a range of other staff including school counsellors and school nurses who participated in this study. It examines the barriers and limitations that are encountered by schools in relation to conducting alcohol education programs. It also looks at the facilitators that schools identified or used to assist them in providing alcohol education.

4.6.2 Key Points

Barriers and limitations that schools encountered in relation to their role in providing alcohol education included:

- Schools are only one component to addressing alcohol use – ambivalence towards and acceptance of alcohol by parents, students and the broader community impacted upon the ability of schools to provide alcohol education

- The respective roles of schools and parents in relation to alcohol education need to be clearly delineated

- Schools would like to do more but are limited by an already crowded curriculum and access to and availability of funding and information technology

- Divergence of opinion about who should deliver alcohol education in the school and external settings – includes a related issue about the nature of the learning environment i.e., the traditional classroom-based approach versus a more interactive and possibly community based approach

- A range of resource and workforce related issues including a lack of appropriate and up-to-date resources; professional development including teacher training; school support; teacher commitment

Facilitators identified included:

- Support from the school principal and broader school community – including the nature and philosophy of the school

- Embedding alcohol education within the curriculum

- Teachers building positive relationships and trust with their students

- Accessibility and relative inexpensive cost of programs and resources.

Suggestions for the future include:

- Examining the use of new or different approaches to the provision of alcohol education
- A greater focus on professional development
- Provision of adequate funding to develop and implement programs
- Exploring a greater use of information technology.

4.6.3   Barriers and Limitations to Schools Providing Alcohol Education

A consistent theme that emerged from the consultations was that schools have a key role to play in the provision of alcohol education to their students.[32] The scope for school personnel to do this was, however, influenced by a range of factors such as:

- the supportive (or otherwise) nature of the school environment
- the degree of latitude that schools and their personnel are provided with to identify, develop and implement alcohol education programs
- the availability of resources including information resources that can used or adapted to a school-based setting
- funding, and
- information technology.

At any point in time these factors can operate as barriers.

School personnel generally thought that while schools have an important role to play in relation to alcohol education, they are not the only ones who should be responsible for teaching young people about these issues. As one teacher in an independent school stated:

"We're not the people to fix every problem a young person has."

Some thought that a school's main role was to present information, provide options and alternatives and to help students make informed choices. There was also a strong call from schools for a clearer delineation of the respective roles and responsibilities of the school versus parents and the community in relation to alcohol education.

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[32] It is acknowledged that this view is also likely to be influenced by the self selection of schools that opted to participate in this scoping review (a positive response bias); that is, schools that may hold a more negative view about the role of schools in relation to alcohol may have chosen not to have participated and therefore their views are not contained herewith.

A school's ability to adequately fulfill its role in relation to alcohol education, and the range of barriers it had to overcome, was constantly raised by principals, teachers and other school staff. It was noted that the letigimacy of alcohol education in a school setting was also significantly influenced by the ambivalence of students', parents' and the wider community's attitude towards alcohol. As one independent school noted:

> *"Education is a state issue; however, drinking is part of a national culture, therefore, there should be a national approach".*

An over-riding frustration raised throughout the consultations was the inability of schools to be able to fit all relevant material into the curriculum while accommodating competing needs. This conflict was summed up by one teacher in a catholic school who stated:

> *"If you add more, something needs to fall out."*

There was also strong concern expressed about the lack of time available to devote to the provision of alcohol education. Many participants noted that they were not allocated sufficient time to be able to provide the information in a meaningful and appropriate manner.

Some school staff reported that because alcohol education did not ential an academic outcome (such as literacy and numeracy) and was, therefore, not measurable, it was regarded by the schools' leadership teams as being less relevant to the school curriculum.

There was a divergence of opinion about who should deliver alcohol education with some schools and school personnel arguing strongly that it should be provided as part of the health and physical education components of the curriculum. Further, there was also some disagreement about whether health and physical education should be combined. Some argued that while alcohol education has a place in health and physical education it also needed to be integrated throughout the broader curriculum. This concern about the lack of coordination across the curriculum was also considered to be a broader issue that schools could not resolve in isolation.

Other factors identified as barriers to the school's role in providing alcohol education included:

- Lack of teacher education or training
- A lack of trust of teachers by students. This arose in respect to the issue of teacher credibility and raises the question: are teachers the best people to teach alcohol education?
- Lack of resources including up-to-date information
- Large class sizes
- Inability of teachers to be able to effectively convey their messages
- Pressure on schools to ensure that the information provided by external 'experts' was consistent with and linked to the information that the school provided.

At a broader level, some participants noted that a formal learning environment was inadequate to address a range of social issues, including alcohol consumption. It was further noted that alcohol education was conducted in a classroom when alcohol is not present. As such, there was a concern that some of what was taught in schools becomes irrelevant in real life situations.

4.6.3.1   School Environment Support

It was evident during the consultations that the type of school environment that teachers and other school staff work in will influence the level of support that those personnel receive to deliver alcohol education. While the environment is significantly influenced by the school leadership team and the principal in particular, it was noted that there was also a range of factors that impinged on a school's level of support for the provision of alcohol education. These included the input from the school's Board or governing committee and parents into a school's curriculum. Schools frequently noted that they would like to be able to do more in relation to alcohol education and other related programs but they also had a responsibility to ensure that their students were provided with a range of appropriate traditional academic topics.

A number of teachers indicated that they received limited support from their school leaders to provide the type of alcohol education that they wanted because of the school's philosophical underpinnings or ideology. Some school staff also indicated that when they were given support to develop and deliver a particular program, they were not always given the ongoing support to ensure that the material and resources remained up-to-date.

While recognising that there were significant financial pressures on schools, some school personnel reported frustration at not being able to attend appropriate training sessions and indicated that this often reflected a lack of support from the school.

4.6.3.2   Teachers' commitment to alcohol education

Teacher commitment in relation to delivering alcohol education was considered to be either a significant facilitator or barrier. In relation to the latter, it was noted that the effectiveness of a program hinged upon the creativity and enthusiasm of individual teachers. In particular, examples were provided of teachers who had invested considerable time and resources in developing and implementing a program having to stop their involvement because they had either taken on a new role or they had left the school. It was noted that when this occurred it could have a major impact on both the program's efficacy and sustainability.

A number of examples were provided where programs had been developed by the school but staff changes had subsequently affected their uptake, particularly where staff participation in the program was voluntary. The implication was that due to the elective nature of such programs both teachers and students may be less willing to be involved in its delivery and participation.

4.6.4   Funding/Information Technology

Funding and the use of new information technology were recurrent themes throughout the consultations. They are dealt with separately below.

4.6.4.1   Availability of Funding

Not surprisingly, many schools who participated in the consultations identified funding as a major barrier to the development and delivery of alcohol education programs. In particular, the issues of equitable funding and the ability to implement and sustain programs were particularly relevant for schools that had limited resources and facilities.

A recurrent issue for schools was the use of external speakers and the cost involved in getting speakers to provide alcohol education/information sessions. School staff frequently indicated that a lack of funding hampered their ability to use guest speakers to supplement their program or to have speakers on a regular basis. As one teacher in a government school noted:

"Can only do so much with the funding we have."

Lack of funding for staff to attend appropriate professional development was considered to be a significant barrier for teachers and limited their ability to deliver alcohol education in a confident manner. Some school staff provided examples of where they had not been approved, purely on the basis of a lack of funding, to attend a training session relevant to their role in delivering alcohol education.

Many schools reported that when selecting alcohol education and related programs those that involved a significant cost were considered unfavourably or were only utilised as a 'one-off'. In addition, schools were cautious about developing programs which involved a significant initial funding commitment or which would require substantial ongoing funding. The issue of program sustainability was noted to be an important factor for a number of schools.

Schools that had developed highly regarded programs also found it difficult to make those programs available to other schools due to financial constraints. Many participants in the consultation identified the significant financial cost required to develop and reproduce programs for other schools. Conversely, they noted that imposing a cost on the program could ultimately act as a barrier for other schools who may be interested in using the program. Accordingly, many school staff commented that one way to resolve this situation would be to ensure that funding was provided to schools to enable them to both develop and disseminate their alcohol education programs.

4.6.4.2   Use and availability of Information Technology

Lack of access to Information Technology was cited as a frequent source of frustration and was regarded as a major barrier to the development and implementation of innovative and interactive alcohol education programs. A number of concerns were raised about the poor state or total lack of computing facilities for teachers and students alike in some schools. These included having a poor Information Technology infrastructure or very limited resources such as in one school where only a single computing room was available for the whole school to use.

It was also noted that there was significant variations between schools, with some schools still waiting to receive computers as part of the Australian Government's commitment to providing schools with computers while others were already using online alcohol modules as part of their alcohol education program.

Schools were generally positive about being provided with new computers from the Australian Government and saw the potential for them to be able to develop more interesting and interactive lessons that would be more engaging than traditional workbook approaches. Some school staff also noted that the new technology would require them to receive appropriate training on how to use the new technology before they could impart that knowledge to their students. However, they were uncertain whether sufficient funds would be available to enable this to happen.

4.6.5 Facilitators

The facilitators identified by principals, teachers and other school staff that they believe can assist them to deliver alcohol education in their schools is examined on below. Also highlighted are their suggestions for the future and in particular how things could be done differently.

4.6.5.1 Current Facilitators

During the consultations it was suggested that strong leadership from the principal ensured that appropriate structures were put in place and that dedicated roles were clearly defined. It was also noted that teachers were more likely to be encouraged to attend appropriate professional development sessions and be reimbursed for attending those sessions if there was strong support from the principal. Strong leadership was also regarded as an important factor in guaranteeing that the school was able to establish positive links with community partners and external providers.

Ensuring that alcohol education programs were embedded into the curriculum was regarded as a positive and achievable aim by many schools. Some schools reported that they were more likely to develop their own or utilise existing programs that were broadly aimed at student wellbeing or at supporting students because alcohol was not the only issue that the school needed to address. Programs were therefore more likely to be utilised if they reflected the school's philosophy, particularly where it was

based around student decision-making, building student resilience and student personal development. This in turn was more likely to result in a greater commitment from teachers and other school staff to deliver alcohol education programs or sessions. When alcohol education was embedded into the curriculum it was also more likely to be a core component of Health and Physical Education.

Cost was another criterion that some school personnel used to assess the type of program that they selected. These personnel noted that they were more likely to utilise programs (including guest speakers) that were provided free of charge or at a minimal cost. They were also likely to regard this particular program or approach more favourably.

School staff reported on the importance of resource selection. Many of them noted that using current and relevant resource materials that had been developed by alcohol and other drug experts increased the legitimacy of those resources and also increased the likelihood of them being favourably received by the students.

The nature of the philosophy and values of a school were considered by some staff to be significant facilitators that supported them to deliver alcohol education. This was particularly evident in schools that had a strong focus on spirituality and on student empowerment, building student self-esteem and student confidence. Some schools also considered that their underlying philosophy and principles acted as protective factors for their students and assisted the school to deliver effective alcohol education programs.

4.6.6   Suggestions for the Future

The following is a précis of the main issues and suggestions that emerged from the consultations in regard to what could be done differently to enhance the role of alcohol education in schools. The items below represent the collective views of the participants and are not listed in any order of priority nor are they exhaustive. They are provided as an initial guide to assist policy-makers in identifying future deliberations:

1. New or Different Approaches to the Provision of Alcohol Education
    a. Examine options to embed alcohol education into the curriculum
    b. Look at the proposed National Framework Curriculum and see if there is a specific or formal place for alcohol education

c. Schools may need to consider adopting a different approach to the provision of alcohol education including a greater focus on community based programs and on building positive relationships with students. It was suggested that a possible approach could involve conducting small focus groups with students by using external providers and by engaging in structured conversations with them as a means of information sharing

d. Further consideration needs to be given to the appropriate age/school level at which alcohol education should commence.

e. New programs that are developed will need to be based on evidence and best practice and will also need to be tailored, structured, and supported

f. Schools may explore further opportunities to use peer leadership or peer education as an adjunct to more formal/traditional methods of delivering alcohol education

2. Professional Development

a. Teachers and other school personnel who deliver alcohol education should be provided with greater access to appropriate and affordable professional development opportunities

b. Consideration be given to developing a regular network of teachers from different schools who deliver alcohol education to allow exchange of information and ideas about what works and what does not work; how they can do things differently and in a more coordinated way

c. Explore opportunities for teachers and/or schools to regularly liaise with specialist alcohol and other drug workers or consultants to review available information resources and determine which are the most appropriate to present to students

3. Funding

a. Ensure that adequate funding was available to schools to allow them effectively deliver alcohol education programs

4. Information Technology

a. Explore the use of programs that utilise Information Technology effectively and which are accessible and interactive for students and which also assist teachers to build their own and their students' Information Technology skills

b. Consider the potential of using new technology such as Podcasts, digital audio files and the Keepad Interactive Polling System. It was noted by a number of principals and teachers that the use of the Keepad system (employed as part of this project) prompted them to consider using it as an innovative teaching tool within their own school

c. Provide a readily accessible and user-friendly central database of resource materials that was available electronically to all schools and teachers.

Chapter 5 Student 'Clicker session' results

5.1   Summary points

- The use of audience response technologies or 'clickers' enabled fast and efficient collection of anonymous survey data and they also hold considerable promise for classroom-based alcohol education with this age group.

- Although the consultations were not conducted with a representative sample of Australian secondary students, individual sessions were often very similar to the aggregated results, and a number of key themes emerged throughout.

- Some key findings from the student consultations include:

  - o Although participants agreed that adolescent alcohol misuse is a problem in Australia, many emphasised the fact that 'not everyone does it'. Participants also commonly held the view that 'other schools' had more of an alcohol problem than their school.

  - o Most participants stated that they had received alcohol education, some experimentation with alcohol was seen as 'normal', and also that any education occurring after the experimentation has commenced may be ineffective.

  - o The issue that participants wanted to learn more about was 'how to help someone who has had too much to drink'; this was followed by 'staying safe if I do drink'; and 'the effects of alcohol on the human body'.

  - o In line with previous research, participants exhibited comparatively little interest in learning more about how to avoid drinking and/or intoxication. Some students also conflate the two (i.e., drinking alcohol = getting drunk) and regard 'getting drunk' as synonymous with 'having a good time'.

- Students of both genders, and all age groups expressed a strong desire to take care of their friends. This, combined with their receptiveness to 'active' and

'interactive' modes of delivery could be instructive for future alcohol education efforts.

5.2   Overview

In addition to the interviews and focus groups with principals and teachers, an innovative approach was adopted to engage students in group discussions through the use of clickers, or instant audience response devices. These devices enable the efficient and fast collection of survey data, and are particularly helpful when the topic of interest is personal or sensitive in nature. Each person in a group setting has their own clicker (keypad) unit which resembles a remote control. The 'survey' proceeds in a similar format to a Powerpoint presentation, in which slides are projected into a screen or wall. The facilitator asks a survey question, which also appears on a slide, and each person presses the button which corresponds to their answer. These are transmitted to a receiver in the laptop computer via a radio signal, and specialised 'clicker' software collates and graphs the results which can be viewed almost immediately.

The interactive nature of the data collection process and the immediacy of the results are beneficial, particularly with young research participants who are very receptive to the use of technology. Furthermore, participants' privacy is protected since particular software settings can ensure that it is not possible for other participants, the facilitator, or other members of the research team to see which answers were given to any particular question by any particular individual. One further benefit is that, unlike in traditional pen-and-paper surveys (and even online and electronic surveys) the results for individual questions may be viewed straight away and can serve as a useful focal point for further discussion.

5.2.1   Purpose of sessions

The purpose of the sessions was to enable high school students to share their views on a number of topics relevant to alcohol consumption among young people and the nature and purpose of school-based alcohol education, in a supportive and non-judgemental environment. All of those who participated in the clicker sessions (and the other student focus groups) provided written consent and also had written

parental consent. They were reminded that their answers were anonymous and neither they, nor their school, would be identified as having taken part in the study. Care was taken to explain the purpose of the study and the nature of participation, yet retain a friendly and relatively informal atmosphere which would be conducive to open communication. Sessions in which the students and teachers were present were perhaps a little more 'guarded' in their comments, but the quantitative data were (so far as we could tell) unaffected. The following section outlines some features of the respondent group (as a whole) before moving on to present the clicker survey results. It should be noted that the size of the sample and the nature of the sampling frame preclude generalisation of these results to the wider school population in this country as they represent the views of the participants of the clicker sessions only.

5.2.2 Participants

A total of 16 clicker sessions were conducted with secondary school students from both urban and metropolitan schools in several states and territories (see Table 4.1). These sessions involved between 5 and 20 students, with an average 10 students per session. The clicker sessions were facilitated by the relevant researcher in each state/territory. Around 65% of participants were female, which was largely due to a number of all-girl schools being included. Around 75% of participants were aged between 14 and 16, with students 13 years or younger accounting for around 10%, and students 17 years or older accounting for around 15%, of the total sample. Most of the participants (over 90%) had never used the clicker system previously.

5.3 Results

5.3.1 Attitudes towards underage drinking and alcohol education

The first three questions related to previous clicker use, age, and gender, respectively. Questions 4 and 5 aimed to tap into participants' ideas about how problematic youth alcohol use is, both within Australia in general and within their school more specifically. The response categories for both these questions consisted of a 5-point Likert Scale from 'Strongly agree' through to 'Strongly disagree'.

