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A Study of Selected Aspects of Alcohol Education in Michigan's Elementary and Junior High Schools

Calvin J. Hoogstra
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A STUDY OF SELECTED ASPECTS OF ALCOHOL EDUCATION IN MICHIGAN'S ELEMENTARY AND JUNIOR HIGH SCHOOLS

by

Calvin J. Hoogstra

A Project Report
Submitted to the
Faculty of the Graduate College
in partial fulfillment
of the
Specialist in Education Degree

Western Michigan University
Kalamazoo, Michigan
December, 1970

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Calvin J. Hoogstra

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CHAPTER I

INTRODUCTION

Education is aimed not only at the imparting of factual knowledge to pupils, but in addition, at helping them use this knowledge to live effectively as members of society and to adjust wholesomely to their culture. McCarthy, past professor of education and executive director of the Summer School of Alcohol Studies, Rutgers University, stated:

One of the functions of public education in a democratic society is to provide an interpretation of that society so that students, through understanding, may make a constructive adjustment to it. This is a challenging responsibility. Problems arising out of social interrelations are complex and an individual awareness of the basic issues is not readily attained by the average adult citizen.¹

Background of the Problem

Use of alcoholic beverages is a part of contemporary culture, and is, therefore, a subject worthy of being included in today's curriculum. It will be shown that the use of alcohol has long been a part of man's culture, has been a part of the American way of life since the inception of this country, and currently is a significant component of American life. Because of this, schools should and

often do include instruction about alcohol.

Alcohol and Early History

Man probably learned about alcoholic beverages by coincidence at the dawn of history. It is possible that someone set aside some grape juice or honey for future use, later noticed the effects of fermentation, and having tasted this beverage and enjoyed its effects, he continued to brew it.

Ancient writings show that alcoholic beverages were a part of ancient civilizations. The Epic of Gilgamesh, a Sumarian legend, suggested that early man revered wine as something from the gods, and believed that people must be taught to use alcohol properly. This legend told of the forces of righteousness and evil fighting each other. When some of the good gods fell in the fray, they landed on soil and sprouted vines. The grapes from these vines were thought to contain the blood of the gods, thus those who drank the wine made from these grapes became imbued with divine spirit. Gilgamesh created a child, Enkidu, who was taught to eat and drink according to the ancient customs. Alcohol was recognized as altering mood and behavior, and this child fearlessly captured wolves and lions under its influence.

Wine soon served a variety of purposes. Whereas early man

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first confirmed his pacts and agreements with blood, man soon sub-
stituted the drinking of wine as a toast to symbolize validation. 1
Alcohol was recognized also to be a "social lubricant." This can
be illustrated by the word "symposium," which today is understood
to be a conference at which a specific subject is discussed, but
was derived from the Greek words syn and posis, meaning to drink
together. People were thought to be less inhibited in discussion
after drinking together. 2 The Romans made wine available to the
Barbarians in order to be able to defeat them more easily in battle. 3
Wine also was used in ancient worship as a libation replacing the
sacrificial blood used in still earlier times. 4

Alcohol and United States History

The use of alcoholic beverages, according to McCarthy, was
transmitted through succeeding cultures, and early became a part
of American life. Verazzano, when exploring the Carolina coast
in 1524, noticed that with proper cultivation the grapes he found
there would be good for wine. In 1535, Jaques Cartier, a French
explorer, made the first known sale of alcoholic beverage to the
Indians. Alcoholic beverages were taken from Europe in 1607 to
Jamestown, and in 1620 to the Massachusetts Bay Colony. The

1Philip Stapp, To Your Health (Film—New York: Columbia
University Press, 1956).

2Raymond G. McCarthy, ed., Drinking and Intoxication (New Haven:

3Ibid.

4Salvatore, op. cit., pp. 151-164.
settlers sanctioned its use, but discouraged and punished inebriety. Captain Sedgwick built the first American brewery in 1637.¹

A change from the attitude of these settlers, who sanctioned the use but not the abuse of alcoholic beverages, became apparent during the middle of the eighteenth century, which marked the beginning of the movement to impose temperance on everyone. At first the goal of those behind this movement was to encourage moderation in the use of beer and wine, and abstinence from spirits and hard liquor. These constraints resulted in the closing of several stills by 1837, through the practice of voluntary temperance. The winning of the public to acceptance of the temperance goal was sought by educational means on the part of church and civic temperance groups.²

In the middle of the nineteenth century, temperance organizations redefined temperance to mean total abstinence. Further, achievement of abstinence was attempted not only through educational effort, but also by legal prohibition. There were three waves of prohibition at the state level: (1) in 1851, when the Maine Law, a state prohibition statute, was found unconstitutional, thirteen states were dry; (2) between 1880 and 1904, eight states had prohibition laws and repealed them; and (3) by July 1, 1913, thirty-one states had passed prohibition laws, supported by two federal laws to prohibit dissemination of advertising and transport of liquor into dry states. This latter era culminated in the passage of the Eighteenth Amendment, introducing thirteen years of "Prohibition."

²Ibid., pp. 14-16.

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That period, in turn, ended with the passage of the Twenty-first Amendment in 1933.¹

These movements for temperance, culminating in prohibition, had various effects on alcohol education. The Woman's Christian Temperance Union, concerned with propagating its point of view, prepared instructional materials under the direction of Mary H. Hunt and Julia Colman, which encouraged total abstinence. In 1882, as a result of the efforts of the Woman's Christian Temperance Union, Vermont became the first state to pass a law requiring alcohol education, and within twenty years every state then in the Union passed such a law.² Presently each of the fifty states of the Union has established a legal requirement for alcohol education in its schools.³

The "Committee of Fifty to Investigate the Liquor Problem" was an important committee studying temperance education. This group found that the curriculum content for "scientific temperance" education was not scientific, but founded on spurious information and was therefore undesirable. Ferrier indicated a historical judgment of the value of the committee's findings by stating, "Many suggestions made by this committee are being incorporated in courses of instruction prepared by state departments of education for use in high schools today."⁴

¹Ibid., pp. 16-19.
²Ibid., p. 52.
⁴W. Kenneth Ferrier, "Alcohol Education in the Public School Curriculum" in McCarthy, Alcohol Education, op. cit., p. 55.
The achievement of legal prohibition also affected the drive for alcohol education by diminishing the need to propagandize for abstinence. Although this goal was thought to have been accomplished, the numerous illegal stills which sprang up in many parts of the country reawakened interest in education for public support of prohibition.¹

Confusion with respect to what should be done by the schools regarding education about alcohol existed at the beginning of the post-prohibition era. Abstinence was not consistent with public opinion, and the new aims of moderation and control required a different approach to alcohol education, an objective presentation of facts about alcohol. This change in goals was evident in the stated purposes of the Yale Center for Alcohol Studies, which began in 1940. The center is now housed at Rutgers, the State University of New Jersey.²

**Alcohol and Contemporary Society**

That the use of alcoholic beverages is condoned by a large segment of society is evident. According to Bacon, two of every three adult Americans drink to some extent.³ Those most likely to drink are below forty years of age, urban or suburban residents.

²Ibid., pp. 56-57.
affluent, and educated. Because in the future the United States will most likely have a higher percentage of its citizens be urban or suburban residents, affluent, and educated than it presently has, it can be suggested that the percentage of people who drink will not lessen.¹

The average person consumes more alcohol in the form of beer than in the form of spirits, and he is experiencing an annual decrease in the proportion of his income spent for alcoholic beverages.² In 1967, this nation spent 14.5 billion dollars for alcoholic beverages and 94.9 billion dollars for food.³ Wine has never been a popular beverage in this country. Bacon believes that, because social drinking by women is more accepted by American society now than it formerly was, the place where drinking is done is changing. In former times, he affirms, drinking was most prevalent in taverns and bars, but now is becoming more common in homes and proportionately less common in taverns and bars.⁴ The amount of alcoholic beverages consumed in the United States in 1968 per person eighteen years of age or older was 25.88 gallons of beer, 2.37 gallons of distilled spirits, 1.51 gallons of still wines, and 0.09 gallons

¹Ibid.
²Ibid.
⁴Bacon, op. cit., pp. 102-112.
of effervescent wines.¹

Most children are generally believed to remain abstinent in this country, but the use of alcoholic beverages is often known to begin in adolescence. Studies indicate that approximately two-thirds of the high school pupils above fifteen years of age have used alcoholic beverages, a ratio similar to that of the adult population.² A study of Nassau County, New York, revealed that 87 per cent of the high school pupils studied have used beverage alcohol, whereas a study done in rural Kansas indicated that only 44 per cent of those teen-agers had used alcohol on some occasion. Two to 5 per cent of the pupils studied were believed to create problems for themselves or others, although Bacon indicated that one-third of the drinkers admitted to having been "tight" on occasions.³

Teen-age drinking is looked upon as a rite of passage, a symbol of having passed from childhood to adulthood, for an adolescent is usually given his first drink at home by his parents on some special occasion. While parents support laws controlling drinking of minors, they also permit usage in the home, thus condoning a norm of evasion. This may be why the drinking adolescent ratio tends to equal the adult ratio, for many children are known to follow their parents' example. Since adolescents drink with, not against,

²Todd, op. cit., p. 8.
³Bacon, op. cit., pp. 29-45.
parental permission, defiance of authority probably is not a common motive for their drinking. Use of alcohol does necessitate understanding on the part of young people if they are to avoid being hurt by it.

Alcohol poses difficulties for the society of the United States. It was reported by Keller, research specialist for the Rutgers Center of Alcohol Studies, that five million alcoholics existed in this country in 1969, with a proportion of 5.3 men for each woman alcoholic. This was approximately 5 per cent of the United States adult population. In 1964, according to Plaut, 22 per cent of the nearly 70,000 admissions to 300 state mental hospitals were for alcoholism, as were 22 per cent of the discharges from psychiatric wards of general hospitals. Papas, Chief, Psychiatric Service Section USAF Hospital of Wright-Patterson Air Base in Ohio, was quoted in the report of the Senate's hearings concerning alcoholism held July 23, 24, and 25, 1969, "By now it is almost common knowledge to most professionals involved in treating alcoholics that alcoholism is considered to be the fourth most important health problem in the

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1 D. Pittman and C. Snyder, eds., Society, Culture, and Drinking Patterns (New York: Wiley and Sons, 1963), pp. 242-244.


United States." While the public believes that the alcoholic cannot be helped, Plaut indicated that from one-third to two-thirds of those under rehabilitation treatment have responded favorably. It is important, then, to educate for understanding of alcoholism.

Alcohol is related to the problem of crime. Slightly less than one of every three arrests made in the United States in 1965 was for public inebriety. Jackson and Todd both estimated in 1964, on the basis of various reports that they studied, that between 24 and 40 per cent of those committed to prison for felonies had histories of excessive drinking, and between 8 and 24 per cent were inebriated at the time of arrest. They also believed that almost 90 per cent of adult criminals attributed their deviant behavior to drinking. While alcohol probably was not the direct cause of their crimes, it may have lowered their inhibitions. Most of the crimes committed under the influence of alcohol were misdemeanors, crimes against other people rather than property, individual rather than group crimes, and more impulsive than planned in character. Certainly it is necessary to understand changes in human behavior that are due to the influence of alcohol.

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2Plaut, op. cit., p. 22.

3Ibid., p. 19.


5Plaut, op. cit., pp. 18-19.
Studies conducted in 1964 and 1965 indicated that approximately 10 to 25 per cent of the families who were then welfare recipients had at least one member who was a problem drinker. Although drinking may not have caused this poverty, it may have contributed to it. Drinking can be a factor in unstable marital and family situations also. Children from these situations are in public schools. It is imperative that the schools show awareness of the needs of these students.

Misuse of alcohol also affects industry. Industrial losses stemming from absenteeism, poor performance while at work, impaired interpersonal relationships, and increased managerial inefficiency amount to two billion dollars annually. This economic problem is no respecter of job levels, for there are both worker and manager alcoholics. Some leading industries do operate rehabilitation programs to help offset this loss and to help individuals who need it. Today's pupils are tomorrow's industrial personnel who must deal with this problem.

The prevalent use of automobiles today provides another situation in which misuse of beverage alcohol can create a problem. It was estimated by Jackson in 1964 that the average rate of fatal automobile and pedestrian mishaps involving drinking is 25 per cent.  

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1Plaut, op. cit., pp. 18-19.


3Maxwell, as cited in Kenneth A. Rouse, What to Do About the Employee With a Drinking Problem. (Chicago: Kemper Insurance Co.)

4McCarthy, Alcohol Education, op. cit., p. 179.
Plaut suggested a figure of 46 per cent.\(^1\) To reduce this high rate of fatal accidents involving drivers who drink, the public should know the extent to which drinking before driving must be limited, and refrain from excess of this limit. Public support of legislation which established realistic blood alcohol limitations for categorization of the inebriated driver and public acceptance of the "implied consent" law are both necessary for the reduction of the rate of fatal accidents.\(^2\) Plaut regarded this problem as important enough to aver, "Using the topic of drinking and driving as a starting point, much useful education about alcohol could be undertaken in these driver-training courses."\(^3\)

Alcohol and Public Education

It has been shown that beverage alcohol: (1) has been a part of man's culture since the dawn of history, (2) has been a part of American life since the colonial days, and (3) is a significant factor in contemporary life. Therefore, education about alcohol is relevant to the adjustment of youth to their culture. McCarthy regarded it of sufficient importance to state:

\(^1\)Plaut, op. cit., p. 20

\(^2\)Canadian National Forensics Board, Point Zero Eight. (Film—New York: National Film Board of Canada, 1967).

