



Community needs assessment prior to developing a substance abuse program
by Jaclyn Paugh Mavencamp

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science in
Home Economics

Montana State University

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Abstract:

The purpose of this study was to identify a set of educational needs relative to substance abuse curriculum as perceived by parents, students, and non-parental community leaders for Gardiner School Districts 4 and 7 during the 1988-89 school year. Characteristics assessed were knowledge, beliefs, values, norms, and sanctions.

The parent and non-parental community leader survey was developed using a Delphi technique. Of the parents contacted, 37.8 percent completed the survey. Sixty-seven percent of the non-parental community leaders responded to the survey. Students were surveyed using the American Drug and Alcohol Survey, produced by RMBSI, and a locally developed survey instrument. Ninety-two percent of the students enrolled in the school district completed the surveys.

The results of the parent survey indicated there were no significant differences between parental responses and non-parental community leader responses to the survey. Both groups showed very strong support for a substance abuse curriculum in the school district. The student surveys provided baseline data for comparison with continuing data collection and also indicated that students recognize the necessity for substance abuse education.

The study provides direction for the school district in the planning and implementation of a substance abuse curriculum. The curriculum will be available to all students in grades kindergarten through twelve and will include factual information, affective components, and life skills development. The development of the substance abuse curriculum will reflect the significant differences in responses by grade level and gender to some survey items. In addition, the curriculum should provide opportunities for parental interaction with students and educational programs.

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APPROVAL

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This thesis has been read by each member of the thesis committee and has been found to be satisfactory regarding content, English usage, format, citations, bibliographic style, and consistency, and is ready for submission to the College of Graduate Studies.

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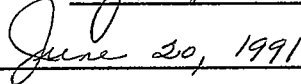


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ABSTRACT

The purpose of this study was to identify a set of educational needs relative to substance abuse curriculum as perceived by parents, students, and non-parental community leaders for Gardiner School Districts 4 and 7 during the 1988-89 school year. Characteristics assessed were knowledge, beliefs, values, norms, and sanctions.

The parent and non-parental community leader survey was developed using a Delphi technique. Of the parents contacted, 37.8 percent completed the survey. Sixty-seven percent of the non-parental community leaders responded to the survey. Students were surveyed using the American Drug and Alcohol Survey, produced by RMBSI, and a locally developed survey instrument. Ninety-two percent of the students enrolled in the school district completed the surveys.

The results of the parent survey indicated there were no significant differences between parental responses and non-parental community leader responses to the survey. Both groups showed very strong support for a substance abuse curriculum in the school district. The student surveys provided baseline data for comparison with continuing data collection and also indicated that students recognize the necessity for substance abuse education.

The study provides direction for the school district in the planning and implementation of a substance abuse curriculum. The curriculum will be available to all students in grades kindergarten through twelve and will include factual information, affective components, and life skills development. The development of the substance abuse curriculum will reflect the significant differences in responses by grade level and gender to some survey items. In addition, the curriculum should provide opportunities for parental interaction with students and educational programs.

CHAPTER 1

INTRODUCTION

There can be no question that substance abuse is a societal problem of immeasurable proportions. Recent studies by the Institute for Social Research indicate that 58% of high school graduates have used an illegal drug. In 1986 the Institute for Social Research also found the United States has the highest rate of teenage drug use of any industrialized country. (U.S. Dept. of Education, 1986, p. 5) Drug use is high among all regions and types of communities, among both male and female students, and among increasingly younger students. (U.S. Dept. of Education, 1986, p.5)

The tradition of turning to the schools to solve social problems continues as the nation's leaders look for solutions to the problem of substance abuse among youth. The United States Department of Education provides guidance to school districts and communities interested in combatting substance abuse through the handbook Schools Without Drugs (U.S. Dept. of Education, 1986) and with funding and other resources provided by the Drug Free Schools and Communities Act of 1986.

Evaluative studies of substance abuse education programs initiated during the 1960s and 1970s indicate that while many of these programs have not encouraged substance abuse, they have demonstrated little effect on attitude change or incidence of substance abuse. (Barnes, 1984) In order to provide effective programs for students, the factors leading to successful substance abuse education programs must be examined. Effective "education for the prevention, control and reduction of substance abuse is a shared responsibility between home, school, and community." (Eiseman, Robinson, and Zapata, 1984, p. 357) Time must be taken to study and understand the current state of the community system if efforts are to be properly directed and ultimately successful. (Havelock, 1973)

How can the relationship between home, school and community be identified? Needs assessment is recognized as an appropriate tool for the identification of substance usage, school and community prevention, and intervention programs. (Ohio State Dept. of Education, 1983) In fact, "a needs assessment is absolutely necessary in order to determine the needs of the community in which the program will operate." (Murrell, 1979)

The Gardiner Elementary and High School Districts have elected to participate in the Federal Drug Free Schools and Communities program. To ensure effective program

initiation, it was necessary to conduct a community needs survey as an integral part of the development of a substance abuse curriculum.

Purpose of the Study

The purpose of this study was to identify a set of educational needs relative to substance abuse curriculum as perceived by parents, students, and non-parental community leaders for Gardiner School Districts 4 and 7 during the 1988-89 school year.

Objectives

The following objectives were established for this research:

- (1) To assess the knowledge, beliefs, values, norms, and sanctions frequently identified by parents and non-parental community leaders as appropriate to the development of substance abuse education.
- (2) To determine the knowledge, beliefs, values, norms, and sanctions related to students' needs for the development of substance abuse education.

Need for the Study

In addition to the staggering national and state statistics regarding substance abuse, the impetus for the development of a substance abuse curriculum within the Gardiner School Districts 4 and 7 lay in two areas of concern. Gardiner School District disciplinary referral records showed there had been an observed and documented increase in student substance abuse related incidents in school and during after-school activities, especially among junior high school students, during the last three school years. In addition, records from the Park County Sheriff's Department and the Gardiner Volunteer Ambulance Service documented episodes related to substance use and abuse by students within the community setting.

Another area of concern was the degree to which the Gardiner community exists in relative isolation within Park County. The 110 mile round trip from Gardiner to Livingston deters students from utilizing social services available to other Park County students who live in closer proximity to Livingston, the county seat. Although it would be inappropriate to expect a school district to provide evaluative and treatment services for students, provision for supplemental services may be included in a substance abuse education program.

Prior to the development of a substance abuse curriculum based on the identified concerns, a survey of community needs was conducted to provide a research base for the formulation of prioritized goals and objectives. Once formulated, the program goals and objectives provided direction for the planning committee in the design of a substance abuse curriculum.

Definitions

The following definitions clarify the terminology used in the study.

- (1) Curriculum--A planned unit of instruction using prioritized objectives to direct student outcomes identified by the community assessment.
- (2) Educational Needs--The student needs which students, parents, and non-parental community leaders expect will be met within the school setting.
- (3) Non-parental community leaders--Adult community members who work as professionals or volunteers in leadership roles who do not have children enrolled in grades kindergarten through twelve.

- (4) Parents--Adults who have children enrolled in grades kindergarten through twelve.
- (5) Students--Any children regularly enrolled in grades seven through twelve.
- (6) Substance abuse--The overuse or misuse of any substance, including over-the-counter, prescription, and illegal drugs, alcohol and tobacco, which may cause physical, mental or emotional damage to a child.
- (7) Drug Free Schools and Communities program--A federally funded grant program to provide states and local school districts with funds to initiate and support a substance abuse and intervention program in the school setting. This program is also referred to as Schools Without Drugs.
- (8) Knowledge is the factual body of information about substance abuse and substance abuse education. (National Drug Center for Training and Resource Development [NDCTRD], 1981)
- (9) Beliefs are the strong personal convictions held by individuals. (NDCTRD, 1981)
- (10) Values are the ideals held by individuals within a group. (NDCTRD, 1981)

- (11) Norms are the acceptable standards of conduct or the actual behaviors accepted by the group for its members. (NDCTRD, 1981)
- (12) Sanctions are the rewards or punishments that a group uses to maintain the norms or accepted behaviors of the group. (NDCTRD, 1981)

Limitations

For the purpose of this study, the population was limited to those parents, non-parental community leaders and students who resided within the boundaries of Gardiner Secondary and Elementary School Districts during the 1988-89 school year. Excluded from the research population were those children and parents who, as members of the Church Universal and Triumphant, attended a private school within the district boundaries. Private school representatives indicated in writing that they did not wish to participate in the Schools Without Drugs program.

The study did not attempt to evaluate community characteristics which had been previously identified. Previously identified characteristics are described in Method of Investigation, Community section.

Assumptions

The following assumptions were made:

- (1) Substance abuse is a problem within the Gardiner community and the development of an educational program related to substance abuse would play a role in addressing the problem.
- (2) The Gardiner community would support the initiation of a substance abuse curriculum related to the results of the needs assessment.
- (3) The knowledge available from community parents and non-parental community leaders about substance abuse would be helpful in planning the program.
- (4) The survey of the student population would provide responses representative of the knowledge, beliefs, values, norms, and sanctions of the student population.
- (5) Students, parents, and non-parental community leaders can identify and articulate knowledge, beliefs, values, norms and sanctions related to substance abuse.

CHAPTER 2

THE REVIEW OF RELATED LITERATURE

The Background of Needs Assessment

The use and development of needs assessment is a relatively new addition to the systematic process of program planning for education. The widespread use dates to the 1960s and 1970s when Congressional funding legislation required needs assessment at the federal, state and local levels. Witkin (1984, p. 1) states:

. . .the legislation stimulated not only the development of numerous models and approaches to identifying and analyzing needs. . . (but) also established the centrality of obtaining community consensus on goals and needs.

Wlodkowski (1986, p. 108) identified needs assessment as "any systematic process for collecting and analyzing information about the educational needs of individuals, groups, and organizations." In order to clarify the definition of needs assessment, a need may be defined as "a condition in which there is a discrepancy between an

acceptable state of affairs and an observed state of affairs". (Anderson, 1975, p. 254)

It is important to note that needs assessment is not an end in itself, but part of the ongoing program planning model. One of the primary tasks in the planning cycle is assessing the needs of the group, as illustrated by the program cycle model in Figure 1.

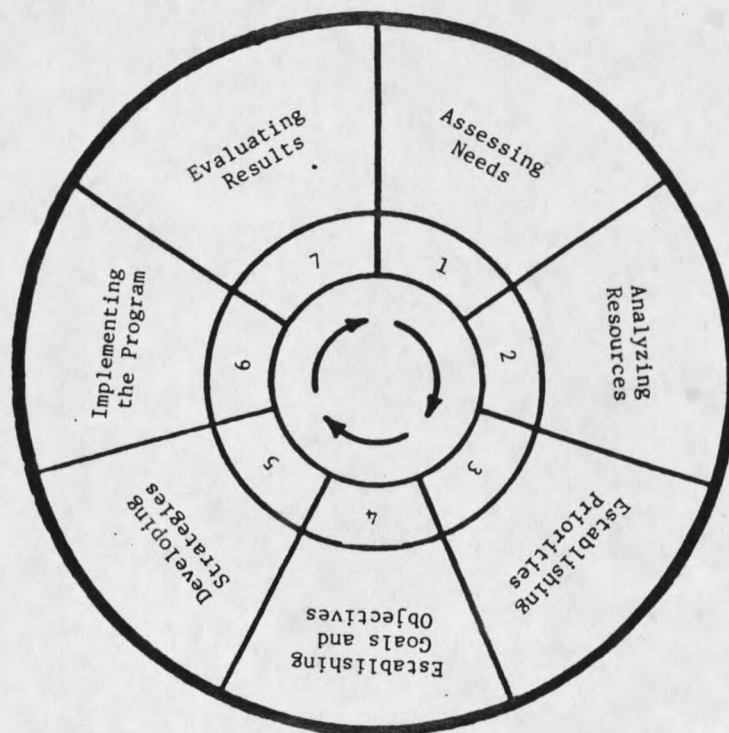


Figure 1. Needs assessment in the program cycle
(Lehman, 1986, p. 2)

Reasons for Assessing Needs

Regardless of the agency for which the needs assessment is conducted, there are basic questions which should be addressed (Harrison-Burns & Kunisawa, 1981, p.8):

*Is the problem being examined actually a problem for the population being considered?

*How many people within the population experience the problem?

*What is the view of the problem that is held by the system members and the target population?

*What clues are there to possible problem solutions?

*Are certain problems or perceptions more common among certain segments of the population?

*What resources are available within the system?

*Are the services already being provided within the system?

The responses to the key questions listed above should provide support for conducting the needs assessment.

Community Needs Assessment

In order to conduct a needs assessment, as indicated in the previous segment, the population to be assessed must be identified. A population with identifiable characteristics which may be assessed is a community. A community social

compass (Figure 2) provides us with a representational model of the characteristics of a community.



Figure 2. A community social compass. (National Drug Center for Training and Research Development [NDCTRD], 1981, p. 92)

History

The background data collected about a community and its past elements can give many insights into the values and factions involved within a community. The development of a community history may lead to an understanding of the present situation and to the identification of key residents. (National Drug Center for Training and Resource Development [NDCTRD], 1981, p. 93-95)

Space Relations

The examination of the space relations of a community identifies internal and external relations. Internal relations within the community include the geographic area, the people, the industry, and the social activities, for example. External relations evaluates a community's relationships with other communities in a vicinity and regional and national centers. The interaction of internal and external relationships also aids in defining space relations. [NDCTRD], 1981, p. 93-95)

Resources

The resources within a community may be used by a community to meet identified individual or group needs. Resources within a community may be categorized as human, man-made, or natural. [NDCTRD], 1981, p. 93-95)

Knowledge and Beliefs

Knowledge can be defined as that which is known about the world and life within that sphere. Belief contains an element of personal conviction which is not present in knowledge. Experience has shown that knowledge is easier to change than is belief, thus identification of firmly held beliefs provides a strong foundation for the development of programs. [NDCTRD], 1981, p. 93-95)

Values

Values are the ideals held by individuals within a community. Many in a community may hold the same values and therefore form the basis of predictable behavior. [NDCTRD], 1981, p. 93-95)

Norms

Norms are the acceptable standards of conduct for situations within a community. Every community has its own guidelines for what is right and wrong or good and bad and their own social code and forms of pressure for enforcing those guidelines. [NDCTRD], 1981, p. 93-95)

Power, Leadership, and Influence

These three characteristics may be interrelated or separate within a community depending on the particular situation. Power refers to the ability of one person to control another individual or group. Leadership involves an ability to help a group reach a decision and act on it. Influence is the ability to affect the behavior of others, often without their awareness. The identification of the people within a community who possess all or some of these characteristics is an important step in needs assessment. [NDCTRD], 1981, p. 93-95)

Socioeconomic Status

Socioeconomic status refers to an individual's rank within the community. The ranking process may be based on family or personal characteristics depending on the values which predominate within the setting. [NDCTRD], 1981, p. 93-95)

Sanctions

The rewards and punishments which encourage the individual to maintain the standards or norms of a group are sanctions. The sanctions endorsed by a community are intended to maintain the way of life within the community. [NDCTRD], 1981, p. 93-95)

Stability

This characteristic refers to the degree of change within a community. To determine stability, the constancy of the community members and institutions must be assessed. [NDCTRD], 1981, p. 93-95)

Family Ties

To identify family ties within a community, the family structures would be researched. The range of family combinations from children without parents to multi-generational households would be measured. [NDCTRD], 1981, p. 93-95)

Racial/Ethnic/Cultural Identification

Many communities are made up of one racial group. The identification of the racial group with a cultural past or tradition may have a major impact on the characteristics of the community. [NDCTRD], 1981, p. 93-95)

Physical Location

Isolation is the factor closely identified with the physical location of a community. Isolation may influence the types of problems within a community as well as the availability of services or resources. [NDCTRD], 1981, p. 93-95)

These factors need to be addressed to provide the data necessary for determining general aims or the prioritized goals and objectives for a program. Any type of community or subcommunity may be defined by accumulating information about each factor. The compilation of the data will provide a reasonably complete view of the population studied.

Substance Abuse Education

Since the first drug education programs in the early 1960's, many different programs and curricula have been used in our nation's schools. "Drug Education: Why We Have So Little Impact" by Sheppard, Goodstadt & Williamson (1985) suggests "there are hundreds (if not thousands) of drug education programs, only a few have ever been evaluated and

still fewer over any time period long enough that could begin to show an effect." (p. 5)

Programs have dealt with drugs as a total topic and have segregated topics such as smoking or alcohol abuse as the basis for curriculum development. Informational programs have been designed in an effort to eliminate the problem by providing knowledge about drugs. Curricula which attempt to modify attitudes and behavior by focusing on the affective domain have also been developed and used in the classroom. These programs "have, in general, received societal support" (Milgram, 1987, p. 55) but because of lack of stated philosophy, goals and objectives unevenness in the content and methodology of these programs is apparent. (Milgram, 1987)

Lohrmann and Fors (1986) cite a 1984 Rand Corporation report entitled Strategies for Controlling Adolescent Drug Use in concluding "that school-based prevention programs were the most promising means despite lack of significant previous success." (p. 327)

"Our most optimistic conclusions are related to prevention--not because past drug prevention programs have proven eminently successful, which they have not, but because we believe we know why past approaches have failed: They were grounded in incorrect

assumptions about why adolescents begin using psychoactive substances." (Polich, Reuter & Kahn, 1984)

The conclusions of the Rand Report support school-based programs with the following recommendations:

- "1. School-based drug education should be the focus for prevention of adolescent drug abuse following formation of a consistent governmental policy toward reducing adolescent drug abuse including special funding for curriculum development, teacher training, implementation, evaluation, and maintenance.
2. School-based drug education programs should be the focus of prevention of adolescent drug abuse if they include implementation of additional specific programs designed to meet the specific needs of high risk children.
3. School-based drug education programs should be the focus for prevention of adolescent drug abuse if, and only if, specific strategies for reinforcing the

goals of such programs are developed and implemented by other social institutions." (Lohrmann & Fors, 1986, p.328)

The Western Center for Drug-Free Schools and Communities supports a comprehensive substance abuse model outlined in Together: Guidelines for Alcohol and Drug Programs (Johnson, Card & Jones, 1983) which adheres to the guidelines established as a result of the Rand Report. The four levels of a substance abuse program includes primary prevention, early intervention, treatment and aftercare.

Primary prevention focuses on the educational curriculum for the development of knowledge, understanding and awareness about substances and abuse for students. The development of the primary prevention aspect requires policy formation, goal formation, teacher training, curriculum development and evaluation.

Early intervention involves identifying high risk children and providing resources to prevent further problems. Treatment focuses on providing help for students with diagnosed substance abuse problems outside the school setting. Aftercare suggests supportive services for students who are receiving or have received treatment. The services for treatment and aftercare require the support by other community social institutions for the goals and policies of the school-based program.

Substance Abuse Education and Needs Assessment

Research supports the use of needs assessment in the development of substance abuse education programs. Dembo (1979, p. 205) states that "basic to our recommendations to the school and community is the concept that drug prevention needs to involve both community and school resources." The more you know about your community, the more able you are to develop a prevention program which meets the community's needs. (National Drug Center for Training and Resource Development, 1981, p.91)

Zoller and Weiss (1981) have devised The Guiding Model for the Curriculum. The model (Figure 3) clearly illustrates the role of needs assessment in the planning process for a drug education program.

The model identifies the needs of students in the development of drug education programs. According to Milgram (1987) the development of specific goals for a substance abuse program should be preceded by a survey of student interest and attitudes.

"Alcohol and drug education programs require a philosophical position on prevention, on alcohol and alcoholism, and on drugs. The position should evolve from and within the community. Since it is the community which will

support the educational efforts, it must be part of the process. . . . students should be an integral part of the process." (p. 44)

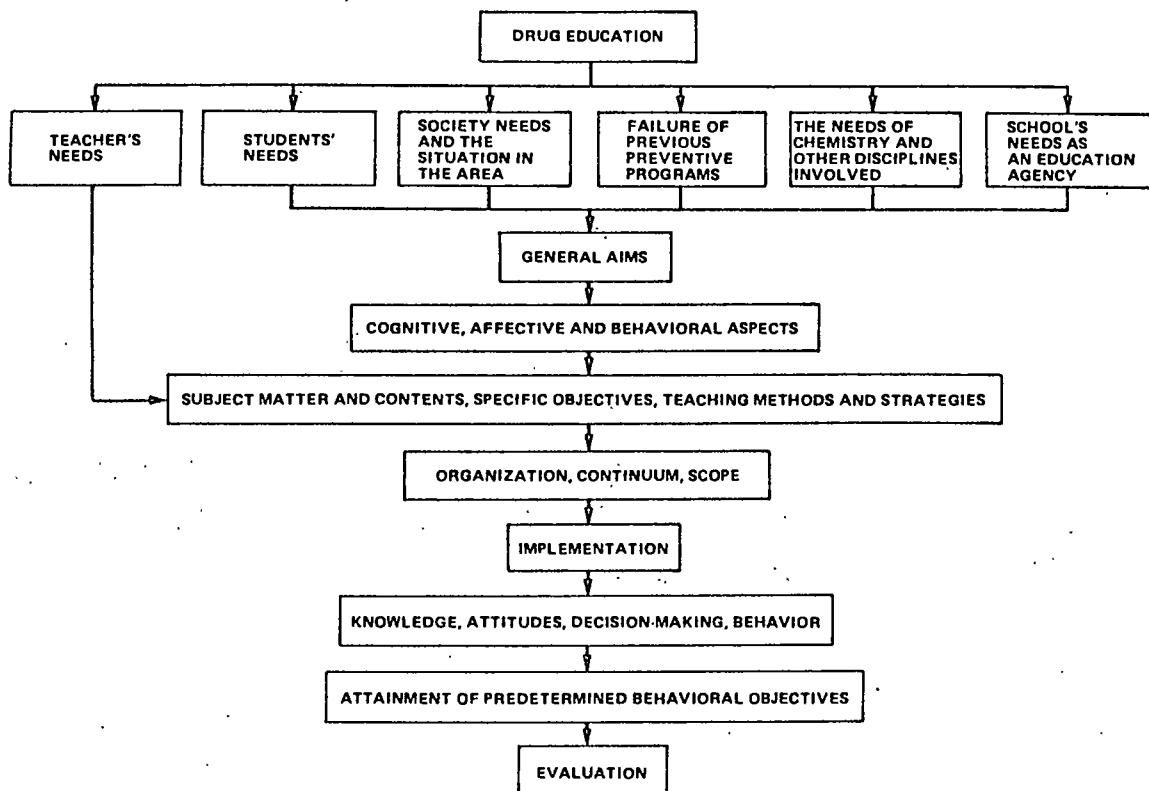


Figure 3. The guiding model for the curriculum development (Zoller & Weiss, 1981, p. 41)

The identification of needs of a population within a community, then, is an integral part of the planning process for the development of a program, especially in the area of substance abuse education. Students have been identified as an important part of the community population to be assessed and to provide input for the development of substance abuse curriculum.

Procedure for Needs Assessment

The most commonly used procedure for the assessment of needs is the survey. Needs surveys are used to gather facts, attitudes and opinions. In needs assessment the survey instrument most frequently used is the written questionnaire. (Witkin, 1984)

Needs assessors usually have three options for sources of survey instruments: "to use off-the-shelf questionnaires, to adapt published instruments for local use, or to design and develop their own." (Witkin, 1984, p. 66)

The review of literature did not yield a community needs assessment instrument appropriate to the research problem. Therefore, a survey instrument was designed. One method frequently used by researchers to design and develop written questionnaires is the Delphi Method. The purpose of

the technique is to arrive at a consensus on goals, concerns or potential needs.

