# High School Students' Perceptions of Alcohol Prevention Programs

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## Abstract

The purpose of this study was to explore Grade 11 students' perceptions of programs related to the prevention of alcohol use in high school settings through an analysis of quantitative and qualitative data elicited from student questionnaires (n=452) and focus groups. It was found that students felt a need for increased information on alcohol education at the high school level. They identified content and preferred methods of delivery to improve cognitive, behavioral, and emotional engagement. Several metapolicy implications arose. At a broader policy level, provincial ministries may consider systematic collection of data to monitor youth alcohol use, as well as to inform educational programs and evaluate their efficacy.

**Keywords:** Prevention of alcohol use in youth, students' perceptions, high school alcohol prevention programs, alcohol education

# Résumé

Le but de cette étude était d'explorer les perceptions des élèves de 11e année des programmes liés à la prévention de la consommation d'alcool en milieu scolaire grâce à une analyse de données quantitatives et qualitatives recueillies au travers de questionnaires complétés par les étudiants (n = 452), et de groupes de discussion. Il a été constaté que les étudiants ressentent un besoin accrue d'information sur l'alcool et ses dangers au niveau de l'école secondaire. Ils ont identifié des contenus et des méthodes privilégiées de prestation pour améliorer l'engagement cognitif, comportemental et émotionnel. Différentes implications méta-politiques ont émergé. Sur un plan politique plus large, les ministères provinciaux devraient envisager une collecte systématique de données afin de surveiller la consommation d'alcool des jeunes et d'informer les programmes éducatifs et évaluer leur efficacité.

**Mots-clés:** Prévention de la consommation d'alcool chez les jeunes, perceptions des élèves, programmes scolaires de prévention sur l'alcool, information sur l'alcool

### **High School Students' Perceptions of Alcohol Prevention Programs**

Students' experiences, role models, and their environment form many of the ideas, attitudes, and expectations of youth regarding the use of alcohol (The National Alcohol Strategy Working Group, 2007). In frameworks, the Canadian Government has identified health promotion, prevention, and education programs for youth as priorities to reduce the harms associated with youth alcohol use (Health Canada, 2005; The National Alcohol Strategy Working Group, 2007). Moreover, these frameworks advocate a coordinated approach among agencies to meet the challenges associated with youth alcohol use.

Mass-media campaigns and school-based curricula are the main vehicles in use for conveying health and safety information regarding alcohol use to youth. Health Canada (2008) reported that despite preventative efforts, youth are using alcohol at hazardous rates and "had higher rates than the general population of reported lifetime harms in the past year as a result of their own drinking" (p. 5). Alcohol use tends to start in adolescence and is the most frequently used substance by Canadian youth (Health Canada, 2005). Motor vehicular accidents continue to be the number one cause of death in youth (Saskatchewan Government Insurance, 2008). Furthermore, the early use of alcohol is associated with development of dependence and of various types of harm related with its use (DeWit, Adlaf, Offord, & Ogborne, 2000; Poulin & Elliot, 2007).

A systematic review of the literature by McBride (2003) revealed a consensus that effective school drug education programs "should be based on the needs and be relevant to the young people who are likely to participate" in them (p. 734). Trends in, and consequences of, alcohol use can change quickly and dramatically during the teenage years due to the developmental significance of the pivotal adolescent years and because they are the targets of continuous marketing of psychoactive substances including alcohol. Tracking patterns of use is essential to keep the public and educators informed regarding use of alcohol and its consequences. Knowledge related to "the extent of alcohol use and the consequent harms can help greatly in determining the aims, timing and key messages for a school district" (Roberts, 2010, p. 10). Furthermore, information derived directly from students is central in providing useful information on prevalence rates. Three Canadian provinces/territories—Saskatchewan, Quebec, and Nunavut—lack data regarding the use of alcohol among youth (i.e., prevalence rates) and do not have a process for systematic collection and recording of data on a regular basis (Clark, 2009).