\(^3\)Plaut, op. cit., pp. 156-157.
Young people have ideas about drinking gained from sources outside the school. Some of these ideas may be valid; others have little foundation in fact. But students must have the right to hear evidence on all sides of the question if they are to understand the range of adult behavior—abstinence, moderate social drinking, and alcoholism—which they see about them in the community. They need opportunity to explore and analyze, not only their own feelings, but also the facts and attitudes regarding drinking that circulate in our culture. For many young people, the classroom represents the last opportunity for an unbiased consideration of the questions about alcohol. The organization of instruction to meet their psychological needs in this important area is a social responsibility to which the school can make a unique contribution. However, this will require the application of the professional training and experience of mature teachers who are prepared to expend proportionately as much energy in organizing material and evaluating techniques for this subject as they would for any other teaching responsibility. In relatively few school systems in this country has instruction about alcohol been allotted the administrative sanction and the technical proficiency in the classroom that the importance of the subject warrants.1

Atkins and Gwynn have also indicated the present insufficiency of alcohol education by stating, "Some of the states have gone quite far in developing alcohol education programs . . . . Yet, in spite of recent efforts, many shortcomings still exist."2 The following are some of the insufficiencies they cite: token compliance with legal requirements has resulted in haphazard and less than sufficient treatment of the subject; the emphasis has often been too limited, dealing with physiological aspects of alcohol to the neglect of the more important concerns of alcoholism and social implications; attempts at scaring students away from the use of alcohol

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1McCarthy, Alcohol Education, op. cit., p. 179.

has characterized some approaches, whereas understanding of its use and abuse is needed; and a lack of adequate educational materials exists.¹

Plaut, in preparing a report for the Cooperative Commission on the Study of Alcoholism, also indicated a number of areas of improvement needed in alcohol education. Among them he recommended: (1) that a new academic climate must be created in the public schools where a controversial topic can be discussed objectively, where local pressure is not applied against honest consideration of alcohol usage; (2) that teachers must be prepared adequately to discharge their duty, realizing that their more than average tendency to be anti-alcohol might inhibit their effectiveness; (3) that good mental health attitudes and an understanding of behavior as related to the effects of alcohol appear likely to make the teaching of the physiological aspects of alcohol more meaningful, (4) that the United States Office of Education needs to give leadership, leaving to state departments of education the providing of experts to assist local districts in curriculum planning of alcohol education, (5) that the local school should discharge its responsibility through the teachers rather than to rely chiefly on outside experts, and (6) that instruction about beverage alcohol should be integrated with the various subject areas in the school curriculum wherever possible.²

¹Ibid.
²Plaut, op. cit., pp. 153-159.
If legislation may be assumed to reflect social concern, one more argument obtains in support of alcohol education. A law requiring alcohol education has been enacted in each of the fifty states.\(^1\) Michigan's law reads as follows:

In addition to the branches in which instruction is now required by law to be given in the public schools of the state, instruction shall be given in physiology and hygiene, with a special reference to the nature of tobacco, alcohol and narcotics and their effect upon the human system. Such information shall be given by the aid of textbooks in the cases of pupils who are able to read, and as thoroughly as in other studies pursued in the same school.\(^2\)

Statement of the Problem

The purposes of this study were to obtain information, by means of questionnaires addressed to elementary and junior high school principals and to institutions training prospective teachers, about current selected practices and issues in alcohol education at the elementary and junior high school levels, to solicit suggestions for improving same, and to make recommendations supported by these data. The questionnaires were concerned specifically with the following:

1. What should be taught in alcohol education, and is it presently being taught?

2. Are elementary and junior high school principals familiar with the law requiring alcohol education to be offered in Michigan's public schools?

\(^1\)Todd, *op. cit.*, p. 4

\(^2\)Section 340.364, General School Laws--Part II.
3. Does the present school law need to be revised to support desirable alcohol education?

4. Is the teaching staff adequately prepared to offer quality alcohol education?

5. Are sufficient instructional materials of high quality available to support the aims of alcohol education?

6. What do principals perceive to be adequate counseling of a child who has an alcoholic parent?

7. Are schools presently providing adequate counseling?

Definitions and Assumptions

Today there are different ways of organizing the school program. One method of school organization is to group grades kindergarten through six into an elementary school, grades seven and eight into a junior high school, and grades nine through twelve into a senior high school. Other schemes of organization would include placing the ninth grade in the junior high school, or combining grades six, seven, and eight into an intermediate or middle school. Because of these variations, the terms elementary school principal and junior high school principal require definition.

Definitions

An elementary school principal is a person with building administrative responsibilities over kindergarten (or grade one) through grade six.

A junior high school principal is a person with building administrative responsibilities over grades seven through grades eight or nine.
This study excluded principals from all systems where grade six is in a middle, intermediate, or junior high school plan, for responses to questionnaire items by elementary principals who do not have responsibility for grade six might differ significantly from those who do. Likewise, junior high school principals who are responsible for grade six might also respond differently from those who do not have this responsibility.

Those junior high school principals who were also principals of high schools were included in this study, because it was believed that their high school responsibilities would not significantly affect the results of this study.

Assumptions

1. Principals were assumed to be in a position to exert educational leadership. Because of this role of leadership they were assumed to be knowledgeable on present practice in alcohol education and to be able to judge changes which might be necessary in these practices. Their cooperation was assumed to be an important factor in determining the acceptance by school systems of these changes.

2. It was assumed that the principals selected for this study were representative of the principals of the state of Michigan. The data obtained in this study were assumed to indicate present practice in alcohol education and the opinions of principals about these practices.

3. The questionnaires of this study were assumed to be adequate tools for acquiring the required data. Personal interviews or other means were not considered necessary.
CHAPTER II

REVIEW OF RELATED RESEARCH

Only a few studies relating to alcohol education seem to be available. The Alcohol Studies Center Library at Rutgers, the State University of New Jersey, contained only one report, and it was made by Milgram.¹ That report concerned the defining of goals for high school education about alcohol in Greentown, a pseudonym for a city in New Jersey.

Two unpublished Specialists' project reports relating to alcohol education were also found at Western Michigan University. Paul² studied the adequacy with which information about alcohol had been treated in textbooks up to 1964, and Coe³ studied the attitudes and opinions of selected high school administrators in Michigan's public schools. Some of the findings of these projects, as well as of the Milgram thesis, are described in brief.


The data reported by Milgram included opinions about teen-age drinking in Greentown held by administrators, teachers, counselors, parents, and students, since these opinions were considered important in determining educational objectives. That a number of teen-agers of the community drank to some extent had been established in a previous study, which indicated that, of the 143 students interviewed, thirty-seven were regular drinkers, fifty drank occasionally or moderately, and fifty-six abstained.¹ The school administrators, viewing today's teen-agers as more aggressive, more questioning of authority, and more demanding of freedom than their predecessors, typically reacted in one of two ways; those who seemed accepting of teen-age drinking recognized that many did it, but those desiring teen-age abstinence did not recognize the prevalence of the drinking which existed. The teachers also showed divergence of opinion in that the liberal arts teachers tended to be more accepting of moderate teen-age drinking than were the physical education and the driver education teachers. Parental acceptance of teen-age drinking appeared to relate directly to such variables as their marital status, their educational levels, their social class, their own drinking habits, and to the drinking habits of their children. A majority of all the groups questioned in this study agreed that only 5 per cent of the students were using alcohol inappropriately (e.g., obtaining alcohol in undesirable ways or ex-

periencing "blackout") and tended to be accepting of a moderate amount of teen-age drinking. The understanding of the teen-age drinking done in this community was believed to be germane to the development of goals for high school education, according to Milgram.

All groups shared the following as goals for alcohol education, Milgram found, for the high school of "Greentown" (in rank order of desirability): (1) the physiology of alcohol effects, (2) information regarding alcoholism, (3) mental health education, (4) the sociology of drinking patterns, (5) fostering of attitudes toward temperate drinking, and (6) education for abstinence at the teen-age level. Mental health education included both the pupil's formation of wholesome attitudes toward the use of alcoholic beverages and the development of the ability to cope with life's problems effectively, which would reduce his risk of becoming an alcoholic.

A study was made by Paul of questions which pupils in the eighth and eleventh grades wanted answered regarding alcohol. His study of pupil interests or needs revealed the following: (1) effects of alcohol on the body, (2) the reasons why people drink, (3) alcoholism and alcoholics, (4) moral aspects of drinking, (5) basic facts about alcohol, (6) legal regulations on drinking, and (7) problems related to drinking. He recommended that greater stress be placed on the effects of alcohol on the body and mind and on basic facts regarding beverage alcohol at the senior high school level. At the junior high school level, it was recommended that greater stress be placed on alcoholism and alcoholics, on problems
related to alcohol use, and on the legal regulations on drinking.

Paul used this list of pupil needs as criteria to analyze the adequacy of textbooks, based on the assumption that textbooks which are to be considered adequate would contain answers to the questions that the students had raised. He found textbooks in general to be inadequate for the following reasons: (1) fewer than 50 per cent of the students' questions were answered in the textbooks studied, (2) 75 per cent of the textbooks treated alcohol in conjunction with narcotics, which tended to obscure the differences, (3) some topics about alcohol tended to be treated inadequately, (4) insufficient reference was made in textbooks to other available materials, (5) there was a duplication of dissemination of information, for the same facts were contained in the textbooks of more than one subject, and (6) there was insufficient discussion of the reasons for drinking. Coe, in studying the opinions of high school administrators, found that 54 per cent of them also regarded textbooks as inadequate.

Upon investigation of the high school grade levels at which alcohol education was offered, Coe found that most high schools were reported to have the greatest concentration of such education in the ninth or tenth grade, often with some additional exposure in the twelfth grade. In addition, driver education classes, guest speakers, assemblies, and films were used by some schools to provide experiences in alcohol education. Sixty-five per cent of the administrators who responded indicated the time allotted to alcohol
education to be adequate. Coe also found that, of the high school administrators who reported, 53 per cent reported that the junior high schools and 29 per cent that the elementary schools in their districts exposed the pupils, mostly in general science or health classes, to alcohol education. Thirty-two per cent of the administrators who reported did not have sufficient familiarity with the elementary programs of their districts to indicate whether alcohol education was offered at that level.

Seventy-three per cent of the administrators who responded, according to Coe, indicated their opinion that the teacher training institutions did not prepare teachers adequately for discharging their responsibilities of providing alcohol education, and 43 per cent of the administrators were aware of college courses being offered in this area. While a majority of the administrators expressed an opinion that the teacher training institutions were doing an inadequate job of preparing teachers for conducting alcohol education, 60 per cent of the administrators queried considered the teachers adequately prepared. The following are possible explanations of this apparent inconsistency: administrators were not sufficiently knowledgeable of the preparation that was provided by the colleges and universities; teachers were preparing themselves through the use of handbooks, guides, or in some other ways; or perhaps the administrators, though believing their teachers were inadequately prepared, were defensive of their teachers and programs. The administrators recommended workshops, courses in college, and
increased availability of materials to aid teachers. Although 96 per cent of the administrators who responded reported no in-service education as existing, 68 per cent did believe such a training program would be beneficial.

An awareness of the law requiring alcohol education was believed to be necessary. Coe found that 89 per cent of the administrators were familiar with the law, but he expressed the opinion that it is necessary for more than 89 per cent of the principals to be familiar with the law. One administrator thought that the State was unjustified in requiring education about alcohol, and he objected because the State asked teachers to do something for which they were not prepared. While the majority of the study respondents believed no revision of the law to be necessary; strengthening of the law, making it more specific, and requiring teacher training for alcohol education were recommended by some.

The three studies described were found to contain information about the following five areas of alcohol education: (1) the goals and content of alcohol education, (2) the adequacy of textbooks for executing alcohol education, (3) the amount of time spent on alcohol education in high schools, (4) the degree of adequacy to which teachers are prepared to discharge their obligations for alcohol education, and (5) the degree to which high school administrators are familiar with the law requiring alcohol education. With the exception of Paul's study of eighth grade pupils and junior high school textbooks, these studies related to alcohol education at the high school level.
The present study, unlike the three studies described above, investigated four of these five concerns as they were perceived by elementary and junior high school principals. The data reported in this study related to elementary and junior high school alcohol education.
CHAPTER III

METHODOLOGY

Two questionnaires were utilized in this study: one was sent to selected principals of elementary and junior high schools, the other to teacher training institutions. Best, in his discussion of the use of questionnaires, stated, "Actually, the questionnaire has unique advantages, and properly constructed and administered, it may serve as a most appropriate and useful data-gathering device in a particular research project." The questionnaire method was decided to be the most effective one for this study for three reasons.

One reason for favoring the questionnaire method was the size of the geographic area containing the study populations. Since the populations were located throughout the state of Michigan, any method of study which would involve personal contact with the selected subjects was beyond the means of the writer to execute. A questionnaire-type study was, therefore, considered to be reasonable because it could be done by mail.

A second reason for using questionnaires was the number of subjects selected for study. The questionnaire method made it possible to include all of Michigan's twenty-six institutions.

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preparing teachers, and 100 principals located throughout the state. Since personal contact with 100 study subjects would not reflect judicious use of time, and the desired information was believed to be obtainable by means of a mailed questionnaire form, the personal interviews did not seem warranted.