The Delphi method, from its beginning "in a non-profit organization, has found its way into government, industry, and finally academe." (Linstone & Turoff, 1975, p. 11) While many people label Delphi as a forecasting procedure, the purpose for which it was originally devised, the Delphi method has many application areas, including:

- gathering current and/or historical data not accurately known or available.
- exploring planning options
- planning curriculum development
- delineating pros and cons associated with potential policy options
- distinguishing and clarifying real and perceived human motivations
- exposing priorities of personal values and social goals (Linstone & Turoff, 1975)

One or more of the following properties leads to employment of Delphi in this and other instances:

- the problem does not lend itself to precise and analytical techniques but can benefit from subjective judgements on a collective basis.

- more individuals are needed than can effectively interact in a face-to-face exchange.
- time and cost make frequent group meetings infeasible.
- the heterogeneity of the participants must be preserved to assure the validity of the results. (Linstone & Turoff, 1975)

A precedent for use of the Delphi technique in the area of substance abuse questions occurred when a form of the Delphi method was employed to explore national drug abuse policy in 1973 and 1974. (Jillson, 1974)

The basic procedure for the Delphi technique is as follows. "Typically, a sequence of three questionnaires is mailed to respondents who remain anonymous to each other: (Witkin, 1984, p. 154)

Respondents first generate several rather concise statements of events, and in the second round give estimates as to the probability of each event occurring at a given date in the future. . . .(The) responses are collated and returned to each respondent who then is invited to revise his estimates. The third-round responses are made with the knowledge of how others

felt regarding the occurrence of each event. Again, the responses are assembled and reported back to the participants. If a respondent's estimate does not fall within the interquartile range of all conjectures, he is asked to justify his position, whether or not he wishes to change his position. (Weaver, 1971, p. 267)"

The rationale for use of this procedure lies in "two basic assumptions which underlie Delphi inquiries:

- (a) In situations of uncertainty (incomplete information or inadequate theories) expert judgements can be used as a surrogate for direct knowledge. . .
 - (b) In a wide variety of situations of uncertainty, a group judgement (amalgamating the judgement of a group of experts) is preferable to the judgement of a typical member of the group."
- (Dalkey, 1975, p. 240)

In the use of Delphi as a technique, several common problems have been identified by Linstone and Turoff (1975). Problems which may be applicable to this study include underestimating the demanding nature of a Delphi for panel members, assuming that the Delphi can be a replacement for

other communications in the situation, imposing researcher views of the solution on the group of respondents, and utilizing poor summary and response techniques.

Summary

The review of related literature indicates that a community needs assessment is an essential component of the planning process. Specifically, the literature cited the importance of needs assessment in the development of curriculum within the school setting, especially in the area of substance abuse education.

The definitive tool for surveying needs is the written questionnaire which can be developed or designed, using the Delphi technique as a method. Survey instruments may also be adapted for use with a specific population from published questionnaires.

CHAPTER 3

METHOD OF INVESTIGATION

The purpose of the study was to identify a set of educational needs relative to substance abuse curriculum as perceived by parents, students, and non-parental community leaders for Gardiner School Districts 4 and 7 during the 1988-89 school year. Areas assessed were knowledge, beliefs, values, norms, and sanctions.

Population Characteristics

The history of the Gardiner community indicates the presence of substance abuse over a period of time. Substance abuse problems within the community have been previously overlooked to a large extent if the problems were not evident at school or at school-sponsored events. The severity of community problems came to community attention following the substance abuse related molestation of a Gardiner student in September, 1986.

Gardiner is the northern gateway community to Yellowstone National Park. This feature contributes to frequent, seasonal ties with people from very diverse regional and national communities. The community relies on

the Yellowstone National Park Service, park concessionaires and related service providers for employment and industry. The Mineral Hill Mine is the second largest employer within the community. Social activities within the community are employment or school related functions with little additional entertainment provided within the community. Generally, except in the workplace and among the younger segment of the population, there are limited interactions between external and internal populations.

Community resources include social services provided by Park County and the State of Montana located in the county seat of Livingston. Gardiner is served by a community health and school nurse, two full-time law enforcement officers, volunteer emergency medical treatment specialists and ambulance service, Yellowstone National Park law enforcement officers, a medical clinic in Mammoth, Wyoming, and pastoral counseling service. Other resources include facilities for meeting and recreation in the school building and elsewhere in the community. Limited financial support for community endeavors is available from either government or private sources.

The socioeconomic status of Gardiner community members is categorized as white, middle class, middle income and rural. While there is a segment of the population consisting of single parent families, the predominant family

structure within the population to be assessed consists of biological and reconfigured two-parent families.

Gardiner is an isolated community, located fifty-two miles from Livingston, the county seat and the closest community, which complicates the delivery of social services to the community. The general resident population is fairly stable with a limited influx of permanent residents. However, during the summer visitor and temporary employment season, the community experiences a large influx of young people who work in Yellowstone National Park and seek entertainment within the Gardiner community.

Current information was not available to evaluate the knowledge, beliefs, values, norms, and sanctions in operation within the community system. The collection of this information was a part of this investigation.

Survey Instruments

The tools for community needs assessment consisted of questionnaires chosen and constructed for the identified study groups--parents and non-parental community leaders and students. The survey instruments were developed using two approaches.

Development of Parent and Community Leader Survey

The survey instrument for use with the parents and community leaders was constructed using the Delphi

technique. Drug-Free Schools project directors were identified as potential Delphi panel members by the Montana Office of Public Instruction.

Twenty Drug-Free Schools project directors were randomly selected to participate in the Delphi process. Panel members were asked in a cover letter (Appendix A) to participate by generating twenty questions (Appendix B) which they believed would assess the knowledge, beliefs, values, norms and sanctions of parents and non-parental community leaders. Twelve directors responded to the first round questionnaire and agreed to participate in the remaining two rounds.

All responses generated were listed and compiled for the second round questionnaire. In the second round the panel members were asked to identify those survey items which they believed would elicit the desired information. See Appendix C. The third round again asked Delphi panel members to select questionnaire items, given knowledge of opinions of other panel members. See Appendix D. If a respondent could not agree with the group consensus, he/she was asked to justify the response. Those survey items identified by the panel group formed the items for the final questionnaire which was written in Likert scale format. This questionnaire is in Appendix E. Delphi panel

members had approximately two weeks to respond to each round of questionnaires.

The reliability of the survey instrument was evaluated using test-retest. West Yellowstone, Montana was chosen as the test site because the community shares many similar characteristics with the Gardiner community. Nine adults completed the questionnaire twice, with a two week time span between the two sessions.

Development of Student Survey

Following a review of survey instruments gathered during the review of literature and those used by Montana school districts, two survey instruments were selected for use with students. The American Drug and Alcohol Survey was chosen to provide established reliability and validity to the study and to provide the basis for establishing norms for assessing student substance abuse behavior . In addition, an original survey was developed to further assess student knowledge, beliefs, values, norms and sanctions.

The American Drug and Alcohol Survey is copyrighted by the Rocky Mountain Behavioral Science Institute. The survey was developed with support from the National Institute on Drug Abuse. (RMBSI, 1987, p. 41) Reliability and validity were established for the survey through field testing over 35,000 students. (RMBSI, 1987, p.42)

The second survey instrument was constructed using questions adopted from the University of Michigan public domain Student Use Survey and original questions. The survey instrument (Appendix F) was reviewed by a panel of five secondary and post-secondary teachers and counselors.

Following review of the questionnaire, test-retest was used with a group of students from Park High School in Livingston, Montana. The test was given to twenty-one students followed by the retest two weeks later.

Survey Populations

The entire population of the parent group was contacted because of the small number of parents with children. Mailing labels for all parents with children enrolled in grades kindergarten through twelve were generated by the school district computer data base.

The survey population for the non-parental community leaders group consisted of adults working within the community as professionals or volunteers in health, law enforcement, counseling, education or other leadership roles. In the Gardiner community, the leaders did not have children attending school within the school district. The survey of the non-parental community leaders accessed information from a group otherwise unrepresented in the

survey process. The entire identified population was contacted.

The entire population of all regularly enrolled students in grades seven through twelve was surveyed. Students absent from school on the survey day were not included in the survey.

Procurement of Data

Approval was given by the Gardiner School District Board of Trustees for the survey process. Questionnaires were distributed to all members of the survey populations on May 23, 1988.

The parent surveys were mailed with a cover letter (Appendix G) explaining the purpose of the survey and notifying the parents that the student survey had been conducted. Fifty six parents or 37.8 percent had responded by June 1. A large number of responses were returned with identifying numbers removed which eliminated the ability to contact non-responders directly. No additional surveys were returned following a published request in the community newsletter.

The non-parental community leaders were contacted with a cover letter (Appendix G) explaining the importance of their role in the survey process. Eight respondents or 67 percent completed the survey. The four non-respondents

declined to participate in the survey when contacted by telephone.

The students were surveyed during their regular second period classes on Tuesday, May 23. Of 138 enrolled students, 127 or 92 percent were surveyed. The classroom teachers were given uniform instructions for administering the surveys. The students had no advance knowledge of the survey. All student surveys were randomly assigned an identification number to assist in data analysis.

Analysis of Data

The test-retest results of all surveys were evaluated for consistency of item response. The Chi square test for independence was used to show the dependent relationship between the test and retest items.

The student responses to the American Drug and Alcohol Survey were compiled and analyzed by RMBSI. The results were returned to the school district in a report of drug and alcohol use. The Detailed Report of Drug and Alcohol Use Among Gardiner School Districts 7 & 4 Students is included as Appendix H.

The results of the Gardiner Student Survey and the parent and non-parental community leader survey were analyzed using frequency of response and percentages on each item. The mean for each item was also calculated to

determine the relative position of the respondents to the neutral position.

One-way analysis of variance was used with the student survey data to identify significant differences among respondents on individual items by grade level. Pooled variance estimates were calculated to identify significant differences between respondents on individual items by gender.

Variables of knowledge, beliefs, values, norms, and sanctions were evaluated using means calculated for the grouped survey items. The computed scales indicated the position of the respondents in relationship to neutrality on each variable.

Pooled variance estimates were used with the results of the parent and community leader surveys. The *t*-test provided data regarding the significant differences between the parent responses and non-parental community leader responses.

CHAPTER 4

RESULTS AND DISCUSSION

The purpose of this chapter is to present data gathered from the survey of students, parents and non-parental community leaders. The population was surveyed to gather information regarding the characteristics of knowledge, beliefs, values, norms and sanctions. The information will be used to identify a set of educational needs related to the development of a substance abuse curriculum.

Survey Reliability

The reliability of the individual items on the student and parent and non-parental community leaders surveys were evaluated using calculated chi squares. The actual test and retest frequencies were compared to theoretical or expected frequencies. The resulting chi squares are listed by item in the Appendices. Appendix I contains data for the parent and non-parental community leader survey and Appendix J lists data for the individual items from the student survey.

The chi squares for all items, with the exception of survey item 4 from the student survey, had calculated chi squares which indicated no significant differences between

test and retest responses. The value for chi square, using four degrees of freedom, must be greater than or equal to 9.49, to indicate a significant difference between compared frequencies.

The responses to item 4, "Alcoholism is a disease which may be inherited", on the test were significantly different from the retest responses. The item is a knowledge question and the correct response is strongly agree or agree. The responders to this item showed a shift in individual responses from strongly disagree and disagree towards neutral on the retest. After evaluating the actual responses to student survey item 4, the surveys were determined to be capable of providing consistent responses.

The American Drug and Alcohol Survey data calculated the reliability coefficients for the Gardiner School District Survey to be .90. Fewer than one percent of the respondents showed signs of exaggerating their substance usage. Two percent of the students surveyed were classified as inconsistent responders. (RMBSI, 1989, p. 2)

Student Survey

The student population of grades seven through twelve of Gardiner School District 7 and 4 was surveyed. There were 138 students enrolled and 127 students in attendance on the day the surveys were administered. Therefore, 92

percent of the students in grades seven through twelve participated in the survey. For the purpose of the study, the students' responses were also analyzed by grade and gender. Table 1 shows the frequency distribution of the respondents by gender and grade categories.

Table 1. Distribution of Student Respondents by Grade and Gender.

Grade	Gender		Frequency Total	Percentage		
	Male	Female		Male	Female	Total
7	13	12	25	10.0	9.7	19.7
8	7	12	19	5.5	9.4	14.9
9	10	11	21	7.9	8.7	16.6
10	16	4	20	12.6	3.1	15.7
11	13	7	20	10.2	5.5	15.7
12	<u>9</u>	<u>13</u>	<u>22</u>	<u>7.1</u>	<u>10.2</u>	<u>17.3</u>
TOTAL	68	59	127	53.5	46.5	100.0

Student Characteristics

In the selection and preparation of survey instruments, items were designed to assess the student variables of knowledge, beliefs, values, norms and sanctions. Items were selected from the American Drug and Alcohol Survey and written for the Gardiner Student Survey to provide baseline data about the Gardiner student population. Questionnaire

items were grouped or identified according to the characteristic each group addressed.

Knowledge

Knowledge is the factual body of information available about substance abuse and substance abuse education. The data analysis for the knowledge section of the survey indicated that students demonstrated a high level of knowledge regarding substance abuse issues. A majority of students with knowledge of substance abuse topics either strongly agreed or agreed with the survey items. The item analysis in Table 2 shows the percentages of students responding to each value for each item. The mean or average response, and the standard deviation or variation in responses is also given in the table.

Although not shown in the table, analysis indicated no significant differences in responses by gender. However, one-way analysis of variance indicated a significant difference ($F = .0101$, significant to .0500) in responses by grade on item 3, "Alcohol is the most abused drug among young people."

Beliefs

Beliefs are the personal convictions held by individuals. Table 3 shows the percentages of student response for each value for each statement. The responses by students to the belief statements tended to be near the neutral range. Item 8, "It would help my friends if more information about drugs and alcohol was available", had 37.8 percent of students responding in neutral and don't know columns. Item 10, "My parents are less concerned about me drinking alcohol than they are about me taking drugs", had 31.5 percent combined neutral and don't know responses. The majority of students disagreed or strongly disagreed with item 11, "Only people with drug or alcohol problems need substance abuse education."

Item analysis by gender indicated a significant difference using a two-tailed t-test pooled variance estimate among responses on item 11, "Only people with drug or alcohol problems need substance abuse education". See Table 4. One-way analysis of covariance, shown in Table 5, indicated significant differences by grade level on item 6, "I think alcohol and drug education should begin no later than kindergarten"; item 8, "It would help my friends if more information about drugs and alcohol was available"; and item 11, "Only people with drug or alcohol problems need

substance abuse education". The differences were significant at the .05 level.

Items 29 through 32 evaluated student beliefs about the relative risk of physical or emotional harm associated with certain types of substance usage. In Table 6, the percentages indicate that students believe that some degree of risk accompanies all behaviors except item 31, "Trying one or two drinks of an alcoholic beverage." "Taking one or two drinks nearly every day", item 32, was also seen as less risky than other behaviors.

There were significant differences in student responses to items 31 and 32 by gender and to items 29, 31, 32 and 33 by grade. The differences are shown in Tables 7 and 8.

The Detailed Report, Drug and Alcohol Use Among Gardiner School Districts 7 & 4 Students contains the results from The American Drug and Alcohol Survey (See Appendix H. RMBSI, 1989, p. 20) which evaluated Gardiner student perceptions of harm related to certain substance use behaviors. "The attitudes that young people have about the dangers of drugs often shape their decisions about whether they will use drugs or not. . . . Table 7 (Appendix H) shows the percent of students who think that trying a drug will lead to "a lot" of harm." Appendix H, Table 8, page 21 "shows how many Gardiner students believe that using drugs regularly will harm them." Only 28 percent of students in

Table 2. Percentage Responses to Knowledge Items, Student Survey.

No.	Item	Percentage by Value Label						Mean	SD
		1	2	3	4	5	6		
1.	Users of drugs and alcohol develop physical and/or emotional dependence on the substance.	57.5	28.3	5.5	4.7	0.0	3.9	1.61	.85
2.	Alcohol and drug use can threaten normal development of children and teenagers.	64.6	27.6	6.3	1.6	0.0	0.0	1.45	.69
3.	Alcohol is the most abused drug among young people.	58.3	20.5	8.7	3.1	1.6	7.9	1.69	.96
4.	Alcoholism is a disease which may be inherited.	36.2	32.3	7.9	7.1	5.5	11.0	2.13	1.15
5.	It is illegal in Montana for anyone to provide alcohol to someone under the age of 21.	69.3	14.2	6.3	1.6	3.9	4.7	1.57	1.02

Key to Value Labels: 1 = Strongly Agree 2 = Agree 3 = Neutral
4 = Disagree 5 = Strongly Disagree 6 = Don't Know

Table 3. Percentage Responses to Beliefs Items, Student Survey.

No.	Item	Percentage by Value Label						Mean	SD
		1	2	3	4	5	6		
6.	I think alcohol and drug education should begin no later than kindergarten.	26.0	26.0	19.7	15.0	7.9	5.5	2.53	1.25
7.	I have learned enough about drugs and alcohol in school already.	20.5	27.6	22.0	18.1	8.7	3.1	3.33	1.23
8.	It would help my friends if more information about drugs and alcohol was available.	19.7	24.4	26.0	11.8	6.3	11.8	2.61	1.12
9.	It is okay to drink with my parent's permission.	12.6	22.0	21.3	12.6	27.6	3.9	2.80	1.39
10.	My parents are less concerned about me drinking alcohol than they are about me taking drugs.	12.6	19.7	17.3	11.0	25.2	14.2	3.17	1.34
11.	Only people with drug or alcohol problems need substance abuse education.	8.7	9.4	15.0	20.5	40.2	6.3	2.26	1.31

Key to Value Labels: 1 = Strongly Agree 2 = Agree 3 = Neutral
4 = Disagree 5 = Strongly Disagree 6 = Don't Know

Table 4. Beliefs Items, Student Survey: Significant Differences by Gender.

No.	Item	Gender	No. of Cases	Mean	SD	Error	2-Tail Prob.
11.	Only people with drug or alcohol problems need substance abuse education.	Male	68	2.5588	1.397	.169	
		Female	59	1.9153	1.281	.146	
							.005 < .050

Table 5. Beliefs Items, Student Survey: Significant Differences by Grade.

Oneway Analysis of Variance						
No.	Item	Source	D.F.	Sum of Squares	Mean Squares	F Prob.
6.	I think alcohol and drug education should begin no later than kindergarten.	Between	2	22.1463	11.0732	
		Within	124	173.5072	1.3993	.0006
8.	It would help my friends if more information about drugs and alcohol was available.	Between	2	15.5017	7.7509	
		Within	124	142.8132	1.1517	.0017
11.	Only people with drug or alcohol problems need substance abuse education.	Between	2	15.0673	7.5336	
		Within	124	201.3579	1.6239	.0114

Significant at < .0500

Table 6. Percentage Responses to Beliefs Items, Level of Risk Created by Certain Behaviors, Student Survey.

No.	Item	Percentage by Value Label						Mean	SD
		1	2	3	4	5	6		
How much do you think people risk harming themselves either physically or emotionally if they. . .									
29.	Smoke one or more packs of cigarettes per day.	54.0	23.0	3.2	4.8	0.0	15.1	1.74	.92
30.	Smoke marijuana on an occasional or regular basis.	59.5	26.2	4.8	3.2	0.0	6.3	1.58	.81
31.	Try one or two drinks of an alcoholic beverage.	3.9	26.0	18.9	23.6	20.5	7.1	3.31	1.18
32.	Take one or two drinks nearly every day.	33.1	33.9	12.6	9.4	3.1	7.9	2.16	1.09
33.	Take four or five drinks nearly every day.	63.0	20.5	7.1	1.6	1.6	6.3	1.58	.89
34.	Have five or more drinks once or twice each weekend.	44.9	29.1	15.0	3.9	.8	6.3	1.87	.94
35.	Try or take other drugs (LSD, cocaine, etc.) occasionally or regularly.	85.8	4.7	0.0	1.6	.8	7.1	1.27	.73
Key to Value Labels: 1 = Great Risk 2 = Some Risk 3 = Little Risk 4 = Slight Risk 5 = No Risk 6 = Don't Know									

Table 7. Beliefs Items, Level of Risk, Student Survey: Significant Differences by Gender.

No.	Item	Gender	No. of Cases	Mean	SD	Error	2-Tail Prob.
31.	...Try one or two drinks of an alcoholic beverage.	Males	68	3.5294	1.215	.147	
		Females	59	3.0508	1.090	.142	
							.022 < .050
32.	...Take one or two drinks nearly every day.	Males	68	2.3382	1.087	.132	
		Females	59	1.9494	1.057	.138	
							.044 < .050

Table 8. Beliefs Items, Level of Risk, Student Survey: Significant Differences by Grade.

Oneway Analysis of Variance						
No.	Item	Source	D.F.	Sum of Squares	Mean Squares	F Prob.
29.	. . .Smoke one or more packs of cigarettes per day.	Between	2	6.3596	3.1798	
		Within	123	99.9976	.8130	.0226
31.	. . .Try one or two drinks of an alcoholic beverage.	Between	2	14.7743	7.3872	
		Within	123	160.2493	1.2923	.0042
32.	. . .Take one or two drinks nearly every day.	Between	2	9.4551	4.7275	
		Within	123	139.3953	1.1242	.0171
33.	. . .Take four or five drinks nearly every day.	Between	2	9.7167	4.8583	
		Within	123	91.1651	.7352	.0019
Significant at < .050						

grades nine and ten believe that regular use of alcohol will lead to "a lot" of harm. Thirty nine percent indicated that regular use of marijuana would not lead to "a lot" of harm. The regular use of alcohol was believed to lead to "a lot" of harm by fewer than 50 percent of all students responding.

Values

Values are the ideals held by individuals within a group. Value statements often indicate what should happen or what should exist, rather than what actually does happen or what actually does exist. In the Gardiner Student Survey, items 12 through 16 address the value positions of students relative to substance abuse issues.

The individual item analysis in Table 9 indicates that smaller percentages of students responded by strongly agreeing or agreeing to the value statements. The responses to item 13, "The drinking age should be lowered", have a mean score near the neutral point and further examination of the responses on the item indicates that students' opinions were fairly evenly divided across the Likert scale categories.

The analyses of variance indicated significant differences in the responses to item 12, "Underage drinkers should be allowed to drink at home", and item 13, "The drinking age should be lowered", by both gender and grade. Tables 10 and 11 show the results of statistical

computations for items 12 and 13, which questioned student values about the appropriateness of alcohol consumption related to age.

When responding to items 36 through 42, students were asked to indicate the degree of approval or disapproval of certain types of substance usage by adults. Table 12 shows that students disapprove of most substance usage, even by adults. However, students did not appear to strongly disapprove of item 38, "Adults trying one or two drinks of an alcoholic beverage", or item 39, "Taking one or two drinks nearly every day.". The highest disapproval rating by students was for item 42, "Trying or taking other drugs (LSD, cocaine, etc.) occasionally or regularly". There were no significant differences in responses by grade or gender.

The American Drug and Alcohol Survey asked students whether they intend to use drugs in the future. The intention is indicative of the personal value held by the student regarding personal substance use and abuse. "The 7-8th graders' responses to those questions are presented in Table 11 because it is the attitudes of these younger students that are most significant in this respect." See Appendix H. (RMBSI, 1989, p. 27)

Table 9. Percentage Responses to Values Items, Student Survey.

No.	Item	Percentage by Value Label						Mean	SD
		1	2	3	4	5	6		
12.	Underage drinkers should be allowed to drink at home.	9.4	11.0	21.3	17.3	35.4	5.5	2.42	1.32
13.	The drinking age should be lowered.	15.0	17.3	19.7	14.2	27.6	6.3	2.78	1.41
14.	There should be more spot checks by police to find people driving under the influence of alcohol.	36.2	23.6	25.2	6.3	4.7	3.9	2.20	1.14
15.	Substance abuse (drug and alcohol) education should not be taught in school.	11.8	2.4	13.4	16.5	51.2	4.7	2.07	1.36
16.	Substance abuse education should teach you how to resist your friends pressuring you to drink.	45.7	29.9	14.2	1.6	3.1	5.5	1.87	.99
Key to Value Labels: 1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree 6 = Don't Know									

Table 10. Values Items, Student Survey: Significant Differences by Gender.