In response to Question 4 which stated, "*Misuse of alcohol by high school students is a real problem in Australia*", 46% agreed or strongly agreed, 32% were neutral, and only 8% disagreed or strongly disagreed. This result suggests a perception among those surveyed that underage drinking is a significant problem in Australia, although the size of the 'neutral' category may be indicative of a level of ambivalence concerning the issue. Several students at one school commented that even though they consider that it is a problem, they pointed out that the statement generalises and assumes (incorrectly) that 'everyone goes out and gets drunk every weekend.'

It is interesting to compare the results for Question 4 to Question 5, which asked essentially the same question but in relation to the participants' own school. In response to Question 5, 28% agreed or strongly agreed, 42% were neutral, and 30% disagreed or strongly disagreed. Student comments following the presentation of this school-specific question commonly centred on how *other* high schools (and often particular neighbouring schools) have 'way more of an alcohol problem' than their own school. At some schools, participants commented that although the statement may be true of some students at that school, it certainly did not apply to everyone with students at one school noting:

> "there's probably one or two at this school (who misuse alcohol); but not most of us. You sometimes hear about peoples' older sisters having alcohol, but not getting drunk."

At other schools, students were adamant that their school did not have a drinking problem:

> "Who drinks at this school? It's not a problem. No students at this school turn up drunk, or anything like that."

Questions 6 and 7 related to the link between alcohol education and the misuse of alcohol. These and all remaining questions utilised the same 5-point Likert scale. In response to the statement "Students at this school would not misuse alcohol if they received better alcohol education", over half the participants disagreed (with 37% disagreeing and 19% strongly disagreeing). At the other end of the scale, only a relatively small proportion of participants agreed with the statement (with 14% and less than 1% strongly agreeing). As was the case with the preceding two questions, a relatively large proportion (29%) was 'neutral' on this issue. This could mean that many participants believe that they are already receiving very good alcohol education (in which case there is little scope for improvement) and/or that their peers will

misuse alcohol regardless of the standard of alcohol education they receive. The 'invincibility of youth' issue arose during some discussions, as an explanation why some students are not receptive to information about alcohol-related harm with a student stating:

> *"We don't want to hear it. It's because, you know, we've heard it all. A lot of people our age don't want to hear that, because they don't really think that it's going to happen to them."*

More light is shed on this issue by Question 7, which asked participants the extent to which they agree or disagree with the statement "High school students will misuse alcohol regardless of what they are taught at school". Over half the participants agreed (39%) or strongly agreed (20%) with this statement. Participants frequently made comments along the lines of *"that's just what kids our age do"*, the extension of which is that a level of experimentation with alcohol is 'normal' and should be expected from this age group with students stating:

> *"I don't think education will really affect it. I don't think it will change their minds. Some people are just gonna do it anyway".*

Around 17% disagreed or strongly disagreed with the statement, and nearly a quarter (24%) indicated a neutral stance.

5.3.2   Directions for learning

Questions 8 through 12 aimed to elucidate students' level of interest in different facets of alcohol education. They addressed physiological effects (including health effects), harm minimisation (relating to avoiding alcohol altogether, avoiding getting drunk and/or getting hurt if they do drink), and how to help someone else who has had too much to drink. All these questions followed the format "I would like to learn more about….' It should be noted that these questions do not address students' ideas of the adequacy of the alcohol education they have received to date. For instance, with respect to Question 8 regarding the effects of alcohol on the human body, a student who has received very little education on the topic, and a student who has received a considerable amount and which has sparked their further, might both agree that they would learn more about the topic. Likewise, a student who is satisfied with the level of information they have gained to date, and a student who is simply not interested in finding out any more, might both indicate a level of disagreement with the statement.

5.3.2.1   Physiological effects

Despite indications that much school-based alcohol education around the country focuses on teaching students about the effects of alcohol consumption on the human body, there appears to be a reasonable level of interest in learning more about this. Figure 5.1 below, displays the results to the statement "I would like to learn more about the effects of alcohol on the human body"

Strongly Disagree, 8.10%
Disagree, 13.10%
Neutral, 21.90%
Strongly agree, 17.50%
Agree, 39.40%
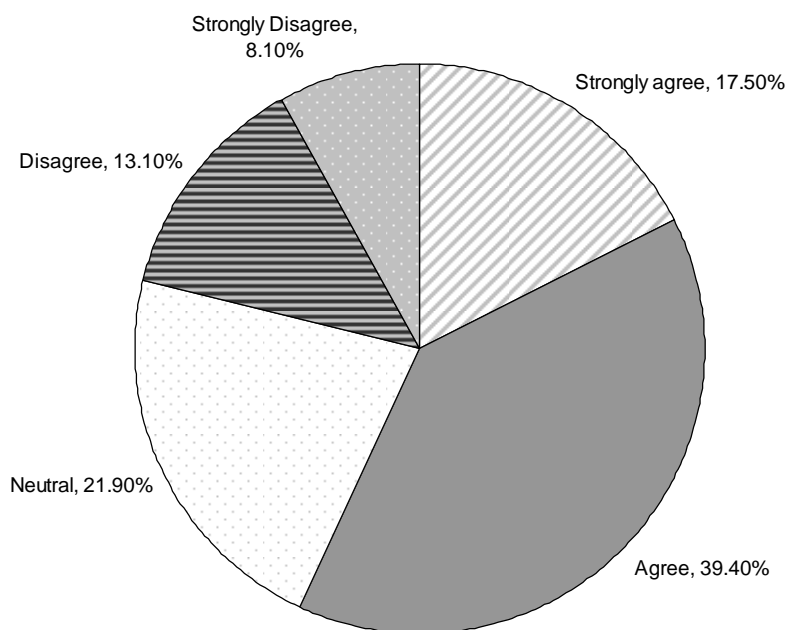
Figure 5.1 Results for Question 8. "I would like to learn more about the effects of alcohol on the human body"

Qualitative comments related to such issues as finding out more about the differential impacts of alcohol on different people (such as children, teenagers and pregnant women) rather than having an overarching 'this is what alcohol does to the body' approach. Several students indicated they already knew that alcohol will affect the liver or brain of a teenager differently to how it would affect the liver or brain of an adult, but said that what they learned in the classroom often did not reflect that. Some students were particularly interested in the impact of drinking upon sporting performance and many indicated that the alcohol education they had received did not address that issue. "If you played sport or something and you found out that it would wreck your sport, well then you'd stop (drinking)." There was a recurrent theme that

alcohol education needed to be relevant to them and to be presented in such a way that it 'made it real'.

5.3.2.2   Avoiding alcohol

The results of the question relating to finding out more about ways to avoid alcohol were, perhaps not surprisingly, mixed. Nearly a third of participants were neutral on the issue. Around a fifth agreed or strongly agreed. Nearly half disagreed or strongly disagreed.
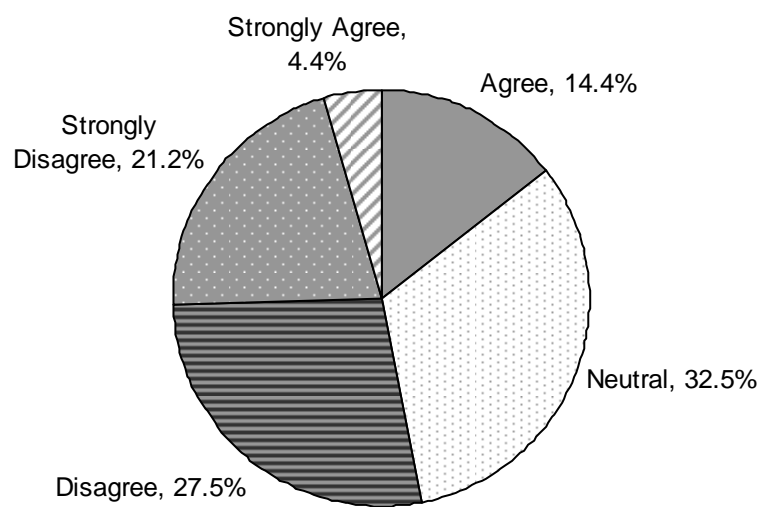
Figure 5.2 Results for Question 9. "I would like to learn more about ways to avoid drinking alcohol"

These results are in keeping both with research and with anecdotal evidence that high schools students are, generally speaking, not receptive to abstinence messages when it comes to alcohol. This could reasonably be assumed to encompass education that focuses on 'how to say no' (refusal skills) as well as on ways to avoid situations in which students may be overtly or covertly pressured to drink (avoidance skills). The data from the current study does not allow for analyses of that level of sophistication to be undertaken.

5.3.2.3   Safety/harm minimisation

There appeared to be a reasonable level of interest in learning more about how to stay safe when drinking. This was a broad question that was intended to encompass

'safety' across the whole spectrum of harm including both physical and psychological damage. Student discussions associated with this question sometimes related to ways in which their judgement could be impaired and wanting to learn about how to protect themselves in certain situations – such as from unwanted or unsafe sex or from involvement in physical or verbal fights.

Girls seemed to be more concerned than boys about the potential 'reputational consequences' of sexual contact and other things that they had done or said under the influence of alcohol. For instance, as part of a discussion about the potential for private matters to become 'public', one student commented "if someone took a photo and put it on the internet, you'd be very unpopular. And plus it would affect you in the long term, because these days a lot of things are on the internet and when you're looking for a job, people (i.e., potential employers) will look you up on the internet and if there's all these bad photos of you, they're not going to hire you". Thus, 'staying safe' in this context should be regarded as including, but not being limited to, issues of physical safety.
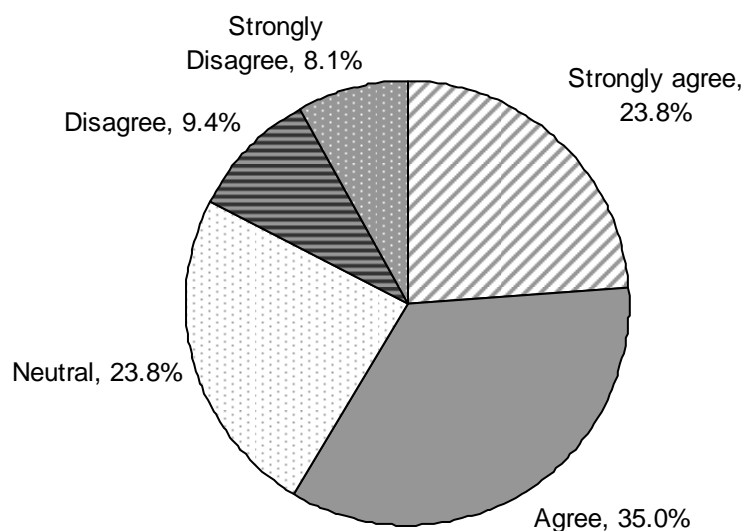
Figure 5.3   Results for Question 10. "I would like to learn more about how to stay safe if I do drink"

As can be seen from Figure 5.3 above, over half the participants agree or strongly agree with the statement "I would like to learn more about how to stay safe if I do drink". As was the case for many other questions, around a quarter of participants report a neutral stance on the issue. In contrast to the previous question about avoiding drinking (with which 27.5% disagreed and 21.2% strongly disagreed) only

9.4% of participants disagreed and 8.1% strongly disagreed. The students' facial expressions and non-verbal cues also frequently conveyed a level of enthusiasm for this topic, and several of them indicated that the education they received in the classroom setting did not address the topic or did not, in their opinion, address it adequately. Emphasis was also placed on the value of practical information and active involvement ('doing stuff') rather than just being 'told the facts'. Students' conversations also often particularly emphasised their desire to keep their friends safe:

> *"You don't want anything to happen to friends or yourself. That would just be the worst thing ever. "*

5.3.2.4   Avoiding intoxication

The results for the question relating to learning more about how to avoid getting drunk closely resembled those for the question about how to avoid drinking alcohol. Taken together, those results indicate lack of receptiveness (noted in the literature) of the participants to alcohol education approaches which emphasise, or are regarded as attempting to promote, abstinence. Interestingly, on several occasions students claimed that the question had been repeated, and remained unconvinced even when it was pointed out that Question 9 asked about 'drinking' and Question 11 asked about 'getting drunk'. Several participants half-jokingly asked 'what's the difference?' This conflation of drinking and drunkenness may well warrant further attention and could provide a potentially useful 'angle' in future prevention efforts with secondary students.
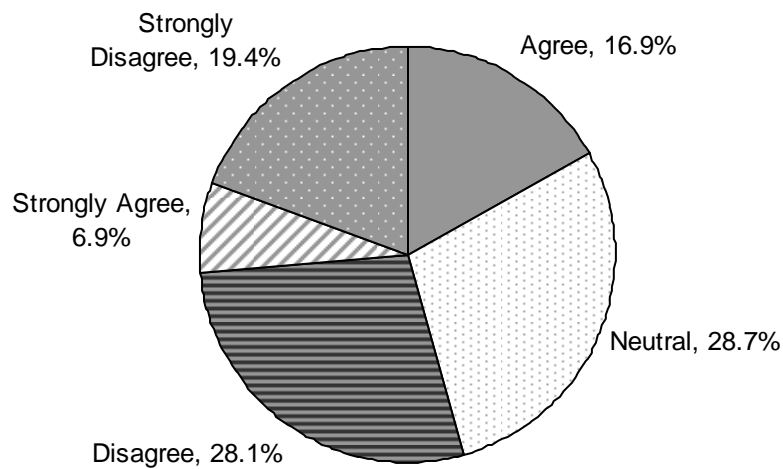
Figure 5.4 Results for Question 11. "I would like to learn more about how to avoid getting drunk"

Nearly half the participants disagreed or strongly disagreed with the statement, and over a quarter were neutral. Notwithstanding the above comments, a reasonable proportion of participants indicated a desire to learn more about how to avoid intoxication. Nearly one quarter agreed or strongly agreed with the statement. The qualitative comments shed additional light on this topic. Specifically, participants sometimes contrasted being 'good drunk' (associated with a sense of fun and feelings of sociability, confidence and enjoyment) and being 'bad drunk' (which implied having 'gone too far'). In other words, some participants stressed that they don't want to avoid getting 'good drunk' (because that is precisely what they seek to achieve when drinking) but they did want to avoid getting 'bad drunk' because 'that's when things get ugly' and people get hurt and/or people do things they later regret.

5.3.2.5   Helping others

The final question on the clicker survey related to whether or not participants were interested in learning more about how to help someone who has had too much to drink. This question received the strongest level of agreement of all questions, with nearly three-quarters of participants either agreeing or strongly agreeing with the statement "I am interested in learning more about how to help someone who has had too much to drink". Furthermore, only around 14% of participants were 'neutral' on this issue (compared to around 30-40% for the other topic-related questions) and only 13% disagreed or strongly disagreed.
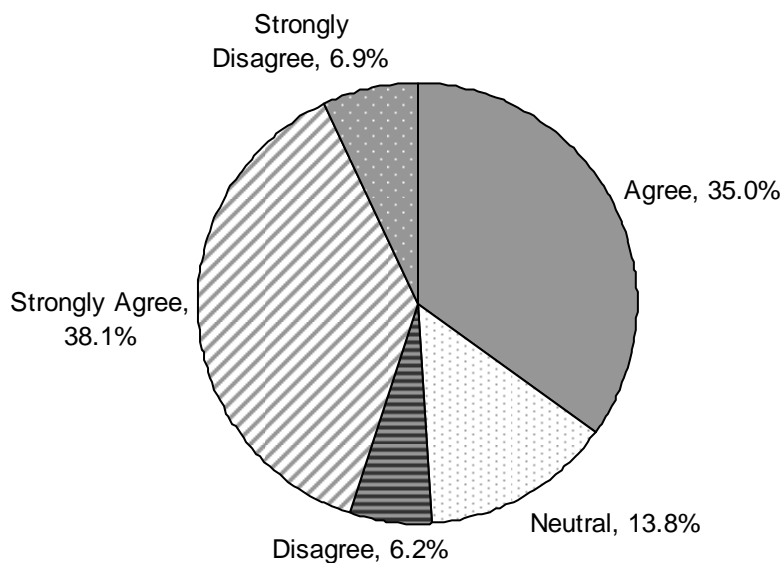
Figure 5.5 Results for Question 12. "I would like to learn more about how to help someone who has had too much to drink"

These results should not be interpreted as indicating that the participants had not received any education in this area: it was more a matter of wanting additional (or more detailed) information or particular skills. Some students indicated an interest in undertaking refresher courses or booster sessions, particularly if they had received this sort of education in previous years. Once again, the emphasis was often on the material being presented in an interesting way, with lots of 'hands on' experience.

There were also several animated discussions about the common 'myths' surrounding appropriate first-aid or other care for seriously intoxicated people, and some participants expressed a concern that young people could inadvertently 'make things worse' by acting on inaccurate information. Another interesting (and somewhat unexpected) aspect was that concerns about 'getting into trouble' might dissuade some students from getting emergency medical assistance for a seriously intoxicated person. The following exchange, which occurred after viewing the results for question 12, illustrates the issue well:

> **Student 1:** *"We'd know to ring 000. But I'd like to know how to immediately help someone if they're unconscious or throwing up or something. "*
> **Student 2:** *"And sometimes you don't really want to ring triple zero 'cos you might get into trouble, or get them into trouble."*
> **Facilitator:** *"What makes you think that?"*
> **Student 2:** *"If you did, and their parents were notified, they'd probably get in trouble, and then you'd feel bad."*

Facilitator: "So if they were lying on the ground, and passed out, and you were a bit scared to ring triple zero, who would you ring, or what would you do to help?"
Student 2: (pause) "Well it would be better if you knew First Aid. I think that would be really helpful"
Student 1: "I don't really know who I'd call" (voice trails off)
Student 2: "Yeah, I don't really know who I'd call, either. You could ring your parents, but they'd probably be angry that you were at a party where there were, like, problems."

