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PRACTICES IN SAFETY EDUCATION IN THE SCHOOL SYSTEMS OF SELECTED CITIES IN THE UNITED STATES

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PRACTICES IN SAFETY EDUCATION IN THE SCHOOL SYSTEMS OF SELECTED CITIES IN THE UNITED STATES

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DEDICATION

This thesis is respectfully dedicated to my wife, Lillian O. Gilliland, who has been a constant inspiration and guide to me.

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Thanks is also due to the chief of police in each of these cities for supplying information used in this study.

Lonnie Gilliland, Sr.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

PRACTICES IN SAFETY EDUCATION IN THE PUBLIC SCHOOLS OF SELECTED CITIES IN THE UNITED STATES

CHAPTER I

INTRODUCTION

Background of the Problem

Accidents of all kinds cause a tremendous drain on the human resources of this nation. Each year approximately 100,000 fatal accidents occur and well over 10,000,000 persons are injured from the same cause. During each twenty-four hour day, one person is involved in a fatal accident every five and one-half minutes and one is less seriously injured every three seconds. According to the United Census Bureau, accidents take more lives in the one-to-thirty year age group than any disease. Eleven thousand three hundred eighty school-age pupils lost their lives because of accidents during 1953.[1]

The annual costs of accidents to the United States in 1953 were $9,700,000,000. These costs include wage losses of $3,300,000,000; medical fees and hospital expenses,

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[1]National Safety Council, Statistical Division, Accident Facts (Chicago: 1954), p. 4.

$700,000,000; administrative and claim settlement costs of insurance, $1,700,000,000; property damage in motor vehicle accidents, $1,600,000,000; property destroyed by fires, $865,000,000; and property destroyed or production lost due to work accidents, $1,500,000,000.[1]

This tragic situation should be of some concern to educators. Any integral part of the activities of the community should have a place in the school program.[2] It is the responsibility of the school to contribute, as much as possible, to happy and useful living in a democratic society. The school has the opportunity of reaching more children than any other agency in the community. Also, the compulsory attendance laws require all children to attend school until they have reached a specific age. The schools have a responsibility for providing a safe environment for pupils as well as an educational program in safety that meets the needs of all of them at the various grade levels.

Safety education is the part of an educational program which helps an individual to grow and to develop the qualities which are essential for the safe participation in worthwhile activities. Safety is substitutional;[3] it

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[1] Ibid., p. 4.

[2] American Association of School Administrators, Safety Education, Eighteenth Yearbook (Washington: National Education Association, 1940), p. 44.

[3] Ibid., pp. 18-23.

prepares the individual for having good adventures rather than poor ones. Its purpose is to enrich life through an increase in quality and amount of adventure. There are opportunities for more adventures and, therefore, far greater intrinsic hazards in the world today than ever before. These hazards can be overcome mostly through good safety education. One should always take all the precautions possible, thus reducing the element of danger. The survival of the fittest has been the survival of the safest. Man must learn to master his environment. Education should teach us not only how to meet life, but how to direct and use it.

The Problem

The problem of this study was to make an investigation of the recommended practices which should be observed in an accident prevention program in the schools. The investigation should also show what the current practices in safety were in the school systems of 56 selected cities of the United States during the years 1952 to 1955. The geographical location of these cities is shown in Figure 1.

The 56 cities in this study included at least one from each state in the United States. They were in the 200,000 to 400,000 population bracket as listed by the National Safety Council for the Traffic Safety Inventory Contest. The principal reason for choosing these cities was because Oklahoma City, Oklahoma was in the same population

bracket with them. Since the person who made this investigation was responsible for establishing and directing the total safety education program in the public schools of Oklahoma City, it was believed much help could be obtained from such a study for use in the local safety program.

