Drug education: A deceptively simple answer to a complex question

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This paper describes a quantitative and qualitative evaluation of a drug education programme in schools. This description leads to discussion of the many influences beyond the classroom that severely challenge drug education. A case is then advanced for drug education to be seen as a primary preventative measure in a framework of graduated responses that are related to students' needs and circumstances.

Complex human behavioural phenomena are rarely amenable to simple solutions. Substance use by students is a complex issue, and not least because of the pervasive use of medicinal and recreational drugs in our society. Drug education in schools is a response to concerns about students and drugs. As a consequence of a single session or, more often, a series of classes it is hoped that young people will abstain from use or minimize the harm from drug use. Research indicates that drug education can reduce substance use but the gains are modest (Dusenbury & Falco, 1995; Midford, 2000; Tobler & Stratton, 1997).

This paper describes a quantitative and qualitative evaluation of a drug education programme in schools. This description leads to discussion of the many influences beyond the classroom that severely challenge drug education. A case is then advanced for drug education to be seen as a primary preventative measure in a framework of graduated responses that are related to students' needs and circumstances.

Drug education evaluation

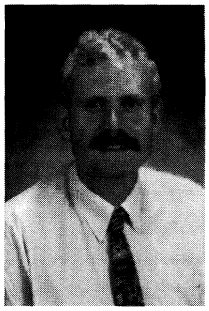
In 1997 the Drug Education Development Programme (DEDP) was initiated by Government to reduce the number of drug-related suspensions and to assist schools to implement drug education and intervention programmes consistent with the new health and physical education curriculum. The Ministry of Education contracted five organizations to provide programmes and undertake research. The five organizations were: the Alcohol and Public Health Research Unit (APHRU) of The University of Auckland, the Foundation for Alcohol and Drug Education (FADE), Drug Abuse Resistance Education (DARE), Getting Alternative Information Now (GAIN), and Specialist Education Services (SES).

SES was asked to provide information on drug use, and personal and social factors amongst year 7 and 8 students in a multicultural and low socioeconomic area, and to investigate the impact and effectiveness of drug education for the same group of young people. SES was also contracted to develop guidelines for the identification of students who are at risk of substance abuse and other problem behaviours. This paper is restricted to the drug education evaluation.

Between June and September 1998, 450 year 7 and 8 students attending decile 1 and 2 schools received a composite education programme from class teachers. The education programme was made up of the personal and social skills programme *Reaching Out,* and three supplementary lessons that were developed by SES.

Reaching Out is designed for intermediate aged children and its aim is "to help students develop the understanding, skills and attitudes that will enable them to respond in more positive ways to situations which confront them in their everyday lives" (Child Development Foundation, p.1). To achieve this end, young people are assisted to identify their strengths, understand the roles of groups, recognise pressures and influences, appreciate the options that are available to them, engage in problem solving and decision making, and know who and how to ask for help.

Reaching Out has many of the features found in affective and skills-based drug education. However, as it is not a dedicated drug education programme, three extra lessons were written to complement the



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standard sessions. The first of the supplementary lessons asked students to consider positive and maladaptive responses to unhappiness, as low moods may make people susceptible to substance abuse. The second lesson provided information on drugs and the personal and social consequences associated with the use of alcohol, tobacco, and cannabis. In the last lesson, students were given statistics about drug use and made aware of the views of their age-mates about use of drugs (Stanley, Rodeka, & Eden, 1999, Appendix D, Supplementary Drug Education Lessons.). The supplementary lessons were integrated into the *Reaching Out* programme and employed similar teaching techniques such as drawing, discussions, group work, and continuums.

All of the 450 young people who received the combined drug education programme were pretested and posttested using a 56 item questionnaire, as were another 140 local children who were not exposed to the programme and who constituted the comparison group. The questionnaire was designed as both a general survey of drug use and related variables and as a before and after assessment of the drug education programme. There were 34 questionnaire items that could be affected by the programme and these questions are provided in Table 1.

Questionnaire items

Substance use and reasons

1. In the last month how many cigarettes (if any) have you smoked?
2. In the last month how many times (if any) have you drunk alcohol?
3. In the last month how many times (if any) have you used marijuana?
4. Scenario related. If you were Amber and chose not to smoke, what would be the main reason?
5. If you were Amber and took a smoke, what would be the main reason?
6. Scenario related. If you were Lealofi and chose not to smoke marijuana, what would be the main reason?
7. If you were Lealofi and chose to smoke marijuana, what would be the main reason?