Third, the decision to use a questionnaire was based on the previous use of this method in two other studies related to alcohol education. The use of a questionnaire was discussed with Milgram, who used this method in her study of "Greentown."¹ Coe's questionnaire was also studied thoroughly by this writer, and it was considered to be helpful by this writer in developing the questionnaire used in this study for purposes of quering selected elementary and junior high school principals.²

However, the decision to use a questionnaire was made with full recognition of the risk of a poor rate of return. Best stated, "The unfavorable characteristics of so many questionnaires help to explain why so small a proportion of the questionnaires sent out by mail are returned."³ Cover letters were developed to explain the study and encourage cooperation, and they were printed on official stationery of the State of Michigan Department of Public Health to help increase the rate of return. The questionnaires were

¹Gail G. Milgram, personal interview at Rutgers University, July, 1969.
²Coe, op. cit., pp. 76-78.
³Best, op. cit., p. 143.
intended to be brief enough to encourage response, while being meaningful enough to contribute significant data and to command the respect of the respondents. Every effort was made to make the questionnaires neat in appearance.

A second copy of the questionnaire was sent to those principals who were believed not to have responded to the first mailing. Some of the respondents in the first mailing were identified by the postmarks on the envelopes by which the questionnaires were returned, which helped to avoid needless duplication of mailing effort. Again, for those being sent a second copy of the questionnaire, a cover letter on official stationery was used. Colleges and universities not responding were contacted by telephone calls, which either led to a subsequent reply by mail or an immediate response during the telephone conversation.

Procedures for Sampling

This study contained two populations: the colleges and universities in Michigan training prospective teachers, and the public elementary and junior high school principals of this state. Borr, whose position includes responsibilities for teacher certification at Western Michigan University, was consulted to obtain a list of the colleges and universities recommending prospective teachers for certification.\textsuperscript{1} A listing of the principals of Michigan was

\textsuperscript{1}Earl Borr, personal interview at Western Michigan University, April, 1970.
found in the *Michigan Education Directory and Buyer's Guide*.\(^1\)

Because only twenty-six institutions recommending teachers for certification are known to exist in Michigan, each such institution was included in the study.

A sample of fifty elementary and fifty junior high school principals was drawn from those listed in the *Michigan Education Directory and Buyer's Guide* by the following procedures: First, the elementary principals fitting the definitions of this study were numbered consecutively as listed in the Directory. Second, fifty numbers were drawn by means of a table of random numbers.\(^2\) Having selected these numbers, the names of the principals which corresponded to these numbers chosen by means of the table were recorded, and the principals were considered selected for this study. This process was repeated to select fifty junior high school principals. Care was taken to exclude from selection all who did not qualify according to the definitions of this study.

The Questionnaires

Two questionnaires were used in this study, one for selected principals of elementary and junior high schools in Michigan, the


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other for institutions training teachers in Michigan. The questionnaire for the principals was divided into five parts, the first part dealing with the law about alcohol education. The first question asked whether the principals were familiar with the law requiring alcohol education, for this was believed to be a prerequisite for compliance with the law. The second question inquired whether the principals believed the State to be justified in requiring education about alcohol, for compliance with the law would depend, it was thought, on the principals' acceptance of the law. A third question was included to determine whether the administrators believed a change in the law was necessary to support an improvement in alcohol education, and why this change would or would not be necessary.

The second section of this questionnaire related to the area of teacher preparation. The first question asked principals whether they believed the teacher training institutions were preparing teachers adequately for offering alcohol education. The writer decided, when adequate information was not available upon consultation with Daniel, Chief, Alcoholism Program, Michigan Department of Health, also to send copies of a questionnaire to colleges and universities to study the extent to which alcohol education is offered in institutions recommending teachers for certification in Michigan. This questionnaire was designed to investigate the following possibilities:

1) a course in alcohol education was offered by the school or department

\footnote{Ralph Daniel, personal interview, April, 1970.}
of education, (2) a course was offered by some other department, (3) alcohol was studied in health education, (4) it was studied in physical education, and (5) there were some other ways of preparing teachers for facing their responsibilities with respect to alcohol education.

The second question addressed to the principals asked them to estimate the ratios of their staffs who have had the following experiences: (1) a course in alcohol education, (2) in-service training activities in this area, (3) a study of alcohol in general health courses, and (4) other possible ways for preparation for alcohol education. Physical education would probably prepare only those who have done more in this area than comply with minimum requirements for graduation, and therefore was not included in the questionnaire. The principals were also asked whether in-service training in alcohol education was necessary.

The third area of the questionnaire addressed to principals related to current practices and improvement in instruction in alcohol education. Inquiry was made concerning the levels and subject areas at which alcohol education is being offered; concerning beliefs as to what should be offered in alcohol education, and at which level; and concerning the use of methods of alcohol education other than classroom instruction. The previously discussed goals of education developed by Milgram and Paul, as well as the topics in Oregon's manual for alcohol education and other related

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1George C. Dimas, Alcohol Education in Oregon Schools (Portland: Mental Health Division Board of Control, 1968).
literature were used to determine some of the topics that might be included in alcohol education. A question was designed with the intent of determining both what is presently being taught, and at which levels, and the principals' beliefs concerning what should be taught, and at which level.

The fourth area of the questionnaire was developed to study some of the opinions of principals concerning instructional materials. The first question was designed to determine whether the previously reported inadequacy of textbooks was believed to exist presently at the elementary and junior high school levels. The second question was intended to determine whether the principals were sufficiently aware of the materials made available by the State Department of Health. The third question solicited opinions with respect to the State's role in the development of materials and units for alcohol education.

The final section of this questionnaire investigated the ways a principal might help a child who has an alcoholic parent. This section contained two questions; one was concerned with ways of help outside of building staff which the principals would regard as important in helping such a child, the other asked principals to list methods they have already used.
Analysis of Responses to the Questionnaires

The questionnaire addressed to institutions in Michigan training prospective teachers solicited data which were descriptive in nature, and data received therefore were not subjected to statistical analysis.

The results obtained from the questionnaire addressed to the principals were analyzed by either the chi-square test or the Fisher test of exact probability. The selection of nonparametric methods for this analysis was based on the following considerations. "A parametric statistical test," according to Siegel, "is a test whose model specifies certain conditions about the parameter of the population from which the research sample was drawn. These conditions are not ordinarily tested, they are assumed to hold."¹ These conditions are based upon the assumption that the population from which the sample was drawn was a normally distributed one. He further stated, "A nonparametric statistical test is a test whose model does not specify conditions about parameters of the population from which the sample was drawn."² Because the population studied, the principals of Michigan's public elementary and junior high schools, may not be a representative population, the nonparametric methods seemed more appropriate.

²Ibid.
The chi-square test can be used to test the hypothesis that two groups differ with respect to some characteristic, and therefore the number of cases of each group occurring in each of two categories can be counted.¹ Most of the answers required by this questionnaire were yes or no type responses, and thus were categorical, which means that the chi-square test was appropriate.

The Fisher test is more appropriate for the same type of data as the chi-square test under two conditions: the sample size is less than forty and at least one of the expected frequencies is less than five, or the sample size is less than twenty.² In cases where the chi-square test was not appropriate for these reasons the Fisher test was used.

Having shown that the chi-square test and the Fisher test were appropriate for this study, it is also necessary to indicate how they were useful to this study. Their value is in their description of the differences which were noted among the responses made by respondents of the various classifications of principals. Each principal reporting was classified as to the size and level of the school which he administered. This made it possible to analyze differences in responses which occurred among the various established classifications. With the use of the statistical tests there were three possible indications of the observed differences: reports by raw score, by percentages, and

¹Ibid., p. 104.
²Ibid., p. 110.
by statistical results. Showing the statistical results should help the reader understand the extent to which a difference, with a specified sample size, is significant.¹

¹John Michael, personal interview, Western Michigan University, June, 1970.
CHAPTER IV

FINDINGS

One hundred per cent of the colleges and universities responded to the questionnaires sent to them, and 82 per cent of the principals responded to the ones sent to them. A 100 per cent response was achieved in the first case by telephone follow-up of those institutions which did not respond. Of the fifty elementary and fifty junior high school principals who were sent questionnaires, forty-one of each group returned them.

A return of 82 per cent of the questionnaires was considered adequate for drawing conclusions from the data they contained. That rate of return compared favorably to the rates reported by Good.¹

At the beginning of the questionnaires sent them, the principals were each requested to indicate both whether he administered an elementary or a junior high school, and the number of pupils enrolled in his buildings. From these two items of information, it was possible to analyze the reported data under the following classifications: total respondents, principals of elementary schools, principals of junior high schools, principals of small schools, principals of large schools,

principals of small elementary schools, principals of large elementary schools, principals of small junior high schools, and principals of large junior high schools.

To separate elementary school principals into principals of small schools versus those of large schools, an average was made of the elementary school enrollments reported on the questionnaires. Small elementary schools were considered to be those elementary schools which reported less-than-average enrollment for elementary schools; large elementary schools were those with average or above-average size enrollments. The average elementary school enrollment was 535 pupils, which resulted in classifying the forty-one elementary principals as follows: twenty-five from small schools, and sixteen from large schools.

The junior high school principals could not be classified as forthrightly as the elementary ones, for a factor not indicated in the reported elementary enrollments appeared to manifest itself in the junior high school enrollments. Junior high school building enrollments were, in certain cases, indicated to include grades that would not commonly be understood to be junior high level, i.e., an enrollment figure for grades seven through twelve was reported. In such cases, the writer prorated the enrollment, usually accepting half of the total reported enrollment if it was indicated to include more than junior high school grades as the junior high school enrollment. The average junior high school enrollment was thus estimated to be 690 pupils. Those junior high school principals reporting
less that average enrollments were considered to be principals of small junior high schools, and those principals reporting average or above average enrollments were considered to be principals of large junior high schools. There were, therefore, twenty-two principals considered as administering small junior high schools, and nineteen principals were considered as administering large ones.

The principals of small schools were considered to be principals of the small elementary and the principals of small junior high schools, a total of forty-seven. There were thirty-five principals considered as administering large schools.

The Law and Alcohol Education

The first section of the questionnaire addressed to the principals related to Michigan's law requiring education about alcohol. The first question asked the principals whether they were familiar with the law requiring alcohol education. Table 1 contains a summary of responses received. The fact that 69 per cent of the principals indicated familiarity with the law indicates that some lack of familiarity does exist. As might be apparent from Table 1, the greatest significant difference occurred between the elementary and the junior high school principals (chi-square 14.894).

Table 2 displays data derived from responses to the second question, which was, "Do you think the State is justified in requiring instruction in alcohol education in the curriculum?" Seventy-five of the 82 responding principals responded to this question. Indecisive responses (e.g., question marks rather than yes or no answers) were
### TABLE 1
FAMILIARITY OF THE PRINCIPALS WITH THE LAW CONCERNING ALCOHOL EDUCATION

<table>
<thead>
<tr>
<th>Principal</th>
<th>Number</th>
<th>Chi-square</th>
<th>Percentage</th>
<th>Number non-responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Total</td>
<td>55</td>
<td>25</td>
<td>14.894</td>
<td>69</td>
</tr>
<tr>
<td>Junior high</td>
<td>36</td>
<td>4</td>
<td>14.894</td>
<td>90</td>
</tr>
<tr>
<td>Elementary</td>
<td>19</td>
<td>21</td>
<td>1.405</td>
<td>48</td>
</tr>
<tr>
<td>Small</td>
<td>28</td>
<td>17</td>
<td>1.405</td>
<td>62</td>
</tr>
<tr>
<td>Large</td>
<td>27</td>
<td>8</td>
<td>1.405</td>
<td>77</td>
</tr>
<tr>
<td>Elementary: Small</td>
<td>10</td>
<td>14</td>
<td>0.338</td>
<td>42</td>
</tr>
<tr>
<td>Large</td>
<td>9</td>
<td>7</td>
<td>0.338</td>
<td>56</td>
</tr>
<tr>
<td>Junior high: Small</td>
<td>18</td>
<td>3</td>
<td>0.178</td>
<td>86</td>
</tr>
<tr>
<td>Large</td>
<td>18</td>
<td>1</td>
<td>0.178</td>
<td>95</td>
</tr>
</tbody>
</table>

*See Appendix A

### TABLE 2
THE PRINCIPALS' OPINIONS AS TO WHETHER THE LAW ABOUT ALCOHOL EDUCATION IS JUSTIFIED

<table>
<thead>
<tr>
<th>Principal</th>
<th>Number</th>
<th>Chi-square</th>
<th>Percentage</th>
<th>Number non-responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
<td>9</td>
<td>0.045</td>
<td>88</td>
</tr>
<tr>
<td>Elementary</td>
<td>31</td>
<td>4</td>
<td>0.045</td>
<td>89</td>
</tr>
<tr>
<td>Junior high</td>
<td>35</td>
<td>5</td>
<td>0.045</td>
<td>88</td>
</tr>
<tr>
<td>Small</td>
<td>35</td>
<td>5</td>
<td>0.045</td>
<td>88</td>
</tr>
<tr>
<td>Large</td>
<td>31</td>
<td>4</td>
<td>0.045</td>
<td>89</td>
</tr>
<tr>
<td>Elementary: Small</td>
<td>17</td>
<td>2</td>
<td>*</td>
<td>90</td>
</tr>
<tr>
<td>Large</td>
<td>14</td>
<td>2</td>
<td>*</td>
<td>88</td>
</tr>
<tr>
<td>Junior high: Small</td>
<td>18</td>
<td>3</td>
<td>0.014</td>
<td>86</td>
</tr>
<tr>
<td>Large</td>
<td>17</td>
<td>2</td>
<td>0.014</td>
<td>90</td>
</tr>
</tbody>
</table>

*Fisher test greater than 0.05
considered to be non-responses. Eighty-eight per cent of the principals believed that a law requiring education about alcohol was justified. Although Table 2 indicates no apparent significant differences among the responses from principals in the classifications of schools, a difference did exist in the number of non-responses. Six of the 25 principals from small elementary schools did not respond to this question, while only 1 of the 67 principals from the other three classifications did not respond (chi-square 8.394).