The cities used were as follows:

Atlanta, Ga.
Baltimore, Md.
Birmingham, Ala.
Boise, Idaho
Burlington, Vt.
Cambridge, Mass.
Casper, Wyo.
Charlotte, N. C.
Columbia, S. C.
Concord, N. H.
Dallas, Texas
Dayton, Ohio
Denver, Colo.
Des Moines, Iowa
Fort Worth, Texas
Grand Forks, N. D.
Grand Rapids, Mich.
Great Falls, Mont.
Green Bay, Wis.
Hartford, Conn.
Huntington, W. Va.
Indianapolis, Ind.
Jackson, Miss.
Jacksonville, Fla.
Jersey City, N. J.
Kansas City, Kan.
Kansas City, Mo.
Little Rock, Ark.
Long Beach, Calif.
Louisville, Ky.
Memphis, Tenn.
Miami, Fla.
Norfolk, Va.
Oklahoma City, Okla.
Omaha, Nebr.
Peoria, Ill.
Phoenix, Ariz.
Pittsburg, Pa.
Portland, Maine
Portland, Ore.
Providence, R. I.
Reno, Nev.
Richmond, Va.
Rochester, N. Y.
San Diego, Calif.
Salt Lake City, Utah
Santa Fe, N. M.
Seattle, Wash.
Sioux Falls, S. D.
Shreveport, La.
St. Paul, Minn.
Syracuse, N. Y.
Toledo, Ohio
Tulsa, Okla.
Wilmington, Del.
Worcester, Mass.

The facets of the safety education program included in this study were the historical background of the safety movement, protection that was provided for school children in the proximity of the school, instructional procedures and areas of safety included in the curriculum, type of teacher-