The purpose of this study was to explore the perceptions of alcohol prevention programming for Grade 11 students in selected high school settings and to ascertain the rates of alcohol use among these students. In order to fully understand the students' perceptions, this research was directed in an effort to identify the intentions of the policies, the processes of implementation, and the students' experiences of the programs. Guba's *Domains Model* (1985) provided a framework for examining students' perceptions of alcohol prevention programs. Guba (1985) stated that "the experience is heavily mediated by context (e.g., by the local culture; by the reactions and expectations of peers; by the motivation of the implementers and the size of their workload) and the actual availability of authorized resources" (p. 11). He went on to say that "there are at least three levels at which the term policy has meaning" (Guba, 1985, p.11): policy-in-intent, policy-in-implementation, and policy-in-experience. Furthermore, he said, "It is never policy that is tested but only some treatment or program undertaken in the name of the policy, together with the experience of that treatment or program by the target group and other affected stakeholders" (p. 11). The students, themselves, should be the main source of data

collection when exploring programs for alcohol prevention since they are the target group and "it is the young that are most knowledgeable about their own behavior" (World Health Organization, 1993, p. 1).

#### **Literature on Alcohol Prevention Programs**

The most widely used and evaluated school programs for drug prevention are universal curriculum-based programs (Roberts, 2010). Two major models currently used in universal programs focused on the prevention of alcohol use in youth are the *social influences model* and the *life skills model*. The *social influences* model views adolescent substance use as a result of influences such as substance use itself or from messages sent by family, peers, and the media (Flay & Petraitis, 1994). This model aims to create awareness, to develop skills that analyze and minimize these influences' effects on student use, and to identify when these influences are apparent. It also has implications for teaching strategies. However, this approach has not been found to contribute to program effectiveness (Cuijpers, 2002).

The *life skills model* emphasizes teaching of personal and social skills (Botvin, 2000). The skills are necessary for decision-making, problem-solving, resisting peer pressure, and media influences (cognitive); increasing personal control; and enhancing self-esteem, coping, and improved assertiveness. This approach is common and is claimed to be effective when used with specific drug-related situations.

Universal programs are unable to deliver a program that is effective for all and seem to be more effective with lower-risk students, mainly because they are unable to tailor their content to youth with different needs or those at higher risk (Gottfredson & Wilson, 2003). It has been concluded that the best of universal curriculum-based programs are modestly successful, benefiting those who are the least at risk and with effects eroding after a year or two and (Gottfredson & Wilson, 2003; McBride, 2003). Studies have identified short-term effects of interactive programs directed at middle/junior high school students more than other levels. More specifically, the effects include "delaying or preventing onset of use, hazardous use and harmful consequences for some of the students exposed to the programming" (Roberts, 2010, p. 28).

A recent study evaluated European adolescents' patterns of alcohol use after a new curriculum-based program, focused on the social influences model (Faggiano et al., 2008). This trial once again reiterated the above summary, and reported mild effects of fewer episodes of drunkenness and frequent drunkenness three months after the intervention. Another recent trial based in the US reported iatrogenic effects of a program delivered (Sloboda, Stephens, Stephens, Grey, Teasedale, Hawthorne, Williams, & Marquette, 2009). Use of evidence-based school drug education programs is not common in the U.S.A, and those that are used are frequently "not being delivered as intended" (Roberts, 2010, p. 29). The situation in Canada on this matter is unknown because of the absence of evaluations of these programs. Furthermore, there is a notable lack of literature in the area of students' perceptions of alcohol prevention programs at the high school level.

# Methodology

To understand the context in which the students were experiencing the program, teachers, counselors, and vice-principals were interviewed. In order to understand the policy-in-intent, vice-principals were interviewed. Teachers and counselors were interviewed in order to obtain

perspectives on policy-in-implementation. Through the use of surveys and focus groups with Grade 11 students, policy-in-experience relating to these programs was brought to description.

For this study, I used mixed methods to depict the students' perceptions of programs related to the prevention of alcohol use. Creswell and Garrett (2008) define mixed methods as "an approach to inquiry in which the researcher links, in some way (e.g., merges, integrates, connects), both quantitative and qualitative data to provide a unified understanding of a research problem" (p. 322). One form of data could become *less dominant* in a *dominant* design based on the other form of data and can be done concurrently, in parallel, or sequentially so that data from one source could enhance, elaborate, or complement data from the other source (Creswell, 2002).