No.	Item	Gender	No. of Cases	Mean	SD	Error	2-Tail Prob.
12.	Underage drinkers should be allowed to drink at home.	Males	68	2.6471	1.369	.166	.035 < .050
		Females	59	2.1525	1.229	.160	
13.	The drinking age should be lowered.	Males	68	3.0294	1.435	.174	.031 < .050
		Females	59	2.4915	1.331	.173	

Table 11. Values Items, Student Survey: Significant Differences by Grade.

Oneway Analysis of Variance						
No.	Item	Source	D.F.	Sum of Squares	Mean Squares	F Prob.
12.	Underage drinkers should be allowed to drink at home.	Between	2	11.1586	5.5793	
		Within	124	209.7233	1.6913	.0402
13.	The drinking age should be lowered.	Between	2	15.7873	7.8937	
		Within	124	234.0395	1.8874	.0175
Significant at < .0500						

Table 12. Percentage Responses to Values Items, Disapproval Ratings for Types of Substance Abuse Behaviors.

No.	Item	Percentage by Value Label						Mean	SD
		1	2	3	4	5	6		
Do YOU disapprove of people (who are 18 or older) doing the following. . .									
36.	Smoking one or more packs of cigarettes per day.	14.2	7.1	18.1	11.0	35.4	14.2	2.54	1.40
37.	Smoking marijuana on an occasional or regular basis.	11.0	8.7	11.8	10.2	49.6	8.7	2.21	1.42
38.	Trying one or two drinks of an alcoholic beverage.	12.6	22.8	34.6	11.0	11.8	7.1	3.13	1.14
39.	Taking one or two drinks nearly every day.	8.7	14.2	22.0	22.0	24.4	8.7	2.61	1.24
40.	Taking four or five drinks nearly every day.	12.6	4.7	11.8	13.4	46.5	11.0	2.24	1.41
41.	Taking five or more drinks once or twice each weekend.	8.7	11.0	19.7	20.5	31.5	8.7	2.45	1.28
42.	Trying or taking other drugs (LSD, cocaine, etc.) occasionally or regularly.	15.7	3.1	3.9	7.9	61.4	7.9	2.04	1.51

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Key to Value Labels: 1 = Strongly Approve 2 = Approve 3 = Neither approve or disapprove
4 = Disapprove 5 = Strongly Disapprove 6 = Don't Know

Norms

The norms for a group are the acceptable standards of conduct or the actual behaviors accepted by the group for its members. The American Drug and Alcohol Survey provided the majority of the data collected related to the norms for Gardiner student behaviors related to substance abuse.

The current estimates of drug use by students in the year prior to the date of the survey are expressed in Table 2 in Appendix H. (RMBSI, 1989, p. 6) The local 11-12th graders reported alcohol use at approximately the same level as 12th graders nationwide.

Patterns of substance use were established to determine the percentage of students at high, moderate and low levels of risk because of their involvement with drugs. High risk students get drunk and/or use drugs nearly every weekend or even more frequently. These students are in danger from accidents while under the influence of substances or of becoming dependent upon a substance.

Students at moderate risk or low risk do not use substances as frequently as high risk students. However, because of their willingness to use substances, there is some risk that they may increase their use of substances sometime in the future. See Appendix H (RMBSI, 1989, p. 8-14)

The analysis of data presented earlier in the norms sections indicated that alcohol is the substance most frequently abused by Gardiner students. Table 6A in the Detailed Report (Appendix H) shows, in general terms, where students have used alcohol. (RMBSI, 1989, p. 17)

The Gardiner Student Survey item 17, "I usually get the alcoholic beverages I drink from a same age friend", and item 18, "I usually get the alcoholic beverages I drink from an adult friend or parent", establish where students get the alcoholic beverages they drink. The means for the responses were neutral, as shown in Table 13, with equivalent numbers agreeing and disagreeing with the statements. There were no significant differences in student responses by gender or grade level.

Sanctions

Sanctions are the rewards or punishments that a group uses to maintain the norms or accepted behaviors of the group. The item analysis for items 19 through 28 shown in Table 14 indicate a variation in the mean scores between individual items. In this section, student responses would indicate the sources of the strongest sanctions for upholding student norms.

Table 13. Percentage Responses to Norms Items, Student Survey.

No.	Item	Percentage by Value Label						Mean	SD
		1	2	3	4	5	6		
17.	I usually get the alcoholic beverages I drink from a same age friend.	7.9	14.2	17.3	11.0	24.4	25.2	3.30	1.21
18.	I usually get the alcoholic beverages I drink from an adult friend or parent.	6.3	19.7	19.7	7.1	22.0	25.2	3.19	1.17
Key to Value Labels: 1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree 6 = Don't Know									

Respondents to item 25, "The fear of getting caught drinking or using drugs prevents me from drinking or using", indicates that only 31.5 percent strongly agree or agree that fear of getting caught drinking or using is a deterrent. In addition, only 23.6 percent of the respondents to item 26, "The school rules about drinking and drug use discourage students from drinking or using drugs", indicate that the school rules would be an effective deterrent to drinking or using drugs. The data from this item analysis indicates that parental disapproval is a strong sanction for limiting student substance abuse.

Significant differences were found in the responses by grade. The probability factors for items 21, "My parents do not allow me to drink", item 23, "If I came home drunk, my parents would be furious", and item 28, "My friends do not approve if I use alcohol or drugs", are shown in Table 15.

Parent and Non-parental Community Leader Survey

The parents of all students enrolled in Gardiner Schools in grades kindergarten through twelve were contacted using a mailed survey instrument. Fifty six parents (37.8 percent), representing 84 children, responded by completing the survey instrument. Community leaders, identified by their involvement in issues related to substance abuse, who did not have children enrolled in Gardiner schools, were

Table 14. Percentage Responses to Sanctions Items, Student Survey.

No.	Item	Percentage by Value Label						Mean	SD
		1	2	3	4	5	6		
19.	My parents approve if I attend a party where alcohol and drugs are available.	1.6	1.6	7.1	11.8	66.9	11.0	1.59	.95
20.	My teachers would disapprove if I attended a party where alcohol and drugs were available.	51.2	23.6	7.9	0.0	11.0	6.3	1.96	1.29
21.	My parents do not allow me to drink.	43.3	22.0	11.0	11.8	7.9	3.9	2.19	1.32
22.	My parents give me drinks at home for special occasions.	23.6	31.5	7.9	10.2	24.4	2.4	3.20	1.52
23.	If I came home drunk, my parents would be furious..	66.1	18.1	4.7	4.7	3.1	3.1	1.61	1.03
24.	Law enforcement people in my community ignore students who are drinking.	7.1	14.2	14.2	15.7	29.1	19.7	2.54	1.25
25.	The fear of getting caught drinking or using drugs prevents me from drinking or using.	14.2	17.3	22.8	15.7	18.9	11.0	3.08	1.29

Table 14. Continued.

No.	Item	Percentage by Value Label						Mean	SD
		1	2	3	4	5	6		
26.	The school rules about drinking and drug use discourage students from drinking or using drugs.	10.2	13.4	20.5	19.7	26.0	10.2	3.38	1.28
27.	My close friends expect me to drink when they do.	3.1	7.9	17.3	18.1	41.7	11.8	2.13	1.14
28.	My friends do not approve if I use alcohol or drugs.	30.7	18.1	16.5	16.5	6.3	11.8	2.50	1.26
Key to Value Labels:		1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree 6 = Don't Know							

Table 15. Sanctions Items, Student Survey: Significant Differences by Grade.

Oneway Analysis of Variance						
No.	Item	Source	D.F.	Sum of Squares	Mean Squares	F Prob.
21.	My parents do not allow me to drink.	Between	2	12.0210	6.0105	
		Within	124	207.4436	1.6729	.0304
23.	If I came home drunk, my parents would be furious.	Between	2	6.8525	3.4263	
		Within	124	127.4624	1.0279	.0389
28.	My friends do not approve if I use alcohol or drugs.	Between	2	12.0807	6.4353	
		Within	124	186.8773	1.5071	.0161
Significant at < .0500						

also contacted using the mailed survey instrument. Of the twelve community leaders identified, eight (67 percent) responded to the survey.

Parent and Community Leader Characteristics

The survey items were designed to identify the knowledge, beliefs, values, norms and sanctions of the population. The responses given by parents and non-parental community leaders were analyzed to determine responders' positions relative to the characteristics.

An analysis of variance, using a t-test of independence and computing a pooled variance estimate indicated no significant differences in responses from the parent group and from the non-parental community leader group. The probability factor, significant at the .05 level, for each characteristic was shown in Table 16.

Since the analysis of variance indicated no significant differences between parental respondents and community leader respondents, the responses of both groups were combined for the individual item analyses for each characteristic. The mean for each individual item was used to compute a mean score and standard deviation for each variable characteristic in the study, shown in Table 17.

Table 16. Significant Differences between Parents and Non-Parental Community Leaders.

Group	No. of Cases	Mean	S.D.	Error	2-Tail Prob.
<i>t</i> -test for KNOWLEDGE					
Leaders	8	18.3750	4.502	1.592	
Parents	56	19.3750	4.868	.650	.586
<i>t</i> -test for BELIEFS					
Leaders	8	28.7500	4.559	1.612	
Parents	56	27.4643	5.397	.721	.574
<i>t</i> -test for VALUES					
Leaders	8	21.6250	5.579	1.972	
Parents	56	21.7679	4.962	.663	.940
<i>t</i> -test for NORMS					
Leaders	8	26.1250	7.680	2.715	
Parents	56	29.0000	6.986	.934	.286
<i>t</i> -test for SANCTIONS					
Leaders	8	22.2500	5.312	1.878	
Parents	56	24.9286	5.650	.755	.211
Significant at $< .050$					

Table 17. Means and Standard Deviations for Grouped Characteristics, All Responders (N = 64).

Variable	Mean	Standard Deviation	Minimum	Maximum
KNOWLEDGE	19.25	4.80	12.00	34.00
BELIEFS	27.63	5.28	16.00	41.00
VALUES	21.75	5.00	14.00	35.00
NORMS	28.64	7.08	15.00	47.00
SANCTIONS	24.59	5.64	15.00	36.00

Knowledge

Parents and non-parental community leaders indicated a high level of knowledge regarding substance abuse issues by their majority responses to items 1 through 12 . The percentages from Table 18 indicate accurate responses on all items except items 7 and 11.

Slightly more than 50 percent of the responders agree or strongly agree with item 7, "Teenagers can become alcoholics more quickly than adults" and item 11, "Adolescents have an ability to complete the stages of addiction faster than adults". On both items, 37 percent of the respondents indicated they did not know or were neutral.

Table 18. Percentage Responses to Knowledge Items, Parent Survey.

No.	Item	Percentage by Value Label					
		1	2	3	4	5	6
1.	Substance abuse includes only illegal drugs.	1.6	1.6	0.0	6.3	85.9	4.7
2.	Addiction refers to either physical or psychological dependence on a chemical.	73.4	23.4	0.0	0.0	3.1	0.0
3.	Prevention and intervention are important in helping the substance abuse problem.	81.3	18.8	0.0	0.0	0.0	0.0
4.	After drug treatment, it is an ongoing battle to remain free from drugs.	71.9	21.9	3.1	0.0	0.0	3.1
5.	Alcohol is the most abused drug among young people.	51.6	35.9	3.1	1.6	1.6	6.3
6.	Alcoholism is a disease.	70.3	23.4	1.6	0.0	4.7	0.0
7.	Teenagers can become alcoholics more quickly than adults.	21.9	32.8	18.8	6.3	1.6	18.8

Table 18. Continued.

No.	Item	Percentage by Value Label					
		1	2	3	4	5	6
8.	Incorrect use of prescription drugs is a form of substance abuse.	64.1	31.3	3.1	1.6	0.0	0.0
9.	Alcoholism is a disease affecting the entire family.	82.8	14.1	0.0	3.1	0.0	0.0
10.	Students are experimenting with alcohol, tobacco, and other substances at much earlier ages.	62.5	29.7	1.6	1.6	0.0	4.7
11.	Adolescents have an ability to complete the stages of addiction faster than adults.	25.0	31.3	14.1	4.7	1.6	23.4
12.	Hereditry is not related to addiction.	3.1	9.4	9.4	35.9	26.6	15.6

Mean 19.25 Standard Deviation 4.80

Key to Value Labels: 1 = Strongly Agree 2 = Agree 3 = Neutral
 4 = Disagree 5 = Strongly Disagree 6 = Don't Know

Beliefs

Parent and non-parental community leaders indicated personal convictions supportive of substance abuse prevention and education activities by their responses to items 13 through 25. The percentages of respondents by value label for the individual items are shown in Table 19.

Respondents to item 20, "Since the majority of student drug use occurs away from school, the issue isn't any of the school's business", indicate strong disagreement (98.4 percent) with the statement. Therefore, the belief that the school should be involved in substance abuse education may be inferred. Only 37.5 percent of the respondents to item 16, "If there were 'hard drugs' in this community, I would know about them", agreed with the statement. Slightly more than 54 percent of the respondents to item 21, "Anyone can stop drinking if they really want to", believe that it may be difficult for anyone to stop drinking even if they really want to. Respondents to item 25, "Communities do not supply enough alternative activities to keep students from substance abuse", were evenly divided with 37.5 percent believing they do and 43.8 percent believing communities do not.

Table 19. Percentage Responses to Beliefs Items, Parent Survey.

No.	Item	Percentage by Value Label					
		1	2	3	4	5	6
13.	Experimentation with alcohol and marijuana is expected.	4.7	15.6	10.9	23.4	45.3	0.0
14.	It is better for my child to use alcohol than smoke marijuana.	0.0	7.8	25.0	23.4	40.6	3.1
15.	It is permissible for my minor child to drink at home.	1.6	7.8	3.1	21.9	65.6	0.0
16.	If there were "hard drugs" in this community, I would know about them.	9.4	28.1	12.5	29.7	10.9	9.4
17.	Alcohol and marijuana use leads to use of stronger drugs.	34.4	35.9	14.1	12.5	0.0	3.1
18.	Substance use and abuse is contributed to by easily available money, cars, and drugs and the societal pressures and boredom students feel.	31.3	46.9	10.9	6.3	3.1	1.6
19.	Using drugs is so common in our society that it is a normal growing stage.	1.6	9.4	3.1	28.1	57.8	0.0

Table 19. Continued.

No.	Item	Percentage by Value Label					
		1	2	3	4	5	6
20.	Since the majority of student drug use occurs away from school, the issue isn't any of the school's business.	1.6	0.0	0.0	25.0	73.4	0.0
21.	Anyone can stop drinking if they really want to.	10.9	18.8	10.9	23.4	31.3	4.7
22.	Beer is the most abused drug among teenagers.	18.8	37.5	14.1	9.4	3.1	17.2
23.	Parents shouldn't drink or use drugs and then tell their kids not to.	48.4	23.4	6.3	17.2	1.6	3.1
24.	People who become addicted to drugs or alcohol are just weak--all they need is self-control.	4.7	6.3	6.3	34.4	45.3	3.1
25.	Communities do not supply enough alternative activities to keep students from substance abuse.	12.5	31.3	18.8	29.7	7.8	0.0

Mean 27.63 Standard Deviation 5.28

Key to Value Labels: 1 = Strongly Agree 2 = Agree 3 = Neutral
 4 = Disagree 5 = Strongly Disagree 6 = Don't Know

Values

The group mean (21.75) and standard deviation (5.00) for the values category indicated less variation in responses to the values items than to responses in the belief category. At least 75 percent of the respondents to each item, except item 34, "There should be a convenient drug testing procedure for school officials to detect drug use in individual circumstances", demonstrated support for a strong school role in substance abuse education and prevention. Table 20 shows the percentages of responses by value label for each item 26 through 38.

One hundred percent of the respondents agreed with item 36, "Students should have a positive self-concept and be taught refusal skills to help resist negative peer pressure", and item 37, "Students should be familiar with the adverse effects drugs have on their bodies and how they impair bodily functions". Of those responding to item 33, 95.3 percent agree "People returning from treatment for a substance abuse problem should receive full aftercare support from school, community and family".

Table 20. Percentage Responses to Values Items, Parent Survey.

No.	Item	Percentage by Value Label					
		1	2	3	4	5	6
26.	Anyone selling illegal substances should be punished with a mandatory jail sentence.	70.3	18.8	6.3	1.6	1.6	1.6
27.	Anyone possessing illegal substances should attend a mandatory treatment program.	48.4	34.4	12.5	1.6	1.6	1.6
28.	A drug education program should start in kindergarten.	46.9	34.4	1.6	9.4	6.3	1.6
29.	Smoking should be banned on all school property.	67.2	23.4	7.8	1.6	0.0	0.0
30.	Teaching about drugs and drug usage should be left to the parents.	3.1	3.1	3.1	32.8	57.8	0.0
31.	Parents should practice and teach the type of alcohol use they expect their children to practice.	45.3	32.8	10.9	4.7	3.1	3.1
32.	People should come to view alcohol and tobacco use as a national health issue, not a personal freedom issue.	40.6	35.9	14.1	6.3	1.6	1.6

Table 20. Continued.

No.	Item	Percentage by Value Label					
		1	2	3	4	5	6
33.	People returning from treatment for a substance abuse problem should receive full aftercare support from school, community and family.	62.5	32.8	3.1	0.0	0.0	1.6
34.	There should be a convenient drug testing procedure for school officials to detect drug use in individual circumstances.	20.3	39.1	12.5	10.9	6.3	10.9
35.	Students in our community should participate in a substance abuse curriculum from grades K through 12.	42.2	39.1	7.8	6.3	3.1	1.6
36.	Students should have a positive self-concept and be taught refusal skills to help resist negative peer pressure.	70.3	29.7	0.0	0.0	0.0	0.0
37.	Students should become familiar with the adverse effect drugs have on their body and how they impair bodily functions.	75.0	25.0	0.0	0.0	0.0	0.0
38.	I'd like my child to know other students who don't use.	57.8	35.9	6.3	0.0	0.0	0.0

Mean 21.75 Standard Deviation 5.00

Key to Value Labels: 1 = Strongly Agree 2 = Agree 3 = Neutral
 4 = Disagree 5 = Strongly Disagree 6 = Don't Know

Norms

The parents and non-parental community leaders exhibited wide variation in responses to the norms survey items as indicated by the standard deviation of 7.08. The responses indicate 65 to 75 percent of the respondents strongly agree or agree with item 41, "By and large, our town 'looks the other way' in regard to drinking youth"; item 42, "Students are receiving very 'mixed messages' from parents, law enforcement authorities, and advertising"; and item 44, "Drinking is part of the culture in our community". The percentages of responses to each norm item by value label are shown in Table 21.

Sanctions

Items 53 through 66 were developed to identify the sanctions which might maintain the norms within the population surveyed. The responses of the parent and non-parental community leader survey groups are displayed in Table 22. One hundred percent of respondents agreed with items 54, "Possession of illegal substances in school should result in parental notification", and item 63, "Parents should be notified when their children are violating laws." About half (51.6 percent) of the respondents agreed with item 61, "Parents, as a rule, provide a denial system for their children in the use of

alcohol". Of the remaining responders to item 61, 43.5 percent did not know or were not sure how to respond to the item.

Parents and non-parental community leaders, in their responses to item 58, "Young people are treated too leniently for alcohol and drug related offenses", indicate that 67.2 percent agree with the item. In the responses to item 59, "Students using drugs during the school year should immediately be excluded from all school athletics and activities for the remainder of the year", which suggests a stringent disciplinary action, approximately 41.6 percent indicated that they disagreed with the item.

The information gathered in the process of surveying students, parents and non-parental community leaders provides identifiable characteristics for the Gardiner community. The knowledge, beliefs, values, norms and sanctions are representative of community members' views about substance abuse and substance abuse education.

Table 21. Percentage Responses to Norms Items, Parent Survey.

No.	Item	Percentage by Value Label					
		1	2	3	4	5	6
39.	Parental discipline in cases of student use or abuse is sadly minimal.	20.3	34.4	17.2	4.7	1.6	21.9
40.	The "Just Say No" program is not sufficient in preventing drug use and abuse.	25.0	53.1	12.5	1.6	1.6	6.3
41.	By and large, our town "looks the other way" in regard to drinking youth.	25.0	40.6	6.3	12.5	0.0	15.6
42.	Students are receiving very "mixed messages" from parents, law enforcement authorities, and advertising.	35.9	46.9	3.1	6.3	4.7	3.1
43.	Most people look the other way instead of helping because they don't want to get involved.	20.3	53.1	9.4	12.5	0.0	4.7
44.	Drinking is part of the culture in our community.	26.6	50.0	14.1	3.1	6.3	0.0

Table 21. Continued.

No.	Item	Percentage by Value Label					
		1	2	3	4	5	6
45.	Parents would rather see their children drinking than using drugs like marijuana, cocaine and speed.	21.9	51.6	7.8	9.4	6.3	3.1
46.	Until the older population changes their attitudes about alcohol, the younger population will continue to abuse alcohol.	32.8	43.8	14.1	4.7	3.1	1.6
47.	Social drinking by adults and students is considered permissible in our community.	21.9	40.6	12.5	12.5	4.7	7.8
48.	Students engaging in substance abuse should be identified.	28.1	23.4	17.2	15.6	4.7	10.9
49.	The home, school and law enforcement should work together to help a student who abuses.	57.8	42.2	0.0	0.0	0.0	0.0
50.	Students who are caught selling harmful substances to school age children should be prosecuted.	68.8	26.6	4.7	0.0	0.0	0.0

Table 21. Continued.

No.	Item	Percentage by Value Label					
		1	2	3	4	5	6
51.	Parents who furnish alcohol and allow students to have alcoholic parties on their premises should be charged with contributing to the delinquency of a minor.	53.1	31.3	9.4	3.1	1.6	1.6
52.	Most students in our community feel it is all right to use alcohol before graduation from high school.	21.9	42.2	12.5	4.7	1.6	17.2
Mean 28.64		Standard Deviation 7.08					
Key to Value Labels: 1 = Strongly Agree 2 = Agree 3 = Neutral							
4 = Disagree 5 = Strongly Disagree 6 = Don't Know							

Table 22. Percentage Responses to Sanctions Items, Parent Survey.

No.	Item	Percentage by Value Label					
		1	2	3	4	5	6
53.	Possession or use should result in forced attendance at a court ordered counseling and educational program.	40.6	37.5	17.2	0.0	1.6	3.1
54.	Possession of illegal substances in school should result in parental notification.	92.8	7.8	0.0	0.0	0.0	0.0
55.	Possession or use of an illegal substance in school should result in suspension.	48.4	21.9	14.1	12.5	3.1	0.0
56.	An arrest of a student for use or possession of an illegal substance should require counseling and educational classes for both student and parents.	57.8	40.6	0.0	0.0	0.0	1.6
57.	Students caught with drugs at school should be referred immediately to legal authorities.	50.0	35.9	4.7	4.7	0.0	4.7

Table 22. Continued.

No.	Item	Percentage by Value Label					
		1	2	3	4	5	6
58.	Young people are treated too leniently for alcohol and drug related offenses.	32.8	34.4	18.8	6.3	0.0	7.8
59.	Students using drugs during the school year should immediately be excluded from all school athletics and activities for the remainder of the year.	20.3	15.6	18.8	29.7	10.9	4.7
60.	Parents or other adults providing alcohol or drugs to minors should be required to serve a minimum of 24 hours in jail and pay a \$500 fine for the first offense.	45.3	28.1	17.2	4.7	3.1	1.6
61.	Parents, as a rule, provide a denial system for their children in the use of alcohol.	17.2	34.4	25.0	3.1	0.0	20.3
62.	Parents should be supportive of law enforcement officials.	60.9	37.5	1.6	0.0	0.0	0.0
63.	Parents should be notified when their children are violating laws.	82.8	17.2	0.0	0.0	0.0	0.0
64.	Students who have been caught drinking or using drugs should be excluded from extra-curricular activities for a specified time.	48.4	43.8	1.6	3.1	0.0	3.1

Table 22. Continued.