Such comments emphasise the need for school-based safety and harm minimisation messages to be reinforced by parents and the wider community. Broad community responsibility for alcohol education was also a theme which ran through the consultations with teachers, principals and other school staff.

5.4   Priorities for future learning

The following figure shows the percentage of the overall sample that indicated agreement (including both 'strong agreement' and 'agreement') with the statements relating to interest in learning more about the five identified content areas of 'physical effects', 'avoiding alcohol', 'staying safe', 'avoiding intoxication' and 'helping others' (i.e., clicker survey Questions 8 through 12).
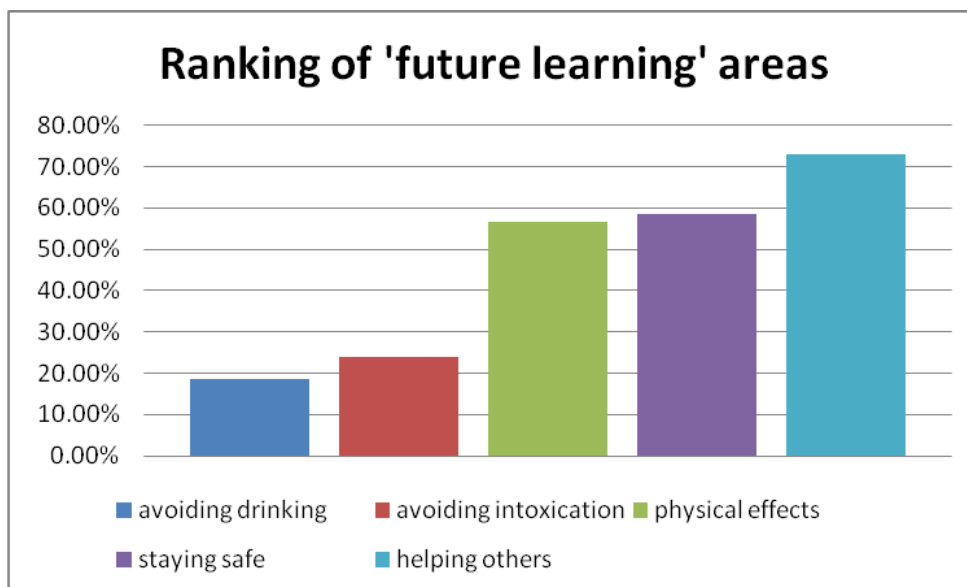
Figure 5.6 Percent of students reporting an 'interest in learning more about' specific alcohol education content areas

Among the participants, a relatively small proportion indicated being interested in learning more about how to avoid drinking/intoxication. Much greater proportions

(over 50% of those surveyed) are interested in learning more about the effects of alcohol on the body and how to stay safe if they do drink. Learning more about 'how to help someone who has had too much to drink' was of interest to over 70% of the young people surveyed.

5.5   Discussion and implications

The clicker sessions provided a useful supplement to the other methods of data collection involved in the scoping project. Although there was an element of novelty associated with having a 'gadget' to 'play with', the benefits of the clicker system are significant and should not be underestimated, particularly for involving high-school aged respondents in research. The sessions enabled a wider cross-section of students to be involved than if the written submissions were the only avenue for involvement. Also, the clicker sessions allowed meaningful input and involvement from students who, for whatever reason, might not 'speak up' in a focus group situation. Facilitators noted that students were generally quite willing to share their opinion or at least comment on the results to the previous question. Arguably, the 'clickers' present exciting opportunities for teachers and others to provide and/or evaluate school-based alcohol and other drug education in the secondary school setting. This topic is discussed later in this report and is also the focus of an article in preparation.

Overall, the participants recognised that underage drinking in Australia is a serious issue which causes a significant amount of harm both to those who drink and to those who are affected by others' drinking. The questions relating to the impact of alcohol education on students' behaviours painted a picture of a social issue that is 'wicked' (i.e., intractable) in that a certain amount of experimentation with alcohol (and possibly other drugs) is to be expected among people during the high school years, regardless of the nature or quality of the alcohol education that is delivered in the school setting.

However, the conversations we had with students during the consultations reinforced that it is inappropriate to take a wholly negative view of either young peoples' alcohol use, or school-based alcohol education in this country. The participants were, on the whole, remarkably well informed about many aspects of alcohol and its effects on individuals, families and communities. They also appeared to be more familiar with

the concept of 'standard drinks' than many adult audiences we come into contact with. They frequently emphasised that not all young people misuse alcohol and expressed indignation that all young people were 'tarred with the same brush', when only a minority are 'behaving irresponsibly'.

During the clicker sessions, the project team encountered a level of receptiveness to alcohol education that is *realistic* (i.e., not abstinence focused) *relevant* to the students' lives and developmental stages, and both *active* (i.e., involves them actually doing things) and *interactive* (allowing opportunities for conversation and other forms of engagement with their peers and adult teachers/facilitators) – all of which were echoed in our conversations with school staff. Two other enduring themes that emerged from the student sessions were:

- the value secondary students place on their friendships
- their level of comfort with technology (especially computers, mobile telephones, ipods etc). Interactive approaches and/or resources (such as podcasts, web-based delivery or sms) which capitalise on the friendship focus represent exciting opportunities for future work in this area.

The next chapter presents findings from the online survey conducted between February and April 2009 to obtain views about alcohol education from members of the general public and other key stakeholders.

Chapter 6 On-line Survey

Overview of key findings:

- An online questionnaire was developed to assess perceptions of the wider community about the role of schools and alcohol education. Total number of respondents = 275.

- Sample characteristics - majority were female (81%), between 36-55 years (58%), and located in regional, rural/remote areas (55%). Respondents included similar proportions of school personnel (24%), parents (22%), health professionals & government representatives (22%); and community and other representatives (24%). Student respondents comprised 8% of the total sample.

- The role of schools in alcohol education – Around 85% of respondents agreed that schools had an important role to play in educating young people about alcohol. There were differences in stakeholder opinions regarding the extent of the role and responsibility of schools in addressing young people's alcohol use.

- Effectiveness of school-based programs – Just over 60% of respondents believed that school-based alcohol education programs were somewhat to moderately effective in addressing youth binge drinking.

- Views on school-based programs – Most respondents stated that alcohol education should be offered in secondary school, mainly in Years 7-9, and preferably delivered by alcohol experts, trained student peers, and/or specially designated teachers.

- Young people's alcohol use – The majority of respondents recognised that binge drinking was a serious issue in Australia and that young people should be educated about sensible drinking. Approximately 30% of student

respondents supported total abstinence as a solution to binge drinking, compared to the majority of other stakeholders who disagreed with this.

- Relative effectiveness of alternative strategies – Vis-à-vis school-based alcohol education, most respondents perceived measures such as implementing community programs to enhance social connectedness, providing alcohol-free leisure time options for young people, imposing stricter control on alcohol advertising, imposing stiffer penalties on alcohol suppliers / sellers, and increasing police presence where young people drink, were more effective. Strategies including increasing the price of alcohol and placing warning labels on alcohol packaging were considered less effective.

6.1   Methodology

An online questionnaire was developed to assess perceptions of the wider community about the role of schools and alcohol education. This method of data collection was employed due to its user-friendliness, cost and time efficiency, speed in the process of collecting and collating data, and its ability to maximise the penetration and reach of the survey.

The questionnaire included sections addressing:
- basic demographics such as age, gender, location, stakeholder category
- personal experiences of specific school-based and other alcohol education
- programs
- the role of schools in educating young people about alcohol
- strengths/limitations of school-based alcohol education
- awareness, strengths/limitations of the Principles of School Drug Education
- relative effectiveness of alternatives strategies to school-based alcohol education
- young people's consumption of alcohol.

A section for additional comments was provided at the end of the questionnaire. The survey took approximately 10-15 minutes to complete and respondents were assured of their confidentiality and anonymity. This component of the project was approved by the Flinders University Social and Behavioural Research Ethics Committee.

6.1.1 Procedure

An invitation to participate in the online survey was distributed through various media including the NCETA website, professional e-mail distribution lists, and newsletters. Weekly reminders were sent out to increase response rates. The online survey was active and accessible from 27th February 2009 to 15th April 2009.

The questionnaire was accessed, completed and submitted online via SurveyMonkey, an online software program that allows for the design, administration and collation of surveys via a secure website. The online survey was open for a period of approximately seven weeks, enabling adequate time for notification and completion by respondents. The research team's contact details were provided in case the participants had any questions or concerns, or if they wished to complete a hard copy in preference to the online survey. Survey data were imported and collated via SurveyMonkey and entered into an SPSS spreadsheet for subsequent analysis. Responses were pooled and aggregated and not individually analysed.

6.2 Survey Results

6.2.1 Respondents

A total of 275 surveys were eligible for analysis. As shown in Figure 6.1, survey respondents comprised school personnel (24%), parents (22%), health professionals and government representatives (22%), students (8%), and community representatives and other (24%). The majority of respondents were female, irrespective of stakeholder category (Table 6.1), and 93% of parents who responded to the survey were mothers.
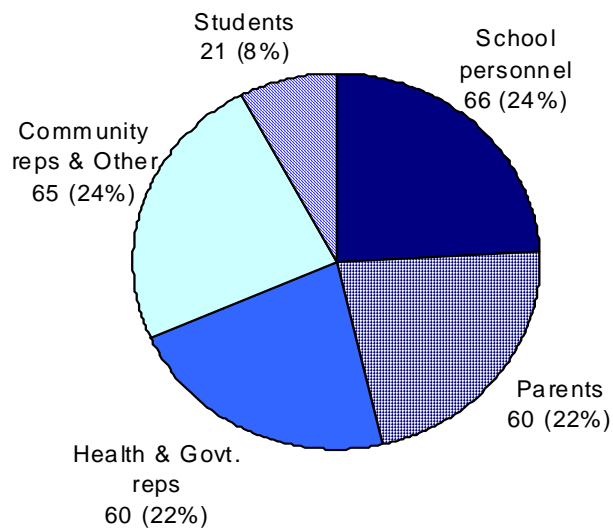
Figure 6.1 Survey respondents by stakeholder type (N=272)

Table 6.1 Proportion of survey respondents by gender & stakeholder category

Stakeholder	Male	Female	No (%)
School personnel	15 (23%)	51 (77%)	66 (25%)
Parents	4 (7%)	56 (93%)	60 (22%)
Health & Govt. reps	11 (19%)	47 (81%)	58 (21%)
Students	7 (33%)	14 (67%)	21 (8%)
Community reps & Other*	14 (22%)	51 (78%)	65 (24%)
Total	51 (19%)	219 (81%)	270 (100%)

Note: *Other includes university students, researchers, academics, ministers, educators & police

The majority of respondents were aged between 36 to 55 years (see Figure 6.2).

Most of the student respondents were aged between 12 and 15 years.
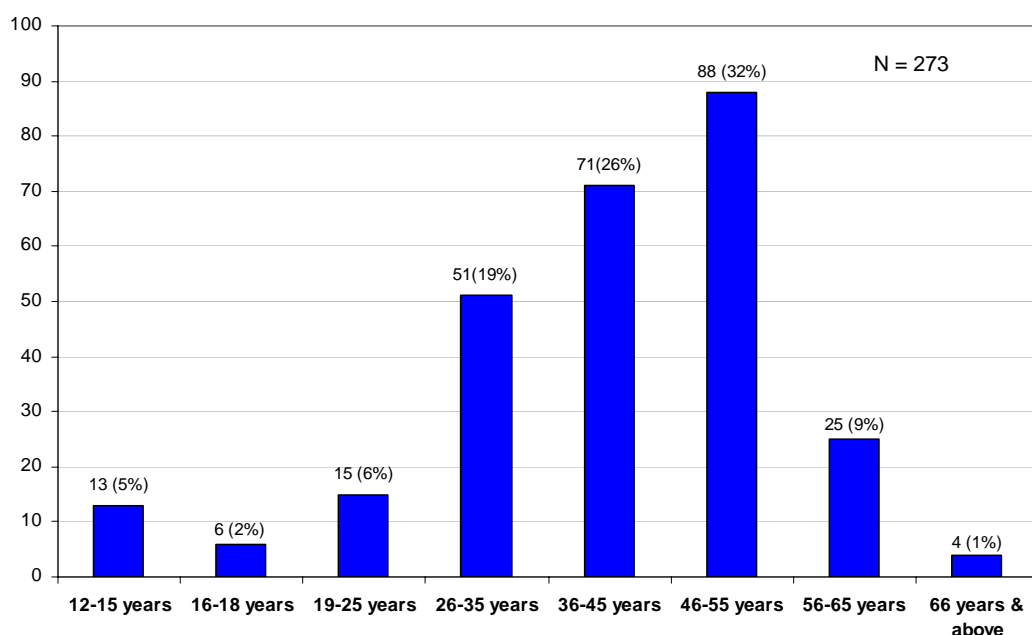
Figure 6.2 Age range of survey respondents

More than half the respondents who were students, school personnel or parents went to, worked for, or had a child/children who attended a government school (see Table 6.2).

Table 6.2 Type of school attended by students, school personnel or children of parent stakeholders

Type of School	No	Frequency (%)
Government	107	56%
Catholic	17	9%
Independent	31	16%
Not applicable	37	19%
Total	192	100%

6.2.1.1   Location of respondents

The majority of respondents (25%) were located in Queensland, followed by South Australia (14%) and New South Wales (12%) (see Figure 6.3). There were equal proportions of respondents from Northern Territory, Tasmania, Victoria, and Western Australia. Less than half of the respondents (45%) were from metropolitan areas, and more than 50% of respondents were from regional, rural and remote areas (see Table 6.3). It should be noted that the geographical spread of respondents is not representative of the actual population.
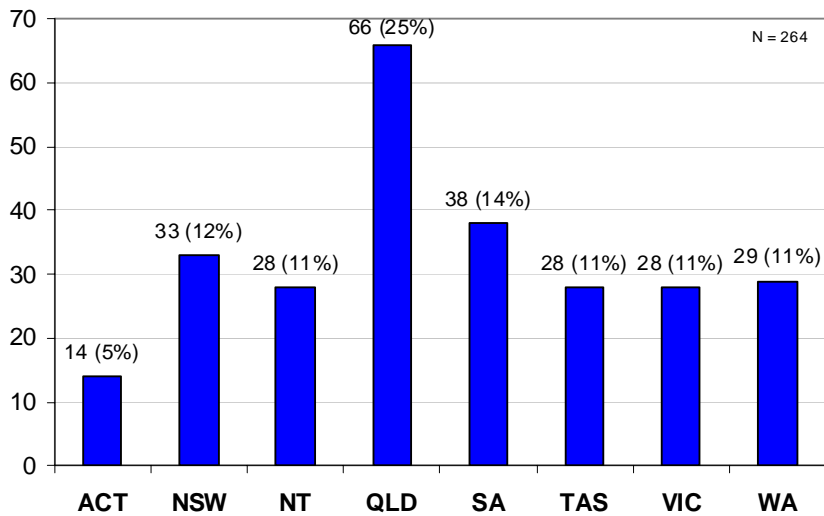
Figure 6.3 State/Territory breakdown of respondents

Table 6.3 Geographic location of survey respondents

Region	No	Frequency (%)
Metropolitan	125	45%
Regional	65	24%
Rural	73	27%
Remote	11	4%
Total	274	100%

6.2.2   Engagement in school-based alcohol education

When asked about the types of programs they had participated in, survey respondents most commonly reported that they (or their children) had participated in school-based alcohol education programs (36%) and community-based programs (11%) (see Table 6.4).

Table 6.4 Type of alcohol programs or interventions participated in at school

Type of program	No	Frequency (%)*
School-based programs	99	36%
Community-based programs	30	11%
Combined strategies (e.g., family + school)	23	8%
Family-based programs	7	3%
Other	7	3%
Don't know	15	5%
None	29	11%
Not applicable – not a student, teacher, principal or parent	27	10%

Note: *More than one response permitted

6.2.3 Views on school-based programs

When invited to expand on these programs, survey respondents primarily selected school-based alcohol programs (42%) on which to provide comment re their views or experiences (see Table 6.5).

Table 6.5 Type of specific program selected

Type of program	No	Frequency (%)
School-based programs	116	42%
Community-based programs	30	11%
Combined strategies	19	7%
Family-based programs	6	2%
Other	14	5%

Respondents were asked to provide the name and details of school-based programs with which they were familiar (see Table 6.6). These programs were mainly delivered by teachers or school-based nurses and formed part of physical education or the health curriculum of students. Some respondents stated that they also used the Australian Government's 'Rethinking Drinking' and/or 'Resilience Education & Drug Information' (REDI) resources. Other specific programs mentioned were the 'Party Safe/I Party' programs and the School Health and Alcohol Harm Reduction Program (SHAHRP).