Bryman (2006) identified numerous rationales for using mixed methods. In this research study, quantitative methods were initially employed in order to establish the *context* of the participants, and the qualitative methods, through the use of focus groups, were used to gain in-depth understanding of the perceptions of the participants. Bryman classified this rationale as *completeness*, which "refers to the notion that the researcher can bring together a more comprehensive account of the area of enquiry in which he or she is interested if both quantitative and qualitative research are employed" (p. 106) to contribute to a more comprehensive understanding of the results. The data collection was conducted in stages whereby the quantitative data (student questionnaires) were administered prior to the student focus groups in each of the schools.

#### **Demographics**

A distinguishing feature and key strength of qualitative research is that data are collected through "contact with people in settings where subjects normally spend their time" (Bogdan & Biklen, 2007). This study took place in the natural setting, the school. To capture multiple perspectives, schools from two school systems in two Saskatchewan cities were used.

The participating schools' enrollment ranged from 250 to 1500 and included Grade 9-12 students. Their populations included youth from various cultures and the students who attended these schools were from the communities themselves except for one school that offered special programs. These students traveled to attend this school but were from the city itself. Counselors and addictions workers, who visited the school once a week, staffed the student resource offices. Two of the schools were situated in affluent neighborhoods. The third school was situated in the core neighborhood, and the fourth school was located in middle-to-higher income neighborhood. One of the schools had experienced a recent influx of immigrant families, and provided a variety of supports and special needs students formed an integral part of this population. Yet another one of the schools offered programs to mainstream, honors, and advanced placement students, modified, alternative, French immersion, functional integrated, and English as a second language.

The main participants of this study were Grade 11 students. Purposeful sampling was used in that samples were chosen that were "rich in needed information" (Patton, 1990, p. 288). Creswell (2007) explained that a purposeful sample "will intentionally sample a group of people that can best inform the researcher about the research problem under examination" (p. 118). Grade 11 level students were chosen because all curriculum content related to the prevention of alcohol by youth was completed by the end of tenth grade.

The student participants (n=452) were equally distributed between males and females. Of these students, the largest proportion (50%) was 17 years of age, and 45% were 16 years of age. There were three criteria for students to participate: (a) enrollment in at least one Grade 11 class,

(b) presence during the time the study was conducted, and (c) agreement to participate in the research. The overall student response rate was 61%. Eight teachers and two vice-principals were interviewed from the participating schools.

# Analysis

Data collection and analysis are presented below according to the three levels of Guba's *Domains Model* (1985). The term 'policy' has meaning at the policy-in-intent, policy-in-implementation, and policy-in-experience level.

## **Policy-in-intent**

The purpose of this phase was to describe the policy-in-intent. According to Guba (1985), "policy-in-intent is the domain of policy framers" (p. 11). The administrators were responsible for the development and enforcement of alcohol prevention policy in these schools; consequently, they were the appropriate subjects to collect data for the policy-in-intent phase. The school identities were held in strict confidence by assigning a pseudonym to each of the four schools and removing identifying information from the data.

Data collection, in this phase, included an overview of programs and semi-structured personal interviews. The questions were developed in order to answer the central question of the study, were open-ended where the participants answered freely, and were sent in advance. Twelve interview questions focused on aspects of alcohol prevention such as: school policy, program components, promotional activities, strengths and challenges, as well as indicators and processes used for assessment and program development. These questions were refined through pilot testing (Creswell, 2007) with vice-principals who were not participants in the study to determine relevance and extent to which they could be clearly understood and answered in the allotted time. Individuals were asked to respond to each question and add relevant questions. Once changes were made to clarify the questions, they were utilized for collecting data. Written material and policy documents from the selected school districts that addressed policy on the prevention of alcohol use were collected and included as part of the data on policy-in-intent.