No.	Item	Percentage by Value Label					
		1	2	3	4	5	6
65.	An intervention and referral process should be included in schools to aid in the identification and placement of students in need of counseling services.	46.9	51.6	1.6	0.0	0.0	0.0
66.	The majority of students don't want to become substance abusers but they need to have some help in dealing with peer pressure and learning how to say "no" effectively.	57.8	35.9	4.7	0.0	1.6	0.0
Mean 24.59		Standard Deviation 5.64					
Key to Value Labels: 1 = Strongly Agree 2 = Agree 3 = Neutral							
4 = Disagree 5 = Strongly Disagree 6 = Don't Know							

CHAPTER 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this chapter is to summarize, draw conclusions and implications, and make recommendations based on the information gained from the study. The study was based on the responses of students, parents, and non-parental community leaders in the Gardiner School Districts 7 and 4 to the survey instruments.

The objectives of this study were to determine students' needs for the development of substance abuse education and to assess the variables frequently identified by parents and non-parental community leaders as appropriate to the development of substance abuse education. The characteristics evaluated for survey groups were knowledge, beliefs, values, norms, and sanctions.

Summary

The students were surveyed using a commercially developed survey instrument, The American Drug and Alcohol Survey, and a locally developed survey instrument. The survey instrument for use with parents and non-parental community leaders was developed by a panel of drug-free

schools project coordinators using the Delphi process. The survey instruments were designed to assess the knowledge, beliefs, values, norms, and sanctions of the groups.

The American Drug and Alcohol Survey, used for the students, had established and published validity and reliability data. The local student survey was tested for validity by a panel of five educators who reviewed the survey items. Test/retest reliability was established using a sample of 21 students in a neighboring community.

The Delphi process established validity for the parent survey. Test/retest reliability was established using a sample of nine parents from a neighboring community.

The rate of survey return for non-parental community leaders was 67 percent. The rate of return for parents was 37.8 percent. Ninety-two percent of the students enrolled in grades seven through twelve were surveyed and 100 percent of those students responded.

The individual survey items were evaluated using frequency distributions, percentages, means and standard deviations. Means and standard deviations were computed for each response category. One-way analysis of variance was used to identify significant differences in student responses by grade. A two-tailed *t*-test for independence provided data regarding significant differences by gender. The two-tailed *t*-test was also used to determine if

significant differences existed between the responses of parents and non-parental community leaders.

The results of this study will be used by educators within the Gardiner School Districts 4 and 7 to plan substance abuse education programs for parents, non-parental community leaders, and students. The study provides new data which will serve as the baseline information for evaluative purposes and future studies.

Conclusions

Since 92 percent of the students attending grades seven through twelve in the Gardiner Schools responded, the conclusions drawn from the student survey were determined to be representative of the entire student population. The conclusions drawn as the result of the 67 percent response from the group of non-parental community leaders were generalized to the entire group originally identified as community leaders and was also generalized to the parent respondents, since analysis showed no significant differences between the two groups of respondents. Due to the 37.5 percent response rate by parents to the survey, the conclusions drawn from parent data were not generalizable to all parents of Gardiner students.

General conclusions drawn from the study relative to the review of literature on which this study was based are as follows:

- 1) Needs assessment, as part of the program planning model, identified a discrepancy between the stated ideals and the actual level or norms of student substance abuse.
- 2) The accumulation of data regarding knowledge, beliefs, values, norms, and sanctions provided a basis for determining goals and objectives reflective of the needs of students, parents, and community leaders.
- 3) Needs assessment provided data indicative of the level of support from surveyed groups for important aspects of successful substance abuse education programs.

Implications for Gardiner Schools

While the responses to each survey item have implications for the development of a substance abuse program in the Gardiner School Districts 4 and 7, the conclusions drawn from measuring student, parental, and non-parental community responses within each characteristic were especially important. The conclusions from the student survey are:

- 1) Although students' responses indicated above average to high knowledge levels about substance abuse, 30 percent of the students did not know or had inaccurate responses regarding the relationship between alcoholism and heredity. There was also a significant difference in responses by grade level on the same topic. The substance abuse curriculum must contain the study of the scientifically documented link between heredity and alcoholism.
- 2) The mean scores for the belief items were near the neutral score of three which indicated students as a group neither strongly agree or strongly disagree with the belief statements. The wide range of student beliefs must be considered when designing curriculum materials. While forty-eight percent of the students surveyed indicated they had experienced enough substance abuse education already, 60.7 percent indicated that substance abuse education was necessary for all students, not just those with drug or alcohol problems. While it appears that students recognize the importance of substance abuse education, they seem to lack enthusiasm for their own participation in the program. Females and younger students agreed more strongly than males and older students that

additional information and substance abuse education is needed.

- 3) The students' value responses indicated that more than 50 percent of the students felt substance abuse education should be taught in school and should teach students how to resist negative peer pressure. Older students agreed more strongly than younger students that it was acceptable for adolescents to drink alcohol at home and that the drinking age should be lowered. Eighty-five percent of the students in grades seven and eight have never used drugs and do not intend to use them in the future. Substance abuse teaching materials must be designed to assist students in maintaining their expressed intentions.
- 4) The survey established alcohol as the most frequently used substance by Gardiner students with 82 percent of 11-12th graders using alcohol within the last year. Although 56 percent of students responded that they had never been drunk, the average age of first drunk for the remaining respondents was 13.1 years. Although 82 percent of students had never used marijuana, the age of first use for those who had was 12.6 years. The school district must address the topic of substance abuse

well before the junior high grades in an effort to reach students before abuse of substances begins.

- 5) Fifteen to twenty percent of students are at moderate to high risk for substance abuse and special efforts must be directed to identify and treat those students.
- 6) Students indicated the most effective sanctions for preventing substance abuse by students were those placed by their parents. The district needs to make parents aware of the strong influence they have on their students. Interestingly, the threat of disciplinary action taken by the school district or by law enforcement was not seen as a strong deterrent to illegal use of substances by 40 percent of the students surveyed.

An important implication for Gardiner Schools arose from the comparison of responses by parents and non-parental community leaders to the survey. Because no significant difference was found between parent responses and the responses from non-parental community leaders, the district may rely on the opinions expressed by the small group of community leaders as being representative of the parents most likely to respond to a survey about substance abuse issues. The identified community leaders may form a core advisory group for the district regarding substance abuse

education and alleviate the expensive process of surveying parents frequently.

The relative positions of parents and community leaders in the areas of knowledge, beliefs, values, norms, and sanctions have important implications for Gardiner Schools. The conclusions are listed below:

- 1) Parents and community leaders demonstrated a high level of knowledge about substance abuse. However, 45 percent of the respondents indicated misunderstandings about addiction and adolescents. An educational program for parents and non-parental community leaders regarding children, adolescents, and substance abuse may be helpful.
- 2) The responses of parents and community leaders indicated beliefs supportive of the school role in the process of substance abuse education. Of parent and non-parental respondents, 62.5 percent believe they would not know if hard drugs were available in the community. The school district, law enforcement, and parents need to work cooperatively to share information to support existing beliefs and assist in the development of beliefs helpful to students. The parent position regarding the community role in providing activities as alternatives to substance

abuse for students was unclear. The school district may benefit by encouraging community groups to take a more active role in providing activities or meeting places for students and in providing positive adult role models for students away from the school setting.

- 3) The respondents to the parent survey indicated strong support on values items for the components which the review of literature cited as essential to a successful substance abuse program. The components supported were:
 - a) a substance abuse program that would begin at the kindergarten level,
 - b) students would have the opportunity to participate in a substance abuse curriculum from grades kindergarten through twelve,
 - c) students would develop a positive self-concept,
 - d) students would be taught refusal skills to help resist negative peer pressure,
 - e) students would become familiar with the adverse effect drugs have on their bodies,
 - f) an intervention and referral process would be included in schools to aid in

- the identification and placement of students in need of counseling services,
 - g) students returning from treatment for a substance abuse problem would receive full aftercare support from the school,
 - h) students would have the opportunity to associate with other students who do not abuse substances,
 - i) smoking would be banned on all school property,
 - j) students possessing illegal substances would attend a mandatory treatment program, and
 - k) students selling illegal substances would be severely punished.
- 4) The parents and community leaders responded to the items related to the norm for the Gardiner community by indicating that some substance abuse, especially alcohol abuse, by students was tolerated. School district personnel may need to assume a leadership role in conjunction with other community leaders to encourage parents and law enforcement officials to accept and enforce a stronger anti-abuse message.

- 5) The sanctions section indicated strong concern on the part of parents to be notified and involved in decisions made regarding substance abuse by their children. Parents and community leaders indicated support for school policy which would remove students violating substance abuse rules from extra-curricular activities for a period of time less than one school year. Parents also indicated a clear understanding of the necessity of their role as supporters of law enforcement officers who work to enforce local, state, and federal laws.

Recommendations

This study provided information for the Gardiner School Districts 4 and 7 to utilize in establishing goals, priorities, and objectives consistent with the needs and knowledge, beliefs, values, norms, and sanctions of students, parents, and non-parental community leaders. The data gathered during the survey process established baselines of student behavior which will serve as the standard for comparison for future student surveys. Future surveys should be conducted to determine what effects, if any, substance abuse education has had on student behavior.

Guidelines for Curriculum Planning

Based on implications drawn from this research, specific guidelines regarding the substance abuse curriculum are suggested. Practical suggestions for the planning of the substance abuse curriculum at Gardiner Schools follow:

- 1) In the knowledge area, students in grades seven through twelve demonstrated high levels of knowledge about substance abuse and related legal and social issues. Factual information, including the relationship between heredity and alcoholism and other addictions, should be disseminated in the elementary grades. Students should study the impact of alcohol and drug use on families and communities. Prior to entering grade seven a competency examination should be given to ensure that elementary students continue to enter junior high school with a high level of knowledge to prevent substance abuse.
- 2) Students currently express positive beliefs toward substance abuse education as an important part of education. However, students need to be taught at school and at home, beginning at the kindergarten level, a belief system which says that alcohol use before the age of 21 is illegal; and that the use of illegal drugs and the misuse of legal drugs is unhealthy at any age. As students become older,

the belief system which supports alternative social activities other than social and experimental drinking and drug use should be modeled by student leaders, parents and other adult role models in the community as a part of the substance abuse program. Students should be taught that substance abuse is often symptomatic of underlying concerns and taught to look beyond the abuse to identify the problems that may be causing the substance abuser physical or psychological pain.

Older students view fewer substance abuse behaviors as risky than do younger students. Males tend to identify all drug and alcohol usage behaviors as less risky than do females. Therefore, in classroom discussions the grade and gender differences arising from attitudes related to adolescent development and stereotypical male behavior may need to be addressed.

- 3) The school and the substance abuse curriculum can assist students to develop a personal value system consistent with healthy family values. The curriculum should give students of all ages the opportunity to practice refusal skills and communication skills.

Again males and older students were more receptive to the value items which supported a lower legal drinking age and saw underage drinking as being acceptable when done at home. Hence, the substance abuse curriculum should continue to support students who express disapproval of substance abuse behaviors and encourage those students to behave consistently with the values they express.

- 4) The surveys indicate that while Gardiner students use alcohol and abuse illegal drugs, the statistics for Gardiner students fall below national averages, with the exception of alcohol use by twelfth graders. Additional alcohol education in grades ten, eleven, and twelve may be indicated. Students who are already practicing a healthy life style should be reinforced. All students, throughout all grade levels, should be given the opportunity to practice a variety of life skills, such as decision-making and problem-solving. Students should also develop recreational skills, beginning at an early age, which they can continue to enjoy throughout their lives. Students who use their talents and skills to enhance school and

community life should receive official recognition for their efforts.

Twenty percent of the students surveyed indicated that they usually get alcoholic beverages from a same age friend and twenty-five percent indicated they get them from adult friends or parents. Projects which help develop social responsibility and a feeling of community may be helpful in encouraging students and parents to be more responsible for their own substance use and their contributions to the use of substances by others.

- 5) The substance abuse curriculum should teach students, beginning in elementary school and continuing into the secondary school, the legal ramifications of substance abuse. In addition, the school policy regarding substance abuse and the disciplinary actions which accompany infractions of the policy should be clearly articulated to students. The substance abuse curriculum should encourage parents to participate in discussions and activities with their students. Survey items which addressed student perceptions of parental disapproval indicated parental comments were a strong deterrent to substance abuse by students and

demonstrated that parents can have a powerful influence on their children in this area.

Improvement of the Study

If the study was to be replicated, it was recommended that:

- 1) the Delphi method used to construct the parent and non-parental community leader survey instrument be modified to allow the researcher to categorize panel responses prior to final panel approval of the survey instrument,
- 2) the survey instruments for parents and student be refined to ensure all individual survey items were properly assigned to the corresponding category,
- 3) test/retest reliability for the revised survey instruments be established using a larger sample population, and
- 4) the level of parent response be improved to increase the generalizability of the survey by designing an effective method of identifying parent responses, so that non-responders can be contacted directly or by selecting a random sample of the parent population to survey rather than attempting to survey the entire parent population.

Use of Results from the Study

In addition to the school district for which the study was designed, the results of this study may be useful to other school districts attempting to develop a substance abuse curriculum. The survey instruments resulting from this study could be used, with revision, to gather information about the knowledge, beliefs, values, norms, and sanctions for groups within other districts or communities.

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APPENDICES

APPENDIX A

FIRST ROUND LETTER
DELPHI PANEL MEMBERS

You have been identified, through the Office of Public Instruction, as an experienced substance abuse educator because of your work in your school's substance abuse program. You have been selected, along with other Montana substance abuse educators, to assist in constructing a survey questionnaire. The questionnaire will be used in a community needs assessment. The results of the community assessment will be used in developing a substance abuse curriculum and program in the Gardiner Schools.

The process of writing the questionnaire will consist of three rounds of responses from you and other educators who comprise the panel of experts. In the first round, you will be asked to write five questions to address each area to be measured. In the second round, all questions submitted by panel members will be listed. Panel members will be asked to select questions from the list to be included in the survey. In the third round, an effort will be made to arrive at a group consensus based on the responses elicited in the second round. Panel members will have the opportunity to reevaluate questionnaire items with the knowledge of responses of other panel members. There will be a two week interval between rounds.

Although student survey instruments are widely used to obtain information about students and substance abuse, research did not reveal a survey instrument which could be used to assess the perceived needs of parents. The parents and non-parental community leaders will be surveyed to provide more parental input into the curriculum design process.

Please complete the enclosed form and return in the self-addressed, stamped envelope by November 7. If you have any questions, I will be happy to answer them if you call or write. The phone number is 848-7563.

Thank you for your participation in this project.

Sincerely yours,

Jaclyn P. Mavencamp

APPENDIX B

FIRST ROUND QUESTIONNAIRE
DELPHI PANEL MEMBERS

The questionnaire will assess the knowledge, beliefs, values, norms and sanctions of parents and community leaders related to student substance use and abuse. Knowledge is a body of facts about a particular topic. Beliefs are personal convictions held about a subject. Values are the ideals of the members of a community. Norms are the acceptable standards of the community. Sanctions are the rewards and punishments within a community which encourage a member to maintain the community norms. Sample questions are given to assist you in formulating questions for each area. A Likert scale (strongly agree through strongly disagree) will be used with the questions.

Directions: Please write questions in each area which could be used to provide information about the community and substance abuse issues.

Knowledge (The facts)

Example: Substance abuse refers to the misuse or overuse of mind altering chemicals, including alcohol.

1.

2.

3.

4.

5.

Beliefs (Personal convictions)

Example: Alcohol is not as harmful to students or adults as other drugs.

1.

2.

3.

4.

5.

Values (The ideals or the way I'd like it to be)

Example: Students in our community should not use alcohol before they reach the age of 21.

- 1.
- 2.
- 3.
- 4.
- 5.

Norms (The standard or the way it really is.)

Example: Most students in our community should experience alcohol before graduation from high school. It's a part of growing up.

- 1.
- 2.
- 3.
- 4.
- 5.

Sanctions (Rewards and punishments or what maintains the status quo)

Example: Students should not be arrested by law enforcement officials for alcohol-related offenses, such as possession by a minor or driving under the influence.

- 1.
- 2.
- 3.
- 4.
- 5.

Please place your name, mailing address and phone number at the bottom of the page so rounds two and three may be mailed directly to you. This information will be detached before your answers are compiled.

Name _____

Mailing Address _____

Phone Number _____

APPENDIX C

SECOND ROUND QUESTIONNAIRE
DELPHI PANEL MEMBERS

Following is a list of the questions submitted by panel members during round one of the questionnaire building Delphi technique. Remember that this survey is to assess PARENTS and other adults. Please indicate ten questions in each category which you feel would best assess that category. If you think a question would assess another category better, please change it to the appropriate one. You may also make any additions or corrections to the statements. If you think a topic has not been adequately addressed, you may write new statements at the end of each list. Please return this round two questionnaire immediately (no later than November 21). I would like to mail round three before the Thanksgiving break. Thank you all for your time, effort, and input during round one.

Knowledge (The facts)

Example: Substance abuse refers to the misuse or overuse of mind-altering chemicals, including alcohol.

1. Substance abuse only includes illegal drugs.
2. Marijuana's effects last only for approximately two hours.
3. Cocaine is available in most schools.
4. The majority of illegal substances consumed are provided by other students.
5. Alcohol, marijuana and cocaine are addictive.
6. Cocaine can be very addicting.
7. Many substance abusers use a variety of drugs.
8. Some adults abuse prescription drugs.
9. One of the easiest drugs to obtain, which is addicting, is nicotine.
10. Alcohol can be very addicting for some individuals.
11. Beer is not as dangerous as other drugs.
12. Beer is not a drug.
13. Most young people drink to be sociable, not to get drunk.
14. Young people cannot get "hooked" on beer.
15. Addiction refers to either physical or psychological dependence on a chemical.
16. Because of their high activity levels and healthy bodies teenagers can metabolize more alcohol more quickly than an adult.
17. A person should be a true addict before being sent to a chemical dependency treatment center.
18. A person cannot become addicted to marijuana.
19. Substance abuse is mainly a problem in the teen years.
20. Only the substance abuser is affected by his problem.
21. A family can all be ill because of one or more users.
22. Substance abuse deals only with illegal drugs.
23. Prevention and intervantion are important in helping the chemical abuse problem.

24. Alcohol is not a drug but is used as a refreshment beverage.
25. The use of marijuana impairs ones reflexes/reactions while driving.
26. After drug treatment it is an ongoing battle to stay off drugs.
27. The content of pot is higher than it was fifteen years ago.
28. Steroids are damaging and habit forming.
29. Alcohol is the most abused drug among young people.
30. Alcoholism is a disease.
31. Alcoholism is a disease that affects the entire family.
32. A black-out means you lose consciousness from drinking alcohol.
33. Drinking coffee is a good way to sober up.
34. A blood alcohol content (BAC) of .10 is considered legally intoxicated.
35. Teenagers can become alcoholics must faster than adults.
36. Substance abuse has a detrimental effect on student's academic success.
37. Incorrect use of prescription drugs is a form of substance abuse.
38. Most students experiment with tobacco but it isn't very harmful to them.
39. Substance abuse by students is increasing both in occurances and intensity.
40. Students are experimenting with alcohol, tobacco, and other substances at an increasingly earlier age.
41. Adolescents have an ability to complete the stages of addiction faster than adults. (Six months for teens-- 10 years for adults.)
42. Marijuana hasn't been proven to be dangerous.
43. The long term effects of alcohol use as a teenager are relatively mild.
44. There isn't a genetic link to being a predisposed addict.

Beliefs (Personal convictions)

Example: Alcohol is not as harmful to students or adults as other drugs.

1. Experimentation with alcohol and marijuana are expected.
2. Marijuana is safer than alcohol.
3. Marijuana and hashish should be legal under the same provisions as alcohol.
4. Smoking cigarettes is less physically harmful than occasionally smoking marijuana.

5. Beer is better for teenagers to drink than vodka.
6. It is better for my child to use alcohol than smoke marijuana.
7. It is OK for my minor child to drink.
8. It is OK for my minor child to drink at home.
9. If there were "hard drugs" in this community, I would know about it.
10. Smoking pot leads to the "hard stuff".
11. Alcohol and marijuana are "gateway" drugs.
12. Alcohol and marijuana for some people are "terminal" drugs.
13. Availability of money, cars and alcohol/drugs combined with leisure time, societal mixed messages and self-stated boredom all contribute to use and abuse.
14. There is no correlation between juvenile crime and drug/alcohol use today.
15. Using drugs is so common in our society that it is a normal stage of growing up.
16. Tobacco use is much less harmful than alcohol use.
17. Since the majority of student drug use occurs away from school, the issue isn't really any of the school's business.
18. It is acceptable for staff members to teach students not to smoke or drink and still continue to do so in their personal lives.
19. Marijuana is less harmful than the "hard core" drugs.
20. Anyone can stop drinking if they really want to.
21. Student problems are due to poor parental behavior.
22. Drugs do not impair me like they do most people.
23. No one can become addicted to a prescription drug.
24. The use of tobacco is as addicting as cocaine.
25. Reactions to drugs vary among individuals, i.e. behaviors.
26. There is a correlation between highway alcohol related deaths and the use of seat belts.
27. Two drinks a day are good for your health.
28. More should be done to stop the drug trafficking in America.
29. Beer is the most abused drug among teenagers.
30. Although marijuana is illegal, it is not as harmful as other drugs.
31. Drugs should be legalized in the United States.
32. Parents shouldn't drink or use drugs and tell their kids not to.
33. Beer and wine are not as harmful as hard liquor.
34. People who become addicted to drugs or alcohol are just weak--all they need is self control.
35. Tobacco and alcohol are not addictive.
36. It is not possible for young children to become alcoholics.
37. Substance use enhances a student's social skills.

38. Experimenting with alcohol during the teen years is a normal occurrence.
39. Communities do not supply enough alternatives to keep students from substance abuse.
40. Marijuana can be useful and is not as harmful as other drugs.
41. Alcohol is not a drug and shouldn't be called one.
42. I can remain a social user all my life.
43. Going to a party with a "buzz" helps me socialize.
44. The only way to "fit in" is to use or at least to pretend that you are using.
45. Having a little to drink (2 to 3 beers) can't effect my driving.
46. My parents use and I haven't seen any drastic results.

Values (The ideals or the way I'd like it to be)

Example: Students in our community should not use alcohol before they reach the age of 21.

1. Tobacco use should be illegal until the age of 21.
2. Possession of marijuana should be a felony.
3. Sale of illegal substances should draw a mandatory jail sentence.
4. Possession of illegal substances should draw a mandatory treatment program.
5. Students know the dangers of substance abuse.
6. A drug education program should start with first grade.
7. Smoking should be banned on all school property.
8. Students should be "taught" on how to drink alcoholic beverages.
9. Teaching of drugs and drug usage should be left to the parents.
10. My desire is that young people who choose to drink will drink in moderation.
11. The drinking age should be the same as the draft age.
12. Parents should model and teach the type of alcohol use they expect their children to practice.
13. If you're old enough to vote, you're old enough to buy alcohol.
14. People should come to view alcohol and tobacco use as a national health issue, not a personal freedom issue.
15. Moderate use of alcohol for all adults is okay.
16. Students with abuse problems agree to attend treatment to receive help.
17. People returning from treatment should receive full after care support from school, family, and community.
18. Prevention/education programs in elementary school prevents chemical use/abuse in the teen years.
19. All parents welcome the opportunity to learn more about chemical use/abuse.