Drug knowledge

8. Which of these sentences about drugs is true?
9. What is the best description of what drugs are?
10. Which one of these can happen with marijuana?
11. Which of these can happen with tobacco?

Drug attitudes

12. It is okay for young people your age to smoke cigarettes.
13. It is okay for young people your age to drink alcohol.
14. It is okay for young people your age to use marijuana.
15. It is okay for young people your age to sniff glue.
16. What do you think is the view of most other young people your age?

Drug advertising

17. Fact from opinion. If you want good times and good mates you will choose a good beer.
18. Do you agree or disagree with this sentence? Advertisements like this always tell the truth.

School

19. How much of the time do you feel good about school?

Personal and social skills

20. How easy or hard is it for you to tell other people what you are good at?
21. How easy or hard is it for you to say what makes you a special or unique person?
22. How easy or hard do you find it to describe what you feel?
23. How sure or unsure are you about who to go to for help with personal problems?
24. How easy or hard is it for you to ask for help with personal problems?
25. Who would you be most likely to discuss any personal problems with?
26. Problem solving scenario. The advice that Tali s cousin gives him is good advice because
27. If Tali decided to deal with the problem by stopping going to school, this would be
28. What do you think is usually the best way to make a decision?
29. How much of the time do you feel unwanted by other children your age?
30. If you are a girl, how easy or hard is it to talk with most boys your age? If you are a boy, how easy or hard is it to talk with most girls your age?
31. How good (or skilled) are you at dealing with bad comments from other children your age?
32. How much of the time do you handle conflict by hitting, kicking, or other physical violence?
33. Peer pressure scenario. How did Rangi handle this situation?
34. Imagine you are being pressured by your friends to do something you don t want to do. How likely or unlikely is it that you will say no ?

Table 1 - Questionnaire items by categories

The questionnaire was modelled on the Listening Comprehension Test of the Progressive Achievement Test series. It was made up of short scenarios, followed by multiple choice questions and it was read to students by class teachers. This format was followed because of its familiarity to students and to avoid problems occasioned by reading difficulties. Table 2 contains a scenario and related item from the questionnaire.

Results from the first administration of the questionnaire were compared with the responses from the second administration for both the pupils who had received the drug education programme and for those who had not. Most importantly, the composite education programme (*Reaching Out* and the supplementary lessons) was found to be capable of reducing tobacco and alcohol consumption by students in the previous month. There were small percentage changes (3.2% for tobacco and 0.5% improvement for alcohol) that contrasted with increased use amongst the comparison children. There were other slight improvements for the treatment group, associated with obtaining help with personal problems (questionnaire items 23 and 24), for ease in describing feelings, and in the appreciation of consequences in problem solving (item 27). They also had relatively better understanding of the nature of drugs (items 8 and 9) and the effects of tobacco use.

The drug education programme did not have clear positive effects on the following questionnaire items: marijuana use (0.7% increase in use in the last month for the treatment group), knowledge of the effects of marijuana use, constructive responses to peer pressure (item 33) and saying "no" to others, aspects of problem-solving and decision-making (items 26 and 28), understanding advertising (item 17 and 18), ease in telling other people what you are good at and what makes you a unique person, feeling good about school, ease in talking to the opposite sex, feeling unwanted by other children, dealing with put-downs, and responding to conflict with physical violence.

John, Tino, Patrick and Rangi are staying the night at John's house on his birthday. They stay up talking and laughing till it is really late. The rest of John's family have gone to bed. John starts to show off about drinking alcohol. He says that his Dad has some cans of beer in a fridge in the garage. The others follow him into the garage. John gets a can from the fridge, opens it and takes a drink. He then passes it to Tino and Patrick and they have a mouthful each. It is now Rangi's turn but he stands back. "No thanks, I don't like the taste. I'm kind of hungry though. Got any food in the house?"

How did Rangi handle this situation? Pick the BEST answer.

A	well	– because the way he said "no" probably would be okay with his friends
B	well	– because he really wanted something to eat
C	not well	– because he probably disappointed his friends by not drinking
D	not well	– because he could have just pretended to drink the beer

Table 2 – Sample scenario

The drug attitude items (12 – 15) showed some clear trends on the second administration of the questionnaire. Across both the programme group and the comparison group more students strongly disagreed with young people smoking cigarettes, drinking alcohol, using marijuana and sniffing glue. However, on every item, the comparison children evidenced a greater increase in opposition to these practices. By contrast, the question about what others think about drug use (item 16) may have revealed a softening of attitudes in the programme schools, with more participants on the second occasion choosing the alternative that it was acceptable for young people to use some drugs but not others.