Table 6.6 Name and details of specific school-based programs

Name/Details of program	Frequency
Part of health/physical education delivered by teachers/school nurses	37
Rethinking Drinking resources	15
Not sure/cannot remember name	10
Party Safe/I Party Program – delivered by community health agency	5
AOD program – delivered by AOD agency	5
Government sponsored/run alcohol programs	5
School Health and Alcohol Harm Reduction Program (SHAHRP)	3
Life Education	3
School Drug Education Road Aware (SDERA) Program/ACT Road Ready Program	3
Part of Christian studies/run by ministers/pastoral	3
Year 12 'Schoolies' Program – delivered by school-based nurse, police officer and teachers	2
Resilience Education and Drug Information (REDI) resources	2
'It's Our Shout' – delivered by alcohol experts	1
'Save-a-mate' – Australian Red Cross	1
Reduce Risk, Increase Student Knowledge (RRISK) Program	1
AOD/Sexual assault education/information – delivered by youth AOD counsellor and sexual assault counsellor	1
'Know Before You Go' Program – aimed at school leavers; increase awareness of behavioural standards and laws regarding licensed premises	1

Table 6.7 presents respondents' views concerning school-based alcohol education programs. Nearly 80% of respondents strongly agreed/agreed that their experience with the program was positive and that the program was worthwhile. Approximately half of the respondents (55%) considered that the program was effective in addressing young people's consumption of alcohol. But about 20% did not consider the program in question to be effective. Most respondents (66%) affirmed that the program was relevant to the needs of students. About a third (31%) of respondents indicated that the program was difficult to implement and nearly 70% of respondents reported that the program was not costly to implement.

Table 6.7 Views of school-based programs

Statements	Strongly agree/agree	Neither agree nor disagree	Strongly disagree/disagree	N
My experience with this program was positive	78 (74%)	19 (18%)	9 (8%)	106
This program was effective in addressing young people's alcohol use	58 (55%)	26 (24%)	22 (21%)	106
This program was worthwhile	80 (77%)	11 (11%)	13 (12%)	104
This program was not relevant to the needs of students	18 (17%)	17 (17%)	68 (66%)	103
This program was difficult to implement	20 (31%)	11 (17%)	33 (52%)	64[1]
This program was expensive to implement	5 (8%)	16 (24%)	44 (68%)	65[1]

[1] Nos are lower as only school personnel were asked to respond to these questions

More broadly, respondents were asked about their opinions regarding the role of schools in educating young people about alcohol use (see Table 6.8). There was strong support from school personnel and parents for schools to teach young people about alcohol. However, just under 20% of health professionals, government representatives, and students in particular, did not support this.

Overall, 56% of respondents strongly disagreed/disagreed that young people's drinking is not the responsibility of schools. However, a quarter of respondents agreed that it is not the responsibility of schools, particularly 37% of health professionals and government representatives who strongly agreed/agreed with this statement. Just over a third of students neither agreed nor disagreed with the case.

While the majority of stakeholders (over 70%), particularly parents and school personnel, strongly agreed/agreed that schools have a crucial role to play in educating young people about alcohol, a quarter of health professionals and government representatives disagreed with this statement.

Table 6.8 Stakeholders' opinions on the role of schools in educating young people about alcohol

Statements	Response options	School personnel		Parents		Health & Govt. reps		Community reps & Other		Students		N	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Teaching young people about alcohol is not the role of schools	Strongly disagree/disagree	42	90%	48	94%	34	81%	36	72%	12	70%	172	83%
	Neutral	2	4%	3	6%	0	0%	7	14%	2	12%	14	7%
	Strongly agree/disagree	3	6%	0	0%	8	19%	7	14%	3	18%	21	10%
	Total	47	100%	51	100%	42	100%	50	100%	17	100%	207	100%
Young people's drinking is not the responsibility of schools	Strongly disagree/disagree	30	64%	29	57%	21	51%	25	50%	7	41%	112	56%
	Neutral	8	17%	8	16%	5	12%	13	26%	6	35%	40	19%
	Strongly agree/disagree	9	19%	14	27%	15	37%	12	24%	4	24%	54	25%
	Total	47	100%	51	100%	41	100%	50	100%	17	100%	206	100%
Schools have an important role to play in educating young people about alcohol	Strongly disagree/disagree	1	2%	3	6%	10	25%	8	15%	2	12%	24	12%
	Neutral	2	4%	1	2%	1	2%	4	8%	1	6%	9	4%
	Strongly agree/disagree	46	94%	48	92%	29	73%	41	77%	14	82%	178	84%
	Total	49	100%	52	100%	40	100%	53	100%	17	100%	211	100%

Table 6.9 Perceived appropriate facilitators of alcohol education programs in schools

Instructor	School personnel		Parents		Health & Govt. reps		Community reps & Other		Students		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Regular classroom teachers	30	45%	13	22%	21	35%	18	28%	7	33%	89	32%
Specially designated teachers	37	56%	32	53%	21	35%	23	35%	8	38%	121	44%
Alcohol experts	34	52%	35	58%	26	43%	36	55%	12	57%	143	52%
Police	28	42%	26	43%	16	27%	16	25%	12	57%	98	36%
Students trained as peer leaders	30	45%	29	48%	23	38%	32	49%	9	43%	123	45%
None - there should not be any alcohol education in schools	-	-	-	-	1	2%	3	5%	1	5%	5	2%

Note: More than one response permitted

Respondents' views about appropriate people to provide alcohol education in schools are shown in Table 6.9. Alcohol experts were commonly selected as the appropriate people to deliver alcohol education. The second and third most preferred facilitators were students trained as peer leaders and specially designated teachers. Students more frequently selected police or alcohol experts as suitable facilitators. More than half of the school personnel selected specially designated teachers and alcohol experts, whereas a higher proportion of parents selected alcohol experts, specially designated teachers and peer students as preferable choices.

Most respondents nominated Years 7-9 as the appropriate school level at which alcohol education should be taught, followed by Years 10-12 (see Table 6.10). Nevertheless, many respondents noted that they thought alcohol education could be tailored according to age and conducted across schooling levels.

Table 6.10 School levels at which alcohol education should be taught

Level	No	Frequency (%)*
Years 1-3	34	12%
Years 4-6	105	38%
Years 7-9	195	71%
Years 10-12	173	63%
None - there should not be any alcohol education in schools	3	1%

Note: *More than one response permitted.

Survey respondents were also asked their opinions on what schools should not do in relation to young people's drinking (see Table 6.11). There were 117 qualitative responses to this question. The most frequently cited comment from respondents was that schools should not adopt a zero-tolerance or complete abstinence approach in efforts to curb young people's alcohol consumption.

> *"Schools should not use punitive or abstinence based programs. These programs have not been shown to be effective and are irrelevant in a culture that accepts (and sometimes promotes) drinking and alcohol consumption."* - Community representative, 26-35 years, regional QLD.

> *"They should not assume that non-use is the only acceptable strategy especially for secondary school students. Of course non-use is the safest strategy but if this is the only message of school-based alcohol education, then schools are not preparing students for the real world where alcohol use is glamorised, sanitised and normalised."* - Parent, 46-55 years, metropolitan WA.

> *"Zero tolerance for alcohol in school is essential. However, it's not appropriate to expect underage children not to drink outside school. As with the drug education, I feel a 'safe drinking' approach is rather more effective (and more sympathetically received) than a 'no drinking' message. E.g. my son started drinking at 16 at parties, but he and his friends do seem to follow strict rules about designated drivers and no drinking + driving. i.e., they are generally quite 'sensible' although not following strictly prescribed 'no*

drinking' as advocated by his school." – Principal of independent school, 46-55 years, rural Tasmania

Other frequently-stated remarks were that schools should not "lecture" or utilise "scare tactics" to prevent them from drinking alcohol as these approached were considered ineffective.

> *"Don't have teachers lecture them about the evils of drinking but show them the consequences of not drinking responsibly."* – Parent, 36-45 years, regional NSW.

> *"It is imperative that schools have an evidence based approach to education and don't use an emotive or fear based approach."* – Drug & alcohol adviser, 36-45 years, metropolitan NSW.

> *"Fine the drinkers. Name them. Don't just say 'drinking is bad'. Tell them why; how it affects you and perhaps the people around you. My mum has said I can drink, but she described to me what drinking can to do me, which is the reason I won't. It's not because she has punished me because I want or whatever. She told me when you [are] 18, you can drink. Maybe this method should be tried with the students and other youths?"* – Student from government school, 12-15 years, rural NT.

Some respondents were of the opinion that schools should not ignore the problem, tolerate intoxication or alcohol on the premises, organise alcohol-sponsored events or events where alcohol is available (e.g., at graduation parties).

> *"Schools should not sanction drinking by turning a blind eye"* – Parent, 46-55 years, location not stated.

> *"[Schools should not] tolerate intoxication on school premises (particularly not in classes) - intoxicated children should ALWAYS be removed from class, and parents called to take them off the premises."* – Government school teacher, 46-55 years, metropolitan ACT.

> *"[Schools should not] allow any alcohol at any school functions where students are in attendance - they should all be "alcohol free"* – Government school nurse, 46-55 years, rural Vic.

Table 6.11 Commonly held opinions on what should NOT be implemented by schools in relation to young people's drinking

Actions	Frequency
Zero-tolerance / prohibitive / abstinence approach	23
Allow alcohol (e.g.,at school events) / tolerate intoxication	19
Preach or lecture students on what they should do / not do	19
Encourage / trivialise young people's drinking	15
Ignore the problem	15
Be judgemental or moralistic	11
Have ex-alcoholics give talks	6
Have unqualified or ill-informed people deliver alcohol education	5
Have teachers being bad examples (e.g.,coming to school with hangovers, drinking with students at parties, etc.)	4
There is nothing schools should not do	4

Note. Respondents usually noted more than one action

Table 6.12 Perceived level of effectiveness of alcohol education programs in schools in addressing the issue of youth binge drinking

Response options	School personnel		Parents		Health & Govt. reps		Community reps & Other		Students		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Not effective at all	6	12%	4	8%	7	18%	9	17%	1	7%	27	13%
Somewhat ineffective	20	40%	14	28%	15	38%	13	25%	5	33%	67	32%
Moderately effective	18	36%	11	22%	13	33%	12	23%	7	47%	61	29%
Very effective	2	4%	3	6%	0	0%	3	6%	0	0%	8	4%
Don't know enough to say	4	8%	18	36%	5	13%	16	30%	2	13%	45	22%
Total	50	100%	50	100%	40	100%	53	100%	15	100%	208	100%

The majority of respondents believed that alcohol education programs in school were somewhat to moderately effective in addressing youth binge drinking (Table 6.12). One third of parents and other community members reported that they did not know enough to make such a judgement.

Related to the perceived effectiveness of school-based alcohol education programs, respondents were requested to state what they believed to be the strengths of currently existing programs (see Table 6.13). Forty-eight percent (n=132) of total respondents answered this question.

Table 6.13 Frequently-noted perceived strengths of current school-based alcohol education programs

Strengths	Frequency
Source of information and resources	20
Delivered by qualified teachers who knew their students	16
Empower kids to make informed decisions	10
Interactive	10
Peer-led approaches	10
Evidence-based	8
Harm-minimisation approach	6
Integrated into curriculum	6
Advantage of having a "captive audience"	6
Age appropriate	5
No strengths	11
Don't know / unsure	20

Note. Respondents usually noted more than one strength

While a proportion of respondents stated that they were unsure or did not know enough about the programs to identify their strengths, many respondents believed that alcohol education programs in schools were an important source of alcohol-related information and knowledge for young people. Another strength frequently mentioned was that the education was delivered by appropriately qualified teachers who already had established relationships with their students.

> *"The strengths are that young people are being exposed to information that is not 'second hand' and is based on facts. Any education program focusing on alcohol is going to start a dialogue for young people; however, some are more effective than others. I believe the programs that are effective, are delivered by people who engage young people, encourage discussion and provide information to young people that they can use in a practical sense and also follow up themselves."* – Youth sector worker, 26-35 years, metropolitan QLD.

> *"Delivered by teachers who know their students. Such role-modelling can have a large impact on students if that teacher is well-respected. Teachers are now getting PD on this topic, rather than haphazard handling of kits only."* – Government representative, 56-65 years, rural SA.

> *"That the schools address the issue of alcohol from many angles and using lots of resources. It is good that the kids get information from their teachers, special visits and speakers and that parents are educated too."* – Parent, 26-35 years, metropolitan NSW.

Other strengths noted included the opportunity to engage and empower students to make informed decisions; peer-led teaching implemented; the programs were evidence-based; the programs used a harm minimisation approach; and the programs were integrated into the health curriculum in an age appropriate manner.

> *"School is one of the main places children and teenagers spend time and learn about life (as well as the curriculum). This places them in a good position to educate youth*

about social issues, such as youth binge drinking." – Community representative, 26-35 years, Regional QLD.

"The Principles for school drug education (DEST 2004) outlines the 12 Principles for ensuring the best outcomes for students. Teachers are best placed to provide drug education as part of an ongoing program, and many schools recognise this. If the DEST resources are used, they are evidenced based involve interactive strategies and skills development and have credible and meaningful learning activities." – Government representative, 26-35 years, metropolitan ACT.

"The opportunity for children to discuss it with their peers and get varying perspectives. It is also an opportunity for them to get expert input and attend talks from trained professionals which some would not normally get exposure to." – Parent, 46-55 years, rural Tas.

On the other hand, some respondents believed that there were no favourable aspects to current school-based alcohol education programs.

"Can't see any strengths, in fact think [alcohol education] are dangerous (small amount of out of date information)" – Community drug educator, 46-55 years, rural QLD.

Respondents were also asked whether they thought that there were any limitations or gaps in current school-based alcohol education (see Table 6.14). A total of 137 respondents answered this question.

Table 6.14 Frequently-noted limitations of current school-based alcohol education programs

Limitations / Gaps	Frequency
Inadequate coverage, not continuous	28
Educators lack expertise, poorly delivered	25
Not integrated sufficiently; an add-on component	20
Lack of time	16
Inconsistency across schools, state-wide, nationally	16
Lack of community and parental involvement	14
Lack of accessible resources	12
Limited funding	9
Difficulty in overcoming culture of drinking	9
Young people apathetic / disengaged	6
Don't know	9

Note. Respondents usually noted more than one limitation

The limitations that were most frequently mentioned were the insufficient coverage and lack of continuity of alcohol-related education, as well as the inadequately trained educators and poor methods of delivery.

"Crowded curriculum where health in general and alcohol and other drug education specifically is not timetabled for. Lack of belief in the importance of health/alcohol/drug education by education department hierarchy and other key stakeholders. Emphasis by government and politicians on "the 3 R's" thereby devaluing health ed." – Health education consultant, 46-55 years, metropolitan WA.

"I think there is not a consistent message about alcohol put out through all schools. A little happens here and there however it is often just before events such as school balls and leavers week. Alcohol education needs to be taught consistently throughout high school." – Community representative, 19-25 years, metropolitan WA.

"Inexperience of some teachers in talking about/teaching alcohol education inconsistent programs taught and out of date resources/information used time to teach alcohol education in an already jam packed PDHPE curriculum." – NGO AOD youth worker, 36-45 years, metropolitan NSW.

Alcohol education was also often perceived as "tacked-on" rather than core component of health education and thus was considered to be inadequately integrated within the curriculum. Some respondents also noted the inconsistencies in content and approach across schools state-wide and nationally.

"Curriculum is not mandated to educate on alcohol and therefore only a brief few weeks it may be discussed in the health curriculum, at times it is not discussed at all, until the school has an incident then they look at a quick fix approach which doesn't work. The biggest challenge is for an educator working with children or young people is whatever is happening at home in that child's life has a major impact on their perception and bias on whatever issue is being discussed for example alcohol. Parents are ultimately the biggest influence in their life and all the education you do in school will not change that." – Government school-based nurse, 36-45 years, regional QLD.

"Schools are often so busy fulfilling other requirements that they lack the time and resources to provide evidence-based school-based alcohol education programs. They may also not have a suitable teacher/facilitator available to run the classes or the ability to evaluate the programs for their effectiveness." – Community representative, 26-35 years, regional QLD.

Other limitations identified included the lack of time and available resources that restricted the development of effective alcohol education programs, and the lack of involvement and collaboration from parents and the wider community.

In addition to strengths and constraints, respondents were requested to comment on what they thought should be included in an alcohol education program in order for it to be effective. Fifty-five percent (n=150) of total survey respondents provided suggestions that primarily included the following:

- Biological, physical, psychological, behavioural, and/or social effects of drinking alcohol and/ or being intoxicated
- Legal and/or social implications and consequences of alcohol consumption and intoxication
- Facts and figures (e.g., standard drinks, types and alcohol content of alcoholic beverages, alcohol-related statistics, chemical structure of alcohol)

- Coping strategies, practical skills and tips (e.g., building resilience, increasing self-esteem, responding appropriately to peer pressure, informed decision-making, safe partying) in relation to alcohol consumption

- Attitudes, cultural awareness, experiences and perceptions related to alcohol consumption

- Harm-minimisation approaches (e.g.,safe and responsible drinking practices)

- Presenting videos / images of the consequences and accidents related to alcohol misuse.