20. Smoking should be banned in all public places and businesses.
21. Advertising for alcoholic products glamorizes its usage.
22. There should be a convenient drug testing procedure for school officials to detect drug use in individual circumstances.
23. Advertising should not use alcoholic businesses when they reflect the thoughts (programs) of young people.
24. Legal drinking age should be 21 nationwide.
25. Alcohol is the older population's drug of choice.
26. Students should be taught how to say no to drugs and alcohol.
27. No one should feel pressure to use drugs or alcohol.
28. There should be an out-patient treatment center in our community to help alcoholics and addicts and their families.
29. Our community should start a youth center so the kids will have something to do.
30. The entire community should be educated in the harmful effects of drugs and alcohol.
31. Students in our community should participate in a substance abuse curriculum from K through 12.
32. If students are going to experiment with alcohol, they should do so at home under parental supervision.
33. If students are caught drinking or using drugs, they should be apprehended and dealt with by law enforcement.
34. Students should have a positive self-concept and be taught refusal skills to help resist negative peer pressure.
35. Students should be familiar with the adverse effect drugs have on the body and impairment of its functions.
36. Students in our community do not use alcohol very often.
37. Students in our community should not use drugs before they reach the age of 21.
38. Students have a hard time socializing without using substances.
39. Very seldom do students get the message that not using is better than using.
40. I want students to accept me for who I am without labels.
41. An adult mentor might help me with unresolved user issues concerning drugs, sex, and self-esteem.
42. I'd like to know other students who don't use--I want to have fun without drinking.

Norms (The standard or the way it really is)

Example: Most students in our community should experience alcohol before graduation from high school. It's part of growing up.

1. Most parents expect their kids to experiment with alcohol and marijuana.
2. Cocaine is available in almost every school.
3. Most students that use illegal substances are impossible to detect.
4. Parental discipline in cases of student abuse or use is sadly minimal.
5. Many students use at home with parental permission.
6. Most students in our school experiment with pot before they graduate.
7. The "Just Say No" program is not sufficient in preventing drug use and abuse.
8. Over half of all high school students in our town get drunk at least once a week.
9. By and large, our town "looks the other way" in regards to drinking youth.
10. Students are receiving very "mixed messages" from parents, law enforcement authorities and advertising.
11. It's not possible to have fun without drinking alcohol.
12. You can't expect any different behavior from students if the parents use.
13. To be a part of the crowd, you must use at times.
14. Kids will be kids--it's been that way for years.
15. It's understood that students from broken families are the real abusers.
16. Most people look the other way instead of helping because they don't want to get involved.
17. Drinking is part of the culture in our community.
18. Parents would rather see their children drinking than using drugs like pot, cocaine, speed, etc.
19. Drinking alcoholic beverages proves your manhood.
20. Do as I say, not as I do.
21. The catchy advertising slogans for tobacco and alcoholic products help influence young people to drink, smoke, etc.
22. Until the older population changes their attitudes about alcohol, the younger population will continue to abuse alcohol.
23. In our community, it is OK to say no to drugs and alcohol.
24. Social drinking by adults and students is considered OK in our community.
25. I do not feel peer pressure to drink or use drugs.
26. The reason people in our community drink is because there is nothing else to do.

27. Drinking is expected at parties in our community.
28. Students that engage in substance abuse should be identified and the home, school and law enforcement should work together to implement a remedial program for the student.
29. Students that are caught selling harmful substances to school age children should be prosecuted.
30. Parents that furnish alcohol and allow students to have alcoholic parties on their premises should be charged with contributing to delinquency of minors.
31. Experimenting with substance use is not a problem unless the students are caught or they develop a dependency or addiction.
32. Communities should attempt to provide programs that deter drug use such as recreation programs or supervised youth centers.
33. Most students in our community feel it is all right to use alcohol before graduation from high school. Everyone else does.
34. Peer pressure results in students giving up "choice".
35. The only thing to do on Friday and Saturday is "party"-smoking dope or drinking.
36. If you're in high school it's a given that you drink or smoke.
37. Students give up their values and standards when they drink or use.
38. Once a student uses at a party, they are trapped to use again and again.

Sanctions (Rewards and punishments or what maintains the status quo)

Example: Students should not be arrested by law enforcement officials for alcohol-related offenses, such as possession by a minor or driving under the influence.

1. Possession or use should result in forced attendance at a court ordered counseling and education program.
2. Possession of illegal substances in school must result in parental notification.
3. Possession or use of illegal substances in school must result in suspension.
4. Possession of any marijuana product must be prosecuted as a felony.
5. Any arrest of a student for use or possession of an illegal substance should require counseling and education classes for both the student and the parents.
6. Students caught with drugs on campus should be turned over immediately to the legal authorities.
7. Our justice system is too easy on drug offenders.

8. Parents should be held responsible for their minor children caught with drugs.
9. Use of alcohol with minors should be treated the same as the use of pot.
10. Young people are treated too leniently for alcohol/drug related offenses.
11. Juvenile and adult DUI offenders should be prosecuted to the fullest extent of the law instead of given a minimal sentence.
12. Schools should punish students for alcohol or other drug offenses only if they occur on school property or at school functions. All other offenses are law enforcement issues only.
13. Students using drugs during the school year should immediately be excluded from all school activities including Honor Society, Student Council, etc. To allow them to remain in such functions sets a bad example.
14. Parents or other adults providing alcohol or other drugs to minors should be required to serve a minimum of 24 hours in jail and pay a \$500 fine for a first offense.
15. No one has a right to intervene on a person who hasn't asked for help.
16. The school has no right to punish my child for his behavior out of school.
17. I've drunk a lot and I'm still okay and very successful.
18. The family and church are responsible to help. School and community programs are not the answer.
19. You can't expect peers to tell on each other even if it is a life or death matter.
20. Students caught drinking by the police, who have not received their drivers license yet, should be required to wait until 18 years old to drive.
21. Students underage caught drinking (police) should have their drivers license revoked until they are 21 or for at least 2 years.
22. If legally drunk and driving, an automatic two days in jail, regardless of age or "who you know".
23. If drunk and driving, and cause a wreck where others are killed, an automatic one year jail term.
24. Parents, as a rule, provide a denial system for their children in the use of alcohol.
25. Law enforcement officials pick on some kids and look the other way when others are in trouble.
26. Parents should be supportive of law enforcement officials.
27. Keggers are a rite of passage and should be overlooked by law enforcement officials.

28. Parents should be notified anytime their children are violating laws.
29. Law enforcement should not just warn the juvenile without notifying parents.
30. Training rules should be strictly enforced.
31. Students that have been caught drinking or using drugs should be excluded from extra-curricular activities for a specified time.
32. Students that are interested in an anti-abuse support group (Rainbow Connection, Teens in Partnership, etc.) should have an adult sponsor/s and a meeting place provided.
33. An intervention/referral process should be included in schools to aid in the identification and placement of students in need of remedial services.
34. The majority of students don't want to become substance abusers but they need to have some help in dealing with peer pressure and learning how to say "no" effectively.
35. Parents, not communities, are responsible for insuring that students do not engage in substance use and abuse.
36. Students should be allowed to drink when they wish and not be held accountable for their actions.
37. How can a DUI or MIP effect my life as an adult? Everyone gets one sometime.
38. MIP is not a "big deal". A few hours of community service and that's all.
39. DUI's have forced students to choose a designated driver.
40. Adults get DUI's all the time so why not be a little more lenient on teens.
41. Pine Hills and other institutions don't have a follow-up program in schools. How can I change without support?

APPENDIX D

THIRD ROUND QUESTIONNAIRE
DELPHI PANEL MEMBERS

This is the final request for your input. The statements listed below represent your collective selections of the most suitable statements for use in a PARENT survey. As you review the statements, please edit the statements and evaluate content and suitability of the statement for use in the survey. Feel free to shorten or reword existing statements or write new ones. If you have any comments regarding the survey or the process used to develop the survey, I would be very interested in receiving them. Please return this round no later than December 16. Thank you all for your time, effort and expertise. Once the survey has been tested and approved, I will send you a copy. Thanks again!

Knowledge (The facts)

Example: Substance abuse refers to the misuse or overuse of mind-altering chemicals, including alcohol.

1. Substance abuse only includes illegal drugs.
2. Addiction refers to either physical or psychological dependence on a chemical.
3. Prevention and intervention are important in helping the chemical abuse problem.
4. After drug treatment it is an on going battle to stay off drugs.
5. Alcohol is the most abused drug among young people.
6. Alcoholism is a disease.
7. Alcoholism is a disease that affects the entire family.
8. Teenagers can become alcoholics much faster than adults.
9. Incorrect use of prescription drugs is a form of substance abuse.
10. Students are experimenting with alcohol, tobacco, and other substances at an increasingly earlier age.
11. Adolescents have an ability to complete the stages of addiction faster than adults. (Six months for teens--10 years for adults.)
12. There isn't a genetic link to being a predisposed addict.

Beliefs (Personal convictions)

Example: Alcohol is not as harmful to students or adults as other drugs.

1. Experimentation with alcohol and marijuana are expected.
2. It is better for my child to use alcohol than smoke marijuana.
3. It is OK for my minor child to drink at home.

4. If there were "hard drugs" in this community, I would know about it.
5. Alcohol and marijuana are "gateway" drugs.
6. Availability of money, cars and alcohol/drugs combined with leisure time, societal mixed messages and self-stated boredom all contribute to use and abuse.
7. Using drugs is so common in our society that it is a normal stage of growing up.
8. Since the majority of student drug use occurs away from school, the issue isn't really any of the school's business.
9. Anyone can stop drinking if they really want to.
10. Beer is the most abused drug among teenagers.
11. Parents shouldn't drink or use drugs and tell their kids not to.
12. People who become addicted to drugs or alcohol are just weak--all they need is self control.
13. Communities do not supply enough alternatives to keep students from substance abuse.

Values (The ideals or the way I'd like it to be)

Example: Students in our community should not use alcohol before they reach the age of 21.

1. Sale of illegal substances should draw a mandatory jail sentence.
2. Possession of illegal substances should draw a mandatory treatment program.
3. A drug education program should start with first grade.
4. Smoking should be banned on all school property.
5. Teaching of drugs and drug usage should be left to the parents.
6. Parents should model and teach the type of alcohol use they expect their children to practice.
7. People should come to view alcohol and tobacco use as a national health issue, not a personal freedom issue.
8. People returning from treatment should receive full after care support from school, family, and community.
9. There should be a convenient drug testing procedure for school officials to detect drug use in individual circumstances.
10. Students in our community should participate in a substance abuse curriculum from K through 12. enforcement.
11. Students should have a positive self-concept and be taught refusal skills to help resist negative peer pressure.
12. Students should be familiar with the adverse effect drugs have on the body and impairment of its functions.
13. I'd like to know other students who don't use--I want to have fun without drinking.

Norms (The standard or the way it really is)

Example: Most students in our community should experience alcohol before graduation from high school. It's part of growing up.

1. Parental discipline in cases of student abuse or use is sadly minimal.
2. The "Just Say No" program is not sufficient in preventing drug use and abuse.
3. By and large, our town "looks the other way" in regards to drinking youth.
4. Students are receiving very "mixed messages" from parents, law enforcement authorities and advertising.
5. Most people look the other way instead of helping because they don't want to get involved.
6. Drinking is part of the culture in our community.
7. Parents would rather see their children drinking than using drugs like pot, cocaine, speed, etc.
8. Until the older population changes their attitudes about alcohol, the younger population will continue to abuse alcohol.
9. Social drinking by adults and students is considered OK in our community.
10. Students that engage in substance abuse should be identified and the home, school and law enforcement should work together to implement a remedial program for the student.
11. Students that are caught selling harmful substances to school age children should be prosecuted.
12. Parents that furnish alcohol and allow students to have alcoholic parties on their premises should be charged with contributing to delinquency of minors.
13. Most students in our community feel it is all right to use alcohol before graduation from high school. Everyone else does.

Sanctions (Rewards and punishments or what maintains the status quo)

Example: Students should not be arrested by law enforcement officials for alcohol-related offenses, such as possession by a minor or driving under the influence.

1. Possession or use should result in forced attendance at a court ordered counseling and education program.
2. Possession of illegal substances in school must result in parental notification.
3. Possession or use of illegal substances in school must result in suspension.

4. Any arrest of a student for use or possession of an illegal substance should require counseling and education classes for both the student and the parents.
5. Students caught with drugs on campus should be turned over immediately to the legal authorities.
6. Young people are treated too leniently for alcohol/drug related offenses.
7. Students using drugs during the school year should immediately be excluded from all school activities including Honor Society, Student Council, etc. To allow them to remain in such functions sets a bad example.
8. Parents or other adults providing alcohol or other drugs to minors should be required to serve a minimum of 24 hours in jail and pay a \$500 fine for a first offense.
9. Parents, as a rule, provide a denial system for their children in the use of alcohol.
10. Parents should be supportive of law enforcement officials.
11. Parents should be notified anytime their children are violating laws.
12. Students that have been caught drinking or using drugs should be excluded from extra-curricular activities for a specified time.
13. An intervention/referral process should be included in schools to aid in the identification and placement of students in need of remedial services.
14. The majority of students don't want to become substance abusers but they need to have some help in dealing with peer pressure and learning how to say "no" effectively.

APPENDIX E

PARENT AND NON-PARENTAL
COMMUNITY LEADER SURVEY

Your response to the following statements will help school personnel plan a substance abuse prevention curriculum in the Gardiner schools.

Please respond to each of the statements by placing a check (✓) in the appropriate box to the right of each statement. (SA--strongly agree, A--somewhat agree, N--neither agree nor disagree, D--somewhat disagree, SD--strongly disagree, DK--don't know.)

	SA	A	N	D	SD	DK
1. Substance abuse includes only illegal drugs.						
2. Addiction refers to either physical or psychological dependence on a chemical.						
3. Prevention and intervention are important in helping the substance abuse problem.						
4. After drug treatment, it is an ongoing battle to remain free from drugs.						
5. Alcohol is the most abused drug among young people.						
6. Alcoholism is a disease.						
7. Teenagers can become alcoholics more quickly than adults.						
8. Incorrect use of prescription drugs is a form of substance abuse.						
9. Alcoholism is a disease affecting the entire family.						
10. Students are experimenting with alcohol, tobacco, and other substances at much earlier ages.						
11. Adolescents have an ability to complete the stages of addiction faster than adults.						
12. Heredity is not related to addiction.						
13. Experimentation with alcohol and marijuana is expected.						
14. It is better for my child to use alcohol than smoke marijuana.						
15. It is permissible for my minor child to drink at home.						
16. If there were "hard drugs" in this community, I would know about them.						
17. Alcohol and marijuana use leads to use of stronger drugs.						

- [illegible]

	SA	A	N	D	SD	DK
34. There should be a convenient drug testing procedure for school officials to detect drug use in individual circumstances.						
35. Students in our community should participate in a substance abuse curriculum from grades K through 12.						
36. Students should have a positive self-concept and be taught refusal skills to help resist negative peer pressure.						
37. Students should be familiar with the adverse effect drugs have on their body and how they impair bodily functions.						
38. I'd like my child to know other students who don't use.						
39. Parental discipline in cases of student use or abuse is sadly minimal.						
40. The "Just Say No" program is not sufficient in preventing drug use and abuse.						
41. By and large, our town "looks the other way" in regard to drinking youth.						
42. Students are receiving very "mixed messages" from parents, law enforcement authorities, and advertising.						
43. Most people look the other way instead of helping because they don't want to get involved.						
44. Drinking is part of the culture in our community.						
45. Parents would rather see their children drinking than using drugs like marijuana, cocaine and speed.						
46. Until the older population changes their attitudes about alcohol, the younger population will continue to abuse alcohol.						
47. Social drinking by adults and students is considered permissible in our community.						
48. Students engaging in substance abuse should be identified.						
49. The home, school and law enforcement should work together to help a student who abuses.						
50. Students who are caught selling harmful substances to school age children should be prosecuted.						

- [illegible]

66. The majority of students don't want to become substance abusers but they need to have some help in dealing with peer pressure and learning how to say "no" effectively.

SA	A	N	D	SD	DK

APPENDIX F
STUDENT SURVEY

Your response to the following statements will help school personnel plan a drug abuse prevention curriculum in the Gardiner schools.

Please respond to each of the statements by placing a check (✓) in the appropriate box to the right of each statement. (SA--strongly agree, A--somewhat agree, N--neither agree nor disagree, D--somewhat disagree, SD--strongly disagree, DK--don't know.)

	SA	A	N	D	SD	DK
1. Users of drugs and alcohol develop physical and/or emotional dependence on the substance.						
2. Alcohol and drug use can threaten normal development of children and teenagers.						
3. Alcohol is the most abused drug among young people.						
4. Alcoholism is a disease which may be inherited.						
5. It is illegal in Montana for anyone to provide alcohol to someone under the age of 21.						
6. I think alcohol and drug education should begin no later than kindergarten.						
7. I have learned enough about drugs and alcohol in school already.						
8. It would help my friends if more information about drugs and alcohol was available.						
9. It is okay to drink with my parent's permission.						
10. My parents are less concerned about me drinking alcohol than they are about me taking drugs.						
11. Only people with drug or alcohol problems need substance abuse education.						
12. Underage drinkers should be allowed to drink at home.						
13. The drinking age should be lowered.						
14. There should be more spot checks by police to find people driving under the influence of alcohol.						
15. Substance abuse (drug and alcohol) education should not be taught in school.						
16. Substance abuse education should teach you how to resist your friends pressuring you to drink.						

- [illegible]

Please respond to each of the statements in the next group by placing a check (✓) in the appropriate box to the right of each statement.
(GR--great risk, SR--some risk, LR--little risk, SLR--slight risk, NR--no risk, DK--don't know.)

29. How much do you think people risk harming themselves either physically or emotionally if they. . .

- a. Smoke one or more packs of cigarettes per day.
- b. Smoke marijuana on an occasional or regular basis.
- c. Try one or two drinks of an alcoholic beverage.
- d. Take one or two drinks nearly every day.
- e. Take four or five drinks nearly every day.
- f. Have five or more drinks once or twice each weekend.
- g. Try or take other drugs (LSD, cocaine, etc.) occasionally or regularly.

GR SR LR SLR NR DK

[illegible]

Please respond to the following statements by placing a check (✓) in the appropriate box to the right of each statement. (SA--strongly approve, A--somewhat approve, N--neither approve nor disapprove, D--somewhat disapprove, SD--strongly disapprove, DK--don't know.)

30. Do YOU disapprove of people (who are 18 or older) doing the following. . .

- a. Smoking one or more packs of cigarettes per day.
- b. Smoking marijuana on an occasional or regular basis.
- c. Trying one or two drinks of an alcoholic beverage.
- d. Taking one or two drinks nearly every day.
- e. Taking four or five drinks nearly every day.
- f. Taking five or more drinks once or twice each weekend.
- g. Trying or taking other drugs (LSD, cocaine, etc.) occasionally or regularly.

SA A N D SD DK

[illegible]

APPENDIX G

COVER LETTERS
TO PARENTS AND
NON-PARENTAL COMMUNITY LEADERS

Dear Parents,

Montana school districts have been mandated by federal agencies to address the topic of substance abuse in school. In order to provide your child and our students with a program which reflects parental wishes and community values, we need information from you. The following survey is designed to provide Gardiner School personnel with information and opinions from parents regarding drug and alcohol use and abuse by school-age children.

Today all students in attendance in grades 7 through 12 were also surveyed using a nationally approved survey and an additional opinionnaire. These surveys were done anonymously and will be evaluated by a neutral testing service. These surveys were given to provide school staff with students' input about the substance abuse topic.

Your responses to the parent survey will be anonymous and confidential. Please respond to all survey items. Return the questionnaire by folding the booklet so that the school district address is on the outside. Return by mail as soon as possible and no later than June 1.

The time and energy invested in completing this questionnaire demonstrate once again your interest in children and Gardiner schools. Thank you for your prompt response!

Sincerely yours,

Jaclyn Mavencamp
Drug-Free Schools Project Director

Dear Community Leader,

Montana school districts have been mandated by federal agencies to address the topic of substance abuse in school. In order to provide our students with a program which reflects community and family values, we need information from you. You have been chosen to respond to this survey because of your professional role which places you in close contact with students and their families. Similar surveys have also been sent to parents of Gardiner students.

The following survey is designed to provide Gardiner School personnel with information and opinions regarding drug and alcohol use by school-age children.

Your responses to this survey will be anonymous and confidential. Please respond to all survey items. Return the questionnaire by folding the booklet so that the school district address is on the outside. Return by mail as soon as possible and no later than June 1.

The time and energy invested in completing this questionnaire demonstrate once again your interest in children and Gardiner schools. Thank you for your prompt response!

Sincerely yours,

Jaclyn Mavencamp
Drug-Free Schools Project Director

APPENDIX H

DRUG AND ALCOHOL USE AMONG
GARDINER SCHOOL DISTRICTS 7 & 4 STUDENTS

DETAILED REPORT

THE AMERICAN DRUG AND ALCOHOL SURVEYTM

RMBSI, Inc., 2190 West Drake Road, Suite 144, Ft. Collins, CO 80526, (303) 221-0602

June 10, 1991

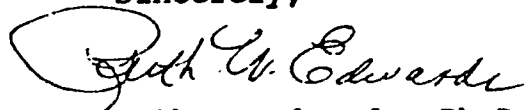
Jaclyn Mavencamp
P. O. Box 26
Gardner, MT 59030

Dear Ms. Mavencamp:

As owners of the copyright for the American Drug and Alcohol Survey Report, RMBSI gives you permission to include a copy of the report in the appendix of your thesis providing you clearly show the copyright information on the first page of the reproduction.

Congratulations on completion of your thesis.

Sincerely,

A handwritten signature in cursive script, appearing to read "Ruth W. Edwards".

Ruth W. Edwards, Ph.D.
Executive Director

**DRUG AND ALCOHOL USE AMONG
GARDINER SCHOOL DISTRICTS 7 & 4 STUDENTS**

**DETAILED REPORT
7-8th, 9-10th, and 11-12th Graders**

1989

**Sponsored by:
Gardiner School Districts 7 & 4
Drug-Free School Projects
Gardiner, Montana**

**Report Prepared by:
RMBSI, Inc.**

**2190 West Drake Road, Suite 144
Fort Collins, CO 80526
(303) 221-0602**

**The American Drug and Alcohol Survey™
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INTRODUCTION

Drug use among adolescents has become a serious national problem. Those concerned about the welfare of the Gardiner School Districts 7 & 4 students have therefore sponsored the American Drug and Alcohol SurveyTM. This report presents the results of that survey and should lead to a better understanding of the local adolescent substance abuse problem.

We encourage those charged with disseminating this information on the local level to study the entire report carefully. The text and accompanying tables are designed to help the community place the local youth drug abuse problem in the proper perspective.

THE SURVEY

The survey is a paper and pencil questionnaire given anonymously that takes less than 35 minutes to complete. The survey items ask students about their history of drug and alcohol use and the frequency and intensity of their current drug and alcohol use. This report summarizes what the Gardiner School Districts 7 & 4 students who were surveyed said they were doing; what drugs they have tried, what they are using now, and how heavily they are involved with drugs.

The survey used has had extensive development. Similar versions have been given to over 200,000 students during the last 10 years. Since drug use changes over time, there have been annual revisions to make sure that it asks the right questions. The present survey was updated in July, 1988.

HOW ACCURATE ARE THE SURVEY RESULTS?

Experience with this survey has shown that students are usually very cooperative and give honest answers about their drug use when they know that their names are not on the surveys, and that no one will ever know how any individual answered the questions. The people who handed out the surveys were very careful to make sure that this anonymity was preserved; that no one saw how a student answered the questions, and that surveys were collected in a way that prevented anyone from knowing who filled out what survey. There are questions on the survey that test whether the students believe their answers will be anonymous. The responses to those questions showed that most students believed the survey was anonymous and felt they could be honest.