The principals were asked also to indicate why they thought the State was or was not justified in requiring alcohol education. Those principals of small elementary schools who believed the State was justified gave the following reasons:

1. "Students must be informed about the dangers of alcoholism."
2. "Alcoholism is such a desperate illness."
3. "An awareness of any social problem is a responsibility of education."
4. "Not as a moral issue, but as one of health and social implications."
5. "Too often education overlooks social needs for academic."
6. "It is important public welfare problem."
7. "Half of the accidents on highways are caused by drinking."
8. "Yes, it is becoming quite a social problem in our state and children should be aware of it."
9. "Because it is a hazard to health--driving."
10. "It is an important and demanding social problem."
11. "Children should know the harmful effects of alcohol."
12. "Deleterious libations that are harmful to one's health should be studied."
13. "Alcoholism seems to be a problem in this attendance area."
14. "Because those who need the education the most would oppose it the greatest."
15. "It is a legitimate area for health education."
16. "Students should be better informed."
17. "Yes, it is a part of health for personal as well as public safety."

The only principal of a small elementary school giving a negative response as to whether the State was justified in requiring alcohol education stated, "Not necessary in elementary education."

Some of the principals of large elementary schools gave the following reasons for their affirmative responses to the question as to whether the State was justified in requiring alcohol education:

1. "A serious social problem."
2. "Children should be aware of what alcohol does to them."
3. "This is a secondary area."
4. "Children should be well aware of alcohol."
5. "Yes, but it should include all addictive materials."
6. "Teenage drinking seems to be more of a problem today."
7. "It is a health problem."

The negative reasons given by the principals of large elementary schools included:

1. "The state makes too much money from booze to talk against it."
2. "Local curriculum planning should determine."

Some of the principals of the small junior high schools advanced the following eight reasons in support of the law requiring alcohol
education:

1. "All schools must."
2. "For complete education of child."
3. "To inform."
4. "Where is there a better place to inform the young people?"
5. "The alcohol problem is getting greater."
6. "Rising social problem for teens."
7. "Important issue to the social conscience of this country."
8. "Because of the inherent evils of alcohol."

One principal, however, stated as a negative reason, "State should recommend that moral conduct be taught—rather than require so much time in specific areas." Another principal, who indicated that he was undecided, stated, "It could be both good and bad."

Principals from large junior high schools justified the law requiring alcohol education with statements such as the following:

1. "Should be taught somewhere, and our science program seems a natural."
2. "I feel that the education should be specifically required with evidence material has been taught at junior high level. More important now that we are faced with an increased use of drugs at this level. Mixture of the two elements is beyond understanding."
3. "Because of the heavy toll it takes in our population."
4. "Alcoholism is a serious social problem."
5. "Because the total area of alcohol is one that requires an informed populace."
6. "Awareness of dangers involved."
7. "Improper use of alcohol is a serious medical and social problem."
8. "The new attitude of society—needs different today."
The negative reasons suggested were:

1. "Not sufficient time and priority is not as high now as previously."

2. "Some educational agency should have the authority to require it."

The third question about the law requiring alcohol education was, "Should the present law requiring mandatory inclusion of alcohol education in the classroom be revised?" Only 50 of the 82 principals who responded answered this question, 27 affirmatively and 31 negatively. Thus, about half of the principals who responded, favored revision of this law (see Table 3). No significant differences were found among

<table>
<thead>
<tr>
<th>TABLE 3</th>
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</thead>
<tbody>
<tr>
<td>OPINIONS OF PRINCIPALS AS TO WHETHER THE LAW ABOUT ALCOHOL EDUCATION SHOULD BE REVISED</td>
</tr>
</tbody>
</table>

| Principal   | Number   | Chi-square | Percentage | Number non- |
|-------------|----------|------------|------------| responses  |
|             | Yes      | No         |            |            |
| Total       | 27       | 31         | 47         | 53         | 24         |
| Elementary  | 9        | 14         | 1.410      | 39         | 61         | 18         |
| Junior high | 18       | 17         | 51         | 49         | 6          |
| Small       | 13       | 18         | 1.038      | 42         | 58         | 16         |
| Large       | 14       | 13         | 52         | 48         | 8          |
| Elementary: |          |            |            |            |            |
| Small       | 4        | 8          | 0.017      | 33         | 67         | 13         |
| Large       | 5        | 6          | 45         | 55         | 5          |
| Junior high:|          |            |            |            |            |
| Small       | 9        | 10         | 0.033      | 47         | 53         | 3          |
| Large       | 9        | 7          | 56         | 44         | 3          |

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which would indicate that the felt need for this change in the law was equally strong in principals of all types of schools. However, 13 of the 25 principals of small elementary schools and 11 of the 57 other principals did not respond to this question. Principals of small elementary schools responded less frequently (chi-square 7.446) than principals of the other types of schools did.

The principals were asked also why they believed the law should or should not be revised. Some comments, having been given identically by the principals for both the second and the third questions, are not repeated here. There were, however, additional comments given. The principals of some of the small elementary schools offered the following reasons for revision of the law requiring alcohol education:

1. "New information has been discovered about treatment, causes, etc."
2. "Have qualified teachers."
3. "More guidelines need to be stated as to what should be taught and to what extent to justify calling it a class in alcohol education."

Four reasons for no revision of the law were also offered by some principals of small elementary schools:

1. "Our only point in education finally gets down to creating emotionally stable children and later adults."
2. "The law is adequate if intended as a reminder rather than a control."
3. "Providing the teachers are aware of it and teach accordingly."
4. "I believe it states what is necessary as it is."

The following were among the reasons expressed by the principals of large elementary schools as to why they believed revision to be necessary:
1. "Textbooks need revision."
2. "To include drugs."
3. "The present law is too general."

Three reasons for not revising the law were also given by some of the principals of large elementary schools:
1. "We don't teach about it anyway."
2. "A serious social problem."
3. "I just read the law and I don't believe it should be revised, it seems to fit our needs."

One principal, who indicated that he was undecided, stated "I am more concerned with the drug problem and it is far more relevant than is the alcohol education. Elementary children use drugs--I have never encountered an elementary child using alcohol."

Some of the principals of small junior high schools reported these four reasons for revision:
1. "All schools must."
2. "Should be reevaluated."
3. "Needs more research."
4. "Perhaps it should be made more definite."

The comments stated against revision by some of this group of principals were:
1. "I believe it is covered adequately."
2. "Serves its purpose."
3. "Follow-up and enforcement need to improve."

Some of the principals of the large junior high schools made the following comments in advocating revision of the law:
1. "Updated."

2. "Mandatory proof that the unit has been taught. Dates, subject areas covered, text, etc., use of films, anything that can attest that young people have been made aware of the results."

3. "In general, curriculum should not be created by legislature."

4. "Because I don't believe it adequately covers the problem—too vague."

5. "Should be taught by a better prepared teacher."

Comments made by principals of large junior high schools suggesting no need for revision of the law were:

1. "I am not aware of any problem with the present law."

2. "I feel it completely covers the need."

3. "Awareness is sufficient."

Those recommending revision of the law requiring education about alcohol represented two opposing points of view. On the one hand, there were a few who were opposed to the requirement for alcohol education while on the other hand there were those who supported the purposes expressed by the law and believed that the law must be strengthened in its requirements to insure the realization of its purposes.

Teacher Preparation

The first question of the section of the questionnaire addressed to the principals and dealing with teacher preparation asked, "Do you believe the teacher training institutions are adequately preparing teachers to include alcohol education in the public school curriculum?" Table 4 indicates that only 6 per cent of those who responded to this
question responded affirmatively. While there were differences in the percentages of principals of the various classifications who considered their staffs adequately prepared, these differences were not significant. Most principals of all the groupings of principals indicated that their teachers were inadequately prepared for conducting alcohol education.

**TABLE 4**

*ADEQUACY OF TEACHER PREPARATION FOR CONDUCTING ALCOHOL EDUCATION ACCORDING TO THEIR PRINCIPALS*

<table>
<thead>
<tr>
<th>Principal</th>
<th>Number Yes no</th>
<th>Chi-square</th>
<th>Percentage Yes</th>
<th>Number non-responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>5 72</td>
<td></td>
<td>6 94</td>
<td>5</td>
</tr>
<tr>
<td>Elementary</td>
<td>3 35</td>
<td>0.000</td>
<td>8 92</td>
<td>3</td>
</tr>
<tr>
<td>Junior high</td>
<td>2 37</td>
<td></td>
<td>5 95</td>
<td>2</td>
</tr>
<tr>
<td>Small</td>
<td>1 42</td>
<td>1.448</td>
<td>2 98</td>
<td>4</td>
</tr>
<tr>
<td>Large</td>
<td>4 30</td>
<td></td>
<td>12 88</td>
<td>1</td>
</tr>
</tbody>
</table>

**Elementary:**
- Small: 0 23 * 0 100 2
- Large: 3 12 20 80 1

**Junior high:**
- Small: 1 19 * 5 95 2
- Large: 1 18 5 95 0

*Fisher test greater than 0.05

A questionnaire was sent to each institution of higher education that recommends prospective teachers for Michigan certification in order to determine the preparation which each institution is giving for education about alcohol. The information obtained from responses to this questionnaire is contained in Table 5. The first question was, "Do you offer a specific course in alcohol education..."
# TABLE 5

**METHODS BY WHICH INSTITUTIONS OFFER ALCOHOL EDUCATION**

<table>
<thead>
<tr>
<th>Name of institution</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>As an education course</td>
</tr>
<tr>
<td>Central Michigan University</td>
<td>*</td>
</tr>
<tr>
<td>Eastern Michigan University</td>
<td>*</td>
</tr>
<tr>
<td>Ferris State College</td>
<td>*</td>
</tr>
<tr>
<td>Michigan State University</td>
<td>*</td>
</tr>
<tr>
<td>Northern Michigan University</td>
<td>*</td>
</tr>
<tr>
<td>University of Michigan</td>
<td>*</td>
</tr>
<tr>
<td>Wayne State University</td>
<td>*</td>
</tr>
<tr>
<td>Western Michigan University</td>
<td>*</td>
</tr>
<tr>
<td>Adrian College</td>
<td>*</td>
</tr>
<tr>
<td>Albion College</td>
<td>*</td>
</tr>
<tr>
<td>Alma College</td>
<td>*</td>
</tr>
<tr>
<td>Aquinas College</td>
<td>*</td>
</tr>
<tr>
<td>Calvin College</td>
<td>*</td>
</tr>
<tr>
<td>Andrews University</td>
<td>*</td>
</tr>
<tr>
<td>Hillsdale College</td>
<td>*</td>
</tr>
<tr>
<td>Hope College</td>
<td>*</td>
</tr>
<tr>
<td>Kalamazoo College</td>
<td>*</td>
</tr>
<tr>
<td>Madonna College</td>
<td>*</td>
</tr>
<tr>
<td>Marygrove College</td>
<td>*</td>
</tr>
<tr>
<td>Mercy College</td>
<td>*</td>
</tr>
<tr>
<td>Nazareth College</td>
<td>*</td>
</tr>
<tr>
<td>Olivet College</td>
<td>*</td>
</tr>
<tr>
<td>Siena Heights College</td>
<td>*</td>
</tr>
<tr>
<td>University of Detroit</td>
<td>*</td>
</tr>
<tr>
<td>Spring Arbor College</td>
<td>*</td>
</tr>
<tr>
<td>Saginaw Valley College</td>
<td>*</td>
</tr>
</tbody>
</table>

Totals | 3 | 10 | 19 | 13 | 15 |
Per cent of schools | 12 | 38 | 73 | 50 | 58 |

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in the College, School, or Department of Education?" Respondents from Michigan State University, Western Michigan University, and the University of Detroit indicated that each offers such a course.

The second question asked, "Do you offer a course about alcohol in some non-Education department? If yes, please name the departments and courses." Of the 26 institutions to which questionnaires were sent, 19 indicated that they offered such a course. Two schools indicated courses offered in the health program, 5 schools indicated courses offered in sociology, 3 schools indicated courses offered in psychology, and 3 schools indicated courses offered in the sciences.

Question three inquired whether alcohol was included as a topic in health education, and question four inquired whether it was offered in Physical Education. Nineteen of the institutions included alcohol education in the health education program, and 13 of them included it in Physical Education. In fact, health education was indicated more frequently than any of the four other choices as a way of teaching about alcohol.

Other methods of disseminating education about alcohol were to be indicated at the end of the questionnaire. A course was said to be offered on drug abuse, tobacco, and alcohol at Ferris State College. The Michigan State University respondent indicated that weekly articles about alcohol were published in the school newspaper. Alcohol education was indicated as being included in sociology courses at Northern Michigan University, particularly in the course, "Sociology of Education." Pamphlets sent by bulk shipment were said to be distributed to the students and the Alcohol Education Journal to be available in the library at Wayne State University. It was reported for Western
Michigan University that alcohol education was taught in its driver education courses.  

Audio-visual aids have been made available to the area public schools and its own students by Adrian College. Albion College reported that its Dean of Students Office disseminated alcohol information along with information about drugs, and has included publications about alcohol in the college library. Education about alcohol was indicated as being included by Alma College in its course, "Foundations of Education." Seminars on the misuse of alcohol were reported at Aquinas College. A workshop was planned at Andrews University for June 22 through 26, 1970, entitled, "Institute of Scientific Studies for the Prevention of Alcoholism." Hillsdale College reported that its staff members were involved in speaking about alcoholism in public addresses. Pamphlets, books, assigned readings, reports, and discussions were reported to be used at Marygrove College. Education about the nutritional aspects of alcohol were reported as included by Mercy College in its home economics program. Nazareth College offered an institute entitled, "Drugs and Education," during the 1970 spring term. Alcohol was a topic in "Human Growth and Development," and "Adolescent Psychology" courses offered at Siena Heights College, and this college also reported that it brought in specialists to lecture. Fifteen institutions of the 26 indicated the ways of disseminating education about alcohol that they used, as requested at the end of the questionnaire.