- Exercises such as group discussions and case studies to engage and interact with students.

Table 6.15 Best practice features of school-based alcohol education programs

Feature	No	Frequency (%)*
Age appropriate	181	66%
Interactive	180	66%
Corrects perceptions of alcohol norms	149	54%
Experiential	145	53%
Information-based	136	50%
Peer-led	121	44%
Other	28	10%

Note: *More than one response permitted

Around half (n=139) the total respondents provided examples of what they considered were inadequate alcohol education in schools. The majority of the examples revolved around pedagogical issues such as poor delivery style (e.g., "chalk and talk", non-interactive, didactic techniques) and ill-informed/unqualified educators.

> *"Didactic, unrealistic, humourless, boring, irrelevant, out-of-touch, non interactive chalk-and-talk sessions without multimedia and a chance for kids to talk. Virtually everything at these ages comes back to what your peers think/are doing/approve of (I have 3 teenage daughters!)"* – Parent, 56-65 years, metropolitan SA.

> *"Disregarding students' own experience, making alcohol consumption a moral issue, disregarding the role of family and peers in shaping student's views, I also think it needs to be realistic. No point having a teacher talking about the dangers of excessive alcohol consumption if they are not prepared to look at and be honest about their own drinking, whether or not it is within safe practice and if not, why not. Students need all the information, not a one dimensional position."* – Community representative, 36-45 years, rural SA.

Other examples of poor approaches that were commonly mentioned included education that was limited to pure facts and figures and those that promoted moralistic, abstinence or fear.

"Programs that are solely information-based or those that use a punitive or abstinence-based approach." – Community representative, 26-35 years, regional QLD.

"Pure information based programs. Programs that ask young people to pledge not to use alcohol. Religious based programs that put young people into conflict." – Other school personnel, 46-55 years, metropolitan VIC.

"Programs that focus on 'scare' or 'shock' tactics and attempt to deter young people from drinking due to this. Programs that 'teach' young people about alcohol (information overload)- with no interaction or opportunities to involve young people." – Youth sector worker, 26-35 years, metropolitan QLD.

Some respondents also considered education that was inconsistently provided ("one-off" or "reactionary"), based on outdated or inaccurate information, or where guest speakers or recovering alcoholics are invited to give talks, to be examples of inadequate alcohol education.

"A health professional being asked to give "a talk on drugs" once a year to a large disinterested group, to fill a gap in the school program, whilst the teachers are absent from the room." – Government representative, 56-65 years, regional NSW.

"Getting people to come and do a one off session that students forget about almost as soon as they walk out the door. Delivering a "Don't drink" message. Or doing no education at all. Running sessions for Year 12 in the week before schoolies, education should have started way before that." – Government school-based nurse, 26-35 years, rural WA.

"Having an ex-problem alcohol user talk to school children about their experiences Non-school staff teaching alcohol education, particularly if the teacher is not present." – Government representative, 46-55 years, metropolitan SA.

Age appropriateness and interactive approaches were nominated by two thirds of respondents as elements that characterise best practice in school-based alcohol education programs (see Table 6.15). Other best practice features nominated by most respondents were corrections of perceived alcohol norms, experiential learning, and information-based teaching.

6.2.4   Principles of School Drug Education

Just under 30% (n=80) of respondents were aware of the Australian Government Department of Education, Employment, & Workplace Relations "Principles of School Drug Education". Of this proportion, 75% of respondents supported these principles.

Respondents were asked their views about the strengths and limitations of these principles. Approximately 50 people responded to this question. In relation to strengths,

respondents noted that the principles provided a sound theoretical framework and guidelines for best practice.

> *"The strengths are that they take a holistic approach. Can be integrated into the curriculum and support other dimensions of health and wellbeing. They are organised into themes and can be grouped appropriately."* – Government school teacher, 19-25 years, metropolitan Tas.

> *"The principles provide guidance and direction for schools on how to effectively incorporate alcohol and other drug education into a whole school approach."* – Government representative, 46-55 years, metropolitan SA.

However, some respondents expressed doubt about whether schools and teachers were familiar with these principles and whether they actually applied them in schools. Some limitations of these principles were that they were not sufficiently promoted across schools, and that they may be too technical to comprehend and difficult for schools to implement.

> *"Very good theoretical model - but not particularly well known or implemented by many schools and teachers. Needs more promotion and how easily they can be integrated into current curriculum and teaching practices."* – University lecturer, 46-55 years, metropolitan WA.

> *"Whilst supporting the content and intent of the principles, these presume teachers and school communities have the resources and ability to source and know evidence based practice and can implement the principles."* – Government representative, 46-55 years, metropolitan Tas.

A proportion remarked that they were not sufficiently well-versed with these principles to comment on them.

Half the respondents were unsure of how well these principles were applied at schools (see Figure 6.4), whereas 23% of respondents believed that they are very well/well applied. More than a quarter noted that the principles were applied poorly/very poorly.
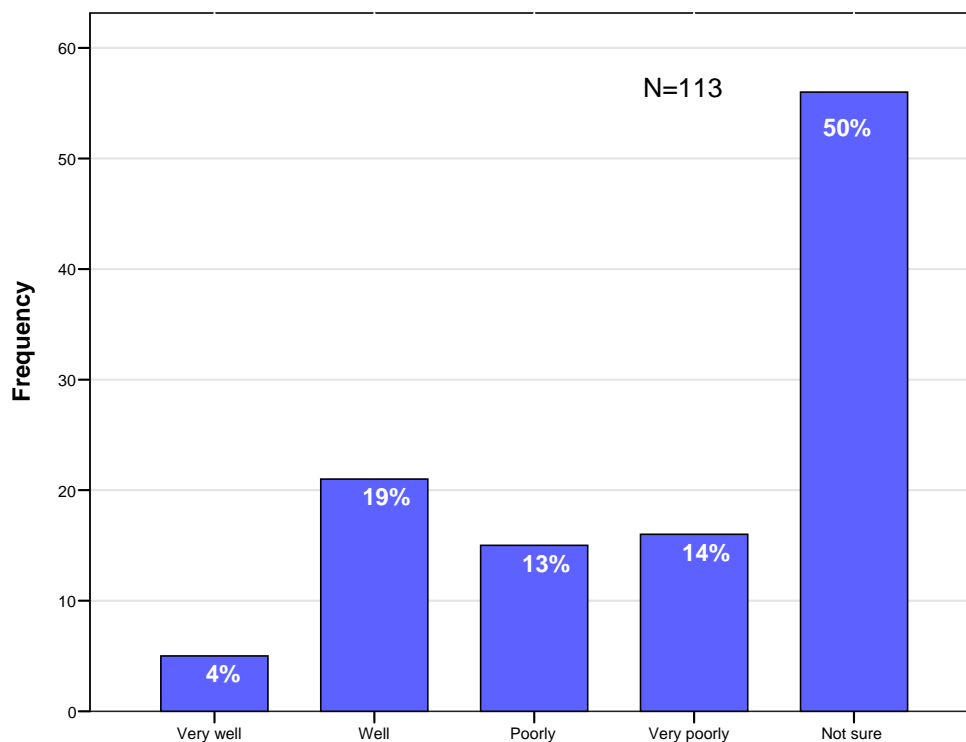
Figure 6.4 Perceived extent of application of the Principles of School Drug education in schools

Table 6.16 presents respondents' perceived effectiveness of alternative strategies or interventions vis-à-vis school-based alcohol education programs. Opinions varied for some alternatives, depending on the type of stakeholder who responded to the question.

Approximately 30%-40% of respondents, irrespective of stakeholder type, noted that community or other non-school-based alcohol programs are just as effective as school-based alcohol programs. Forty percent of respondents who were health professionals or government representatives believed that increasing the price of alcohol is more effective than alcohol education programs in schools. More than a third of student respondents felt that increasing the price of alcohol has the same effectiveness as alcohol education programs whereas two thirds of respondents who were school personnel perceived this strategy to be less effective.

Approximately 60% school personnel, parents, health professionals and government representatives believed a ban imposed on alcohol advertising aimed at young people is more effective than school-based alcohol education. However, only a quarter of student respondents felt the same way. While the majority (i.e., 60% and over) of other stakeholders believed that imposing stricter controls on alcohol-related advertising is

more effective, over half the student respondents felt that it has the same level of effectiveness as school-based alcohol education. Most respondents perceived that displaying advertisements on the dangers of binge drinking was as effective as school-based alcohol programs.

Apart from community representatives and respondents who fell into the 'other' category, the rest of the stakeholders were equally divided on the relative effectiveness of imposing stiffer penalties on underage drinking. Around a third of each of these stakeholders either felt that this strategy is less effective, as effective, or more effective than school-based alcohol programs. The majority of all stakeholders, except for student respondents, believed that imposing stiffer penalties on alcohol sellers/suppliers is a more effective strategy. Sixty-two percent of students perceived this alternative to have about the same level of effectiveness as school-based alcohol education.

Table 6.16 Perceived effectiveness of alternatives to school-based alcohol education

Alternatives	Response options	School personnel		Parents		Health & Govt. reps		Community reps & Other		Students		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Community (or other non-school-based) alcohol education programs	Unsure	5	12%	7	15%	0	0%	8	16%	2	15%	22	12%
	Less effective	15	35%	17	37%	12	33%	6	12%	4	31%	54	29%
	About the same level of effectiveness	18	42%	18	39%	15	42%	17	33%	4	31%	72	38%
	More effective	5	12%	4	9%	9	25%	20	39%	3	23%	41	22%
	Total	43	100%	46	100%	36	100%	51	100%	13	100%	189	100%
Increasing the price of alcohol	Unsure	2	5%	5	11%	1	3%	2	4%	2	15%	12	6%
	Less effective	29	66%	22	48%	13	37%	23	44%	3	23%	90	47%
	About the same level of effectiveness	8	18%	8	17%	7	20%	11	21%	5	38%	39	21%
	More effective	5	11%	11	24%	14	40%	16	31%	3	23%	49	26%
	Total	44	100%	46	100%	35	100%	52	100%	13	100%	190	100%
Banning alcohol advertising aimed at young people	Unsure	3	7%	2	4%	1	3%	1	2%	2	17%	9	5%
	Less effective	5	11%	7	15%	6	17%	8	15%	3	25%	29	15%
	About the same level of effectiveness	9	20%	10	22%	7	19%	19	37%	4	33%	49	26%
	More effective	27	61%	27	59%	22	61%	24	46%	3	25%	103	54%
	Total	44	100%	46	100%	36	100%	52	100%	12	100%	190	100%

Table 6.16 Perceived effectiveness of alternatives to school-based alcohol education (cont'd.)

Alternatives	Response options	School personnel		Parents		Health & Govt. rep		Community reps & Other		Students		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Implementing stricter controls on alcohol-related advertising	Unsure	1	2%	2	4%	0	0%	1	2%	1	8%	5	3%
	Less effective	4	9%	3	7%	6	17%	6	12%	2	15%	21	11%
	About the same level of effectiveness	11	25%	13	28%	8	22%	14	27%	7	54%	53	28%
	More effective	28	64%	28	61%	22	61%	31	60%	3	23%	112	59%
	Total	44	100%	46	100%	36	100%	52	100%	13	100%	191	100%
Imposing stiffer penalties for underage drinking	Unsure	2	5%	1	2%	1	3%	2	4%	2	17%	8	4%
	Less effective	13	31%	14	30%	12	35%	23	44%	3	25%	65	35%
	About the same level of effectiveness	13	31%	17	37%	11	32%	13	25%	4	33%	58	31%
	More effective	14	33%	14	30%	10	29%	14	27%	3	25%	55	30%
	Total	42	100%	46	100%	34	100%	52	100%	12	100%	186	100%
Imposing stricter penalties on suppliers/sellers of alcohol	Unsure	2	4%	0	0%	0	0%	4	8%	1	8%	7	4%
	Less effective	5	11%	8	17%	5	14%	10	19%	1	8%	29	15%
	About the same level of effectiveness	10	22%	16	35%	10	29%	12	23%	8	62%	56	29%
	More effective	28	62%	22	48%	20	57%	27	51%	3	23%	100	52%
	Total	45	100%	46	100%	35	100%	53	100%	13	100%	192	100%

Table 6.16 Perceived effectiveness of alternatives to school-based alcohol education (cont'd.)

Alternatives	Response options	School personnel		Parents		Health & Govt. rep		Community reps & Other		Students		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Increasing police presence where young people are known to drink	Unsure	1	2%	4	9%	1	3%	6	11%	1	8%	13	7%
	Less effective	10	23%	13	28%	6	17%	9	17%	1	8%	39	21%
	About the same level of effectiveness	8	19%	12	26%	11	31%	17	32%	4	33%	52	28%
	More effective	24	56%	17	37%	17	49%	21	40%	6	50%	85	45%
	Total	43	100%	46	100%	35	100%	53	100%	12	100%	189	100%
Providing alcohol-free leisure time options for young people	Unsure	1	2%	1	2%	2	6%	2	4%	1	8%	7	4%
	Less effective	4	9%	4	9%	1	3%	4	8%	0	0%	13	7%
	About the same level of effectiveness	12	27%	8	17%	10	28%	15	28%	4	33%	49	25%
	More effective	28	62%	34	72%	23	64%	32	60%	7	58%	124	64%
	Total	45	100%	47	100%	36	100%	53	100%	12	100%	193	100%

6.2.5 Alternative strategies to school-based alcohol education programs

Table 6.16 Perceived effectiveness of alternatives to school-based alcohol education (cont'd.)

Alternatives	Response options	School personnel		Parents		Health & Govt. reps		Community reps & Other		Students		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Putting warning labels on alcohol packaging	Unsure	2	5%	4	9%	1	3%	1	2%	2	17%	10	5%
	Less effective	21	48%	24	52%	18	50%	22	44%	4	33%	89	47%
	About the same level of effectiveness	16	36%	13	28%	11	31%	21	42%	3	25%	64	34%
	More effective	5	11%	5	11%	6	17%	6	12%	3	25%	25	13%
	Total	44	100%	46	100%	36	100%	50	100%	12	100%	188	100%
Displaying advertisements on the dangers of binge drinking	Unsure	1	2%	1	2%	0	0%	2	4%	1	8%	5	3%
	Less effective	8	18%	8	17%	11	31%	14	27%	0	0%	41	22%
	About the same level of effectiveness	22	50%	29	63%	15	42%	18	35%	8	67%	92	48%
	More effective	13	30%	8	17%	10	28%	18	35%	3	25%	52	27%
	Total	44	100%	46	100%	36	100%	52	100%	12	100%	190	100%
Community programs to enhance the social connectedness of young people	Unsure	1	2%	4	9%	0	0%	2	4%	1	8%	8	4%
	Less effective	1	2%	4	9%	1	3%	3	6%	2	15%	11	6%
	About the same level of effectiveness	12	27%	12	26%	9	25%	14	26%	4	31%	51	26%
	More effective	31	69%	27	57%	26	72%	34	64%	6	46%	124	64%
	Total	45	100%	47	100%	36	100%	53	100%	13	100%	194	100%

The majority of stakeholders noted that increasing police presence where young people are known to drink is either just as effective or more effective compared to alcohol education in schools. Other alternative strategies that were considered relatively more effective by the majority of stakeholder respondents included providing alcohol-free leisure time for young people and implementing community programs to enhance the social connectedness of young people. Putting warning labels on alcohol packaging was considered a less effective alternative by most of the respondents.

6.2.6   Views on young people's consumption of alcohol

Table 6.17 presents respondents views in relation to young people's consumption of alcohol. A significant majority of all types of respondents strongly agreed/agreed that youth binge drinking is a serious problem in Australia and that young people should be taught about sensible drinking. Most respondents (46-57%) strongly disagreed/disagreed that young people should be prevented from drinking alcohol completely. Similarly, a higher proportion of respondents, particularly school personnel, strongly disagreed/disagreed that young people should be taught complete abstinence from alcohol. However, around 30% of student respondents agreed that total abstinence should be taught to young people and that they should be prevented from drinking alcohol completely.

Most respondents also strongly disagreed/disagreed that it is safe for young people to drink alcohol unsupervised. Almost 80% of students strongly agreed/agreed that it is safe for young people to drink small amounts of alcohol but over 60% of them strongly disagreed/disagreed that it is alright to get drunk. The majority of other stakeholders also disagreed that it is acceptable for young people to get drunk. Around half the respondents who were school personnel and parents strongly disagreed/disagreed that it was safe for young people to drink under supervision of adults. The other stakeholder respondents were approximately equally divided in their views of this.