Once the transcriptions were prepared and the respondents reviewed and revised the transcriptions, I listened to each of the recordings of the interviews for accuracy and as an initial form of analysis (Creswell, 2007). After reading the transcripts, I started to interpret and arrange the data systematically into categories rather than themes, which emerged from my research questions. I formally analyzed the data using the data analysis spiral (Creswell, 2007). Specifically, the following procedures employed were: (a) reading and memo-ing, (b) describing, classifying and interpreting, and (c) representing and coding using qualitative software (NVivo). During the process of describing, classifying, and interpreting, "qualitative researchers develop codes or categories and sort text" into categories (Creswell, p. 152). Although I did not have prefigured codes, many categories emerged from the research and interview questions that Creswell (2007) discussed as a popular procedure; however, he cautioned researchers "to be open to additional codes" (p. 152). Additional codes were added that emerged from the data and did not apply to the categories already formed.

#### **Policy-in-implementation**

The purpose of this phase was to collect data about the policy-in-implementation. As Guba (1985) pointed out, "policy-in-implementation is the domain of policy implementers, the agents who carry out the particular programs or treatments undertaken in the name of the policy"

(p. 11). The appropriate source of data collection for this purpose was the teachers in the participating schools who were responsible in delivering the programs related to alcohol prevention. Interviews were done in two schools in two different cities. Three interviews were completed in one school and five from another school and city.

Data collection in this stage included semi-structured interviews. Once again, teachers and counselors received the pilot-tested list of questions in advance. Fifteen questions focused on aspects of alcohol prevention programming including professional development, approaches used, program efficacy, information, skills, and delivery methods. The interviews were taped, transcribed, returned to the respondents for verification of accuracy, and analyzed using the data analysis spiral discussed earlier (Creswell, 2007) and included as content for the second phase of the study, policy-in-implementation.

#### **Policy-in-experience**

The purpose of this phase was to explore students' experiences of alcohol prevention programs. Guba (1985) stated that "policy-in-experience is the domain of putative policy beneficiaries" (p. 11). Students who met the inclusion criteria in four schools completed a questionnaire and four student focus groups were conducted to further explore students' perceptions of alcohol prevention programs.

Questionnaires were used to provide data on generalizability, patterns, and to tap the surface of meaning (Creswell, 2002, p. 396). The Youth Alcohol Prevention Questionnaire included questions on demographical information, core indicators that focused on prevalence and patterns of alcohol use, the harms experienced from alcohol use, and students' self-efficacy. Descriptive statistics were analyzed using Statistical Package for Social Science (SPSS). The data were organized by aggregating the data where frequencies and percentages were used to assess general trends.

The qualitative data collected from the focus groups were audio-taped, transcribed into electronic format, and printed as hard copies. The focus group data were analyzed using the data analysis spiral (Creswell, 2007) explained earlier in the policy-in-intent phase. In the final phase of the process, I reconsidered the content in each of the categories and began to interpret the data as a whole, synthesizing data from all sources (Creswell, 2007).

## Findings

In this section some of the major findings of the study are presented and discussed as they relate to each of the three policy levels in turn.

#### **Policy-in-intent**

Through the mandated curriculum, alcohol prevention was covered in the Wellness or Health curriculum. The Wellness program focused on information and experiences that encouraged a balanced approach in four main dimensions of wellness. Alcohol prevention was included under the physical dimension of Wellness. Overall the approach taken in these schools was of a zero-tolerance nature when it came to alcohol use on school property or in school related events.

The data revealed that these vice-principals did not perceive an increase in events related to alcohol use in the schools over the previous few years; however, they did acknowledge that the students were consuming alcohol after school hours. These participants had a general awareness of where alcohol education fit within the curriculum in their schools. Areas they

perceived to be done well in these schools included the presence of addictions counselors in the schools and the general openness around the prevention of alcohol use in schools. Perceptions of areas that were identified that needed to be improved included increasing active parental participation, school-parent-student information, and increasing information in an ongoing manner. These vice principal's main roles in alcohol prevention were being involved when an issue arose around student alcohol use within the school or at school activities. A punitive approach was used once the students had been involved with alcohol; suspension was mandatory, though the administrators stressed that understanding the situation was important and using the experience as a learning opportunity was critical. A system to track the level of student alcohol use —for measuring the effectiveness of the alcohol-related programs or for identifying issues that students would like included in alcohol education—was lacking in these schools.