There were also some changes in why students chose not to smoke tobacco and marijuana (items 4 and 6). Concerns about health problems became more prominent for the programme pupils but not for the comparison group. The reasons *for* smoking both substances changed in the comparison school with generally larger increases in wanting to have fun and wanting to be like friends. It is possibly significant that friends also became more popular as the people to discuss personal problems with for this group (item 25).

In addition to the pretesting and posttesting, some qualitative data were gathered from teachers and pupils who participated in the drug education programme. Teachers were generally positive about *Reaching Out* and the supplementary lessons. They praised the programme's flexibility and said it was easily integrated into other subject areas. It was probably best to teach *Reaching Out* early in the year when the class is getting to know one another. There was also some feeling that this personal and social skills package reproduces what is already being taught in schools, and that drug education is overdone.

> The kids have had it coming out their ears lately. The other week we had the policeman from DARE in, then last week we had FADE and this week you and *Reaching Out*, and earlier this year we had the Life Education caravan.

The teachers believed that the drug education programme had the potential to produce changes in behaviour.

I know with my quieter girls that they are possibly standing up for themselves more. Even today, I saw one of the girls get shoved by one of the boys, and she just basically stood her ground and just stared him out, whereas before she would have just slunk off.

I have seen them do things from the programme, like they say, 'I have to go', when they see a bad situation developing.

Perhaps for the middle group who could go either way, the programme makes a difference – just thinking about the kids in my class... it may have been enough or at least a reinforcement for them not to start smoking or taking drugs.

Some of the students provided written evaluations of the *Reaching Out* programme and the supplementary lessons.

Our class learnt a lot from the *Reaching Out* programme. It has been really exciting and fun. I liked doing the role plays and watching the videos. Now I know how to stand up for myself and how to avoid a bad situation. I was really shocked when I heard how smoking can really affect your body and what other drugs can do.

All of last term and the starting of this term, I learnt how to deal with problems of my own and of everyone elses. I'm glad that I learnt all the things that I needed to. The most important theme that I learnt was how to handle pressures, and what I learnt about smoking, alcohol, and taking drugs. I'm very happy that I learnt about smoking because if I had started I wouldn't of known the consequences.

During this year I learnt a lot. There are many people who I trusted in but I only just realized they weren't worth trusting. I had many problems that were keeping me down, like I was being told who to be. It was like I had friends who didn't know the real me. But now I can throw those things aside and just be myself. The *Reaching Out* programme really did help me. I knew never to take drugs and smoke, but I never knew why. Now I do. It can kill you.

This drug education evaluation is subject to a number of qualifications and possible criticisms. Firstly, it is not known how thoroughly or effectively the programme was taught. Teachers are encouraged to use *Reaching Out* flexibly. A list of obligatory lessons was provided but there was probably considerable variability in programme content and delivery. Secondly, some of the skills and topics of *Reaching Out* are generally taught in schools, and a number of the children were exposed to other drug education. A third matter was that there were not equivalent numbers of students in the programme and comparison groups. Finally, it may not be considered appropriate to attempt to gauge attitude and behaviour change among young people with a questionnaire.

These important cautions and qualifications do not sideline a serious attempt to consider the impact and effects of a drug education programme with a sizeable sample. The most important finding is that the programme (*Reaching Out* and the supplementary lessons) appears to be able to curtail tobacco and alcohol use. However, the gains are small, and they may reflect little more than changes in experimental use. In the achievement of small, positive gains this drug package probably resembles other school-based programmes which effect modest reductions in the use of drugs (Dusenbury & Falco, 1995; Midford, 2000; Tobler & Stratton, 1997).

Drug education in context

It is probable that small gains are the best that can be expected from drug education in schools. It is unrealistic to hope for more when we consider the array of influences that students are exposed to. Ecological theory (Bronfenbrenner, 1979) provides a useful breadth of perspective here. Children and youth occupy multiple environments (e.g. home, school, peer group, neighbourhood) and each of these settings contests for behavioural control. As well, young people are influenced by circumstances that they may not actually be a part of, such as a parent's gang membership. Further, there are prevailing social attitudes and ideologies regarding drug use and these can be contradictory and confused. In the light of this collection of influences, it is perhaps naïve to think that we can change the out of school behaviour of large numbers of children and youth by talking to them in classrooms or having them engage in interactive activities.