Table 6.17 Views on young people's consumption of alcohol

Statements	Response options	School personnel		Parents		Health & Govt. reps		Community reps & Other		Students		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Youth binge drinking is a serious issue in Australia	Strongly disagree/disagree	2	5%	0	0%	3	8%	2	4%	1	8%	8	4%
	Neutral	0	0%	4	8%	3	8%	5	9%	1	8%	13	7%
	Strongly agree/disagree	42	95%	44	92%	30	83%	46	87%	11	85%	173	89%
	Total	44	100%	48	100%	36	100%	53	100%	13	100%	194	100%
Young people should be prevented from drinking alcohol completely	Strongly disagree/disagree	27	64%	27	56%	24	67%	29	55%	6	46%	113	59%
	Neutral	9	21%	10	21%	9	25%	11	21%	3	23%	42	22%
	Strongly agree/disagree	6	14%	11	23%	3	8%	13	25%	4	31%	37	19%
	Total	42	100%	48	100%	36	100%	53	100%	13	100%	192	100%
Young people should be taught about sensible drinking	Strongly disagree/disagree	2	5%	0	0%	2	6%	5	9%	1	8%	10	5%
	Neutral	1	2%	1	2%	1	3%	3	6%	1	8%	7	4%
	Strongly agree/disagree	40	93%	47	98%	33	92%	45	85%	11	85%	176	91%
	Total	43	100%	48	100%	36	100%	53	100%	13	100%	193	100%
Young people should be taught to be completely abstinent from alcohol	Strongly disagree/disagree	35	83%	32	67%	26	72%	34	65%	5	38%	132	69%
	Neutral	4	10%	9	19%	6	17%	12	23%	4	31%	35	18%
	Strongly agree/disagree	3	7%	7	15%	4	11%	6	12%	4	31%	24	13%
	Total	42	100%	48	100%	36	100%	52	100%	13	100%	191	100%

Table 6.17 Views on young people's consumption of alcohol (cont)

Statements	Response options	School personnel		Parents		Health & Govt. reps		Community reps & Other		Students		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
It is safe for young people to drink alcohol unsupervised	Strongly disagree/disagree	36	84%	40	83%	27	75%	37	70%	7	54%	147	76%
	Neutral	4	9%	3	6%	5	14%	12	23%	5	38%	29	15%
	Strongly agree/agree	3	7%	5	10%	4	11%	4	8%	1	8%	17	9%
	Total	43	100%	48	100%	36	100%	53	100%	13	100%	193	100%
It is safe for young people to drink alcohol under supervision by their parents/guardians	Strongly disagree/disagree	24	56%	23	48%	14	39%	19	36%	3	23%	83	43%
	Neutral	12	28%	16	33%	12	33%	21	40%	5	38%	66	34%
	Strongly agree/agree	7	16%	9	19%	10	28%	13	25%	5	38%	44	23%
	Total	43	100%	48	100%	36	100%	53	100%	13	100%	193	100%
It is okay for young people to get drunk	Strongly disagree/disagree	39	91%	40	83%	30	83%	44	85%	8	62%	161	84%
	Neutral	3	7%	6	13%	5	14%	8	15%	4	31%	26	14%
	Strongly agree/agree	1	2%	2	4%	1	3%	0	0%	1	8%	5	3%
	Total	43	100%	48	100%	36	100%	52	100%	13	100%	192	100%
It is okay for young people to drink small amounts of alcohol	Strongly disagree/disagree	12	29%	16	34%	10	28%	11	22%	1	8%	50	27%
	Neutral	18	43%	16	34%	14	39%	18	36%	2	15%	68	36%
	Strongly agree/agree	12	29%	15	32%	12	33%	21	42%	10	77%	70	37%
	Total	42	100%	47	100%	36	100%	50	100%	13	100%	188	100%

6.3   Summary of survey results

The national on-line survey undertaken as part of this DEEWR project yielded 275 useable survey responses.   Respondents comprised similar proportions of school personnel, parents, health professionals and government representatives, and other members of the community. Students were the minority group at only 8% of total respondents, most of whom were aged 12-15 years. The majority of survey respondents were female, between 36-55 years of age. The largest proportion of respondents was from Queensland, and overall more respondents were located in regional, rural and remote areas than in metropolitan centres. More than half the respondents worked in or had children who attended government schools.

It is important to note that the survey sample is not representative of actual stakeholder populations. Caution needs to be taken in generalising the results to the stakeholder populations, as there may be differences between the people who chose to participate in the project and those who decided not to participate. Comparisons between stakeholders may not represent real differences in the population.

Most of the school-based alcohol education programs that respondents were familiar with or engaged in were those that formed part of the physical education or health curriculum of schools. Generally, most respondents had positive experiences with these programs and thought that they were worthwhile, relevant and effective in addressing young people's alcohol use.

The majority of respondents also agreed that schools had a role and responsibility in educating young people about alcohol. Respondents were of the opinion that alcohol experts, specially designated teachers and/or students trained as peer leaders should deliver alcohol education programs in schools. Most respondents also believed that these programs should be mainly taught in secondary school although it was noted that alcohol education could be incorporated across all levels of schooling if it were tailored according to age.

Alternative strategies to school-based alcohol programs that were considered effective by most respondents were:
- implementing community programs to enhance social connectedness
- providing alcohol-free leisure time options
- imposing stricter controls on alcohol advertisings
- banning alcohol-related advertising aimed at young people
- imposing stiffer penalties on alcohol suppliers/sellers, and
- increasing police presence when young people are known to drink.

Other alternatives strategies that were perceived to be less effective than school-based alcohol education were increasing the price of alcohol and putting warning labels on alcohol packaging. Most respondents perceived other non-school-based alcohol education programs and displaying advertisements on the dangers of binge drinking to have about the same level of effectiveness as school-based programs.

In relation to young people's consumption of alcohol, student respondents seemed to have somewhat contradictory and mixed views compared to other stakeholders. Total abstinence was not a popular solution for most stakeholders apart from the student respondents who agreed that abstinence should be encouraged, a finding that is not surprising given the average age of this group of respondents (i.e., 12-15 years). Nevertheless, a large proportion of students also agreed that it was safe for young people to drink small amounts of alcohol but that it was not acceptable for young people to get drunk. A significant majority of all respondents indicated that youth binge drinking was a serious problem in Australia and supported the view that young people should be educated about sensible drinking.

The next chapter presents findings from submissions received from school personnel, parents, students, health and government representatives, community and other representatives.

Chapter 7 Submissions

7.1 Key points

- All respondents were of the view that school-based alcohol education is important and should be embedded within a whole-of-community approach
- There was consensus that the overall aim of school-based programs and policies related to young people and alcohol should be to educate young people about a) the risks associated with drinking and b) how to stay safe if they choose to drink
- Most respondents were of the view that one-off information sessions are ineffective
- Rethinking Drinking and SHAHRP were the most frequently mentioned resources.

To assess the views of key stakeholders on the role of schools in alcohol education, input was sought from school personnel, including principals, teachers and school nurses, parents, secondary school students, AOD experts, educational bodies, police and other interested community members via a call for submissions. Director-Generals were also invited to separately make submissions (see section 7.5). Results of the submissions process are presented here.

7.2 Methodology

A call for submissions provided an opportunity for interested parties and members of the public to provide written responses regarding their views and experience in regard to alcohol education. Input was sought from relevant stakeholders in the community such as education authorities, experts in alcohol research, law enforcement agencies, youth, parents, teachers, community groups, policy advisors, and school students.

A submission pro-forma was developed to:

- facilitate the compilation and analysis of responses
- provide a framework to guide stakeholder responses
- ensure that comments were received on pivotal areas.

The pro-forma comprised 13 questions that sought information about:

- the role of schools in educating young people about alcohol
- school-based alcohol education programs, including aims, effectiveness, advantages and limitations

- alternative and supplementary strategies to school-based alcohol education programs.

Respondents were also invited to provide any additional comments on the role of schools and/or young people's alcohol use.

General information about the project, guidelines for preparing submissions, and a submission coversheet were also provided with the pro-forma. A copy of the submission package can be found in Appendix 6.

The online submission process was widely advertised and details were placed on NCETA's website. An electronic version of the submission forms could also be downloaded from the website. Respondents were given the option of either e-mailing (preferred) or posting their submission. Respondents could elect for all or part of their submission to be kept confidential. A maximum of six weeks was allocated for the preparation of submissions. A letter of acknowledgment was forwarded to each respondent on receipt of their submission.

7.3   Overview

A total of 12 submissions were received from the Australian Capital Territory, New South Wales, Queensland, South Australia and Tasmania. Of these 12 submissions, nine were from organisations and three were from individuals. Three respondents elected to remain confidential. The list of stakeholders who made submissions can be found in Appendix 7.

7.4   Summary of responses

Respondents were asked to choose the stakeholder group to which they belonged. For comparison purposes, these were collapsed into five groups: school personnel, parents, students, health and government representatives and community and other representatives (Table 7.1).

Table 7.1 Respondents categorised by key stakeholder group

Key Stakeholder Group	Frequency
1. School Personnel	1
2. Parents	1
3. Students	-
4. Health and Government Representatives	3
5. Community and Other Representatives	7
Total	12

A summary of stakeholders' responses is presented below in accordance with the themes and questions in the submission pro-forma (see Appendix A).

Q1. **What are the key issues related to young people and alcohol that need to be addressed in our society?**

Respondents identified the following key issues that they believed should be addressed in relation to young people and alcohol:

- *Culture* – Australian cultural attitudes and general culture towards alcohol
- *Risks and Harms* – including injury, violence and even death
- *Health* - including brain damage, mental health, general wellbeing, chronic health problems and wider implications of health burden on the community
- *Marketing* – alcohol industry marketing to young people
- *Parental influences* – inadequate role modelling.

Other issues mentioned by respondents included the effects of drinking alcohol on pregnancy and child rearing; crime; rules, laws and policies that promote safe use of alcohol; and education in adolescent years.

Overall, the role played by socio-cultural influences was the predominant issue that emerged from the submissions. As noted by one respondent:

> *"… it is evident that there are a broad range of factors beyond a young person's control which may or may not influence their decision to drink alcohol. These varied and complex factors are seldom acknowledged or addressed by either the general community or many of the initiatives aimed at adolescent drinking. They include but are not limited to peers, family, community and cultural influences. Therefore, initiatives and strategies around young people and alcohol use must acknowledge these broader socio-cultural influences that impact on how and why young people may drink".*
> [Community and Other Representative]

Q2. **What role should schools should play in addressing these issues**

Respondents' views in regard to the role that schools should play in regard to alcohol were generally similar. Of 11 respondents, nine believed that schools have a significant role in educating young people in regard to alcohol issues.

Other respondents noted that school alcohol education would benefit from partnerships with parents, the health field, broader community and related agencies. The benefit of ensuring appropriate resourcing of schools was also noted.

Application of the *Principles for school drug education*, formed under the *National School Drug Education Strategy*, was highlighted as effective school practice in the provision of drug education in schools. In particular, one respondent commented that:

"The Principles for school drug education provides a broad conceptual tool to inform the planning, implementation and review of school drug education programs, policies and practices. This involves:

- *comprehensive and evidence-based practice*
- *positive school climate and relationships*
- *programs targeted to needs and context*
- *effective pedagogy."*

[Health and Government Representative]

Support for a nationally co-ordinated position on alcohol education is further reflected in the comment below:

"Schools need to be provided with [a] clearly articulated and consistent position on alcohol education, preferably within a national rather than state-based framework".
[Community and Other Representative]

Respondents also indicated support for an increase in teaching resilience-based skills, utilising peer education strategies and programs, school connectedness, evidence-based and best-practice approaches to teaching and inclusion of socio-cultural factors in education programs.

Q3.   What should be the overall aim of school-based programs and policies related to alcohol and young people

Respondents were unanimous that the overall aim of school-based programs and policies related to young people and alcohol should be to educate young people about:

- the risks associated with drinking and
- how to stay safe if they choose to drink (see Figure 7.1).

Submissions received from parents and health and government representatives were unanimous in their support of school-based programs and policies that encouraged young people not to drink at all.
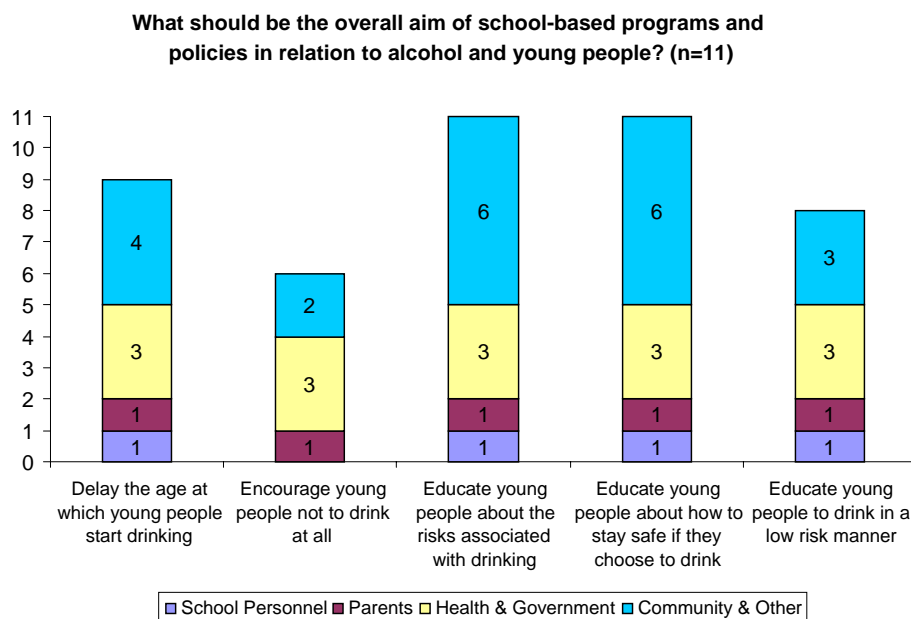
What should be the overall aim of school-based programs and policies in relation to alcohol and young people? (n=11)

Figure 7.1 Overall aim of school-based alcohol education programs and policies by stakeholder group (n=11)

Eight respondents identified a range of other issues which they believed should form part of the overall aim of school-based programs. These included:

- educating young people about the relationship between alcohol and sexual health, including personal safety and pregnancy
- building knowledge, values, attitudes and skills for wellbeing and resilience
- raising awareness of links to mental health issues, and acknowledging that alcohol is also a drug
- providing young people with skills to manage pro-alcohol messages from influential others, e.g. parents, family and peers.

One respondent also noted that the overall aim of school-based programs must be congruent with the age of the students.

A range of school-based policies were identified including:

- support for zero-tolerance for alcohol at all school functions
- introducing young people to a range of alternative (non-alcohol involved) social and sporting activities.

Q4.   Your knowledge and experiences of school-based alcohol education programs

Submission questions four to six were interrelated and relevant only to those who worked within the education sector or parents of students. Respondents were first asked to identify what their school, or their child's school, did in terms of:

- classroom-based alcohol education programs

- school-wide programs that may impact on alcohol use
- community-wide programs in which the school participates.

Subsequent questions invited further comment about these identified programs in terms of what led to these programs being chosen, any positive or negative experiences with those programs, and whether they had an impact on students' drinking behaviour. The following programs were identified:

- School Health and Alcohol Harm Reduction Program (SHAHRP)
- 'On the Edge' Resilience and Drug Education Resources for Lower/Upper Secondary Students
- SA DECS Drug Education Teacher Support Packages R-12
- Drug Education R-12 Teacher Support Packages for students with disabilities and learning difficulties
- Teenagers and Alcohol Fact Sheets – for parents, teachers and young people – a series of 8 fact sheets
- Towards safer partying: a guide for teachers working with students in the senior years
- Resilience Education and Drug Information (REDI)
- Rethinking Drinking
- Resources from the DECS Drug Strategy
- Drug and Alcohol Services SA Safer Celebrations Kit
- Basic information via the school subject 'HPE'.

One respondent noted their school's participation in community parent-teenage communication programs. Another proposed implementation of a program amongst year 10 students, designed to raise awareness and help them to make informed choices. Such a program would involve a drug education worker, ambulance officer, police officer, and a mental health worker from Head Space.

Resources/programs from the South Australia's DECS Drug Strategy were reported as having been developed in response to research that demonstrated that drug and alcohol education will be effective if it:

- is age/developmentally appropriate, embedded in ongoing drug education curriculum R-12 (15 lessons per year)
- is knowledge and skills based
- provides alternatives to drug use
- uses interactive strategies
- values peer leadership, student voice and authentic student participation
- involves professional learning for teachers
- is embedded in a whole school approach to wellbeing.

[Health and Government Representative]

One respondent stated that:

> *"Feedback from teachers at professional learning sessions indicate that programs like SHAHRP build the confidence and competence of teachers to engage with alcohol education".*
> [Health and Government Representative]

Another noted that:

> *"There is some great content [in schools] but no consistency between teachers in what is being taught and accountability that the approach is evidence-based. Programs offered from outside need to be linked to the curriculum needs and outcomes as they still need to assess the subject".*
> [School Personnel]

The following two issues were generally identified by respondents as the reasons for particular programs being chosen:

Program includes professional development activities for teaching staff and an implementation plan that includes a whole of school approach.

Program has been used in previous years and was felt to have been successful.

A few limitations were identified and included the following comments:

> *"Research by Marmot and Wilkinson (1999) and WHO has shown that education does not alter behaviour. Upstream measures such as legislation does. Governments must take responsibility for this aspect of community behaviour".*
> [Community and Other Representative]

> *"On the Edge … is a great resource that addresses resiliency and stress management but I have not seen it used in any of the schools I have worked in. They sit on the shelf and collect dust."*
> [School Personnel]

Q5. What difficulties do you perceive are faced by schools in addressing young peoples' alcohol use

Five respondents indicated that schools face significant difficulties incorporating alcohol education programs into an already crowded curriculum. Several also commented that there are often unrealistic expectations placed on schools whereby they are 'expected' to solve community problems.