#### **Policy-in-implementation**

The minimum level of experience that these teachers and counselors had in teaching content related to alcohol prevention was eight years. If these teachers felt that they needed inservice related to student alcohol prevention it appeared that it was their responsibility to identify and locate information. Although resources had not been made available to use in classroom instruction, information about resources related to addiction services were available. Some of the participants were not aware of what material was covered in various subject areas in relation to alcohol prevention or in relation to what students had already been presented. A general theme that emerged from the data was that time was an issue. Specifically, there was not enough time delegated in the curriculum in alcohol prevention to try new things or to practice skills training. The content was dealt with in a "couple of hours over two days." Overall, the practice of refusal skills was done once in one of these schools and discussed in the other. Various messages were being conveyed through the prevention programs in these schools, which included zero-tolerance, use in moderation and harm reduction; these teachers and counselors emphasized the importance of the family in prevention and felt that the message being presented to these students needed to be consistent at home and in the community to be effective. The curricular content was perceived as a key component of alcohol prevention programs; however, the accuracy of the information and the method of presenting were identified as essential in program efficacy.

### **Policy-in-experience**

Central considerations in the policy-in-experience phase were the students' perceptions of programs and policies related to the prevention of alcohol use in their school and the students' perceptions of their behaviors in relation to their use of alcohol. Although these two elements were the main foci of investigation, the students' perceptions of their behaviors in relation to their consumption of alcohol are used in this article within the emergent themes to provide a perspective of the local youth culture of alcohol consumption in relation to program efficacy. The following categories emerged from the data.

**Relevant information based on student current use.** From the questionnaire, just over half of the Grade 11 students in the current study reported that they recalled one or two classes about alcohol in general and 33% did not recall taking any classes pertaining to alcohol education in high school. Although the exact quantity necessary for alcohol prevention programs to be effective is unknown, content based on the current trends of alcohol use is essential. By Grade 11, the majority (86%) of the students in this study reported drinking alcohol. Furthermore, 40% of students reported drinking greater than five drinks on a typical day and

46% reported drinking greater than five drinks at least once in the previous four weeks. Bandura (2004) noted that, although programs based on knowledge alone are not considered to be effective, students need accurate information in order to make decisions regarding their behaviors.

Many students in the current study did not recall information on alcohol and this brings to mind a number of questions as to why this was so. Was the students' inability to recall information due to a lack of information presented (amount), the lack of relevance of the information (content), or the delivery method employed in the teaching of it? Although many of the students (64%) in this study reported that there was enough information on alcohol and that it was informative, only 48% of students reported the material was relevant and only 47% reported that the classes were effective.

Roberts (2010) suggested that the efficacy of drug and alcohol educational programs might be associated with developmental appropriateness and the method of delivery. Less than half of the students (48%) recalled the presentations being delivered in an interesting manner. Focus group participants in the current study not only suggested that more information needed to be focused at the Grade 9 level but also identified specific content to include at this level and the method of delivery along with rationale. With regard to this point, one focus group participant stated, "In Grades 7 and 8 no one really cares, oh it's never gonna happen and then in Grade 9, they say I'll never do it, and bam, everyone who didn't drink, drinks." These data support McBride's (2003) basic recommendation to base the timing of programming on local data on student usage. McBride (2003) utilized Canadian data and suggested focusing more time and effort on middle level of education in Saskatchewan (Grade 7-8) when most Canadian youth reported first drinking; however, the student participants in the current study suggested alcohol education material needs to be focused at the Grade 9 level. In summary, students' comments were very much in agreement with what McBride (2003) suggested, which was to provide data at three stages: prior to use, at initial exposure, and at a final stage where different risks are posed. These student focus group participants substantiated the survey findings, where the majority of students reported they initiated drinking in Grade 8 or 9. Student participants in this study also suggested increasing information on alcohol in Grade 11 when the use of alcohol is more prevalent, when students are driving, and when the context is changing. One participant suggested Grade 9 students are still not driving and "I guess you learn about it but you don't really apply it ... by the time you actually do it you forget it." Interesting to note was that 24% of students reported driving within two hours of drinking at least once in the previous 12 months and 43% reported being passengers with a driver who had been drinking at least once in the previous 12 months.