A few students in a class may giggle, make jokes, and not treat the survey seriously. Several safeguards are used throughout the survey and during compilation to detect erroneous or exaggerated responses. The survey, for example, includes "fake" drugs and other checks to detect exaggerations. If there were individual surveys that showed signs of exaggeration, they were removed before the results were compiled. Less than one percent of Gardiner School Districts 7 & 4 students showed signs of exaggeration.

A few students may also become confused while taking the survey or have trouble reading and understanding the questions. These students can also be identified through inconsistent answers to questions that are purposely repeated on the survey or because they mark answers that would not be logical, saying, for example, that using alcohol once or twice is more dangerous than using it regularly. Thirty-four different consistency checks were made on each survey. If there were any students who were inconsistent three or more times, their surveys were removed before the survey results were compiled. Only 2% of Gardiner School Districts 7 & 4 students were classified as "inconsistent responders."

There are also statistical ways of assessing the reliability of tests and surveys. The reliability coefficients for the drug use scales on the survey average around .90.

When the survey was given, the survey administrators attempted to include all students who were enrolled in the grades selected. There are several advantages to giving the survey to students in various grades. For example, the senior class represents an accumulation of the experiences and attitudes of the students in this community. Although the 12th graders are soon leaving school, they reflect the general substance abuse scene within the school district. Another advantage of testing the 12th graders is that the community can then compare its students with 12th graders tested in national surveys.

Younger students are surveyed because they are in an important phase of their development -- many adolescents are initially exposed to drugs around the 7th and 8th grades, and drug use usually increases steadily through the high school grades. Information about the drug use of younger students shows what kinds of early drug problems are present. Comparing the drug use of younger and older students shows how drug use increases over these critical years.

The following table shows the total number of Gardiner School Districts 7 & 4 students surveyed and the percent of total enrollment they represent.

Proportion of Gardiner School Districts 7 & 4 Students Surveyed

**Number
Surveyed**
127

**Number
Enrolled**
138

**Percent of Total
Enrollment**
92%

A high enough proportion of students was surveyed to insure that the results would provide a good estimate of the drug and alcohol use of the students who are attending school.

No attempt was made to survey school dropouts or absentees. However, in communities where absentees and dropouts are surveyed, their drug use is usually slightly higher than students who are in school. Those working with dropouts and chronic absentees in your area will probably find higher drug involvement among them than is found in students who are attending school.

There are three parts to this report:

Part I is an overview. It repeats tables from the Executive Summary showing how many students have used or are using alcohol and drugs, and discusses those tables in more detail.

Part II provides additional information about drug use among Gardiner School Districts 7 & 4 students: the availability of different drugs; where and with whom drugs are used; and how much harm these students feel is done by drugs.

Part III lists each drug on the survey and shows how much the regular users among Gardiner School Districts 7 & 4 students are using each drug. This section also provides information about how the different drugs are used and what effects they are likely to have.

PART I

AN OVERVIEW OF DRUG USE

Part I provides a brief, but complete, overview of the results of the survey. The tables and graphs give an accurate summary of the patterns of drug and alcohol use in Gardiner School Districts 7 & 4. More information about the use of individual drugs is available in **Part III** of this report.

HOW MANY GARDINER SCHOOL DISTRICTS 7 & 4 STUDENTS HAVE TRIED DRUGS?

The first table presented here lists the percent of students who have "ever tried" alcohol or drugs. The "ever tried" statistic is a very general measure, since it includes any amount of a drug ever taken. A student who had a small glass of wine at a family celebration would be included as having "ever tried" alcohol -- so would the student who drinks enough to get drunk every week. This table would also not distinguish between the student who tried marijuana once several years ago and one who is now using it every day: both would be listed as having tried marijuana.

Despite its limitations, the "ever tried" statistic is useful. It shows the total exposure that a group has had to a particular drug. It also shows how many students were willing to experiment with a drug.

Furthermore, the "ever tried" measure is highly reliable, and because it is used on most other surveys, it allows us to make comparisons between Gardiner School Districts 7 & 4 11-12th graders and other high school 12th graders across the country. **Table 1** has a column marked "National 12th Graders." The rates given in that column were obtained from a national sample of over 16,000 seniors who were surveyed in 1987. Although the national data were collected over a year ago, the comparisons between national rates and Gardiner School Districts 7 & 4 11-12th grade rates are still informative because the national "ever tried" rates rarely change more than one or two percent a year.

TABLE 1
Percent of Gardiner School Districts 7 & 4 Students
and 12th Graders Across the Country Who Have Ever Tried a Drug
(1988-89)

	<u>Local 7-8th Graders</u>	<u>Local 9-10th Graders</u>	<u>Local 11-12th Graders</u>	<u>National* 12th Graders</u>
Alcohol	62%	78%	92%	92%
Cigarettes	24%	42%	48%	66%
Marijuana	5%	28%	25%	47%
Cocaine	0%	0%	5%	12%
Stimulants	2%	10%	10%	20%
Legal Stimulants	0%	5%	15%	***
Inhalants	12%	5%	12%	17%
Nitrites	0%	0%	12%	3%
Downers**	0%	2%	10%	7%
Quaaludes	0%	0%	8%	3%
Tranquilizers**	0%	2%	2%	9%
Hallucinogens	0%	5%	8%	9%
PCP	0%	0%	0%	3%
Narcotics other than heroin**	2%	3%	5%	9%

Information about crack, heroin, and smokeless tobacco is available in Part III.

* *The national data on drug use among high school seniors are from the annual national surveys funded by the National Institute on Drug Abuse and conducted by the Institute for Social Research at the University of Michigan.*

** *Use of these drugs under a doctor's orders is not included in these figures.*

*** *Data not available.*

**CURRENT DRUG USE AMONG
GARDINER SCHOOL DISTRICTS 7 & 4 STUDENTS**

The "ever tried" figures that were presented in Table 1 showed how many Gardiner School Districts 7 & 4 students have experimented with drugs, but do not show how many are using drugs now. Many young people try a drug for a while, but then stop using it. In a national study, for example, almost a fourth of the high school seniors who had tried marijuana when they were younger did not use it during their senior year, and, in the same study, about half of those who had tried other drugs were not using them at the time of the survey.

Tables 2 and 3 provide estimates of current drug use. Table 2 shows how many students used each drug during the last 12 months. Table 3 shows how many used drugs during the last 30 days prior to the survey. Tables 2 and 3 also include data on 12th graders nationwide for comparison with the local 12th graders.

TABLE 2
Percent of Gardiner School Districts 7 & 4 Students
and 12th Graders Across the Country Who Have Used Each Drug
in the Last 12 Months
(1988-89)

	<u>Local 7-8th Graders</u>	<u>Local 9-10th Graders</u>	<u>Local 11-12th Graders</u>	<u>National 12th Graders</u>
Alcohol	47%	60%	82%	85%
Marijuana	2%	15%	10%	33%
Cocaine	0%	0%	3%	8%
Stimulants	0%	5%	8%	11%
Legal Stimulants	0%	0%	5%	***
Inhalants	5%	2%	5%	7%
Nitrites	0%	0%	5%	2%
Downers	0%	0%	5%	3%
Hallucinogens	0%	0%	2%	6%
PCP	0%	0%	0%	1%
Narcotics other than heroin	0%	3%	0%	5%

*** Data not available.

TABLE 3

**Percent of Gardiner School Districts 7 & 4 Students
and 12th Graders Across the Country Who Have Used Each Drug
in the Last 30 Days
(1988-89)**

	<u>Local 7-8th Graders</u>	<u>Local 9-10th Graders</u>	<u>Local 11-12th Graders</u>	<u>National 12th Graders</u>
Alcohol	16%	40%	40%	64%
Marijuana	0%	10%	8%	18%
Cocaine	0%	0%	3%	3%
Stimulants	0%	3%	3%	5%
Inhalants	5%	0%	2%	3%
Nitrites	0%	0%	0%	<1%
Downers	0%	0%	0%	1%
Hallucinogens	0%	0%	0%	2%
PCP	0%	0%	0%	<1%
Narcotics other than heroin	0%	3%	0%	2%

**PATTERNS OF DRUG USE AMONG
GARDINER SCHOOL DISTRICTS 7 & 4 STUDENTS**

It is rare for an adolescent who is using drugs to use one drug exclusively. Usually if one drug is being used, another will also be used, if only occasionally. There are also many different levels and patterns of drug use. One person may use a drug occasionally, and only use small amounts of that drug. Another may use the same drug, but use it regularly and in large amounts.

A way of classifying young people has been developed that describes their total involvement with drugs (see Table 4). The classification is determined both by the different drugs that are being used and by how heavily each of those drugs is being used. Every student surveyed is classified into one drug use type that briefly describes their total drug use. In order to be placed in a particular type, the student must meet all of the requirements for that type. Those requirements are almost entirely based on current use of drugs -- how often they are used, how they are used, and whether the student sees himself or herself as a drug "user."

A student may meet the requirements for more than one type but is always placed in only one type. For example, Type 4 consists of Heavy Alcohol Users. These are all youth who use alcohol heavily, but do not use other substances. There may, therefore, be heavy alcohol users who are not placed in Type 4. If a youth is a heavy alcohol user and uses stimulants heavily, that youth would be placed in the more serious group, Type 2, Stimulant Users.

The students who are included in any one group are using the same kinds of drugs and are using them in just about the same way. They are also probably similar in other aspects of their lives. They are likely to be associating with other youth classified in the same drug use group. Within their groups, students tend to share values, friends, and hold a similar outlook on life, school and work.

There are nine drug use types, or groups, arranged in descending order of seriousness of drug use. Table 4 shows the percent of Gardiner School Districts 7 & 4 students in each of these nine drug use types. A description of each of the drug use groups appears after Table 4. It is important that the reader become familiar with each group in order to fully understand Table 4.

TABLE 4

**Patterns of Drug Use Among Gardiner School Districts 7 & 4 Students
(1988-89)**

		<u>7-8th Graders</u>	<u>9-10th Graders</u>	<u>11-12th Graders</u>
Level I* (High Risk)	1. Multi-Drug Users	0.0%	0.0%	2.5%
	2. Stimulant Users	0.0%	0.0%	0.0%
	3. Heavy Marijuana Users	0.0%	0.0%	0.0%
	4. Heavy Alcohol Users	0.0%	5.0%	0.0%
Level II (Moderate Risk)	5. Occasional Drug Users	11.6%	5.0%	10.0%
	6. Light Marijuana Users	2.3%	10.0%	2.5%
Level III (Low Risk)	7. Tried a Drug (no current use)	7.0%	10.0%	22.5%
	8. Light Alcohol Users	7.0%	17.5%	17.5%
	9. Negligible or No Use	72.1%	52.5%	45.0%

* See figures on following pages.

**Percent of Gardiner School Districts 7 & 4 Students
at Risk from Drug and Alcohol Use
(1988-89)**

Figure 1 - 7-8th Graders

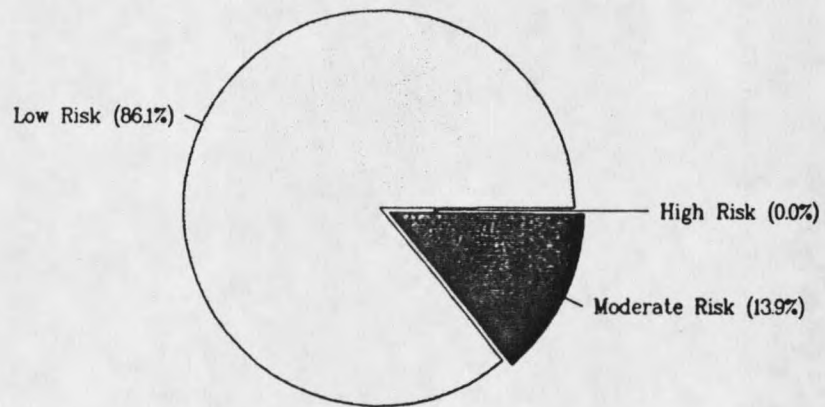
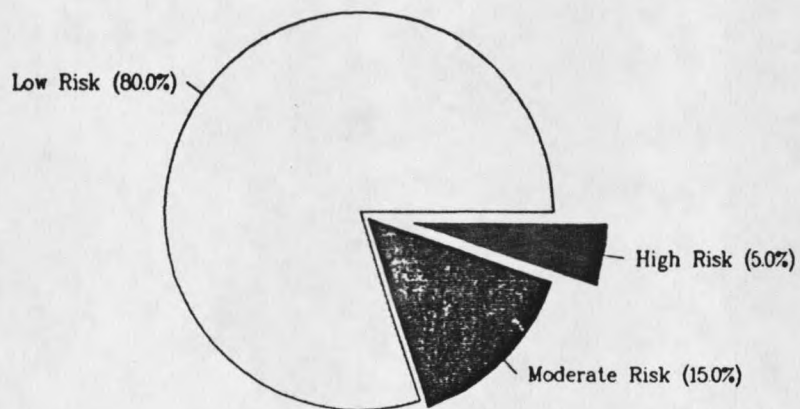
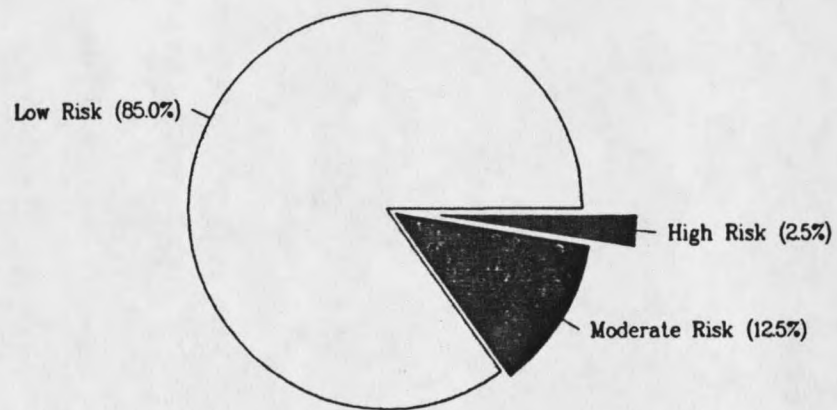


Figure 2 - 9-10th Graders



**Percent of Gardiner School Districts 7 & 4 Students
at Risk from Drug and Alcohol Use
(1988-89)**

Figure 3 - 11-12th Graders



DESCRIPTION OF ADOLESCENT DRUG USE TYPES

1. Multi-Drug Users

These students show current regular use of two or more different types of drugs. Older Multi-Drug Users, for example, generally take some kind of downer and also use stimulants. Younger Multi-Drug Users, on the other hand, may use inhalants heavily and regularly and take other drugs when they can get them. Multi-Drug Users are also likely to use marijuana and get drunk often. Anyone who uses a drug every day is also classified as a Multi-Drug User because their drug use is chronic and highly serious and because they almost always take other drugs as well, particularly when they can not get their "drug of choice."

2. Stimulant Users

Stimulant Users take amphetamines and/or cocaine regularly. They prefer drugs that make them feel "up." Most Stimulant Users also use alcohol and marijuana, often quite heavily, and some of them use hallucinogens. Stimulant Users, unlike Multi-Drug Users, rarely use drugs like downers, heroin, or PCP.

3. Heavy Marijuana Users

Heavy Marijuana Users do not use marijuana every day – if they did, they would be classed, according to this system, as Multi-Drug Users. The students in this group, however, do use marijuana often and in large amounts. They generally use marijuana during the week as well as on weekends. Heavy Marijuana Users are also likely to use alcohol and marijuana together. Other drugs may be taken occasionally, but not regularly. In order to intensify the effect, many Heavy Marijuana Users take strong forms of marijuana such as sensimilla or hashish, and/or use various methods for concentrating the smoke.

4. Heavy Alcohol Users

Students classified as Heavy Alcohol Users drink alcohol every week and get drunk frequently, but do not use other drugs regularly. Any Heavy Alcohol User who does use other drugs regularly would be classified in one of the above groups, and not in this one. Many of these Heavy Alcohol Users get drunk nearly every weekend. While Heavy Alcohol Users do not take other drugs regularly, some will use marijuana occasionally and a few might take another drug occasionally. Alcohol, however, is the substance they prefer.

5. Occasional Drug Users

Occasional Drug Users use drugs other than marijuana, but rarely use any drug more than once a month. Most of them also use marijuana occasionally. While the drug use of the Occasional Drug Users is not heavy, these students have shown a willingness to take drugs and could easily move toward heavier drug involvement.

6. Light Marijuana Users

The young people in this group use marijuana occasionally, possibly only a few times a year. They are also likely to use alcohol occasionally. They rarely take other drugs, but some of them may have tried other drugs.

7. Tried a Drug

The members of this group have tried a drug at some time, but they are not using drugs now and they do not think of themselves as drug users. The drug they have tried is usually marijuana, although some may have tried other drugs.

8. Light Alcohol Users

Light Alcohol Users use some alcohol, but rarely, if ever, get drunk. They have never tried a drug of any other kind.

9. Negligible or No Use

Some of these students may have tried alcohol, but it is not being used now, even socially. These students have never tried any drug with the possible exception of alcohol.

**HOW MANY GARDINER SCHOOL DISTRICTS 7 & 4 STUDENTS
ARE AT RISK BECAUSE OF THEIR DRUG OR ALCOHOL USE?**

Level I (High Risk) Drug Users. Any Gardiner School Districts 7 & 4 student who is classed in the first four groups may be at considerable risk from drug or alcohol use. Young people in these groups get drunk and/or use drugs nearly every weekend or even more frequently. They are in danger of becoming dependent on alcohol or drugs and at risk from accidents while intoxicated or high. Use of alcohol or drugs can also disrupt their social and psychological development.

Level II (Moderate Risk) Drug Users. The youth in the next two groups, Occasional Drug Users and Light Marijuana Users, are in less danger from their drug use. They are, however, using drugs occasionally, most of them only a few times a year. The majority of these students do not take a lot of any particular drug, however, whenever any drug is used there is always some risk of danger. More importantly, they are showing a willingness to take drugs. The students that are Occasional Drug Users or Light Marijuana Users are, therefore, at some risk from their drug use.

Level III (Low Risk). The students who are members of the last three groups are not now at risk from their use of alcohol and drugs. The Gardiner School Districts 7 & 4 students who have Tried a Drug and those who are Light Alcohol Users, are not currently in significant danger from their drug use. The Tried a Drug group (Type 7), however, are not strangers to drugs. As mentioned above, it is possible their drug use could increase in the future. Finally, there are those students who are in Type 9 and can be considered essentially drug-free.

As a cautionary note, it would be wrong to assume that any student not in a low risk group must be "addicted to drugs." Such an overstatement would ignore the detailed information available about the drug use patterns among these students. To understand drug use among Gardiner School Districts 7 & 4 students, one must neither overstate nor understate the problem, but be as accurate and precise as possible.

PART II

GARDINER SCHOOL DISTRICTS 7 & 4 STUDENTS' EXPERIENCES AND ATTITUDES REGARDING DRUGS AND ALCOHOL

In addition to the types and amounts of drugs being used, the survey assessed the attitudes local youth hold toward drugs and alcohol. If the community wants to create an environment where young people are able to remain drug-free, they must understand what factors contribute to the decisions local youth make about drugs.

Part II presents information on the availability of drugs, where drugs are used, problems caused by these substances, and students' attitudes toward drugs.

**HOW AVAILABLE ARE DRUGS TO
GARDINER SCHOOL DISTRICTS 7 & 4 STUDENTS?**

The students were asked how easy it would be to obtain each of the different types of drugs. (Note: This question asks about the availability of drugs in general. It does not mean drug availability at school.) The following table shows how many students felt it would be either "fairly easy" or "very easy" to get each drug.

TABLE 5

**Perceived Availability of Drugs Among
Gardiner School Districts 7 & 4 Students**
Percent Marking Either "Fairly Easy" or "Very Easy" To Get Each Drug

	<u>Local 7-8th Graders</u>	<u>Local 9-10th Graders</u>	<u>Local 11-12th Graders</u>	<u>National 12th Graders</u>
Alcohol	86%	92%	100%	***
Marijuana	28%	47%	67%	86%
Stimulants	18%	34%	43%	66%
Hallucinogens	5%	5%	18%	29%
Cocaine	15%	13%	25%	49%
Downers	18%	28%	50%	51%
Inhalants	86%	89%	85%	***
Tranquillizers	23%	30%	39%	55%
PCP	10%	8%	11%	***
Heroin	13%	8%	8%	21%
Narcotics other than heroin	18%	22%	34%	33%

*** Data not available.

Alcohol is, of course, the most accessible drug because it is legal for adults. Other drugs are usually less available, but in most communities at least some students believe that almost any drug is available.

**WHERE DO GARDINER SCHOOL DISTRICTS 7 & 4 STUDENTS
USE ALCOHOL AND DRUGS?**

Tables 6A and B show some of the places where these students used alcohol and drugs during the last year. While these tables do not include every place that alcohol and drugs can be used, they do show generally where these substances have been used.

TABLE 6A

**Where Gardiner School Districts 7 & 4 Students
Have Used Alcohol**

	<u>7-8th Graders</u>	<u>9-10th Graders</u>	<u>11-12th Graders</u>
On the way to school	3%	0%	2%
During school hours at school	0%	3%	0%
During school hours away from school	0%	0%	5%
Right after school	2%	21%	10%
At school events	0%	15%	12%
At weekend parties	17%	38%	50%
At night with friends	14%	42%	62%
While driving around	0%	12%	25%
At home	38%	44%	48%

TABLE 6B

Where Gardiner School Districts 7 & 4 Students
Have Used Drugs

	<u>7-8th Graders</u>	<u>9-10th Graders</u>	<u>11-12th Graders</u>
On the way to school	0%	0%	8%
During school hours at school	0%	0%	5%
During school hours away from school	0%	0%	8%
Right after school	0%	15%	8%
At school events	0%	0%	10%
At weekend parties	0%	13%	10%
At night with friends	5%	20%	15%
While driving around	2%	3%	12%
At home	5%	3%	8%

In nearly all communities, drugs are mostly used at parties and with friends. Even when drug use is reported as "at home," that drug use is probably with friends and when the parents are away, or in the privacy of a youth's room. Drug use in front of parents can occur, but such cases are rare.

There is usually less drug and alcohol use at school than outside of school. Any use at school is, however, of great concern because alcohol and drugs interfere directly with learning. Unfortunately, use outside of school is also a problem for the school because drugs, such as alcohol, can still interfere with a student's studies even if he or she is not using those substances at school. Many drugs, including marijuana, stay in the body for long periods of time. They may still be present when these youth are in school, and thus interfere with attention and learning. Using drugs also places a youth outside the mainstream of society and generally involves attitudes that make a youth unwilling to listen to a teacher's or a counselor's advice.

The fact that there is usually less substance use at school than in most other settings is a very important point. Media reports often give the mistaken impression that schools are the source of most adolescent drug use. The reason for this misunderstanding is very simple -- schools are the places where young people spend most of their day and it is where there is a lot of talk about drugs. If someone wants to interview young people, where do they find them? -- at school, of course. All of the talk about drugs then gets associated with the schools.

Even the fact that this drug survey was given in school may lead some people to blame the school for drug use. The school, however, is simply the most convenient place to collect this information. While drug and alcohol use at school is a very serious problem, it must be remembered that drug use is a community problem. Even the level of substance use at school events, as reported in Tables 6A and B should be considered a community problem. As Tables 6A and B show, most drug and alcohol use occurs in the community away from school. Where does the responsibility lie, for example, when youth sneak beer into football games or arrive at school dances intoxicated? The real answers to such problems must come from the community and from individual homes in conjunction with the schools' efforts.

HOW HARMFUL DO GARDINER SCHOOL DISTRICTS 7 & 4 STUDENTS THINK DRUGS ARE?