Other difficulties faced by schools that were identified in the submissions included:

- media and public bias towards alcohol use
- lack of community awareness of alcohol-related harms

- lack of appropriate training for school staff
- difficulties in engaging parents in alcohol education.

Q6.   What alcohol-related programs are in use in Australian schools

Respondents were asked whether there were any alcohol-related programs currently in use in Australian schools which they held in positive regard, and to provide comment in terms of their effectiveness and evidence base.

Rethinking Drinking was identified by four respondents. However one respondent expressed concern that this tool may now be outdated, particularly in light of the release of the revised 2009 National Health and Medical Research Council's Australian Alcohol Guidelines. SHAHRP was identified by two respondents, with one comment that the model was considered sound but was based on research completed in 2000. Other programs identified are listed below in Table 7.2 and were identified by one respondent each. Table 7.2 also provides a summary of comments made about the perceived effectiveness and strengths of identified programs.

Few comments were provided on the evidence base of identified programs. One respondent advised that Rethinking Drinking had been independently evaluated by Quantum Research in 2007 and included a trial of 14 schools across three states. Another respondent advised that the quasi-experimental research design of SHAHRP incorporated intervention and control groups and measured behaviour change over a 32 month period. Another respondent advised that Life Education was reviewed in 2006 by Erabus International.

Table 7.2 Alcohol-related programs reported in submissions as currently utilised in schools and their perceived effectiveness and strengths

Program Identified	Comments on Perceived Effectiveness and Strengths
Rethinking Drinking	- Classroom kits including lesson plans, student workbooks and 'discussion starter' role plays on DVD. - Materials comply with the Principles for school drug education. - Inclusion of content relevant to Aboriginal and Torres Strait Islander students. - Annual copyright statistics indicate cost-effectiveness of kits. - Program has clear learning outcomes, helpful teaching tips and is age appropriate. - Balance between educating young people about alcohol-related risks and developing their skills and protective behaviours. - Allows students to explore topic and extend their knowledge.
School Health and Alcohol Harm Reduction Program (SHAHRP)	- Resources enable students to explore and extend their knowledge, understanding and skills and to take action in their own learning. - Program has clear learning outcomes, helpful teaching tips and is age appropriate. - Balance between educating young people about alcohol-related risks and developing their skills and protective behaviours.
IParty	Students are able to increase their knowledge around what the risks are and how they can make safer choices.
Life Education Drug and Health Program	- Promotes healthy lifestyle. - Selection of modules available for schools to tailor programs relevant to their setting. - Building partnerships to active engage whole communities.
'On the Edge' Resilience and Drug Education Resources for Lower/Upper Secondary Students	Teaches resilience skills.
Lead! Student Participatory Approaches to Leading Education about Drugs	Not identified
Youthsafe: 'What's the Plan?' (WTP)	- Program has combined research with best practice pedagogical models for health promotion. - Based on the FRESH (focusing resources on effective school health) model, an interagency initiative involving WHO, UNICEF, UNESCO and the World Bank.
Climate Schools	- Utilises an interactive comic-style resource that young people relate to. - Depicts young people positively.
South Australian Department of Education and Children's Services: Learner Wellbeing Project incorporating the School Drug Strategy	- Student learning has a focus on skill development for resiliency, including drug refusal and resistance skills and responsibility for personal and others safety. - Collaboration between government and non-government agencies, and schooling sectors.

Seven respondents rated the effectiveness of school-based programs in a) educating students about alcohol (Figure 7.2), b) deterring alcohol use (Figure 7.3) and c) reducing alcohol related harm (Figure 7.4). School-based programs were generally seen as effective in educating students about alcohol (n=6) and to be somewhat effective in deterring alcohol use (n=6).
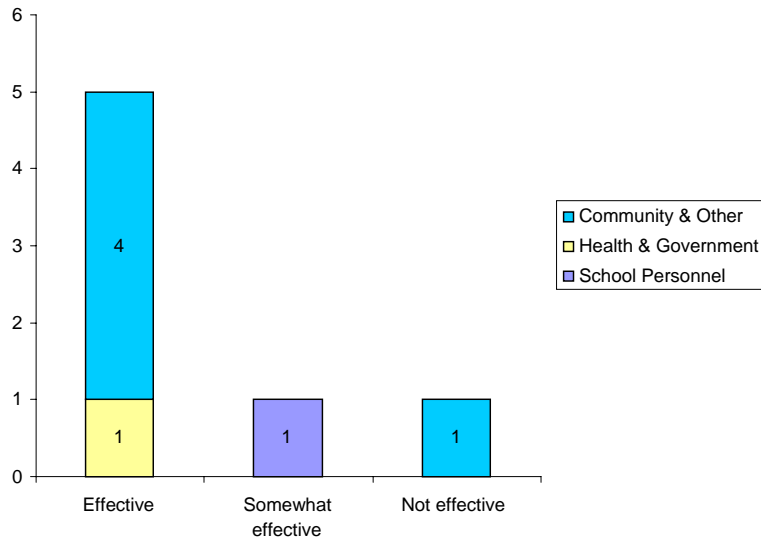
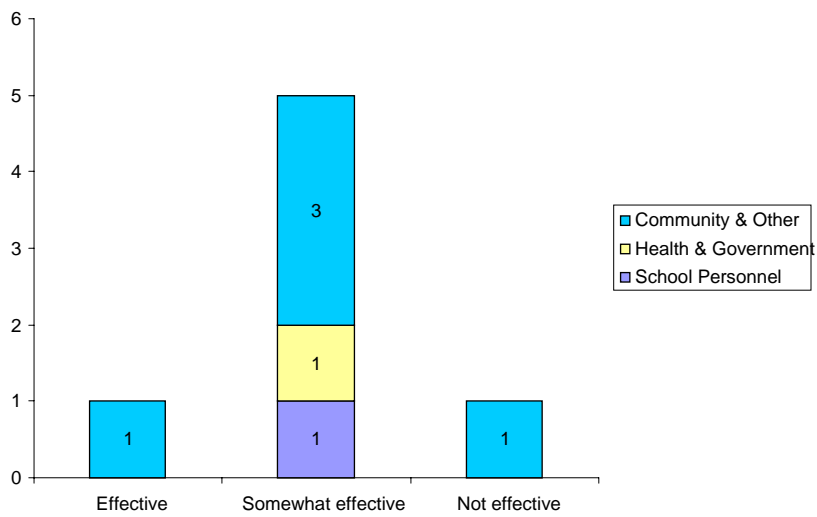**Figure 7.2 Effectiveness of school-based programs in educating students about alcohol (n=7)**

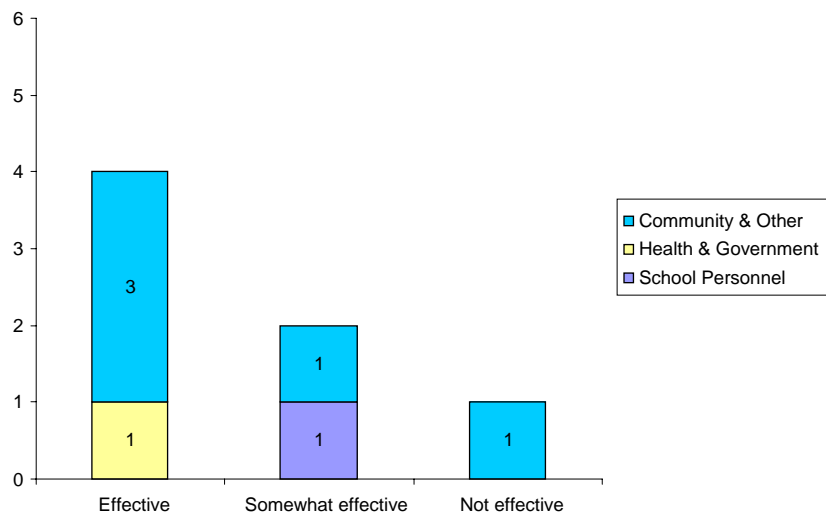**Figure 7.3 Effectiveness of school-based programs in deterring alcohol use (n=7)**

Figure 7.4 Effectiveness of school-based programs in reducing alcohol-related harm in students (n=7)

Other comments on the effectiveness of school-based programs included:

> *"… like any other area of learning, alcohol education must be delivered by classroom teachers; embedded in a curriculum framework; be ongoing over a number of years; coordinated across the learning bands (e.g.,primary, middle and senior years of schooling); sequential, well planned and resourced."*
> [Health and Government Representative]

> *"There is a range of evidence that student-centred and multi-faceted programs are most effective. Programs providing information alone to young people regarding alcohol use are ineffective in bringing about long term change. Young people need to be involved in the decision making process, provided with opportunities for skills rehearsal, involving interaction between peers".*
> [Community and Other Representative]

Q7. What alcohol education programs and strategies should be used more widely in Australian schools

Six respondents commented on whether there were any other alcohol education programs and strategies that should be used more widely in Australian schools. Whilst no specific alcohol education programs were identified, three respondents believed that alcohol education should be coordinated across the curriculum for all school years. Two respondents maintained that there should be greater implementation of student or peer led initiatives. One respondent believed that showing images of car accidents and the effects of fetal alcohol syndrome should be used more widely.

Q8. Complementary programs and strategies identified

A range of programs and strategies which can complement the role of schools in addressing young people's alcohol use were identified in seven submissions. These are summarised by jurisdiction in Table 7.3.

Table 7.3 Summary of complementary programs/strategy identified by jurisdiction

Complementary Program/Strategy	Jurisdiction
Drug Action Week (DAW)	National
Red Cross save-a-mate (SAM)	National
Headspace	National
Mind Matters	National
Beyond Blue	National
KidsMatter	National
Social and Emotional Learning	National
Peer Support Australia Programs	ACT, NSW, NT, Qld, Tas, WA
Youthsafe Seminars and Factsheets	NSW
SAPOL: North on Target, Great Debates and Alcohol Use in the Mallee	SA
SA DECS: Adolescence and Alcohol Initiatives	SA
Catholic Education SA: Made in the Image of God	SA
Encounter Youth Schoolies Week and Seminars	SA

Several respondents commented that addressing alcohol-related issues within a broader resilience program is beneficial. One respondent suggested that a flowchart for action on addressing substance use by a student for both discipline and referral options to health services would assist teachers and principals.

Q9.   Programs and strategies considered not to be effective

Five submissions addressed the question of whether any programs and strategies are ineffective and should not be used. One respondent believed there were no programs/strategies which should not be used, whilst three respondents identified using fear, threat and 'scare tactics' as ineffective and should be avoided.

An example of comments related to scare tactics included the following:

> *"Strategies which are unlikely to be effective include scare tactics: the 'use of fear or threat is to be avoided' (Shanahan et al, 2000: 36). The depiction of extreme consequences ("if you drink, you'll die") and a 'zero tolerance' approach to alcohol, (not giving any further education other than 'don't do it'), can also inhibit the development of positive attitudes and knowledge towards low-risk drinking and targeting individuals vs whole-of-community approach."*
> [Community and Other Representative]

Two respondents identified one-off information sessions as ineffective with one citing Paglia and Room's (1999) conclusion:

> *"Research also shows approaches which provide information and assume that drug use behaviour change would follow are ineffective."*
> [Community and Other Representative]

The same respondent also cited the following research that found the type of program and who delivers the program can influence effectiveness:

> *"Tobler et al. (2000) identified two program types, 'interactive' and non-interactive'. Interactive programs provided for interaction among the participants and generally involved the provision of knowledge together with training in refusal skills. Non-interactive programs involved didactic delivery and emphasised knowledge and affective content. The reviews demonstrated that interactive programs were more effective than non-interactive programs at preventing use of tobacco, alcohol and other drugs."*

And…

> *"Gottfredson and Wilson (2003) conducted a meta analysis on school-based prevention programs which demonstrated that programs that involved peers only in program delivery were most effective whilst those involving no peers or peers plus teachers were far less effective."*
> [Community and Other Representative]

Q10. Other issues raised

The opportunity to provide further information was taken up by seven respondents. The most common theme to emerge was an acknowledgment that school-based alcohol education is only one element involved in addressing alcohol use by young people, and parents, governments, health services and the broader community all need to be engaged in this issue. Two respondents identified that parents and other significant adults need to be aware of the behaviour they model with regard to alcohol use, with one respondent further suggesting that schools may be able to increase parental awareness of alcohol and role modelling through parent information sessions. One respondent believed that government legislation was required to restrict alcohol advertising in terms of frequency and sponsorship activities.

One respondent commented that:

> *"Effective school drug education plays a vital role in equipping young people with the knowledge to adhere to the new National Alcohol Guidelines".*
> [Health and Government Representative]

Another respondent cited a review of young people and approaches to the prevention of injury undertaken by Elkington and Hunter in 2000, where it was concluded that for any program aimed at supporting the health and safety of young people to have a chance of creating any lasting impact, programs should:

- be conducted over multiple sessions (effective programs were all from 5 to 12 lessons long)
- be focused on single issues (e.g.,drink driving, dating violence)
- be delivered by teachers who were trained by experienced health educators
- be delivered in concert with community involvement and/or legislation
- be based on interactive sessions and/or on relevant learning theories
- emphasise developing the skills of identifying and choosing a safer alternative to risk situation.

    [Community and Other Representative]

7.5   Director General (or equivalent) Submissions

The Director General (or equivalent) in each state and school jurisdiction was also invited to make a formal submission as part of the scoping exercise. A total of 14 responses were received from 26 invitations issued.

A range of approaches to alcohol education was reported to be undertaken within schools. Some schools develop their own approaches and programs, while others were supported by over-arching units. Four of the 14 school jurisdictions provided dedicated support positions.

Seven respondents indicated that the Australian Government's *National School Drug Education Strategy (NSDES)* had significantly contributed to professional development activities for teachers, and resource development. Six respondents also advised that the *Principles for School Drug Education* was relied on to provide direction and the overarching framework of alcohol education in their area.

The majority of respondents indicated that alcohol education approaches were evidence and research based. Provision of alcohol education was predominantly situated within the *Personal Development, Health & Physical Education (PDHPE)* syllabus.

One respondent expressed concerned that schools "continue to be seen as the major problem solver for a number of social issues" and suggested that the Australian Government consider an overall wellbeing strategy to increase students' resilience and ability to make appropriate whole of life decisions.

A broad range of resources used within Schools were also highlighted, with four respondents citing the *Rethinking Drinking* resource as commonly used. Other frequently mentioned resources included *Resilience Education and Drug Information (REDI)*, *School Health and Alcohol Harm Reduction Program (SHAHRP)*, *Keeping in Touch (KIT)* and *Challenges and Choices*.

A range of State and/or jurisdictional specific activities were also reported that included the following:

- Victoria has a Memorandum of Understanding (MOU) between the 3 jurisdictions to ensure that all sectors receive, and have access to, the same level of alcohol education.

- In Victorian government Schools it is mandatory for effective drug education programs to be reported. Programs are evaluated via *Drug Education, Evaluation and Monitoring (DEEM)* survey tools.

- This same jurisdiction is also undertaking a pilot *School Drug Education Project* with a view to testing school drug prevention and intervention comprising classroom and parent-assisted homework components.

- Western Australia NDES initiatives are managed by a dedicated board – the *School Drug Education and Road aware (SDERA).*

- Western Australia has a whole-of-government *Western Australian Drug and Alcohol Strategy (WADAS) 2005 – 2009*, which forms an integral part of the Department's Drug and Alcohol Action Plan.

- The Australian Capital Territory Government gauges the effectiveness of alcohol education via the *ACT Secondary Student Alcohol and Drug (ASSAD)* survey.

- An alcohol stream, incorporated into PDHPE syllabus, is mandated in all NSW schools.

Part D:

Summary
& Recommendations

This section contains:

Summary & Discussion

Chapter 8 Summary and Discussion

8.1   Role of schools

This project examined the role of schools in relation to alcohol and young people from a variety of different perspectives. A comprehensive review of the literature in relation to school-based, family-based and community-based programs was undertaken that provided an indication of programs and strategies likely to contribute to successful outcomes. It also identified a variety of ways in which schools may support young people in relation to alcohol. Consultations with schools and the community sector provided further insights into programs and approaches that were considered feasible, appropriate and realistic options within the school setting.

A high level of support[33] was identified for the involvement of schools in relation to alcohol and young people. The findings from the consultations with 36 schools (involving interviews with 113 teachers and principals, and 239 students), the online survey (n=275) and submissions (n=12; plus 14 submissions from Directors General) all indicated strong support for the role of schools in tackling alcohol issues as they apply to young people in Australia today.

Although there was widespread support among school personnel and the community at large for school-based alcohol education, there appeared to be a high level of variability among schools about what constituted optimal programs, resources and educational strategies. It was apparent that a diversity of views was held and there was a degree of uncertainty about the most appropriate approaches or strategies. In addition, there was a wide range of programs and resources employed by schools with over 43 different programs identified in our scoping exercise (see Table 6.6).

Numerous impediments were also identified that acted as substantial challenges to the implementation of 'good practice' in this area. For some schools impediments were lack of resources; while for others ideological differences or a strong focus on traditional

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[33] However, in stating this it should also be noted that a degree of positive response bias may be operating. That is, those teachers, community members and other key informants who participated in this project were likely to hold specific views about the question of alcohol in society; so the likelihood of a 'positive response bias' cannot be discounted. This being said, support was nonetheless very strong for schools to take a very active role and have a high level of involvement in this challenging and at times contentious area.

academic subjects and disciplines acted as impediments. Importantly, the absence of a strong and accessible evidence base meant that schools often lacked vital guidance and support when selecting programs and materials.