---

1 No mention was made of the Alcohol Studies Fellowship which is offered each year to a student at Western Michigan University.
The principals were asked, in the second question of the section on teacher preparation, to estimate the ratio of their staff members who had three types of experiences related to alcohol education: a course in alcohol education, in-service training in alcohol education, and inclusion of education about alcohol in health education classes. The principals could indicate that two-thirds, one-half, one-third, or less than one-third of their staff members had each experience respectively. Because of the infrequent responses other than "less than one-third", the responses were grouped as "more than one-third" or "less than one-third" in the report of the obtained data. Table 6 indicates the number of principals who reported that, in their estimation, more than one-third or less than one-third of their respective staff members had these respective experiences. Two elementary principal respondents did not answer this question.

Eight per cent of the principals estimated that more than one-third of their respective staff members had a course in alcohol education, and 10 per cent reported that more than one-third of their respective staff members had in-service training in alcohol education. However, 41 per cent of the principals estimated that more than one-third of their respective staff members had experienced education about alcohol in their health education classes. The principals as well as the institutions preparing teachers reported health education courses as the most frequently used media in preparation of teachers for alcohol education.
<table>
<thead>
<tr>
<th>Principal</th>
<th>Course in alcohol</th>
<th>In-service training</th>
<th>Health education classes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Per cent</td>
<td>Chi-square</td>
</tr>
<tr>
<td>Total</td>
<td>6 73</td>
<td>8 92</td>
<td>8 71 10 90</td>
</tr>
<tr>
<td>Elementary</td>
<td>3 35</td>
<td>9 92</td>
<td>2 36 5 95</td>
</tr>
<tr>
<td>Junior high</td>
<td>3 38</td>
<td>7 93</td>
<td>6 35 15 85</td>
</tr>
<tr>
<td>Small</td>
<td>3 43</td>
<td>7 93</td>
<td>3 43 6 94</td>
</tr>
<tr>
<td>Large</td>
<td>3 30</td>
<td>9 91</td>
<td>5 28 15 85</td>
</tr>
<tr>
<td>Elementary;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>1 23</td>
<td>4 96</td>
<td>*</td>
</tr>
<tr>
<td>Large</td>
<td>2 12</td>
<td>14 86</td>
<td>0 14 0 100</td>
</tr>
<tr>
<td>Junior high;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>2 20</td>
<td>9 91</td>
<td>1 21 5 95</td>
</tr>
<tr>
<td>Large</td>
<td>1 18</td>
<td>5 95</td>
<td>5 14 26 74</td>
</tr>
</tbody>
</table>

*Fisher test greater than 0.05
The fact that in-service training was, according to the estimations of principals, somewhat more common among the staffs of large junior high schools than among the staffs of the other schools included in this study suggested a comparison of the preparation of the teachers in the large junior high schools with the preparation of the teachers in the other schools. Five of the principals of large junior high schools reported that more than one-third of their staff members had in-service training, whereas 14 of these principals reported that less than one-third of their staff members had in-service training. Of the other three classifications of principals combined, 3 reported that more than one-third of their staff members had in-service training for alcohol education. Fifty-seven reported that less than one-third of their teachers had such training. This difference is significant (chi-square 5.867).

The section about teacher preparation was concluded by inquiring, "Do you believe in-service training to be necessary in this area?" Table 7 contains a tabulation of the answers which the principals gave to this question. Seventy-seven per cent of the principals reporting indicated that they believed in-service training opportunities were necessary.
TABLE 7
PRINCIPALS' OPINIONS CONCERNING THE NEED FOR TEACHER
IN-SERVICE TRAINING IN ALCOHOL EDUCATION

<table>
<thead>
<tr>
<th>Principal</th>
<th>Number</th>
<th>Chi-square</th>
<th>Percentage</th>
<th>Number non-responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>61</td>
<td>18</td>
<td>77</td>
<td>23</td>
</tr>
<tr>
<td>Elementary</td>
<td>30</td>
<td>10</td>
<td>0.553</td>
<td>75</td>
</tr>
<tr>
<td>Junior high</td>
<td>31</td>
<td>8</td>
<td></td>
<td>80</td>
</tr>
<tr>
<td>Small</td>
<td>36</td>
<td>10</td>
<td>0.000</td>
<td>78</td>
</tr>
<tr>
<td>Large</td>
<td>25</td>
<td>10</td>
<td></td>
<td>76</td>
</tr>
<tr>
<td>Elementary: Small</td>
<td>20</td>
<td>5</td>
<td>0.320</td>
<td>80</td>
</tr>
<tr>
<td>Large</td>
<td>10</td>
<td>5</td>
<td></td>
<td>67</td>
</tr>
<tr>
<td>Junior high: Small</td>
<td>16</td>
<td>5</td>
<td>0.023</td>
<td>76</td>
</tr>
<tr>
<td>Large</td>
<td>15</td>
<td>3</td>
<td></td>
<td>83</td>
</tr>
</tbody>
</table>

Instruction

The section about instruction in the questionnaire addressed to the principals was concerned with the following considerations: the level or levels at which alcohol education is being offered, the subject areas where it is presently being offered, the subject areas where principals believe it should be offered, the ways alcohol education might presently be offered beside classroom activity, and the topics which the principals believed to be appropriate for the elementary and junior high school levels.

The first question of this section asked the principals to indicate the level or levels at which alcohol education was offered.
in their respective school systems. Forty-five per cent of the
82 returned questionnaires indicated that alcohol education was
offered at the elementary level, 67 per cent indicated that it was
offered at the junior high school level, and 74 per cent indicated
offerings at the senior high school level. Eleven per cent of the
principals indicated that alcohol education was offered at no level
in their respective school districts. These data are reported in
Table 8.

To establish whether a pupil would be more likely to be ex-
posed to alcohol education in junior high school than in elementary
school, the reports of the elementary school principals were compared
with the reports of the junior high school principals with respect
to the inclusion of alcohol education in the respective programs.
Seventeen of the elementary principals indicated that alcohol education
was included in elementary programs and 24 of them did not, but 33
junior high school principals indicated such education to be offered
in junior high school programs and 8 did not (chi-square 11.532).
Alcohol education was reported by the junior high school principals
to occur more frequently at the junior high school level than it was
reported by elementary principals to occur at the elementary level.

It can be noted in Table 8 that there is a significant diff-
erence (chi-square 5.521) between the percentage of elementary and the
percentage of junior high school principals reporting alcohol education
to be offered in the junior high schools of their districts.
<table>
<thead>
<tr>
<th>Principal Type</th>
<th>Elementary No.</th>
<th>Elementary No. Per cent</th>
<th>Elementary Chi²</th>
<th>Junior high No.</th>
<th>Junior high No. Per cent</th>
<th>Junior high Chi²</th>
<th>Senior high No.</th>
<th>Senior high No. Per cent</th>
<th>Senior high Chi²</th>
<th>At no level No.</th>
<th>At no level Per cent</th>
<th>At no level Chi²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>82</td>
<td>37 45</td>
<td></td>
<td>55 67</td>
<td></td>
<td></td>
<td>61 74</td>
<td></td>
<td></td>
<td>9</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Elementary</td>
<td>41</td>
<td>17 41 0.196</td>
<td></td>
<td>22 54 5.521</td>
<td></td>
<td></td>
<td>32 78 0.256</td>
<td></td>
<td></td>
<td>4</td>
<td>10</td>
<td>0.000</td>
</tr>
<tr>
<td>Junior high</td>
<td>41</td>
<td>20 49</td>
<td></td>
<td>33 80</td>
<td></td>
<td></td>
<td>29 71</td>
<td></td>
<td></td>
<td>5</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>47</td>
<td>18 38 0.475</td>
<td></td>
<td>31 66 0.000</td>
<td></td>
<td></td>
<td>35 75 0.056</td>
<td></td>
<td></td>
<td>6</td>
<td>13</td>
<td>0.059</td>
</tr>
<tr>
<td>Large</td>
<td>35</td>
<td>19 54</td>
<td></td>
<td>24 69</td>
<td></td>
<td></td>
<td>26 74</td>
<td></td>
<td></td>
<td>3</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Elementary:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>25</td>
<td>9 36 0.316</td>
<td></td>
<td>14 56 0.300</td>
<td></td>
<td></td>
<td>20 80 0.000</td>
<td></td>
<td></td>
<td>3</td>
<td>12</td>
<td>0.004</td>
</tr>
<tr>
<td>Large</td>
<td>16</td>
<td>8 50</td>
<td></td>
<td>8 50</td>
<td></td>
<td></td>
<td>12 75</td>
<td></td>
<td></td>
<td>1</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Junior high:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>22</td>
<td>9 41 0.595</td>
<td></td>
<td>17 77 0.027</td>
<td></td>
<td></td>
<td>15 68 0.001</td>
<td></td>
<td></td>
<td>3</td>
<td>12</td>
<td>0.024</td>
</tr>
<tr>
<td>Large</td>
<td>19</td>
<td>11 58</td>
<td></td>
<td>16 84</td>
<td></td>
<td></td>
<td>14 74</td>
<td></td>
<td></td>
<td>2</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>
The fact that 11 per cent of the principals reported that alcohol education did not occur at any level in their respective school districts indicates that the requirements of the law concerning education about alcohol was being fulfilled with 89 per cent cooperation but was not complied with by 11 per cent of the schools reported. Seventy-three of the 82 principals reported some alcohol education being offered in their districts.

The second question asked of the principals relative to instruction about alcohol was intended to determine the subject areas in which education about alcohol was presently being offered. Table 9 indicates the numbers of various responses that were obtained. Science was the most frequently selected subject area for alcohol education (reported by 64 per cent of the principals), and health was second in frequency of choice (56 per cent of the principals). A difference appeared between the reports of the principals of the elementary and of the junior high schools with respect to whether science or health was the subject area in which alcohol education was included. Forty-four per cent of the principals of elementary schools indicated that alcohol education occurred in the science program, but 83 per cent of the principals of junior high schools so reported (chi-square 11.826).

Health was the subject area in which alcohol education was most frequently reported by the elementary principals to be offered, while science was so reported by the junior high school principals. Table 9 shows that 63 per cent of the elementary principals reported health classes as the vehicle for alcohol education, while 44 per cent of them reported science.
TABLE 9

SUBJECT AREAS IN WHICH PRINCIPALS REPORTED ALCOHOL EDUCATION TO BE OFFERED

<table>
<thead>
<tr>
<th>Principal Type</th>
<th>Science No.</th>
<th>Science %</th>
<th>Health No.</th>
<th>Health %</th>
<th>Physical Education No.</th>
<th>Physical Education %</th>
<th>Social Studies No.</th>
<th>Social Studies %</th>
<th>Homemaking No.</th>
<th>Homemaking %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>82</td>
<td>52 64</td>
<td>46 56</td>
<td>19 23</td>
<td>15 18</td>
<td>8 10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior High</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>47</td>
<td>25 53 3.928</td>
<td>29 62 0.921</td>
<td>10 21 0.042</td>
<td>5 11 3.199</td>
<td>3 6 0.666</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large</td>
<td>35</td>
<td>27 77</td>
<td>17 49</td>
<td>9 26</td>
<td>10 28</td>
<td>5 14</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>25</td>
<td>8 32 2.250</td>
<td>17 68 0.184</td>
<td>5 20 0.000</td>
<td>3 12 0.004</td>
<td>1 4 0.051</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large</td>
<td>16</td>
<td>10 63</td>
<td>9 57</td>
<td>4 25</td>
<td>1 6</td>
<td>0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior High:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>22</td>
<td>17 77 0.383</td>
<td>12 55 0.231</td>
<td>5 23 0.009</td>
<td>2 9 5.784</td>
<td>2 9 1.093</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large</td>
<td>19</td>
<td>17 90</td>
<td>8 42</td>
<td>5 26</td>
<td>9 47</td>
<td>5 26</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Another area where there was a difference among the reports of principals from various classifications was in the area of social studies. Eighteen per cent of all the principals responding reported that alcohol education was included in this subject area, but 47 per cent of the principals of large junior high schools reported thus. Although there was a difference between the reports of large and small junior high schools (chi-square 5.784), the fact that 9 of the 19 principals of large junior high schools (47 per cent), and 6 of the 63 principals of the other schools (9 per cent) reported education about alcohol to be included in social studies indicates that a greater difference than the difference reported between large and small junior high schools occurred (chi-square 11.570). The large junior high schools were reported as including education about alcohol in their social studies programs more often than elementary and small junior high schools were.

Alcohol education was reported more often by junior high school principals than by elementary principals as being included in homemaking, as might be expected. After all, few elementary schools offer homemaking. This subject was also reported to include education about alcohol more frequently in large junior high schools than in other types of schools; of the 19 principals of large junior high schools, 5 reported it to occur in homemaking classes, but only 3 of the 63 other principals reported it to occur in homemaking (chi-square 5.449).

Two areas were rather uniformly reported by all groups of
principals with respect to inclusion of education about alcohol:
physical education and vocational education. About one-fourth of
the principals reported alcohol education to be included in physical
education, and no principals reported it to be included in vocational
education.

The question asking principals to report where alcohol ed-
ucation was presently being offered was followed by a question asking
them where they believed it should be offered. This was done in
order to study any change in emphasis which they desired. The opinions
expressed in answer to this question are contained in Table 10.