The attitudes that young people have about the dangers of drugs often shape their decisions about whether they will use drugs or not. For example, if a youth believes that no harm is attached to using marijuana, he or she is much more likely to give it a try.

Table 7 shows the percent of students who think that trying a drug (using it just once or twice) will lead to a lot of harm. Students who think this way will probably not even try a drug.

TABLE 7			
Percent of Gardiner School Districts 7 & 4 Students Who Believe That Using a Substance <u>Once</u> or <u>Twice</u> Will Lead to "A lot" of Harm			
	<u>7-8th Graders</u>	<u>9-10th Graders</u>	<u>11-12th Graders</u>
Use Alcohol	5%	5%	3%
Get Drunk	23%	15%	12%
Marijuana	34%	16%	16%
LSD	55%	72%	62%
"Sniff" inhalants	34%	29%	31%
Stimulants	43%	29%	27%
Cocaine	52%	51%	60%
PCP	54%	73%	67%

Notice in Table 7, however, that quite a few students do not think that trying a drug is harmful. It is much more likely that these students may at least experiment with a drug.

Table 7 also shows that there is greater fear of some drugs than of others. Even for those drugs considered more dangerous, however, there are still youth who do not believe that using them once or twice will lead to much harm. They may, therefore, be willing to experiment with those drugs.

Table 8 looks at this issue a little differently. This table shows how many Gardiner School Districts 7 & 4 students think that using drugs regularly will harm them.

TABLE 8

Percent of Gardiner School Districts 7 & 4 Students
Who Believe That Using a Substance Regularly Will Lead to "A lot" of Harm

	<u>7-8th Graders</u>	<u>9-10th Graders</u>	<u>11-12th Graders</u>
Use Alcohol	46%	28%	49%
Get Drunk	98%	90%	90%
Marijuana	92%	61%	76%
LSD	97%	92%	100%
"Sniff" inhalants	84%	73%	85%
Stimulants	94%	76%	88%
Cocaine	97%	91%	97%
PCP	97%	94%	100%

The numbers are higher than those in Table 7 showing that many students do see regular use of drugs as harmful. Some students, however, see no harm attached to regular use. This group of students is at higher risk of drug use since they do not believe that using drugs regularly is dangerous.

The fact that some young people in this district do not see regular drug use as harmful indicates that educational programs detailing drug hazards could be useful. However, programs that focus only on the dangers of drugs are not as effective as programs that educate students about other aspects of drug abuse as well. One reason is that the relationship between beliefs about drug hazards and drug use is a complex one. Some youth, for example, will actually use a drug because it is dangerous. The risk is part of the appeal.

Another important factor is the way that peer influence interacts with belief about drug dangers. Studies have shown that younger children who believe drugs are harmful will almost always discourage drug use among their friends. By the time these students are seniors, however, many of them will not attempt to discourage drug use among their friends – even if they personally believe drugs are dangerous. Therefore, an effective drug prevention program, in addition to providing a realistic assessment of the dangers of drug use, must address such things as the roles friends play in helping each other to avoid or stop using drugs.

**WHAT PROBLEMS HAVE GARDINER SCHOOL DISTRICTS 7 & 4
STUDENTS HAD BECAUSE OF ALCOHOL OR DRUGS?**

The survey also asked the students whether they had ever experienced any problems because of their alcohol or drug use. The figures in Tables 9A and B show how many students admit that alcohol or drugs have caused them problems, and what types of problems they have had. These percentages are only a base. People who abuse alcohol or drugs often avoid admitting that they are hurting themselves. Thus the following figures are a conservative estimate of these students' problems with alcohol and drugs.

TABLE 9A

**Admitted Problems of Gardiner School Districts 7 & 4 Students
From Alcohol**

	<u>7-8th Graders</u>	<u>9-10th Graders</u>	<u>11-12th Graders</u>
Got a traffic ticket	0%	0%	3%
Had a car accident	3%	0%	8%
Got arrested	0%	8%	8%
Had money problems	0%	8%	5%
Gotten you in trouble in school	5%	12%	3%
Hurt your school work	3%	5%	5%
Fought with other kids	11%	13%	10%
Fought with your parents	8%	5%	23%
Damaged a friendship	5%	3%	5%
Passed out	6%	15%	26%
Couldn't remember what happened	11%	28%	33%
Made you break something	11%	12%	13%

TABLE 9B

**Admitted Problems of Gardiner School Districts 7 & 4 Students
From Drugs**

	<u>7-8th Graders</u>	<u>9-10th Graders</u>	<u>11-12th Graders</u>
Got a traffic ticket	0%	0%	0%
Had a car accident	0%	0%	0%
Got arrested	0%	2%	5%
Had money problems	0%	5%	11%
Gotten you in trouble in school	0%	3%	5%
Hurt your school work	9%	8%	8%
Fought with other kids	6%	0%	8%
Fought with your parents	6%	5%	11%
Damaged a friendship	9%	3%	8%
Made you break something	6%	5%	5%
Had a "bad trip"	0%	3%	5%

Some Gardiner School Districts 7 & 4 students admit that alcohol and drugs have led to problems. Alcohol causes problems for more people than drugs do, but more students use alcohol. Particular note should be taken of any youth who have had fights and damaged friendships because of alcohol or drug use. Friends are extremely important to young people and convincing young people that alcohol and drugs endanger friendships could help prevention efforts among these youth.

AGE OF FIRST USE

Students were asked at what age they began using alcohol, marijuana and inhalants. Other drugs were not asked about since these three are the ones that young people usually begin using first. Table 10 shows the age at which students who have used these three drugs began using them. Knowing the age of first use among students is important in planning prevention programs. Once students have started using drugs it is much more difficult to intervene or to reduce their use. Therefore the most effective prevention programs should be in place just prior to the age when most students who are going to use a drug begin using it. Also it is well known that students who use drugs at very young ages are more likely to have serious and continuing problems later in life. Early intervention with this group is very important in reducing the amount of distress these young people will encounter in the coming years.

TABLE 10

**Age of Gardiner School Districts 7 & 4 Students
When They First Tried Drugs**

	<u>7 - 9 years</u>	<u>10 - 12 years</u>	<u>13 - 15 years</u>	<u>16 or older</u>	<u>Never Tried</u>
Getting Drunk	7%	10%	17%	11%	56%
Average age first drunk: 13.1					
	<u>7 - 9 years</u>	<u>10 - 12 years</u>	<u>13 - 15 years</u>	<u>16 or older</u>	<u>Never Tried</u>
Marijuana	2%	5%	8%	2%	82%
Average age of first use: 12.6					
	<u>7 - 9 years</u>	<u>10 - 12 years</u>	<u>13 - 15 years</u>	<u>16 or older</u>	<u>Never Tried</u>
Inhalants	2%	4%	5%	<1%	88%
Average age of first use: 12.4					

INTENT TO USE DRUGS

What will happen to the younger students during the next year? The survey asked students whether they intend to use drugs in the future. The 7-8th graders' responses to those questions are presented in Table 11 because it is the attitudes of these younger students that are most significant in this respect. For example, if a young person has not used drugs, but "may in the future," that youth is very likely to try drugs soon -- unless something can be done to change his or her mind.

TABLE 11

**Gardiner School Districts 7 & 4 7-8th Graders'
Intentions Regarding Future Drug Use**

	<u>Percent</u>
Never used drugs and never will	85%
Never used drugs, but may in the future	10%
Used drugs, but do not plan to use them again	5%
Used drugs and probably will use them again	0%

Most of the 7-8th graders indicate that they do not plan to use drugs in the future. It is important that these youth are starting with good intentions. Yet we know that there will be some who will start using drugs in the next few years. Although there are many pressures that work against a youth's best intentions to remain drug free, cooperative school and community intervention can work to alleviate these pressures and maintain these good intentions.

PART III

THE USE OF INDIVIDUAL DRUGS

The substances most commonly used by students are alcohol, marijuana and tobacco. Inhalants are sometimes used by younger children. Use of other drugs occurs less often among these students. All of the different types of drugs are, however, discussed in this section because experience shows that any drug eventually becomes available in every community. This is true no matter how small or isolated that community may be. A brief description of each drug, even if it is not used locally, is included to inform readers about the drug and to warn that it may become available locally in the future. When a drug is available, some students are likely to try it. Tables 12A - C show how much each drug has been used during the last month by Gardiner School Districts 7 & 4 students.

TABLE 12A

Use During the Last 30 Days by
Gardiner School Districts 7 & 4 7-8th Graders

	<u>1-2 Times</u>	<u>3-9 Times</u>	<u>10 or More Times</u>
Alcohol	14%	2%	0%
Drunk	0%	3%	0%
Marijuana	0%	0%	0%
Cocaine	0%	0%	0%
Stimulants	0%	0%	0%
Inhalants	5%	0%	0%
Downers	0%	0%	0%
Tranquillizers	0%	0%	0%
Hallucinogens	0%	0%	0%
PCP	0%	0%	0%
Narcotics other than heroin	0%	0%	0%

TABLE 12B

Use During the Last 30 Days by
Gardiner School Districts 7 & 4 9-10th Graders

	<u>1-2 Times</u>	<u>3-9 Times</u>	<u>10 or More Times</u>
Alcohol	25%	10%	5%
Drunk	8%	11%	0%
Marijuana	5%	5%	0%
Cocaine	0%	0%	0%
Stimulants	3%	0%	0%
Inhalants	0%	0%	0%
Downers	0%	0%	0%
Tranquilizers	0%	0%	0%
Hallucinogens	0%	0%	0%
PCP	0%	0%	0%
Narcotics other than heroin	3%	0%	0%

TABLE 12C

**Use During the Last 30 Days by
Gardiner School Districts 7 & 4 11-12th Graders**

	<u>1-2 Times</u>	<u>3-9 Times</u>	<u>10 or More Times</u>
Alcohol	32%	8%	0%
Drunk	11%	6%	0%
Marijuana	2%	2%	2%
Cocaine	3%	0%	0%
Stimulants	3%	0%	0%
Inhalants	2%	0%	0%
Downers	0%	0%	0%
Tranquilizers	0%	0%	0%
Hallucinogens	0%	0%	0%
PCP	0%	0%	0%
Narcotics other than heroin	0%	0%	0%

Table 13 lists a number of high risk behaviors. It shows how many Gardiner School Districts 7 & 4 students are increasing the risk of drug use by the way they use alcohol and/or drugs.

TABLE 13
High Risk Behaviors Among
Gardiner School Districts 7 & 4 Students

	<u>7-8th</u> <u>Graders</u>	<u>9-10th</u> <u>Graders</u>	<u>11-12th</u> <u>Graders</u>
Daily Alcohol Use	0%	0%	0%
Daily Marijuana Use	0%	0%	2%
Passed Out While Drinking	6%	15%	26%
Couldn't Remember What Happened	11%	28%	33%
Had a Car Accident While Drinking	3%	0%	8%
Had a Car Accident While on Drugs	0%	0%	0%
Used Marijuana and Alcohol Together	3%	15%	20%
Took Two Drugs at Same Time	0%	5%	13%
Used a Needle to Inject a Drug	0%	0%	0%
Shared a Needle	0%	0%	0%
Used a Designer Drug	0%	0%	3%

Note: These data are referred to throughout the text of Part III.

The following pages describe each of the different types of drugs, how they are used by youth, what effects they usually have, and the major risks students run by using them.

DESCRIPTIONS OF INDIVIDUAL DRUGS

Adolescents who use drugs usually describe them in positive terms. Indeed drugs do have short term effects that appear very desirable. If this were not the case very few people would try drugs and even fewer would continue to use them. The descriptions below, therefore, include many of the effects that drug users are seeking. This is not meant to put drug use in a positive light – rather the intent is to show why young people may be attracted to drugs.

Keep in mind that continuing use, or even occasional use, of any drug has detrimental effects. These effects may be physical, such as increasing the chances of accidents, or they may be emotional. Adolescents are going through a very important period of emotional growth. They have to confront many difficult tasks such as learning to make friends or learning how to deal with many of the pressures and strains of moving into the adult world. If young people resort to drugs to get through these normal phases of development, they may never achieve the emotional maturity necessary for effective adult living.

Alcohol

Alcohol has been and continues to be the most widely used substance among students. Alcohol is, of course, a legal substance for adults, thus it is both readily available and widely accepted by society.

Alcohol use could involve anything from a single beer to getting drunk, thus it is important to know how much alcohol is being used. Tables 12A - C (pages 28 - 30) show how many Gardiner School Districts 7 & 4 students have been drunk during the month prior to the survey. These figures are the students' own judgments about whether or not they were drunk, and not actual estimates of the amount of alcohol they consumed. Some students who believe they were drunk may not have been legally intoxicated, while others who were legally intoxicated might not think they were. Experience suggests these factors balance each other out and the numbers in the tables provide a close estimate of how many students have actually been drunk.

Some students may have been extremely drunk, greatly increasing the risk from drinking. The number of students who had so much to drink that they "passed out" appears in Table 13 (page 31). Some young people may also have had enough to drink that they do not remember what they did or may have done things while drinking that they prefer to forget. The number of Gardiner School Districts 7 & 4 students who claim to "not remember" what they did appears in Table 13.

While alcohol is legal for adults to use, and while there is considerable social tolerance for adolescent drinking, alcohol is a dangerous substance. For one thing, alcohol is addictive. Heavy use over a long period can lead to all of the attendant physical and social problems of alcoholism. Many alcoholics report that they started heavy drinking as adolescents. At least some youth who are drinking heavily now are on the path to alcoholism.

In addition to potential alcoholism, there are some immediate hazards linked to heavy alcohol use by young people. The most obvious danger is from drunk driving. In addition, each year a significant number of young people lose their lives directly to alcohol poisoning simply because they do not know when to quit drinking.

Some youth who use alcohol also take drugs while drinking, and the effects from taking drugs along with alcohol can be very dangerous. When marijuana and alcohol are used together, the effects on judgment and on driving skills are greater than when those substances are taken separately. Using alcohol with other drugs also increases the danger. See Table 13 for the percent of Gardiner School Districts 7 & 4 students who have used alcohol and drugs together.

Less obvious damage from alcohol use occurs when a youth is unable to study or concentrate because of residual intoxication or hangovers. Damage is also done when heavy alcohol use interferes with emotional development.

Tobacco

Tobacco, like alcohol, is a legal substance for adults and is easily accessible to young people. In recent years the dangers from tobacco use have received wide publicity and tobacco use has subsequently dropped to a degree. The use of smokeless tobacco by young people, incidentally, has increased over this same period. Cigarette use by high school seniors has been declining slightly, but about 20% of American high school seniors still smoke cigarettes daily.

TABLE 14

Tobacco Use by Gardiner School Districts 7 & 4 Students

<u>Cigarettes</u>			
	<u>Ever Used</u>	<u>Use Daily</u>	<u>Half a Pack or More a Day</u>
7-8th Graders	24%	0%	0%
9-10th Graders	42%	12%	8%
11-12th Graders	48%	8%	8%
<u>Smokeless Tobacco</u>			
	<u>Ever Used</u>	<u>Use Daily</u>	<u>Six or More Times a Day</u>
7-8th Graders	13%	5%	2%
9-10th Graders	36%	5%	5%
11-12th Graders	26%	0%	0%

Nicotine is highly addictive, and young people who use tobacco regularly may have trouble if they want to stop later. The adolescent years are very important in determining whether or not people will smoke as adults. Current research suggests that nearly every young adult who smokes today smoked regularly before the age of 19, and that hardly any youth who regularly smoke half a pack a day or more will quit before they reach the age of 30.

Marijuana

Marijuana has, unfortunately, gained wide social acceptance among young people: it is now second in popularity only to alcohol. In 1980, more than 60% of high school seniors surveyed nationally had tried marijuana. While marijuana use has gone down since then, the "ever tried" rate is still around 50%. Marijuana is usually smoked, like tobacco - in a pipe or rolled in cigarette paper. The user gets high very quickly, within a few minutes, and stays high for two to three hours. When eaten, it may take 20 to 30 minutes for marijuana to "hit" - the high is likely to be less intense but may last longer. Many users will stay high for several hours at a time by taking more of the drug.

As with other drugs, the effect of marijuana on the user is likely to depend on the action of the drug, the amount used, the immediate social setting and the user's expectations. The usual response to marijuana is a light and relaxed sensation. Under some conditions, everything may seem hysterically funny. Colors and sounds may seem very bright and intense, time may seem to slow down and appetite often increases for the user. These pleasant sensations are generally associated with the light use of those new to marijuana. As marijuana use continues, however, other less desirable effects are felt.

When marijuana is used in situations that create anxiety or by people already having emotional problems, it can intensify such feelings as depression, anxiety, or fear. Some youth may believe that they are going crazy while on marijuana. These negative responses are more likely with heavy doses of the drug, but even light doses can intensify such moods for particularly sensitive people.

Even in low doses, marijuana interferes with judgment. Young people who have limited experience with the world are likely to make errors that endanger them - marijuana use increases the opportunities for such errors.

Extremely negative emotional and personal experiences, "bad trips," are frequent among people who use marijuana heavily. There is also evidence that long term, heavy marijuana use can ultimately endanger a youth's physical and emotional health.

In the last three years, the price of marijuana has increased. Despite the expense, marijuana is still a very popular drug among high school students.

Since marijuana is passed out of the body slowly, students who use it daily or even several times a week have some of the drug in their systems all the time. Table 13 shows the percent of Gardiner School Districts 7 & 4 students who use marijuana daily.

Cocaine

Cocaine is a white powder derived from the South American coca plant. It is usually "sniffed" or "snorted," but is also dissolved and injected by heavy drug users.

Cocaine is a very powerful stimulant. When sniffed, it is rapidly absorbed into the blood stream through the membranes in the nose. The drug immediately dries out and numbs the nose and sinuses, thus the user often feels "a breath of cold, clean air." When sniffed or "snorted," cocaine hits the brain very fast, and the user generally feels excited, energetic, and capable of great mental and physical feats. Injecting cocaine leads to a similar response, but the feelings are even more intense because of the large amounts suddenly reaching the brain.

The initial effects of cocaine seem extremely pleasant to the user. But when the "rush" wears off, it usually leaves the user feeling tired and let down. The user, in turn, often tries to alleviate this depression with another dose of cocaine. The result is an extended cycle of ups and downs as the user develops an insatiable appetite for cocaine while trying to maintain the high.

Some users are high on cocaine virtually all the time; their lives center around the drug while their work and personal relationships are destroyed. Fortunately, most cocaine use by students is still occasional use, with very few students using it more than once or twice a month. (See Tables 12A-C).

Crack

In the last two years, the drug "crack" has been given a great deal of attention in newspapers and on television. Crack is a form of cocaine quite different from the powdered form taken by most cocaine users. Powdered cocaine is processed from the coca plant with the use of several liquid chemicals. This mixture is dried resulting in a powder which is usually sniffed ("snorted") through the nasal passages. Powdered cocaine is absorbed by the bloodstream and travels to the brain where it has its effect. This regular cocaine powder, however, vaporizes at a very high temperature and therefore cannot be smoked.

Powdered cocaine can be treated so that it vaporizes at a lower temperature. When it is treated this way it comes out in small, hard lumps called "crack," or "freebase." In the past, the usual way of producing "freebase" used flammable chemicals, such as ether, and was very dangerous. More recently, however, a new chemical procedure has been developed that is not flammable. This simple, inexpensive process produces crack. In some places, crack is also called "rock cocaine." The term "Rock", however, is also used in a few locations to describe drugs other than cocaine.

While cocaine powder cannot be smoked because it burns up before it vaporizes, crack can be smoked because it turns to gas at a lower temperature. This smoked form of cocaine delivers a lot of vapor into the lungs where it is rapidly absorbed into the bloodstream. The result is a very intense and immediate high.

The price of cocaine has dropped significantly in the last few years, thus crack can be produced for a relatively low cost. In addition, because it takes less cocaine to get high when it is smoked as crack, crack can be sold in small amounts. Many young people, therefore, can now afford cocaine in the crack form.

Such conditions have made crack a very serious problem in some cities. Crack is relatively cheap, it produces a very intense high, and because it does not need to be injected, it is easy to take. A crack high does not last very long. When it wears off, crack, like other forms of cocaine, leaves the user feeling let down, and the user often tries to maintain the high with successive doses of crack. For those reasons, crack is an extremely dangerous drug. Crack is just beginning to gain popularity with drug users throughout the country. Results from small towns and rural areas that have used the American Drug and Alcohol Survey™ suggest that crack is now available almost everywhere (although in most of these small towns only a few youth have tried it).

TABLE 15

Crack Use by Gardiner School Districts 7 & 4 Students

	<u>Ever Tried</u>	<u>Used in Last 12 Months</u>	<u>Used in Last 30 Days</u>
7-8th Graders	0%	0%	0%
9-10th Graders	5%	2%	0%
11-12th Graders	2%	2%	2%

Stimulants

Stimulants are usually amphetamine or amphetamine-like drugs. They are sometimes called "prescription stimulants" because, to take them legally, they would have to be obtained through a doctor's prescription. Some stimulants, however, are manufactured and sold illegally. While marijuana and cocaine are derived from naturally occurring plants, stimulants are produced artificially in a laboratory. Stimulants cause sensations of alertness and excitement. Stimulants are usually referred to as "uppers" or "speed" by drug users. Stimulant use is usually associated with a dry mouth and a loss of appetite.

Stimulants can be taken in pill or capsule form. They are most often taken orally and absorbed through the digestive system. It takes about 15 to 20 minutes to get high. The high then lasts from two to six hours and may be followed by a "let down" feeling or serious depression if large or repeated doses are taken. Heavy drug users may also inject stimulants, although this is infrequent among adolescents.

The majority of young people who take stimulants once a month or more belong to a peer group that is involved in a drug lifestyle. They use drugs in conjunction with nearly every gathering or social occasion.

In the late '60s and early '70s, some youth were involved in very heavy stimulant use. They used stimulants constantly and made frequent "speed runs" where they took heavy doses every couple of hours, staying high for seven or more hours at a time. "Speed freaks," as they were called at the time, often developed serious hallucinations and delusions of paranoia, and were prone to violence and suicide. The admonition, "Speed Kills!," spread effectively among drug-using youth and helped to diminish greatly the use of speed. Today, even heavy stimulant users do not take as much of the drug, do not get as high, and only a very small proportion of young people who use stimulants stay high for such extended periods of time.

Lighter stimulant use, however, is also dangerous, partly because uppers will keep a person awake while making them feel perfectly competent even when there is considerable loss in reaction time. Judgment may be distorted, but stimulant users often cannot detect that anything is wrong. This is particularly true if alcohol and uppers are taken together. Such users may think they are functioning well when actually they are simply wide-awake drunks, and therefore dangerous ones, particularly behind the wheel.

Legal Stimulants

In some states it is possible to buy mild stimulants and pep pills legally, often by mail. These are called fake pep pills, imitation speed, look-alikes, or have brand names similar to those that drug users apply to illegal prescription stimulants. A few years ago, many legal stimulants contained several different drugs, but federal guidelines now restrict these substances to one active ingredient per dose, which is usually a concentrated amount of caffeine. The response from taking legal stimulants is similar to that from taking other stimulants, but not as intense.

Stay-awake pills can also be bought over the counter and have similar ingredients. Many students use stay-awake pills when they have a lot of homework to do or are studying for tests. Sometimes, however, these pills are taken strictly for the purpose of getting high.

Unless taken in very large amounts, neither legal stimulants nor stay-awake pills present great physical dangers. They do, however, accustom a youth to taking drugs and may encourage the use of illegal stimulants or other substances.

Inhalants

Some youth inhale many different substances, ranging from gasoline to typewriter correction fluid, to get high. The most commonly used inhalants are glue, gasoline, paint and paint thinner. Almost anything that has a solvent that evaporates at room temperature can be abused in this manner. The inhalant is usually smeared on the inside of a paper, plastic bag, rag or old sock. The fumes are "sniffed" (breathed in through the nose) or "huffed" (breathed in through the mouth).