This does not necessarily mean that schools should abandon conventional drug education. As one of the teachers suggested in the evaluation of *Reaching Out* and the supplementaries, it may be important for the child who could go either way, and children should have facts about drugs. However, we do need to acknowledge the inherent limitations of drug education and the false hopes that often exist for it. Typically, programmes are chosen "on the basis of what [decision makers] would like to see happen, rather than on the evidence of what can realistically be achieved." (Midford, 2000, p.445).

The drug education programmes that we provide in schools should also be the best available. In the United States, the Department of Education now requires school districts to select research-based programmes (Hallfors & Godette, 2002). A somewhat different approach appears to occur in this country with schools developing local education programmes according to best practice principles (Education Review Office, 2002).

Between October and December 2001, the Education Review Office (ERO) carried out a nation-wide survey of drug education in schools. As well, there were follow-up interviews in 25 schools. Of the 661 schools surveyed, 81% provide a drug

education programme and on average students are exposed to 12.6 hours of instruction per year. There is heavy reliance on externally developed resources (84% of schools use them) and well over half of schools (58%) make use of programmes provided and delivered by outsiders. The study found that few schools extensively assessed student learning and nor did they evaluate programme effectiveness in a thorough way (Education Review Office, 2002).

Our schools appear to willingly meet numerous expectations in drug education such as having community consultation and an integrated health curriculum, but they seem to be hesitant to ask the critical questions about the extent and durability of behaviour change. This acceptance of lesser criteria, for both school developed and external programmes, will not advance drug education in New Zealand. It is also a concern that external providers can appear in schools in uncoordinated succession, as one of the teachers commented in the *Reaching Out* interviews. Apart from potentially wasting time, this piecemeal approach may be stressful to some students whose lives are already characterized by discontinuity and lack of stability (Pianta & Walsh, 1998).

More evaluation of drug education will likely lead to better programmes but even the best drug education is unlikely to assist students who regularly and heavily use substances. Classroom based drug education is simply not relevant for high risk pupils. When they do attend school, they are made impervious by a distinctive identity and the support of likeminded agemates. Different things need to be done for this group of young people.

To assist students who are using and abusing substances, we might consider a hierarchy of preventative measures, similar to the one that is suggested for antisocial youth by Walker, Horner, Sugai, Bullis, Sprague, Bricker, & Kaufman (1996). In such an integrated approach, drug education is the universal intervention and it represents primary prevention. At the second level, for students with an elevated risk status, drug programmes would be supplemented with other short courses (e.g. anger-management, social skills) and individual counselling. For our most at risk young people, tertiary prevention should be made available and this consists of involvements with social service agencies and highly intensive, individualized interventions that cover all relevant settings (home, school and peers) and that are sustained over time.

It is arguable that all drug programmes and interventions for children and youth should be located in schools (Dryfoos, 1994). There are special opportunities in these settings for the provision of helping responses, and for the identification of students at risk.

Teachers probably incline towards ecological assessment strategies to determine students' needs. At least in primary schools, teachers regularly undertake individualized, needs based assessments and these are at the core of the ecological approach. Ecological assessment has the advantage of leading directly and logically onto programme design and provision (Hengeller, Schoenwald, Borduin, Rowland, & Cunningham, 1998) and of avoiding imprecise and stigmatizing mental health labels.

Conclusion

The evaluation of *Reaching Out* and the three supplementary lessons indicates that this conjoint drug education programme is capable of small reductions in the use of some substances for some students. Similar findings elsewhere mean that we can only have limited expectations of educational approaches to delaying and reducing drug use behaviour.

Drug use is most often a social behaviour that is subject to the powerful contingencies of out of school contexts. Further, while society is keen that young people do not use drugs it allows extensive alcohol advertising and has continued to lower the drinking age.

The approach to drug education in New Zealand schools is to develop local programmes and/or to use external packages. This can demand that teachers be curriculum developers as well as curriculum deliverers. There is a pressing need for all drug education to be more regularly and systematically evaluated.

A problem with drug education can be the premise that is is always the most appropriate way to proceed. In fact, a range of responses is required and this should be based on careful screening of students. The official drug education guidelines (Ministry of Education, 2000) acknowledge the need for comprehensive and differentiated responses as, indeed, does the recent ERO report (Education Review Office, 2002). We must see the question of students and drugs clearly, and in all its complexity, and respond rationally and with realism.

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