On the basis of reports obtained from the principals, it was
found that the junior high school principals considered science the
most desirable subject and health the second most desirable in which
to include alcohol education. The elementary principals reported
health to be the most desirable subject area and science the second
most desirable for inclusion of alcohol education. The report of
present practice thus corresponded closely with what the principals
advocated. The junior high school principals indicated significantly
more often than the elementary principals did (chi-square 12.607) that
they believed science to be an area in which education about alcohol
should be included. Although science was the subject area most fre-
quently preferred (76 per cent of the junior high school principals)
and health the second most frequently preferred (49 per cent) for al-
cohol education, health was the most frequently preferred by elementary
school principals (56 per cent) and science the second most frequently
preferred (34 per cent). Here again present practice corresponded to

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the opinions obtained from the principals regarding desirable practice.

It was found, as was reported above, that social studies was reported as including alcohol education significantly more frequently by principals of large junior high schools than by other principals. There also was an apparent difference which obtained between the opinions of elementary and of junior high school principals with respect to the inclusion of alcohol education in social studies classes. Forty-two per cent of the junior high school principals and 12 per cent of the elementary principals favored inclusion of alcohol education in social studies classes. This difference is significant (chi-square 7.516). Although there was a difference in present practice reported between the principals of large and small junior high schools with respect to the inclusion of alcohol education in social studies classes, the difference between these two with respect to opinions offered was not significant (chi-square 2.778). Social studies was an area in which many of the junior high school principals, irrespective of the size of the school administered, suggested that alcohol education should be included.

Physical education was suggested by 18 per cent of the total number of reporting principals as an area for inclusion of alcohol education. Interest in such inclusion did not differ significantly among the classifications of principals.

Homemaking and vocational education were not selected by many of the principals as desirable areas in which to include alcohol education. Only one principal, from a small elementary school, recommended homemaking as an area in which alcohol education should be
TABLE 10

SUBJECT AREAS IN WHICH ALCOHOL EDUCATION IS RECOMMENDED
BY THE PRINCIPALS TO BE OFFERED

<table>
<thead>
<tr>
<th>Principal Type</th>
<th>Science</th>
<th>Health</th>
<th>Physical Education</th>
<th>Social Studies</th>
<th>Homemaking</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Total</td>
<td>82</td>
<td>45 55</td>
<td>43 52</td>
<td>15 18</td>
<td>22 27</td>
</tr>
<tr>
<td>Elementary</td>
<td>41</td>
<td>14 34</td>
<td>23 56</td>
<td>10 24 1.305</td>
<td>5 12 7.516</td>
</tr>
<tr>
<td>Junior high</td>
<td>41</td>
<td>31 76</td>
<td>20 49</td>
<td>5 12</td>
<td>17 42</td>
</tr>
<tr>
<td>Small</td>
<td>47</td>
<td>27 57</td>
<td>27 57</td>
<td>9 19 0.003</td>
<td>10 21 1.130</td>
</tr>
<tr>
<td>Large</td>
<td>35</td>
<td>18 51</td>
<td>16 46</td>
<td>6 17</td>
<td>12 34</td>
</tr>
<tr>
<td>Elementary:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>25</td>
<td>9 36</td>
<td>12 55</td>
<td>1 5 1.093</td>
<td>6 27 0.194</td>
</tr>
<tr>
<td>Large</td>
<td>16</td>
<td>5 31</td>
<td>8 50</td>
<td>2 13</td>
<td>1 6</td>
</tr>
<tr>
<td>Junior high:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>22</td>
<td>18 82</td>
<td>12 55</td>
<td>1 5 1.281</td>
<td>6 27 2.778</td>
</tr>
<tr>
<td>Large</td>
<td>19</td>
<td>13 69</td>
<td>8 42</td>
<td>4 21</td>
<td>11 58</td>
</tr>
</tbody>
</table>

Chi² tests for significance.
included.

The fourth question inquired about other ways in which the schools disseminate alcohol education. These methods included special programs, outside speakers, the showing of films in assemblies, and counselor activities.

The fifth question asked the principals to select topics for alcohol education at the elementary, junior high, and senior high school levels. A list of eighteen topics was presented for this purpose. A principal could indicate the level or levels at which he would recommend that a given topic be taught by placing an "X" on the appropriate blank or blanks provided. By making no mark, he recommended that the topic not be taught at any level. Each principal was asked to circle the "X" if the topic was presently being taught as he recommended it to be taught. The few encircled marks indicate that many principals disregarded this instruction rather than that little was actually being taught about alcohol; therefore, no comparison between recommendations and current practice was regarded as meaningful. It was possible only to assess recommendations for topics in alcohol education classes.

As can be seen in Table 11, 23 principals (28 per cent) did not select any of the listed topics for elementary school level. The biggest difference noted among the classifications of principals in the selection of topics for elementary education was between the small and large junior high school principals. Principals of large junior high schools appeared less willing than principals of small junior high schools (chi-square 4.439) to select any of the listed
<table>
<thead>
<tr>
<th>Principal Type</th>
<th>Elementary</th>
<th>Junior high</th>
<th>Senior high</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>No.</td>
<td>Per cent</td>
</tr>
<tr>
<td>Total</td>
<td>82</td>
<td>23</td>
<td>28</td>
</tr>
<tr>
<td>Elementary</td>
<td>41</td>
<td>11</td>
<td>27</td>
</tr>
<tr>
<td>Junior high</td>
<td>41</td>
<td>11</td>
<td>29</td>
</tr>
<tr>
<td>Small</td>
<td>47</td>
<td>16</td>
<td>34</td>
</tr>
<tr>
<td>Large</td>
<td>35</td>
<td>7</td>
<td>20</td>
</tr>
<tr>
<td>Elementary:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>25</td>
<td>6</td>
<td>24</td>
</tr>
<tr>
<td>Large</td>
<td>16</td>
<td>5</td>
<td>31</td>
</tr>
<tr>
<td>Junior high:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>22</td>
<td>10</td>
<td>45</td>
</tr>
<tr>
<td>Large</td>
<td>19</td>
<td>2</td>
<td>10</td>
</tr>
</tbody>
</table>
topics for alcohol education at the elementary level.

Seven principals selected no topics for the senior high school level. Selection of topics for high schools was included only to note those topics which principals suggested for teaching at the high school level, but not at their own levels.

There was a difference in the percentage of non-selection for the three levels. Twenty-eight per cent of the principals did not select elementary topics, 6 per cent did not select junior high school topics, and 9 per cent did not select topics at the senior high school level.

Seventy-three per cent of the elementary principals selected topics for the elementary school level. The following is a report of their selections:

1. Effects of alcohol on the human mind and behavior (59 per cent)
2. Alcoholism and family life (41 per cent)
3. Reasons why people do or do not drink (39 per cent)
4. Dangers involved in teen-age use of alcoholic beverages (37 per cent)
5. Definition and description of alcoholism (37 per cent)
6. Alcohol, crime, and deviant behavior (34 per cent)
7. Causes of alcoholism (32 per cent)
8. Diseases related to alcohol (32 per cent)
9. Laws relating to the use of alcoholic beverages (29 per cent)
10. History of the use of alcohol in this country (22 per cent)
11. Alcohol and automobile driving (22 per cent)
12. Liquor industry and its advertising (17 per cent)
13. A.A., Al-anon, and Alateen (for spouses and children of alcoholics respectively--15 per cent)
14. Types of alcoholic beverages and how they are made (12 per cent)

15. How alcoholics are cared for and treated (12 per cent)

16. Alcoholism and industry (12 per cent)

17. Present drinking habits in the USA (10 per cent)

18. Religious attitudes concerning the use of alcohol (10 per cent)

One hundred per cent of the junior high school principals selected topics for the junior high school level. The following is a report of their selections:

1. Dangers involved in teen-age use of alcoholic beverages (98 per cent)

2. Laws relating to the use of alcoholic beverages (88 per cent)

3. Effects of alcohol on the human mind and behavior (88 per cent)

4. Alcohol and automobile driving (85 per cent)

5. Reasons why people do or do not drink (83 per cent)

6. Causes of alcoholism (83 per cent)

7. Alcoholism and family life (83 per cent)

8. Definition and description of alcoholism (80 per cent)

9. Present drinking habits in the USA (76 per cent)

10. Alcohol, crime, and deviant behavior (76 per cent)

11. How alcoholics are cared for and treated (68 per cent)

12. History of the use of alcohol in this country (63 per cent)

13. Liquor industry and its advertising (61 per cent)

14. Diseases related to alcohol (61 per cent)

15. A.A., Al-anon, and Alateen (59 per cent)

16. Alcoholism and industry (59 per cent)

17. Types of alcoholic beverages and how they are made (56 per cent)
18. Religious attitudes concerning the use of alcohol (34 per cent)

**Instructional Materials**

The first question of this section of the questionnaire asked the principals whether they considered the textbooks used in their respective schools to be adequate for alcohol education. Eighteen of the principals (25 per cent) who responded answered in the affirmative, while 53 (75 per cent) answered in the negative, as is indicated in Table 12. In that there were no significant differences apparent among

**TABLE 12**

**REPORTED ADEQUACY OF TEXTBOOKS BY PRINCIPALS FOR ALCOHOL EDUCATION**

<table>
<thead>
<tr>
<th>Principal</th>
<th>Number</th>
<th>Chi-square</th>
<th>Percent</th>
<th>Number non-responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>53</td>
<td>25</td>
<td>75</td>
</tr>
<tr>
<td>Elementary</td>
<td>9</td>
<td>25</td>
<td>0.004</td>
<td>26</td>
</tr>
<tr>
<td>Junior high</td>
<td>9</td>
<td>28</td>
<td></td>
<td>24</td>
</tr>
<tr>
<td>Small</td>
<td>12</td>
<td>30</td>
<td>0.223</td>
<td>29</td>
</tr>
<tr>
<td>Large</td>
<td>6</td>
<td>23</td>
<td></td>
<td>21</td>
</tr>
<tr>
<td>Elementary:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>6</td>
<td>15</td>
<td>*</td>
<td>29</td>
</tr>
<tr>
<td>Large</td>
<td>3</td>
<td>10</td>
<td>*</td>
<td>23</td>
</tr>
<tr>
<td>Junior high:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>6</td>
<td>15</td>
<td>*</td>
<td>29</td>
</tr>
<tr>
<td>Large</td>
<td>3</td>
<td>13</td>
<td>*</td>
<td>19</td>
</tr>
</tbody>
</table>

*Fisher test greater than 0.05

the classifications of principals, it may be suggested that general dissatisfaction with the textbooks existed on the part of all the
types of principals with the level of effectiveness of them for dis-
sseminating and fostering education about alcohol.

The second question asked, "Are you aware of the teaching aids, pamphlets, and literature made available by the State Department of Health to supplement your units on alcohol education?" As is indicated in Table 13, 40 principals (51 per cent) indicated that they were aware

TABLE 13

PRINCIPALS' FAMILIARITY WITH ALCOHOL EDUCATION MATERIALS ISSUED BY THE STATE DEPARTMENT OF HEALTH

<table>
<thead>
<tr>
<th>Principal</th>
<th>Number</th>
<th>Chi-square</th>
<th>Percentage</th>
<th>Number non-responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>38</td>
<td></td>
<td>51</td>
</tr>
<tr>
<td>Elementary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior high</td>
<td>18</td>
<td>20</td>
<td>0.199</td>
<td>47</td>
</tr>
<tr>
<td>Small</td>
<td>22</td>
<td>18</td>
<td></td>
<td>55</td>
</tr>
<tr>
<td>Large</td>
<td>21</td>
<td>25</td>
<td>0.926</td>
<td>46</td>
</tr>
<tr>
<td>Elementary:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>19</td>
<td>13</td>
<td></td>
<td>59</td>
</tr>
<tr>
<td>Large</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infant:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>11</td>
<td>14</td>
<td>0.054</td>
<td>44</td>
</tr>
<tr>
<td>Large</td>
<td>7</td>
<td>6</td>
<td></td>
<td>54</td>
</tr>
<tr>
<td>Junior high:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>10</td>
<td>11</td>
<td>0.446</td>
<td>42</td>
</tr>
<tr>
<td>Large</td>
<td>12</td>
<td>7</td>
<td></td>
<td>63</td>
</tr>
</tbody>
</table>

of these, but 38 principals (49 per cent) indicated that they were not aware of these materials. It appears that a noticeable lack of familiarity on the part of all of the classifications of principals existed with respect to the pamphlets and aids made available by the State.

The third question asked, "Would you favor the State's
developing and issuing resource units and films upon request for use in alcohol education? Seventy-five principals (94 per cent of those responding) responded in the affirmative and 5 principals (6 per cent) responded in the negative. No great difference was indicated in Table 14 to occur among the classifications of principals in the percentage of principals favoring the State's issuing of resource units on alcohol education. Development of resource units and films was favored by most of the principals regardless of the size and type of school administered.

The principals were also asked why they would or would not favor the State's developing and issuing of resource units and films. All but two of the reasons given were in support of these units. The

---

**TABLE 14**

**DESIRABILITY OF THE STATE'S ISSUING RESOURCE UNITS AND FILMS ON ALCOHOL EDUCATION TO PUBLIC SCHOOLS**

<table>
<thead>
<tr>
<th>Principal</th>
<th>Number</th>
<th>Chi-square</th>
<th>Percentage</th>
<th>Number non-responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Total</td>
<td>75</td>
<td>5</td>
<td></td>
<td>94</td>
</tr>
<tr>
<td>Elementary</td>
<td>35</td>
<td>4</td>
<td>0.963</td>
<td>90</td>
</tr>
<tr>
<td>Junior high</td>
<td>40</td>
<td>1</td>
<td></td>
<td>95</td>
</tr>
<tr>
<td>Small</td>
<td>44</td>
<td>2</td>
<td>0.122</td>
<td>96</td>
</tr>
<tr>
<td>Large</td>
<td>31</td>
<td>3</td>
<td></td>
<td>91</td>
</tr>
<tr>
<td>Elementary:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>22</td>
<td>2</td>
<td>0.001</td>
<td>92</td>
</tr>
<tr>
<td>Large</td>
<td>13</td>
<td>2</td>
<td></td>
<td>87</td>
</tr>
<tr>
<td>Junior high:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>33</td>
<td>0</td>
<td>0.005</td>
<td>100</td>
</tr>
<tr>
<td>Large</td>
<td>18</td>
<td>1</td>
<td></td>
<td>95</td>
</tr>
</tbody>
</table>
reasons given by some of the principals of small elementary schools were:

1. "If the students are informed about alcohol and its dangers it could prevent them from becoming problem drinkers."