Inhalants are rapidly absorbed into the blood stream through the nasal passages and lungs, and the user gets high in minutes. Depending on the amount taken, once the user stops inhaling, the high soon passes off; usually within a half hour. Thus, many inhalant users continue to "sniff" in order to stay high. An inhalant high is essentially the same as an alcohol high, with an initial stage of euphoria followed, as the youth continues to inhale, by greater intoxication, dizziness, and loss of physical and mental control.

Inhalants are used mostly by very young drug abusers. The average age of children who use inhalants regularly is between 12 and 13. These youth use inhalants because they are cheap and easily available. Younger children who use inhalants have a tendency to move on to other drugs as they get older, which is one reason why inhalant use tends to be lower among high school seniors than it is among junior high or middle school students. Another reason is that many of the heavier inhalant users never make it to the senior year before dropping out of school, often at least partly because of their drug use.

Some people, usually young adults in their mid-20's or early 30's, use inhalants constantly. These people may use inhalants every day, staying high for hours at a time. Such heavy inhalant use places the user in grave danger. Inhalants can damage the liver, cause an imbalance in blood chemicals, and lead to coma or even death. These inhalant dependent adults are often seriously disturbed – they have a reputation for violence and bizarre behavior. Occasionally, a younger person develops this type of severe inhalant dependence, which inevitably becomes a critical problem.

Most of the students who use inhalants, however, do not use them very often and the amount that they use is unlikely to do any irreparable physical damage. Fortunately, while the substances that are most often inhaled – glue and gasoline – are damaging, they are among the least toxic of inhalants and seem to do little permanent damage when used only occasionally and in small amounts. Inhalant users, however, typically do not know whether the substance they are using is dangerous or not. There are some vapors that can be fatal and others that can sensitize the heart so that suddenly being startled or frightened could kill. Inhalant vapors are also flammable and there is often a danger of explosion or fire. Inhalant intoxication is similar to alcohol intoxication – it interferes with judgment and motor skills, and can cause inhalant-intoxicated youth to get into serious trouble as a result.

Communities should be aware that small groups of children can become obsessed with using inhalants. Occasionally this pattern spreads to other groups of children, thus creating a serious, widespread problem in their community. Such behavior rarely involves older youth, but can remain an epidemic among the younger children. A severe inhalant problem can appear suddenly in one grade or class even when previous classes have not shown it. It is wise to watch for a sudden increase in the number of elementary or junior high school students using inhalants 10 or more times a month.

Amyl and Butyl Nitrites

Amyl and butyl nitrites, when sold by prescription, consist of small capsules holding a gas. Patients with heart problems sometimes use these capsules; the capsule is broken and the gas inhaled to help the heart. These substances, however, are also sold in spray cans, purportedly as "room odorizers" or for other uses. They are often sold under brand names with sexual connotations. The drugs are used by some young people because, when inhaled, they produce a quick surge of energy. The effect passes off almost immediately. The street names for these drugs – poppers, snappers, jolt and rush – describe these feelings.

Nitrites are not viewed as highly dangerous, partly because they are rarely used by youth. Anything that suddenly shocks the system or stimulates the heart, however, could lead to problems, particularly if a young person has an existing physical problem or condition. The sudden drop in blood pressure caused by the drug can lead to fainting and injury. There have been rare cases where youth have taken "poppers" or "snappers" many times on a daily basis – a practice likely to do significant physiological damage.

Downers

"Downers" is a street name that covers nearly all barbiturates, sedatives and sleeping pills. When prescribed by a physician, these drugs relieve muscle spasms, relax the patient, block pain to some extent, and lead to a sleepy, drowsy state. The effect of these drugs is almost identical to that of alcohol, and they have been called "a drink in a pill." The initial response to taking a downer is often the same kind of euphoria felt in early drunkenness. As more drug is taken or more of the drug is absorbed, the response is nearly the same as being drunk – staggering, loss of coordination, dizziness, drowsiness, poor judgment, slurred speech, etc.

Downers are administered in either liquid or pill form, but most illegal downers are sold as pills or capsules for convenience. Also, a major source of downers is the family medicine cabinet. Some youth steal downers that were prescribed to other family members or get them from old, unused prescriptions. While downers can be injected, adolescents usually take them orally. Different downers have different reaction times, but it usually takes the digestive system time to absorb any of them -- thus it can take 20 to 30 minutes to get high. The high from one dose may last from two to four hours, depending on the specific drug. A small percentage of users take additional doses to stay high for longer periods of time.

The major differences between downer intoxication and alcohol intoxication relate to the settings where these substances are taken, and to beliefs about their effects. Young people who use downers usually take them in small amounts and with friends in private surroundings. These occasional users rarely find themselves in fights or involved in aggressive behavior when they are taking downers.

Only about 10% of those who use downers take large amounts, but users who do get very high on downers can become aggressive. In some communities, there will be a small group of adolescent Multi-Drug Users who take downers in large amounts, often with alcohol. Their goal is to get extremely high and do "crazy" things. Such groups are often very rebellious and try to shock the public by their actions. Downers and a variety of other drugs are usually a central focus of such youth, who consider drugs an important part of their social lives.

Downers can be very dangerous since they pose the same dangers as alcohol intoxication, with the accompanying poor judgment and loss of coordination. Furthermore, downers and alcohol potentiate each other. Thus, taking downers with alcohol is like taking very large doses of alcohol. Such use can lead to extreme intoxication, or even to coma or death.

Downers are also highly addictive. While most adolescents do not use them enough to become addicted, taking downers heavily and over a considerable period of time can lead to addiction – the need to take downers constantly and in increasing doses. Heavy addiction to downers can be life-threatening, especially if the person stops taking them abruptly. Withdrawal from downers, as from any addictive substance, should be done under medical supervision.

Quaaludes

Quaaludes ("ludes") are also a form of downer. They are asked about on the survey separately from other downers because there have been recent outbreaks of Quaalude use in some areas. Quaaludes became so popular among drug abusers that they are no longer manufactured by any legitimate company in the United States. However, some illegal manufacturing of them continues. Quaalude use has been dropping since 1982.

The physical and emotional response to Quaaludes and the dangers from their use are the same as the effects and hazards of other kinds of downers.

Tranquilizers

Some young people also use tranquilizers to get high. The figures in the tables in this report do not include use of tranquilizers that were prescribed by a doctor as medicine, but only when tranquilizers were taken just to get high. The effects are similar to those of downers, although tranquilizers are actually very different drugs. A heavy dose of tranquilizers, like downers, creates an initial euphoria, but then drowsiness, inattention and impaired judgment set in. Although some tranquilizers are milder drugs, the dangers are similar to those from taking downers. Two of the more commonly used tranquilizers are ValiumTM and LibriumTM. These drugs are often prescribed for legitimate medical purposes but they are used illegally. If tranquilizers have been used heavily and on a daily basis, withdrawal should be done under medical supervision.

Hallucinogens

Hallucinogens, a class of drugs also known as psychedelics, interfere with the nerve impulses in the brain resulting in strange physical and emotional sensations, such as hallucinations. LSD (lysergic acid diethylamide), the most common hallucinogen, is a substance that appears naturally in a fungus, but is often artificially produced in a laboratory.

Other hallucinogens are derived from plants. The best known among drug users are psilocybin, from a mushroom of that name, and mescaline, from the peyote plant.

Hallucinogens are taken orally, and take from 20 minutes to an hour to take effect. The effects of a hallucinogen can last from less than an hour to a day or longer. The effects of LSD usually last five to six hours.

The response to any drug is caused, of course, by the drug itself, but also to a great extent, by the user's expectations. This is particularly true of hallucinogens. The amount taken is also important; light doses, for example, rarely lead to vivid hallucinations.

After taking a hallucinogen, light, sound, and skin sensations often become very intense. Users may feel disconnected from their bodies, or that their bodies are strange or distorted. On heavier doses, users may see or hear things that are not there or get strange mixed sensations, such as the feeling that they are seeing music or hearing lights.

Hallucinogen users frequently feel happy and relaxed when high, particularly in early stages, but emotional responses can be extreme, particularly with heavy dosages. Most users, however, know that their hallucinations are not real and are caused by the drug. Intense "religious" or mystical feelings may be aroused, particularly if the user anticipates such effects.

Some young people who use hallucinogens believe that if the drugs are "natural" they are safe to use. Psilocybin ("mushrooms" or "shrooms"), for example, are often cited as an "organic" drug by users. Many times, however, the psilocybin mushrooms that they buy are actually grocery store mushrooms soaked in LSD. There are some other hallucinogens that are also viewed as different from LSD, but which are also often simply LSD disguised as something else. It should also be noted that whether or not a drug is "organic" has little relevance to the dangers involved in using that drug.

Many young people use hallucinogens without getting into direct trouble. Hallucinogens, however, can cause problems with some users, such as bizarre behavior or accidents. Sometimes the user experiences strong feelings of paranoia or fear of going insane. Flashbacks (hallucinations that occur long after taking the drug) may occur fairly frequently, but usually do not cause problems unless they lead to panic or fear. Although it is quite rare, a person who has taken hallucinogens can later develop serious emotional problems, problems that cannot be distinguished from the symptoms of severe mental illness.

While these serious problems are infrequent, hallucinogen use can cause other, more subtle problems. These young people are at an age when they are struggling to develop their own attitudes, beliefs, and values. Taking hallucinogens sometimes convinces them that they are developing creative ideas and thoughts and learning the answers to life's problems; so they take the drug instead of seeking real solutions or actually developing creative and intellectual abilities.

There are other artificially produced hallucinogens, some of which are referred to as the "designer drugs." These drugs are usually known by their initials -- DMT, MDA, MDPT, etc. (See Table 13.) These drugs are usually produced in home laboratories by complex chemical procedures. There may be great dangers from these drugs. In at least one case, the chemist failed to complete the chemical reactions involved, and one or two doses of the resulting drug led to permanent damage to the brain and severe Parkinson's disease.

PCP

Phencyclidine (PCP) is a drug developed as an anesthetic for large animals. PCP acts differently in humans. It is taken illegally as a pill or capsule, injected, sniffed or huffed. PCP is often smoked, frequently as an additive to marijuana. When taken orally, it may take about an hour to take effect. When huffed or smoked, the effects are felt in minutes. The user may stay intoxicated for three to six hours on a dose.

With a light dose of PCP, there is often a feeling of euphoria. With a heavy dose, the muscles become rigid, particular movements may be repeated over and over again, and there may be hallucinations and delusions, particularly feelings of paranoia. There was an epidemic of PCP use in the late '70s, but PCP developed a reputation as a very dangerous and damaging drug, even among drug users, and its use subsequently dropped off.

PCP is a very dangerous drug. In heavy doses, which are no more than about four times the dose most often taken by PCP users, the drug can cause coma, convulsions and even death. Chronic PCP users also have a reputation for bizarre and violent acts, including suicide and murder. A number of reports suggest that these behaviors occurred quite some time after the drug was taken.

PCP use is now relatively rare, with almost no chronic PCP users in most communities. In some large cities, however, PCP is beginning to reemerge. There are groups of youth in those cities beginning to use the drug heavily again. In fact, in some cities more than half the young people who have been arrested for serious crimes have had PCP in their systems. Trends in PCP use should be monitored closely.

Heroin

Heroin, morphine, and opium are all opiates. Opium is a drug derived from the opium poppy. It can be smoked or taken orally and has long been used to block pain or to induce sleep. Morphine is a stronger, concentrated form of opium. Heroin is produced by chemical treatment of morphine; it works more rapidly and is more effective because it can get into the brain more readily than morphine. While these are all essentially the same drug, users prefer heroin because of its potency. Heroin is not legally available in the United States.

If injected, heroin takes effect almost immediately, and the sensations will peak in less than five minutes. The high from a single dose lasts from four to six hours. The rapid and intense effect (the "rush") from injecting the drug is popular among the drug's users, thus they often prefer to administer it with a needle. The high is less immediate and less intense when heroin is taken orally.

The response to taking the drug is usually a drowsy, relaxed state, with feelings of euphoria, particularly if the user has experience with the drug. Although the usual response is euphoric, it is not at all rare for a user to feel depressed after taking the drug. When the drug wears off, there is a melancholy feeling that encourages repeated use.

Heroin use by students is rare. Only a little over 1% of high school seniors throughout the United States have tried heroin. Students who have tried heroin are likely to be Multi-Drug Users who have experimented with many different drugs.

Heroin intoxication is, in many ways, similar to alcohol intoxication – judgment, motor skills, memory and attentiveness are affected. Heroin also reduces the user's motivation. It is a highly addictive drug as many users begin to crave the sensations heroin causes and become very anxious when they do not have the drug. When the user comes down from a high, there are often feelings of depression, discomfort and a craving to continue using the drug. Frequent use over a long period of time can trigger an obsession with heroin that dominates the user's life.

TABLE 16

Heroin Use by Gardiner School Districts 7 & 4 Students

	<u>Ever Tried</u>	<u>Used in Last 12 Months</u>	<u>Used in Last 30 Days</u>
7-8th Graders	0%	0%	0%
9-10th Graders	0%	0%	0%
11-12th Graders	0%	0%	0%

Narcotics other than heroin

Many other narcotics have effects similar to heroin. Morphine and opium are, of course, the same basic drug as heroin, but not as concentrated. Demerol is a potent pain killer and narcotic. Codeine has similar effects, but is less powerful. Methadone was developed as an alternative to heroin for treatment of heroin addicts. It can be taken orally and lasts for a day or more. Methadone does not make the user as drowsy and lethargic as heroin, thus the addict can use it while working. Methadone, however, can also be abused. The physical and psychological effects and the hazards of these other narcotics are essentially the same as those of heroin. The survey questions ask only about the use of narcotics to "get high." Use under a doctor's care is excluded.

CONCLUSION

This report shows that there are a significant number of young people from Gardiner School Districts 7 & 4 who are at risk from their use of drugs. The report also provides more details about some of those risks. For example, Tables 9A and B (pages 23 and 24) show some of the consequences of alcohol and drug use that these students admit they have encountered and Table 13 (page 31) lists some of the high risk alcohol and drug behaviors.

The report also shows that the school cannot deal with this problem alone. While some youth may come to school high on alcohol or drugs, Tables 6A and B (pages 17 and 18) show that most drug and alcohol use is with friends and outside of school. These associations with drug using friends are very important in understanding drug use. Young people who use drugs tend to have friends who use drugs. Young people who do not use drugs, on the other hand, have friends who would try to stop them from using drugs.

Drugs seem to be available anywhere in the United States, and Table 5 (page 16) shows that at least some students at Gardiner School Districts 7 & 4 believe that most drugs are available here. Preventing drug use and limiting the damage done by alcohol and drugs will require a concerted effort by the whole community: schools, parents, community leaders, and youth.

APPENDIX I

TEST-RETEST RELIABILITY
PARENT SURVEY
CHI SQUARES

Parent and Non-parental Community Leader Survey
Test-Retest Reliability

No.	Item	Chi Square Value
1.	Substance abuse includes only illegal drugs.	2.00
2.	Addiction refers to either physical or psychological dependence on a chemical.	1.33
3.	Prevention and intervention are important in helping the substance abuse problem.	0.00
4.	After drug treatment, it is an ongoing battle to remain free from drugs.	0.28
5.	Alcohol is the most abused drug among young people.	1.09
6.	Alcoholism is a disease.	1.33
7.	Teenagers can become alcoholics more quickly than adults.	2.73
8.	Incorrect use of prescription drugs is a form of substance abuse.	0.28
9.	Alcoholism is a disease affecting the entire family.	0.00
10.	Students are experimenting with alcohol, tobacco, and other substances at much earlier ages.	1.76
11.	Adolescents have an ability to complete the stages of addiction faster than adults.	1.50
12.	Heredity is not related to addiction.	3.33
13.	Experimentation with alcohol and marijuana is expected.	1.60

No.	Item	Chi Square Value
14.	It is better for my child to use alcohol than smoke marijuana.	1.01
15.	It is permissible for my minor child to drink at home.	5.67
16.	If there were "hard drugs" in this community, I would know about them.	6.86
17.	Alcohol and marijuana use leads to use of stronger drugs.	0.44
18.	Substance use and abuse is contributed to by easily available money, cars, and drugs and the societal pressures and boredom students feel.	0.29
19.	Using drugs is so common in our society that it is a normal growing stage.	1.68
20.	Since the majority of student drug use occurs away from school, the issue isn't any of the school's business.	2.00
21.	Anyone can stop drinking if they really want to.	5.33
22.	Beer is the most abused drug among teenagers.	1.17
23.	Parents shouldn't drink or use drugs and then tell their kids not to.	2.20
24.	People who become addicted to drugs or alcohol are just weak--all they need is self-control.	0.00
25.	Communities do not supply enough alternative activities to keep students from substance abuse.	0.67

No.	Item	Chi Square Value
26.	Anyone selling illegal substances should be punished with a mandatory jail sentence.	0.29
27.	Anyone possessing illegal substances should attend a mandatory treatment program.	1.50
28.	A drug education program should start in kindergarten.	2.29
29.	Smoking should be banned on all school property.	0.09
30.	Teaching about drugs and drug usage should be left to the parents.	1.14
31.	Parents should practice and teach the type of alcohol use they expect their children to practice.	0.53
32.	People should come to view alcohol and tobacco use as a national health issue, not a personal freedom issue.	0.22
33.	People returning from treatment for a substance abuse problem should receive full after care support from school, community and family.	1.07
34.	There should be a convenient drug testing procedure for school officials to detect drug use in individual circumstances.	2.40
35.	Students in our community should participate in a substance abuse curriculum from grades K through 12.	0.00
36.	Students should have a positive self-concept and be taught refusal skills to help resist negative peer pressure.	6.38
37.	Students should become familiar with the adverse effect drugs have on their body and how they impair bodily functions.	8.41

No.	Item	Chi Square Value
38.	I'd like my child to know other students who don't use.	1.11
39.	Parental discipline in cases of student use or abuse is sadly minimal.	0.29
40.	The "Just Say No" program is not sufficient in preventing drug use and abuse.	8.00
41.	By and large, our town "looks the other way" in regard to drinking youth.	2.29
42.	Students are receiving very "mixed messages" from parents, law enforcement authorities, and advertising.	0.00
43.	Most people look the other way instead of helping because they don't want to get involved.	0.00
44.	Drinking is part of the culture in our community.	0.44
45.	Parents would rather see their children drinking than using drugs like marijuana, cocaine and speed.	1.11
46.	Until the older population changes their attitudes about alcohol, the younger population will continue to abuse alcohol.	0.25
47.	Social drinking by adults and students is considered permissible in our community.	5.07
48.	Students engaging in substance abuse should be identified.	2.00
49.	The home, school and law enforcement should work together to help a student who abuses.	0.22

No.	Item	Chi Square Value
50.	Students who are caught selling harmful substances to school age children should be prosecuted.	1.61
51.	Parents who furnish alcohol and allow students to have alcoholic parties on their premises should be charged with contributing to the delinquency of a minor.	0.00
52.	Most students in our community feel it is all right to use alcohol before graduation from high school.	0.25
53.	Possession or use should result in forced attendance at a court ordered counseling and educational program.	0.00
54.	Possession of illegal substances in school should result in parental notification.	0.23
55.	Possession or use of an illegal substances in school should result in suspension.	0.53
56.	An arrest of a student for use or possession of an illegal substance should require counseling and educational classes for both student and parents.	0.53
57.	Students caught with drugs at school should be referred immediately to legal authorities.	2.80
58.	Young people are treated too leniently for alcohol and drug related offenses.	2.15
59.	Students using drugs during the school year should immediately be excluded from all school athletics and activities for the remainder of the year.	0.00

No.	Item	Chi Square Value
60.	Parents or other adults providing alcohol or drugs to minors should be required to serve a minimum of 24 hours in jail and pay a \$500 fine for the first offense.	0.34
61.	Parents, as a rule, provide a denial system for their children in the use of alcohol.	4.33
62.	Parents should be supportive of law enforcement officials.	0.28
63.	Parents should be notified when their children are violating laws.	2.29
64.	Students who have been caught drinking or using drugs should be excluded from extra-curricular activities for a specified time.	1.00
65.	An intervention and referral process should be included in schools to aid in the identification and placement of students in need of counseling services.	0.28
66.	THE majority of students don't want to become substance abusers but they need to have some help in dealing with peer pressure and learning how to say "no" effectively.	1.07
Degrees of freedom = 4		Significance level = .05

APPENDIX J
TEST-RETEST RELIABILITY
STUDENT SURVEY
CHI SQUARES

Student Survey
Test-Retest Reliability

No.	Item	Chi Square Value
1.	Users of drugs and alcohol develop physical and/or emotional dependence on the substance.	1.73
2.	Alcohol and drug use can threaten normal development of children and teenagers.	1.07
3.	Alcohol is the most abused drug among young people.	0.71
4.	Alcoholism is a disease which may be inherited.	13.44
5.	It is illegal in Montana for anyone to provide alcohol to someone under the age of 21	0.37
6.	I think alcohol and drug education should begin no later than kindergarten.	2.58
7.	I have learned enough about drugs and alcohol in school already.	6.07
8.	It would help my friends if more information about drugs and alcohol was available.	0.17
9.	It is okay to drink with my parent's permission.	0.63
10.	My parents are less concerned about me drinking alcohol than they are about me taking drugs.	1.39
11.	Only people with drug or alcohol problems need substance abuse education.	0.61

No.	Item	Chi Square Value
12.	Underage drinkers should be allowed to drink at home.	1.50
13.	The drinking age should be lowered.	1.51
14.	There should be more spot checks by police to find people driving under the influence of alcohol.	4.15
15.	Substance abuse (drug and alcohol) education should not be taught in school.	0.73
16.	Substance abuse education should teach you how to resist your friends pressuring you to drink.	3.32
17.	I usually get the alcoholic beverages I drink from a same age friend.	3.65
18.	I usually get the alcoholic beverages I drink from an adult friend or parent.	3.09
19.	My parents approve if I attend a party where alcohol and drugs are available.	3.16
20.	My teachers would disapprove if I attended a party where alcohol and drugs were available.	3.49
21.	My parents do not allow me to drink.	2.29
22.	My parents give me drinks at home for special occasions.	1.57
23.	If I came home drunk, my parents would be furious.	0.29

No.	Item	Chi Square Value
24.	Law enforcement people in my community ignore students who are drinking.	2.87
25.	The fear of getting caught drinking or using drugs prevents me from drinking or using.	3.32
26.	The school rules about drinking and drug use discourage students from drinking or using drugs.	4.69
27.	My close friends expect me to drink when they do.	5.25
28.	My friends do not approve if I use alcohol or drugs.	3.07
How much do you think people risk harming themselves either physically or emotionally if they. . .		
29.	Smoke one or more packs of cigarettes per day.	3.98
30.	Smoke marijuana on an occasional or regular basis.	3.27
31.	Try one or two drinks of an alcoholic beverage.	2.82
32.	Take one or two drinks nearly every day.	3.23
33.	Take four or five drinks nearly every day.	0.00
34.	Have five or more drinks once or twice each weekend.	0.53
35.	Try or take other drugs (LSD, cocaine, etc.) occasionally or regularly.	3.26

No.	Item	Chi Square Value
Do YOU disapprove of people (who are 18 or older) doing the following. . .		
36.	Smoking one or more packs of cigarettes per day.	3.05
37.	Smoking marijuana on an occasional or regular basis.	2.76
38.	Trying one or two drinks of an alcoholic beverage.	3.65
39.	Taking one or two drinks nearly every day.	1.78
40.	Taking four or five drinks nearly every day.	2.83
41.	Taking five or more drinks once or twice each weekend.	5.09
42.	Trying or taking other drugs (LSD, cocaine, etc.) occasionally or regularly.	6.94
Degrees of freedom = 4		Significance level = .05

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