**Content to engage students.** Various harm reduction messages were apparent to focus group participants in the approaches taken within the schools towards the prevention of alcohol use. The participants also recalled hearing messages such as, "Abstain from using alcohol and when you become of age, use alcohol in moderation." They made suggestions to improve program efficacy that included teaching methods and content. Specific to content, participants reported that scare tactics don't work. For example, one student went on to say, "Give accurate information—don't tell kids that if they drink they are going to become an alcoholic" because students know people who drink occasionally and have not become alcoholics. Participants recommended appropriate content for Grade 9 students should include resisting peer pressure and talking to Grade 9 students to inform them that it is okay not to drink. One participant stated, "You usually learn to do that yourself…they have to find reasons in their self why they would not drink." The rationale the participants provided for the timing of this information was

that they recalled that they started drinking at this age. These proposed suggestions once again support McBride's (2003) three-stage approach based on students' behavioral development and patterns of use, and suggests the importance of local prevalence data rather than national data.

As there was no information on alcohol prevention focused at the upper high school levels (Grades 11 and 12), participants recommended increasing information at this level. Content that was suggested for the upper years included not only how to make decisions on whether to drink, but also harm reduction messages such as information focusing on drinking and driving and legal issues that arise. In the focus groups, student participants reported that along with accurate information, they would like to hear about "how people did not give into peer pressure" including "the bonuses that they got out of not drinking" and most participants agreed the most effective approach was "when the actual person comes to talk to you, about how it affected their life, then it really hits home because they're like an everyday person." Furthermore, they recommended that the above stated messages be presented focusing solely on drinking and not included with information on other psycho-active agents because alcohol was viewed as more socially acceptable and not as much of a problem as hard drugs, "so in comparison to drugs it's not as bad." Therefore, information and skills training need to be specific to alcohol because if "you pile alcohol, drugs, heroine in one presentation, alcohol sort of gets lost... alcohol is overshadowed."

Although student participants reported information was presented to them with examples of what to say if they wanted to say "no" to drinking, students suggested that it was necessary to include information on resisting peer pressure in different situations along with refusal skills. More than one quarter of the students (34%) in the current study did not recall information on refusal skills, decision-making, or peer pressure related to alcohol use. Over half of the students reported that they agreed or somewhat agreed that there was an appropriate amount of information on how to resist using alcohol.

There is controversy about the effectiveness of skills training (Paglia & Room, 1999), and there is also "limited information on when to introduce these types and aims and messages" (Roberts, 2010, p. 28). According to Roberts (2010) content and timing is

best made on the basis of the consumption patterns in a region – the most relevant information being the prevalence of hazardous patterns (e.g., binge drinking, drunkenness, use of more than one substance, and use in risky situations such as before driving); however, the prevalence of past year substance is also relevant. (p. 29)

Roberts (2010) went on to say that based on local data, each school board and health district need to make decisions when to "focus on reducing hazardous patterns of use" (p. 29). The student focus group participants identified the ideal *time* and *content* that they felt needed to be presented, which was consistent to when the students reported initiating drinking and when risks of drinking increased. Among those who had reported experiences with alcohol, the highest percentage had their first experience in Grade 8 or 9 (22% and 21% respectively).

The participants also identified that they were unsure of what teaching approaches would be effective for those students already drinking because they had already made the decision to drink. Student participants who did acknowledge drinking identified certain approaches that had been used, which they found helpful to make them *stop and think* before taking part in risky behaviors, such as drinking and driving. One participant suggested writing as a method "that they should make you write an essay on what would happen if you got in an accident, and make you really think about how it would change your life" and another student agreed "because then you actually bring it close to home."