2. "Need more materials for elementary work."

3. "If resources are readily available and units could be expected."

4. "To bring an awareness of the problem into focus for elementary instruction."

5. "Probably to be developed by authorities—to be factual without emotional upset."

6. "Any schools cannot afford materials along this line and would use it if available from the state."

7. "Easily available to all schools."

8. "Any additional help would aid the teachers' instructing."

9. "Uniformity of instruction would be available throughout the state on alcoholism."

10. "Providing instructional materials to teachers and making them easily available will help in implementing a program on alcoholism."

11. "Where resources are made available more use might be made of them."

12. "The more the better."

13. "It would provide a more uniform presentation of facts and information."

14. "They have the resources and the experience to do it."

The principals of the large elementary schools suggested reasons such as the following in defense of the State's developing and issuing of resource units and films:

1. "Availability of personnel to research and compile materials."

2. "We need all the sources we can get."
3. "If needed."

4. "It would be a great help in school districts that cannot afford special audio-visual equipment etc."

One of the negative comments expressed was, "Inappropriate. We have enough to teach already."

Some of the principals of small junior high schools offered the following in support of the State’s issuing of alcohol education units:

1. "Guidelines for teachers."
2. "Lack of funds to purchase materials."
3. "Needed to develop units."
4. "To help improve alcohol education for students."
5. "This is what is needed."
6. "Cost to individual school is too high."
7. "Serves as a good supplement."
8. "The guidelines would be more uniform throughout the state."

The principals of large junior high schools stated in support of such units:

1. "There is little in this area."
2. "Aid to those systems that see the area having high priority."
3. "So our teaching could be more meaningful."
4. "It would keep us up to date on alcohol research."
5. "Such materials are often well constructed and helpful."
7. "The state could afford to keep their materials more current than a school district."

Another negative comment, expressed by a principal of a large
junior high school, was, "Duplication of resources."

Counseling the Child Who Has an Alcoholic Parent

The purpose of including a section about counseling in the questionnaire was to find those methods which the principals believed to be effective in helping a child who has an alcoholic parent. Nine sources of help, usually other than building-based personnel, were listed, from which the principals were to rank order the five most preferred. The nine suggested were:

1. School nurse services
2. School social work services
3. Summer camp opportunities provided by the community
4. Alateen
5. Community recreational services (i.e., YMCA)
6. Child welfare services
7. Alcohol treatment centers
8. Clergy
9. School psychologist

School counselors were not included in this list because they were considered to be building-based personnel. The fact that six principals suggested the school counselor as a source of help would indicate that the school counselor should have been included as one of the options from which the principals could have chosen.

The rank ordered choices were recorded and weighted by multiplying the number of first choices for a given item by five, of the

---

These sources of help were discussed with Morris Kelley, director of the Alcohol Information Center, Kalamazoo, in a personal interview, February, 1970.
second choices by four, of the third choices by three, of the fourth 
choices by two, and of the fifth choices by one. The five values 
thus obtained for an item were totaled. These totals are shown in 
Table 15. The choices, by classification of principal respondents 
and order of preference, were as follows:

The total group of principals preferred:
1. School social work services
2. School nurse services
3. School psychologist
4. Child welfare services
5. Clergy

The elementary principals preferred:
1. School social work services
2. School nurse services
3. School psychologist
4. Clergy
5. Child welfare services

The junior high school principals preferred:
1. School social work services
2. School nurse services
3. Child welfare services
4. School psychologist
5. Clergy

The principals of small schools preferred:
1. School social work services
2. School nurse services
### Table 15

**RECOMMENDATIONS BY PRINCIPALS FOR HELPING A CHILD WITH AN ALCOHOLIC PARENT**

<table>
<thead>
<tr>
<th>Source of help</th>
<th>Total</th>
<th>Elementary</th>
<th>Junior High</th>
<th>Senior High</th>
<th>Large</th>
<th>Elementary</th>
<th>Junior High</th>
<th>Senior High</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>School nurse services</strong></td>
<td>197</td>
<td>105</td>
<td>88</td>
<td>128</td>
<td>65</td>
<td>74</td>
<td>31</td>
<td>54</td>
</tr>
<tr>
<td><strong>School social worker</strong></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Summer camp opportunities</strong></td>
<td>39</td>
<td>30</td>
<td>19</td>
<td>37</td>
<td>12</td>
<td>12</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td><strong>Alateen</strong></td>
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<td>31</td>
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<td><strong>Clergy</strong></td>
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</tr>
</tbody>
</table>

*Roman numerals indicate first, second, third, fourth and fifth choices.*
3. School psychologist
4. Child welfare services
5. Clergy

The principals of large schools preferred:
1. School social work services
2. School nurse services
2. Child welfare services (tied for second choice)
4. School psychologist
5. Clergy

Preferred by principals of small elementary schools were:
1. School social work services
2. School nurse services
3. Alcohol treatment agencies
4. Clergy
4. School psychologist (tied for fourth choice)

The principals of large elementary schools preferred:
1. School social work services
2. School psychologist
3. School nurse services
4. Child welfare services
5. Clergy

The following were indicated as preferred by the principals of small junior high schools:
1. School social work services
2. School nurse services
3. School psychologist
4. Child welfare services
5. Clergy

The final classification, principals of large junior high schools, preferred:

1. School social work services
2. Child welfare services
3. School nurse services
4. Clergy
5. Alsteen

The final question of the questionnaire asked the principals to indicate any sources of help that they have used in aiding a child who has an alcoholic parent. Thirteen of the 32 principals (16 per cent) indicated that they use some sources of help. Five of the 25 principals of small elementary schools reported using the following:

1. School social worker (1 principal)
2. Elementary counselor (1 principal)
3. School nurse (1 principal)
4. Small group counseling--one to one counseling (1 principal)

Two principals from among the 16 large elementary schools reported using the following aids:

1. School social worker (2 principals)
2. School nurse (1 principal)
3. School psychologist (1 principal)

There were no means indicated as used by the 22 principals of small junior high schools, but 6 of the principals of the 19 large junior high schools reported the following:
1. School guidance services (4 principals)
2. School social work service (2 principals)
3. School psychiatrist and welfare services (1 principal)
CHAPTER V

SUMMARY

The purpose of this study was to obtain information, by means of questionnaires addressed to elementary and junior high school principals and institutions training prospective teachers, about current selected practices and issues in alcohol education at the elementary and junior high school levels, to solicit suggestions for improving the practices, and to make recommendations supported by these data.

Discussion

There were differences found among the types of principals in their responses to questions about the law requiring education about alcohol in Michigan's public schools. More of the junior high school principals than of the elementary principals indicated familiarity with this law.

The second and third questions solicited the principals' opinions concerning the justification of the State in requiring alcohol education and the need to modify the present state law. The principals of small elementary schools had a higher rate of non-response than did the other principals to these questions.

Both the greater unfamiliarity with the law among elementary principals and the greater non-response by principals of small elementary schools to the second and third questions may be explained.
by suggesting that these principals could be younger, less experienced, and have less graduate school education than the other respondents.

The second part of Chapter IV reported findings about the preparation of teachers for conducting alcohol education. Data obtained from institutions preparing teachers indicated that 38 per cent of these institutions offered a course about alcohol in some non-education department. The responses on the returned questionnaires indicated a possible misunderstanding of the question by the individuals reporting. The question asked the respondents to indicate a course only if the entire course was devoted to alcohol education, but some respondents indicated courses in which alcohol education was included along with other topics. Therefore, it is possible that not as much alcohol education was actually being provided as was indicated for some of these institutions.

Both the principals and the institutions preparing teachers reported college health courses to be the most prevalent preparation given teachers for conducting alcohol education. However, only 8 per cent of the principals indicated that more than one-third of their respective staff members had a pre-service course about alcohol and 10 per cent of the principals indicated that more than one-third of their staff members had in-service training, and this may indicate that these methods of preparation are used insufficiently. This supposition is perhaps supported by three findings of this study: (1) only 6 per cent of the principals considered the teachers adequately prepared to conduct alcohol education and 94 per cent of the principals indicated the teachers to be inadequately prepared, (2) courses about
alcohol are offered by less than half of the institutions preparing
teachers, and (3) 77 per cent of the principals indicated in-service
teacher training to be necessary.

More of the teachers in large junior high schools than of the
other types of schools had, according to the findings, in-service
training experiences. Perhaps the teachers in these large junior
high schools tend to be more experienced, and therefore to have had
more opportunity for in-service experiences than less experienced
teachers have had.

Seventy-seven per cent of the principals held the opinion that
in-service training was necessary. This opinion was expressed about
as frequently among principals in one type and size of school as in
another. Two deductions might be made from this finding, namely;
(1) that this opinion is a further indication that principals tend
to regard teachers as inadequately prepared for teaching about alcohol,
and (2) that principals regard in-service training as an efficient
method of upgrading teachers for alcohol education.

In the third section of the questionnaire addressed to prin-
cipals, the section concerned with instruction about alcohol, there
are two possible indications that there may be more reservation on the
part of principals about including alcohol education at the elementary
level than there is about including alcohol education on the junior
high school level. The first indication is in the reports of present
practice. Forty-five per cent of the principals indicated that alcohol
education was offered at the elementary level, 67 per cent of the prin-
cipals indicated that alcohol education was offered at the junior high
school level, and 74 per cent of the principals indicated that it was offered at the senior high school level. The second indication is in the relatively infrequent selection of alcohol education topics for elementary alcohol education. Twenty-eight per cent of the principals did not select elementary topics, 6 per cent did not select junior high school topics, and 9 per cent did not select topics at the senior high school level.

To investigate this possibility further, the fact that 11 of the 41 elementary principals did not select elementary topics and none of the 41 junior high school principals did not select topics for the junior high schools was tested to determine whether a significant difference obtained between these two. The difference between these two groups (chi-square 10.449) would indicate that junior high school principals showed more desire to include education about alcohol at the junior high school level than elementary principals showed in including it at the elementary school level.

The last findings reported in Chapter IV related to the counseling of a child who has an alcoholic parent. This question was designed to determine principals' opinions about various sources of help outside of building personnel in cases where a teacher or a counselor referred to a principal a pupil involved in problems connected with having an alcoholic parent. The fact that many principals of large junior high schools suggested the school counselor to be a primary source of help may indicate that these principals prefer to rely on building counselors rather than on outside sources of help for these children.
In response to the last question of the questionnaire addressed to the principals, thirteen per cent of the principals indicated using some source of help for pupils who have alcoholic parents. Either not many of the principals have made any sources of help available to pupils who have alcoholic parents, or not many of the principals, if they made these sources of help available, indicated having done so. The principals of large junior high schools may judge the help extended by the building counselors to be adequate, but they did not so state. It is possible, however, that some of the principals who did not list sources of help which they extended may be somewhat insensitive to the problems that students face.

Conclusions

The first section of the questionnaire addressed to the principals queried them concerning three questions related to the law requiring alcohol education. Sixty-nine per cent of the reporting principals indicated that they were familiar with the law requiring alcohol education, while 31 per cent indicated that they were unfamiliar with this law. There was less familiarity reported among elementary principals than among junior high school principals. Eighty-eight per cent of the principals who reported expressed the opinion that the State was justified in requiring education about alcohol. More principals of small elementary schools than of other schools failed to respond to this question, possibly suggesting that these elementary principals have not crystallized their thinking to the extent the other principals have with respect to this question.
Forty-seven per cent of the queried principals recommended that this
law be changed. The reasons for this recommendation reflect on the
one hand the few who believe the State to be wrong in this require-
ment, and on the other hand those who would desire a stronger and
more specific statement concerning education about alcohol to be con-
tained in the law. Here again, there was less response from prin-
cipals of small elementary schools, possibly for the same reason.

The second section of the questionnaire for principals was
concerned with the preparation that teachers receive for offering
education about alcohol. Only 6 per cent of the principals indicated
that the teachers were adequately prepared. The institutions rec-
ommending teachers for certification in the State of Michigan in-
dicated the following: 8 per cent offered a class in alcohol educa-
tion under the school, college, or department of education, 38 per
cent indicated that they offered a course about alcohol in some other
department (though in some cases the entire course might not be only
about alcohol), 73 per cent reported that education about alcohol
was included in health education courses, 50 per cent affirmed that
alcohol education was a part of their physical education program, and
58 per cent reported other methods of disseminating education about
alcohol. The principals, in response to inquiry concerning the prep-
paration they estimated their respective staffs to have had, indicated
the following: 8 per cent reported that more than one-third of their
respective staff members had a course in alcohol education; 10 per cent
estimated that more than one-third of the teachers on their respective
staffs had in-service training, although this experience was reported

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somewhat more commonly about the staff members of the large junior high schools than of the others; and 52 per cent of the principals indicated that alcohol education was included in the health education programs of more than one-third of their staff members' academic preparation. Alcohol education offered in health education classes was reported alike by principals and institutions preparing teachers to be the most prevalent experience to have been had by teachers in the area of alcohol education.