Most schools relied heavily upon the *Principles of School Drug Education* (Meyer & Cahill, 2003) to assist them in developing and implementing their programs. In addition, other schools noted the excellent and highly valued support provided by their local ATOD advisors. However, the latter support and expertise was not available in all jurisdictions or accessible by all schools. Survey respondents identified inconsistency of alcohol education across schools, within and across states/territories as an important limitation in this area.

8.1.1   Approach and philosophy

Most teachers, principals and stakeholders supported a harm minimisation approach to educating young people about alcohol. This was the most commonly reported underpinning philosophical position noted in relation to alcohol education in the school setting. It was one area where there was surprisingly little divergence among commentators, in contrast to other issues raised. Not only was there strong consensus around a harm minimisation perspective, there was also relatively little comment or discussion about it as it seemed to be a 'given' that did not warrant further elaboration.

Not surprisingly however, about a third of students who responded to the online survey (aged 12-15 years) supported a total abstinence approach (at least for their age group). This response is not seen as incompatible with a harm minimisation approach; rather, it reflects the need for age-specific and age-appropriate strategies – a principle that was generally agreed upon, even if the details and specifics of what that might comprise differed. Further to this, the response reflects that only a small percentage in this age group drink regularly or at all. It is also noted that in the current environment, and in light of the recently revised NHMRC guidelines which contain a strong message of abstinence for under 15 year olds and greater caution in relation to alcohol use by 16-17 year olds, there may be a reconsideration of messages deemed appropriate for the school setting.

Reconciling the growing evidence base of the harms that 12-17 year olds may experience as a result of alcohol with the more liberal views about youth drinking that have been dominant in Australia for some time may be a challenge for schools. Current alcohol education programs appear to primarily focus on negative consequences of alcohol use and appear to struggle with ways to acknowledge the natural curiosity of

adolescents and the social and cultural drivers that motivate some of them to try alcohol. Young people develop an interest in alcohol for a variety of psychosocial reasons, which also need to be recognised in the development of programs.

Many schools tended to adopt a social influence approach which was delivered universally to students at the inoculation and early relevancy phase (see Table 3.3). However, not all schools implemented universal or whole-of-school interventions.
Some schools also incorporated different approaches tailored to the needs of different student populations. Some schools with a high proportion of at-risk students among their student population implemented targeted programs as it was considered that universal programs were not effective in changing behaviours in these schools, as some students already had "pre-existing addictions".

However, in many schools these presentations and pastoral care classes were not usually focussed on the single issue of alcohol, but were implemented in a holistic fashion to address a range of risk-taking behaviours including driving, partying, and sexual relationships.

8.1.2   Schools Expectations and Aspirations

School personnel were notably pragmatic in both what they felt they, and the school in general, might realistically be able to achieve. There was little indication of unjustified or cavalier optimism regarding expectations and objectives of alcohol education alcohol education. In fact, many teachers and principals expressed a degree of resignation, if not disappointment, that the school was once again left to 'fix' complex social problems, the origins of which were well beyond their scope and remit to address. Moreover, this high expectation was often not matched by the resources available to them to tackle this issue.

8.1.3   Perceived effectiveness of school-based alcohol programs

There is limited research evidence available to assist teachers and schools and assessing the effectiveness of school alcohol education can be a fraught process. Just over 60% of on-line survey respondents believed school-based alcohol programs to be somewhat to moderately effective. This contrasts with views expressed during school consultations, where most school personnel were generally more circumspect and noted

the difficulty in being able to assess the effectiveness of alcohol education in the absence of formal/informal evaluations.

The review of the published literature of studies undertaken to evaluate school-based alcohol education and related programs revealed a large number of studies. However, most of these were of variable quality. Moreover, evidence from the studies included in the literature review came from a variety of sources and their focus often differed, depending on the social, cultural, political and legal factors that dominate. For example, most US-based programs promote abstinence until the legal drinking age and outcomes from these studies were focussed on preventing initial use and/or cessation of drinking. In contrast, other programs acknowledged that some drinking was likely to occur and used a harm minimisation approach, which included different outcome measures.

In general, the research evidence base exhibits the following limitations:

- Few long term follow-up studies
- Inadequate measures of effectiveness (proxy measures, multiple measures capitalise on effects of chance)
- Inappropriate statistical analyses (sub-group analysis, intention-to-treat (ITT), attrition, selectively picking positive outcomes)
- Effectiveness based on too few independently evaluated well-designed studies.
- Negative findings are rarely reported.

While many of the studies undertaken to-date lacked sufficient rigour to adequately guide decision making in terms of optimal or good practice, there were some important findings regarding what constitutes effective school alcohol education that warrant highlighting and these included the following:

- More successful education programs used a social influence approach as a key part of the program, rather than a knowledge/information approach or enhancement of competencies and skills, such as self-esteem, decision-making, goal-setting and stress management (Loxley et al., 2004)
- Effective programs were more likely to include community and parental involvement
- More effective programs may also need to be more intensive and long-term (contain booster sessions) (Loxley et al., 2004)
- Effective programs also addressed the whole school environment – i.e., increase school bonding, reduce victimisation and bullying, improve stress-coping skills, increase social connections etc (see Gatehouse project).

The key findings from the literature review highlight two separate issues:

1. more intensive classroom-based alcohol-focused educational sessions (using interactive approaches) were more likely to be successful;
2. good results can also be achieved through broad generic programs such as the Gatehouse project that address a range of risky behaviours by enhancing support and connectedness.

These two different approaches are not incompatible; indeed, they are potentially quite complementary. Moreover, this offers schools the option of assessing whether their resources and needs can be best applied to either or both approaches.

Corresponding with this view, the majority of survey respondents perceived community programs that aimed to enhance social connectedness to be more effective than school-based alcohol education programs. There is a growing and encouraging evidence base for such approaches. For example, studies of adolescent health have reported that adolescents' connectedness to their family and school is a protective factor against alcohol and drug use (Resnick, Bearman, Blum et al., 1997). Connectedness helps young people to internalise information that guides their decision-making. Similarly, findings from Victoria's Gatehouse project also identified that school connectedness acted as a protective factor against a range of potential adverse outcomes including risky drinking.

Encouragingly, many successful programs can offer the school a range of positive outcomes that extend beyond just a single issue such as risky alcohol use. That is, they are likely to be programs that support young people in terms of their overall mental health and social functioning. In this way, such programs offer good value for the resources invested (whether those resources be money, time, or teachers). There is a case to be made that the 'best buy' in terms of alcohol education is a generic program in which alcohol forms part of a larger and more generic approach to young people's health and wellbeing and social functioning.

8.1.4   Programs that focus on skill development and well-being

In general, survey respondents and key informants believed that alcohol education programs provided students with accurate alcohol-related information and that it was a good opportunity to engage and empower young people to make informed decisions. While no evidence was found to confirm that programs with a skills training focus (e.g., those that focus on developing resistance or social skills) resulted in minimising/preventing risky drinking behaviour (Cuijpers, 2002), some schools and a good proportion of survey respondents nonetheless were of the view that these skills

would help students cope when faced with pressures to drink alcohol/use drugs. Some schools also incorrectly believed that programs that concentrated on enhancing self-esteem and psychological well-being were important (i.e., effective) components in educating young people about alcohol. This is in spite of there being no evidence to support the notion that increased self-esteem is a protective factor against risky drinking behaviour (Cuijpers, 2002; Tobler, 1997). There is clear scope to correct misperceptions about which types of alcohol education programs and approaches are likely to be effective in what circumstances. Most schools were also receptive to advice and guidance in relation to evidence based practice in this area.

Processes are needed to help schools determine which approaches will fit best with their priorities/demographics/location/budget/human resources/school climate and so on. In other words, rather than attempting to implement a particular program, schools could follow a recognised diagnostic process to assist their decision-making about best options to suit their particular circumstances. The development of such a tool would meet an identified need, and would provide beneficial assistance to teachers and other school staff.

8.1.5   Improving alcohol education programs

During the consultations, teachers and principals provided a number of suggestions/recommendations on what could be done differently in relation to the provision of alcohol education. Many of these were based on their experiences and were informed by their perceptions about what had worked or had not worked in their school. It should be noted that while many of the suggestions/recommendations may not necessarily be consistent with the available evidence for the provision of effective alcohol education, programs they are nevertheless informed by practical considerations. As such, they are intended to provide policy-makers with additional guidance to assist them in their future deliberations.

As identified in the MindMatters project, various barriers and facilitators confront educators when attempting to address complex and diffuse issues such as alcohol. The following table (see Table 8.1) provides a useful guide to factors that may impact of the development and delivery of alcohol education within Australian schools.

Table 8.1 Barriers and facilitators to implementation of MindMatters (Hazell, 2005)

Facilitating implementation	Barriers to implementation
Strong level of support across school for student wellbeing	Competition for staff time from other curriculum and departmental demands
Active support and involvement of school executive	Staff turnover
Recognition that program supports/is consistent with school ethos	Industrial issues related to staff workload and roles that undermine willingness to implement program
Adequate professional development for all staff implementing program	Large school size may inhibit communication and quality of implementation
Allocation of resources to implement program (kits, time for planning & training)	
Structural recognition of program in formal curriculum and policies	
Accountability mechanisms to monitor and review program implementation	

Skager (2007) has also recently proposed a paradigm shift for US alcohol education toward universal AOD ed(McBride, 2003)ucation programs that would ideally be delivered to the secondary school population. The key components of the proposed paradigm are remarkably similar to the elements that already tend to characterise alcohol education initiatives in Australia, albeit in an ad hoc fashion. These are:

- Focus on age 14 years and older
- Process dominant, whereby students share their experience, rather than curriculum dominant
- Facilitated, interactive and non-judgemental, rather than didactic and adult-centred
- Flexible and creates "teachable moments", rather than sequenced content
- Advocates abstinence, but addresses harm/risk reduction
- Includes issues and experiences related to both use and abstinence
- Identifies and assists problematic AOD users
- Acknowledges positive aspects of AOD use to establish credibility, rather than focus on negative consequences only.

   (Henry et al., 2005; Resnick et al., 1997)

The above (see Table 8.1 and Skager's model) provide a useful checklist that could be incorporated within a contemporary set of alcohol education guidelines.

While many schools in Australia may already adopt the abovementioned initiatives, much more could be done to ensure that alcohol education in schools is consistent and adheres to established guidelines to maximise the impact that it may have on young people's risky alcohol consumption.

8.1.6 Timing of alcohol education

Schools tended to incorporate school-based learning in the middle school levels (Year 6, 7, 8, 9) opting to provide younger students with factual information, while students in later years (Year 10,11,12) tended to participate more in community based programs and attend presentations involving guest speakers. Part of the rationale for using guest speakers was in response to the view that senior students would see it as a "rehash" if alcohol education was delivered by teachers again.

Some schools considered that even though students in Years 11-12 may have been "bombarded" with messages about alcohol consumption, it was still necessary for them to participate in alcohol education classes. Other schools also identified that it was necesssary for schools to treat the students at senior levels more like adults and help them to reflect and think critically about issues, as well as teach them strategies about how to drink responsibly.

In these instances, schools tended to organise guest speakers on an ad hoc basis, for as one school nurse in a government school stated:

> "It's really important to be able to disclose and ask questions to people who aren't teachers at the school. And I think it's about being out of the classroom, in a different environment that they've never been in before, and about having access to professionals who know the answers and they're confident that they know."

In Years 11 and 12 the focus tended to be more limited with greater time emphasis on the relationship of drinking to sexual activity, injury, drugs, and driving. Also lessons and other activities that focused on these issues tended to be an elective component so not every Year 11 and 12 student needed to attend or participate in them.

In contrast, respondents to the survey (that comprised a large proportion of community members and parents) believed that alcohol education should be offered at earlier ages in Years 7 to 9, and tailored to be age-appropriate. It is important to note that school personnel also reported perceptions of this type of pressure; and, in light of a clear evidence base to guide decision making, are in a difficult position.

8.1.7 Pedagogical Issues

8.1.7.1 Teaching strategies

Comments from school personnel and students during the consultations and those from survey respondents echoed research findings pertaining to effective strategies for student engagement and empowerment. A majority of schools consulted reported involving students in exercises designed to stimulate discussion and exchange of views and experiences, which accords with the findings from several studies (see Cuijpers, 2002; Tobler, 1997; Tobler et al., 2000). As per McBride's (2003) recommendations, survey respondents also frequently selected 'interactivity' and 'age-appropriateness' as best practice features that was crucial for increasing the effectiveness of alcohol education. Similar to the findings of Nation et al., (2003), school personnel also believed that programs which employed a variety of teaching methods that focused on skill development or enhancement, and increasing awareness and understanding problem behaviours were more effective than those that were purely information-based and didactic in approach. Findings from school consultations and the online survey also reiterated the importance of having relevant and up-to-date resources, which were preferred and viewed as more effective than traditional didactic teaching material.

Survey respondents generally favoured a balance of informational material on alcohol (e.g., types of alcoholic drinks, standard drink recommendations, physical, psychological, social, emotional, and legal risks and consequences of risky drinking) and efforts to equip young people with practical skills and positive coping strategies to deal with social and cultural influences/expectations that could encourage them to drink.

8.1.7.2 'Scare tactics'

A preference for the use of 'scare tactics', including the account of gory stories and display of gruesome alcohol-related accident pictures, was reported by students during consultations and by a variety of respondents (i.e., teachers, parents, other community members) from the on-line survey. Several school personnel also reported that 'scare tactics' were commonly used in their alcohol education, although a few teachers voiced their doubts about its effectiveness. Doubts were also expressed by some respondents in the on-line survey.

For all its moral and memorable appeal, research findings suggest that the 'scare tactic' approach does not reduce adolescent alcohol-related harms (Cahill, 2007; Midford,

2000). In fact, personal narratives from survivors may serve to encourage risk-taking behaviour and inadvertently compel young people to engage in risky drinking behaviour.

Why then are scare tactics so frequently employed in youth-targeted alcohol education? One reason could be the issue of 'impact': the school consultations and responses from the online survey indicated that students 'take notice' of frightening or confronting images or scenarios, (which is assumed, perhaps incorrectly, to translate to 'the message getting through to kids'). Another reason could be that the demand for scare tactics relates to habit and/or the expectations of target audiences, since:

> *"…repeated use of fear strategies for particular issues may condition audiences to expect that all advertising on that topic should use fear. For example, smokers in qualitative pretesting research will frequently state that antismoking ads should use visuals of blackened lungs, and drivers in ad pre-tests will demand that antispeeding ads show pedestrians being bounced off car bonnet"* (Hastings et al., 2004, p. 967).

In other words, both students and educators have: a) become accustomed to the use of scare tactics in alcohol education; b) made assumptions about their effectiveness; and, c) therefore expect (or even desire) their continued use. Such sentiments were apparent in many of the interviews and focus groups conducted and from the responses in the online survey in the course of this scoping study. This is one area where clearer guidance to schools, students and parents is needed.

8.1.7.3   Who should deliver it

As reported by survey respondents and school personnel in the consultations, alcohol education programs were currently delivered by health/physical education teachers or school-based nurses. Most survey respondents and key informants generally stated that alcohol education *should* be delivered by experts, trained peers and/or specially designated teachers. Many of them also believed that one of the strengths of school alcohol programs was that it was delivered by appropriately qualified teachers who had a pre-existing and established relationship with the students. There was also strong support for coupling this approach with the use of guest speakers (see below).

8.1.7.4   Who currently delivers it

Survey respondents also noted that most school alcohol education programs were delivered by health/physical education teachers or school-based nurses. Many respondents believed that one of the strengths of school alcohol programs was that it

was delivered by appropriately qualified teachers who had a pre-existing and established relationship with students.

8.1.7.5   Guest speakers

As mentioned in the literature review, there is insufficient evidence on the influence of occasional guest speakers, be it experts in the field or individuals whose lives have been affected by alcohol. Nevertheless, it was identified as a popular approach for schools to undertake in their facilitation of alcohol education. School personnel that were consulted generally viewed guest speakers to be more credible from the students' perspective and provided the novelty of allowing students to engage with someone else other than their teachers. Some respondents from the online survey and school staff, however, queried the appropriateness of having recovering alcoholics as guest speakers. The need for clearer guidelines in relation to the use of guest speakers emerged from this project.

8.1.8   Key Findings

This review has identified the following findings. The evidence base available to inform good practice in relation to school-based alcohol education there is a:

- Need for consistent, transparent, independent and rigorous evaluation of programs
- Need for evaluation of the fidelity and quality of implementation of programs, including full account of all losses to follow up
- Need to determine which outcomes are good indicators of effectiveness for different target groups (e.g., age groups).

There is also a clear need for rigorous evaluation of particular components of interventions, such as parental education/involvement, peer influence, and follow-up after booster sessions. Without the establishment of a solid evidence base schools will be left to their own devices to attempt to identify the best use to which they can apply their limited resources.

Finally, in preparing this report we also recognised that the imperative for alcohol education will persist in the school setting. The task now is to maximise opportunities for schools to be able to assess both the evidence and the resources in regard to best practice.

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Appendices