Although there is much debate about what seems to be the best instructional approach for each given set of circumstances, the participants in the current research suggested a very logical approach. Along with accurate information, refusal skills need to be practiced in Grade 9. In addition to this, more education needs to be implemented in Grades 10, 11, and 12 along with practicing resistance skills. Consistent with the research, student participants stressed that skills training needed to be specific to alcohol-related situations (Botvin, 2000). Controversy exists regarding resistance skills training that are based on the notion that youth choose to drink for a number of reasons; that they are not necessarily pressured by their peers to drink but instead choose their peers based on commonalities. One group of students in the current study agreed that they did feel a strong sense of pressure because situations where people drink are hard to avoid, most people drink, and "kids feel pressure." They went on to say:

Although I don't feel direct pressure to drink. There is no one who is specifically saying, here drink this, the thing is you go to a party and like everyone around you is drinking. There are 14 people drinking, and you are the only one not drinking and indirectly it affects you and makes you want to drink.

These participants recommended teaching not only about how to resist peer pressure, but to draw on the positives of not drinking and have people share personal stories on how this was working in their lives. Along with content the students strongly suggested methods of delivery to increase effectiveness of programs.

**Engaging methods of delivery: The value of interactive approaches.** Engagement includes "attitudes and behaviours that can be affected by teachers and parents, and shaped by school policy and practice" (Willms, 2003, p. 9). The student suggestions identified content, timing of information and methods to increase cognitive, behavioral, and emotional engagement (Fredericks, Blumenfeld, & Paris, 2004). *Cognitive* engagement can be increased by using age-appropriate information based on current prevalence data; *behavioral* engagement can be enhanced using interactive strategies, and *emotional* engagement can be improved by the use of personal stories that students have identified relevant to them.

Tobler and Stratton (1997) have identified that interactive programs have had an effect that was at a minimum twice as effective as non-interactive programs. Furthermore, "the exchange of ideas and experiences between students, the opportunity to practice, acts as a catalyst for change rather than any critical content feature of the program" (Tobler, Lessare, Marshall, Ochsohorn, & Roona, 1999). .Students in the current study concurred with the sentiments of the statement: "When you are in Grade 9, you look up to the Grade 12's. They should talk to Grade 9's about alcohol stuff, and it's okay if you don't want to. That would have more influence than any of the teachers."

Students reported in the focus groups that the information based on alcohol prevention was based on lecture type approaches that they stated were ineffective in keeping their attention and these comments were substantiated by the survey in which just under half of the students reported that the material was presented in an interesting manner. Along with these comments, all groups consistently reported that hearing personal stories would be highly effective. These personal stories were threaded with many messages that were relevant to participants. In particular, some narrative themes that resonated with the participants were those who could speak to the benefits of abstinence from alcohol, those addicted, families of addicts, and victims of drunk drivers. Dissemination of information was reported to be important with the manner or tone of presentations also significant. Students suggested, "Don't be bossy." Moreover, they noted that even content such as statistics can be presented in an engaging manner by making it personal.

Bandura (1986) described four factors that shape efficacy as mastery experience, vicarious experience, social persuasion and affective state. If students are given the opportunity to observe skills modeled by others (vicarious experience), receive feedback and encouragement from others (social persuasion), and are given the opportunity to practice skills (mastery experience) in an atmosphere that decreases anxiety but increases excitement (affective state), would this increase self-efficacy? If this were the case, then the interactive strategies appear to be ways to increase self-efficacy. Bandura (1986) stated that learning how to deal successfully with potentially dangerous situations successfully expands and strengthens an adolescent's sense of efficacy. However, strengthening self-efficacy is best accomplished by successfully being guided and mastering skills, which in turn provides the knowledge and skills needed to perform these skills in risky situations (Bandura, 1986). Successful management of problem situations instills strong belief in one's capability or self-efficacy.

Schooling includes many potential influences on adolescents' self-efficacy (Schunk & Meece, 2006). These influences include how instruction is structured. Instruction affects the ease or difficulty of learning. Methods such as interactive instruction have been identified as significant influences in the success of alcohol prevention programs (Tobler et al., 1999). On the questionnaires, students in the current study reported on their confidence in different contexts. More students reported that they were highly certain that they could resist the urge to drink in negative situations—where things were going badly or during an argument with a close friend—than in positive situations such as celebrating or situations in which they often drank. This might suggest that students would benefit by practicing skills in positive situations to enhance their confidence in resisting the urge to drink in these settings.