The principals' responses probably reflect their judgment of the inadequacy of teacher preparation through their recommendation for in-service education. Seventy-seven per cent of the principals recommended this experience.

Instruction was of concern in the third section of the questionnaire addressed to principals. Forty-five per cent of the principals indicated that alcohol education was offered in the elementary schools of their respective systems, 67 per cent of the principals affirmed that it was offered at the junior high school level in their respective districts, and 74 per cent so indicated for the senior high school level. Eleven per cent indicated that alcohol education was offered at no level in their districts.

Alcohol education was reported given most frequently in health classes by the elementary principals with science being an important second area. Conversely, science was more frequently reported by junior high school principals, with health being an area second in frequency of report for alcohol education. Not only was this reported to reflect present practice, but these areas were likewise recommended as those
where alcohol education should be offered: health, primary and science secondary in frequency at the elementary level, and science foremost and health second in frequency at the junior high level. Physical education was indicated about equally by both elementary and junior high school principals as an area of alcohol education, 22 per cent and 24 per cent respectively. Social studies was so reported more frequently by the principals of large junior high schools (47 per cent) than by the elementary principals (10 per cent) or principals of the small junior high schools (9 per cent). Not only were physical education and social studies indicated as areas where alcohol education was practiced, but they were recommended to be areas where alcohol education was desired by some principals. Physical education was recommended by 18 per cent of the principals and social studies was recommended by 42 per cent of the junior high school principals. A few of the junior high school principals also indicated homemaking as an area of alcohol education. The principals, to a small degree, indicated the use of special assemblies, speakers, and films to disseminate information about alcohol to the students.

Topics were selected for alcohol education at the elementary and junior high school levels. The fact that 23 principals selected no elementary topics, while only 5 selected no junior high topics may indicate that alcohol education is more desired at the junior high school level than at the elementary level.

Seventy-three per cent of the elementary principals selected topics for alcohol education at the elementary level. Those topics selected by half or more of these principals are: (1) Effects of alcohol on the human mind and behavior, (2) Alcoholism and family
life, (3) Reasons why people do or do not drink, (4) Dangers involved in teen-age use of alcoholic beverages, and (5) Definition and description of alcoholism.

The topics selected by half or more of the junior high school principals are: (1) Dangers involved in teen-age use of alcoholic beverages, (2) Laws relating to the use of alcoholic beverages, (3) Effects of alcohol on the human mind and behavior, (4) Alcohol and automobile driving, (5) Reasons why people do or do not drink, (6) Causes of alcoholism, (7) Alcoholism and family life, (8) Definition and description of alcoholism, (9) Present drinking habits in the USA, (10) Alcohol, crime and deviant behavior, (11) How alcoholics are cared for and treated, (12) History of the use of alcohol in this country, (13) Liquor industry and its advertising, (14) Diseases related to alcohol, (15) A.A., Al-anon, and Alateen, (16) Alcoholism and industry, and (17) Types of alcoholic beverages and how they are made.

The fourth section was concerned with instructional materials. Twenty-five per cent of the principals considered the textbooks used in their schools to be adequate for alcohol education. Fifty-one per cent of the principals reported that they were familiar with the teaching aids, pamphlets, and literature made available by the State. The development by the State of resource units and films to be issued upon request was recommended by 94 per cent of the principals.

Principals suggested that the school social worker service and the school nurse services are the two most helpful services to extend to a child who has an alcoholic parent. Other recommendations included the school counselors, school psychologist, child welfare
services, alcohol treatment agencies, Alateen and the clergy. Sixteen per cent of the principals indicated that they have used some source of help for such children.

Recommendations

The following recommendations are suggested as being reasonable courses of action supported by the data gathered in this study:

1. Because of the lack of familiarity with the law requiring education about alcohol, and because of the expressed need for a change in this law, it is recommended that the State develop and issue guidelines to all schools within Michigan to indicate ways of fulfilling the law's intended purposes, to foster awareness on the part of principals of the law, and above all to serve the needs of Michigan's young people.

2. Institutions preparing teachers should be encouraged to offer a course in alcohol education.

3. The State could reasonably expect interest to be shown in in-service training activities related to education about alcohol, and should give both assistance and leadership in their development and execution.

4. The State Department of Health should familiarize principals and teachers with the literature and other materials it disseminates by mailing to the schools of this state a listing of these materials.

5. The development of resource units and films for use by
teachers in the area of alcohol education could provide information and guidance to teachers, and might increase the quality of instruction. The suggested topics for those resource units are considered to be those identified by the principals.¹

6. Building principals should develop a greater awareness of the needs of those pupils who are affected by alcoholism in the home, and use every means available to help those pupils.

¹Above, pp. 84-85.
A. Books:


B. Other Printed Material


Limas, George C. Alcohol Education in Oregon Schools. Portland: Mental Health Division Board of Control, 1968.


Rouse, Kenneth A. "What To Do About The Employee With A Drinking Problem." Chicago: Kemper Insurance Co.


C. Films:


APPENDIX A

CHI-SQUARE TABLES
TABLE OF THE PROBABILITY POINTS OF THE CHI-SQUARED DISTRIBUTION FOR THE ONE-TAILED TESTS OF HYPOTHESES (df = 1)*

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TABLE OF THE PROBABILITY POINTS OF THE CHI-SQUARED DISTRIBUTION FOR TWO-TAILED TESTS OF HYPOTHESES (df = 1)

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<td>13.28</td>
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APPENDIX 5

ORIGINAL COVER LETTER TO THE PRINCIPALS
Dear

Under the joint sponsorship of the State Department of Health and Western Michigan University I am engaged in making a study of alcohol education in selected public elementary and junior high schools.

In order to continue my research in this area it is necessary to gather information from various elementary and junior high school principals throughout Michigan. Fifty elementary and fifty junior high school principals were selected at random to be included in this study; you are one of this number.

To obtain the necessary information a questionnaire was developed to gain knowledge of the extent to which alcohol education is now included in selected elementary and junior high schools, to develop recommendations for program improvement, and to study the help given to a child with an alcoholic parent. The names of schools and principals are not used in this study, but the size of your school enrollment and the level you administer will be used in the analysis of the questionnaire returns.

Since this study is limited to education about alcohol and help given to a child with an alcoholic parent, be assured there will be no attempt to investigate drinking habits of students or parents represented in your school.

The returns will be anonymous, so feel free to express yourself honestly and openly, which is essential for a valid study. Filling out the questionnaires as completely as possible will be appreciated since a complete return also increases the validity of this study. Your efforts and contribution are appreciated.

I would be happy to send you a copy of the findings, or assist you in obtaining pertinent information regarding alcohol education in the classroom. Because your questionnaire is to remain anonymous, kindly use a post card if you desire the above information.

"Equal Health Opportunity for All"
With your cooperation I hope to have a 100 per cent return. A stamped envelope is enclosed for your convenience. Your immediate attention to this is greatly appreciated.

Sincerely yours,

Calvin Hoogstra,
Alcohol Studies Fellow

Ralph Daniel, MSW
Chief, Alcoholism Program
APPENDIX C

SECOND COVER LETTER TO THE PRINCIPALS
Dear Principal:

A questionnaire and cover letter dated March 27 were sent to you as a part of my research project concerning alcohol education in the elementary and junior high schools, under sponsorship of the Michigan State Department of Health. While many of the questionnaires have been returned, the goal is 100 per cent participation.

If you have not returned a questionnaire, please use the enclosed envelope to send your response. A second questionnaire has been included should your original copy not be available to you.

If you have already returned the questionnaire, kindly disregard this letter. It is necessary to mail this letter to you because maintenance of anonymity makes it impossible to determine those who did not respond.

Your cooperation is appreciated. Please express yourself freely in this questionnaire, for you will remain anonymous.

Sincerely yours,

Calvin Hoogstra,
Alcohol Studies Fellow
APPENDIX D

QUESTIONNAIRE
Your building enrollment ___________________
You are a principal of an ___ elementary ___ junior high school.

I. The Law and Alcohol Education

A. Are you familiar with section 340.364 of the General School Laws regarding the teaching of alcohol education in the public schools of Michigan? ___ Yes ___ No

B. Do you think the State is justified in requiring instruction in alcohol education in the curriculum? ___ Yes ___ No

Why or why not?__________________________________________________________

II. Teacher Preparation

A. Do you believe the teacher training institutions are adequately preparing teachers to include alcohol education in the public school curriculum? ___ Yes ___ No

B. Estimate the correct staff ratio of teachers who had the experiences described below:

A course on alcohol education in teacher preparation
___ 2/3 ___ 1/2 ___ 1/3 ___ less than 1/3

In-service training activities
___ 2/3 ___ 1/2 ___ 1/3 ___ less than 1/3

In general health courses in college
___ 2/3 ___ 1/2 ___ 1/3 ___ less than 1/3

Other
___ 2/3 ___ 1/2 ___ 1/3 ___ less than 1/3

C. Do you believe in-service training to be necessary in this area? ___ Yes ___ No
III. Instruction

A. At what levels is alcohol education offered in your school system?
   ___ elementary
   ___ junior high
   ___ high school
   ___ at no level

B. If you are offering alcohol education in the elementary or junior high school, indicate the subject areas below in which alcohol education is given:
   ___ Science
   ___ Social Studies
   ___ Health
   ___ Vocational Education
   ___ Physical Education
   ___ Homemaking
   ___ Other

C. Indicate the subject areas where you believe alcohol education should be offered:

D. What other methods are used in your school to meet the state requirements:

E. Below is a list of topics taught in alcohol education classes. Indicate at which level you believe each should be taught by placing an X on the respective blank. If you consider the topic appropriate at more than one level, indicate by marking more than one blank. If you believe the topic is not appropriate at any level, leave all three blanks unmarked for that item. "E" indicates the elementary level, "J" the junior high level, and "S" the senior high level. Circle the X for any item that corresponds with present practice in your school system.

   History of the use of alcohol in this country
   ___ ___ ___
   Present drinking habits in the USA
   ___ ___ ___
   Reasons why people do or do not drink
   ___ ___ ___
   Laws relating to the use of alcoholic beverages
   ___ ___ ___
   Alcohol and automobile driving
   ___ ___ ___
   Religious attitudes concerning the use of alcohol
   ___ ___ ___
   Liquor industry and its advertising
   ___ ___ ___
   Dangers involved in teen-age use of alcoholic beverages
   ___ ___ ___
E. (Concluded)

Types of alcoholic beverages and how they are made
Effects of alcohol on the human mind and behavior
Causes of alcoholism
Definition and description of alcoholism
How alcoholics are cared for and treated
A.A., Al-anon, and Alateen (for spouses and children of alcoholics respectively).
Diseases related to alcohol
Alcoholism and family life
Alcoholism and industry
Alcohol, crime, and deviant behavior

IV. Instructional Materials

A. Do you consider the textbooks used in your school to be adequate?

B. Are you aware of the teaching aids, pamphlets, and literature made available by the State Department of Health to supplement your units on alcohol education?

C. Would you favor the State's developing and issuing resource units and films upon request for use in alcohol education?

Why or why not? ________________________________

V. Counseling the Child Who Has an Alcoholic Parent

A. Rank order the five items that you consider most important among the following, giving 1 to the most important, 2 to the second, 3 to the third, 4 to the fourth, and 5 to the fifth most important, leaving four choices blank.
<table>
<thead>
<tr>
<th>Service Type</th>
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<tbody>
<tr>
<td>School nurse services</td>
</tr>
<tr>
<td>School social work service</td>
</tr>
<tr>
<td>Summer camp opportunities provided by the community</td>
</tr>
<tr>
<td>Alateen</td>
</tr>
<tr>
<td>Community recreational services (i.e. YICA)</td>
</tr>
<tr>
<td>Child welfare services</td>
</tr>
<tr>
<td>Alcohol treatment centers</td>
</tr>
<tr>
<td>Clergy</td>
</tr>
<tr>
<td>School psychologist</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

4. List below any methods that you have used to help such children.
APPENDIX C

COVER LETTER TO COLLEGES AND UNIVERSITIES
Dear Sir:

Under the sponsorship of the Michigan Department of Health, I am engaged in a study of alcohol education in the elementary and junior high schools of Michigan. That this is an important concern is reflected by the requirement for education about alcohol in Section 340.364 of the General School Laws.

To continue my research, I need information concerning the preparation for alcohol education which Michigan's teachers receive. Each school in the state of Michigan which recommends students for teacher certification is being contacted by letter and questionnaire to gain information concerning ways in which institutions of higher education are attempting to prepare prospective teachers to teach about alcohol.

Enclosed is a short questionnaire concerning possible ways in which your school may be offering education about alcohol. Please complete it and return it in the stamped, self-addressed envelope. With your cooperation, I hope to have a 100 per cent return, which is important for drawing valid conclusions from this study. Your efforts will be appreciated.

I will be happy to supply you with information about the findings of this study, or with other information about alcohol education if you desire either. Please indicate any specific requests that you have when you return the questionnaire.

Sincerely yours,

Calvin Hoogstra,
Alcohol Studies Fellow
Name of your institution ____________________________

Here is a list of some possible ways of offering alcohol education to prospective teachers. Please indicate all methods that are used in your school.

Do you offer:

1. A specific course in alcohol education in the College, School or Department of Education? Yes ___ No ___

2. A course about alcohol in some non-Education department? If yes, please name the departments and courses: Yes ___ No ___

3. Study about alcohol in health education courses? Yes ___ No ___

4. Study about alcohol in physical education courses? Yes ___ No ___

5. Describe below any other ways your school has of disseminating education about alcohol.