The students reported on their confidence levels in being able to get friends' support, parents' support, or teachers' support if they chose not to drink. A greater proportion of students reported that they were highly confident in soliciting a friend's support in their choice not to drink than parents' or teachers' support (65%, 59%, and 47% respectively). Fifty-two percent reported that they were highly confident that they would be able to get professional help if needed; however, 22% reported they did not find resources within the school when needed. According to Bandura (1997), "adolescents who feel efficacious to withstand peer pressure discuss with their parents the predicaments they face" (Bandura, 2006, p. 25). In light of these results, one might conclude that parents might need to initiate discussions with students.

**Messages in alcohol prevention.** Adolescent development takes place in a variety of social contexts but mainly in the home, in school, or through peer networks. The approaches taken within the schools towards the prevention of alcohol use included abstinence, use of alcohol in moderation, and harm-reduction. In tandem with these universal program approaches, the school policies consisted of a zero-tolerance approach. Also interesting is that one student focus group reported not hearing much about alcohol use in school except when it came up in rules such as no alcohol being allowed at football games.

The messages that students reported hearing regarding alcohol use differed between the school, home, and media. Based on the current research, students were more likely to hear from the school that it was not okay to use alcohol (52%) than in the home from their parents (25%) or from the media (10%). The largest proportion of the students reported that they received mixed messages from their parents (43%) and many of the students felt that their friends (68%) felt it

was okay to use as well; however, the largest proportion of students reported that parental disapproval was the most important reason for not using alcohol. The information gathered from students on the questionnaire were consistent with the data gathered in the focus groups. Within all of the focus groups, the students reported that if they were on teams they should not drink.

Consistent with the literature and questionnaire, a student reported "even if the school tells you that it is no good to drink, the family and friends need to tell you the same thing in order to really make you feel confident." According to the Primary Prevention Attitude and Use Report (Education Council Foundation, 2006), parents need to be sending a no-use message to students and peers need to give one another courage to not use alcohol. Bandura (2006) agreed that peers are an influential force but do not take the place or role of family; however, he also stated that the processes by which youth weigh and combine the source and information are not well understood. Understanding that all messages that students are receiving play a role in prevention, it is important to note that "schools exist within a broader community and can influence students beyond the walls of the school building" (Nova Scotia Department of Health, 2002, p. 8).

**Social supports.** On the questionnaire, a significant number of students (22%) reported not being able to find support in school when needed. Many of the focus group participants in the current study reported they were aware that there was an addictions counselor in the schools; however, they were unaware of the processes available to refer themselves to the counselor. Schools have an opportunity to help students by providing students and staff with a strategy for early intervention and a referral process for counseling and treatment services (Nova Scotia Department of Health, 2002). Clearly identifying a process for students to be able to access services and developing a strategy for staff to refer students enhances the potential for early intervention and help-seeking by students.

### Conclusion

In light of the literature and the results of this research, modifications for educational practice and programs need to be considered when working with youth on alcohol prevention. Significant findings from this research included students' views about the need for increased information on alcohol education at the high school level. Furthermore, the students made the point clearly that information should be provided at a stage in development that is relevant to them. The students identified content and preferred methods of delivery that they perceived would improve engagement. Students are using alcohol in various amounts, and their needs differ, thus ongoing collection of local prevalence data and student input appear to be paramount to guiding and improving student engagement, as well as evaluating the efficacy of alcohol prevention in youth.

Several meta-policy implications arose from the study. Educators, board members, and policy-makers need to review how policy is articulated, evaluated, and how student voice, parental voice, and professional voice inform policy intelligence. The development of meta-policy would provide a process through which to include input from stakeholders to ensure that policies are transparent, relevant, and undergo ongoing evaluation. Explicitly stated policy that includes educational strategy congruent with its policy goals to guide school programming would contribute to consistency at all levels: school, home, and community. At a broader policy level, provincial ministries may consider systematic collection of data to monitor youth alcohol use, to inform educational programs, and to evaluate their efficacy.

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