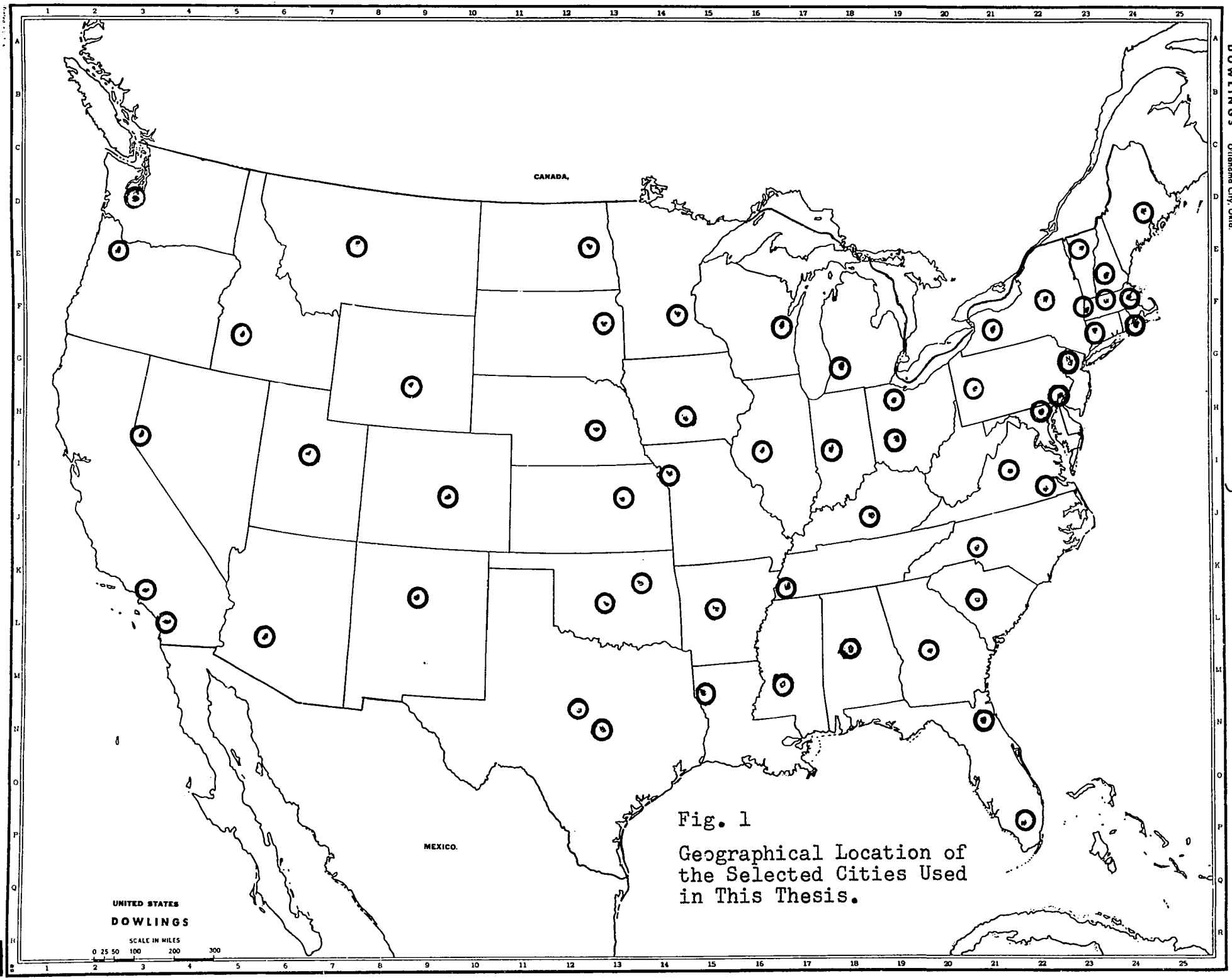

Fig. 1

Geographical Location of the Selected Cities Used in This Thesis.

DOWLINGS
637-9-11 West Grand
Oklahoma City, Okla.

training program provided by the school systems, accident reporting by the schools, kind of services furnished by non-school organizations and agencies and the extent to which these school systems used them, and the fire-exit drills in schools. Special emphasis was given to administrative and instructional practices and to the utilization of services from non-school organizations and agencies.

It is hoped that the facts obtained will serve as a source of information and guidance to those who are in a position to establish and direct a school safety program.

Procedure

The information used in this study was collected from several sources. The data on the types and kinds of protection provided for children in the proximity of the schools were obtained by the use of a questionnaire which was sent to the chief of police in each of the fifty-six selected cities. All of the questionnaires were filled in and returned by these officials. These data were tabulated and compared with the National Recommendations of the Public Roads Administration.

The data relative to safety education in the school curriculum were obtained by a questionnaire which was sent to the superintendent of schools in each of the selected cities. Fifty-one of the 56 school superintendents returned the questionnaire. Five did not return the questionnaire.

These data were tabulated to determine the current practices in relation to methods of teaching safety, areas of safety included in the curriculum, and the kind of in-service training program that was provided by these school systems for teachers of safety.

The data relative to accident reporting by schools and the services of non-school organizations and agencies, were obtained by a questionnaire directed to the superintendent of schools in each of these cities. Fifty-four of them returned the questionnaire. Two did not return the questionnaire.

The facts concerning the fire-exit drills in schools were obtained by asking each superintendent of schools in these cities for a copy of the current fire-exit drill regulations that were used by the schools. Fifty-four school superintendents sent copies of these current regulations. Two did not send the regulations. The data tabulated from these regulations were compared with the National Recommendations of National Fire Protective Association.

CHAPTER II

HISTORICAL BACKGROUND FOR SAFETY EDUCATION

Early Attitudes toward Safety

Safety Education had its beginning long before the dawn of history, when small family groups were forced to find shelter in caves. These people fought against the relentless forces of nature. Survival was a matter of anticipating dangers and meeting them skillfully.

Progress in accident prevention has been greatly handicapped all down through the ages by selfishness and greed. It was formerly believed that accidents were predestined, that they were the price we must pay for progress.

Education for safe living has always been vital and continues to be so.[1] In recent years man has become his own worst enemy. Through education the human mind has been developed to where man has discovered and invented mechanisms of various kinds that take the lives of approximately 100,000 Americans, annually.[2]

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[1]Herbert J. Stack, Elmer B. Seibrecht, and J. Duke Elkow, Education for Safe Living (New York: Prentice-Hall Inc., 1940), pp. 20-23.

[2]National Safety Council, Statistical Division. Accident Facts (Chicago: 1954), p. 5.

None of us can feel smugly that instruction in safety education is ever finished. It is not, it never will be. As rapidly as adequate methods are evolved to meet present situations, a new set of conditions will have arisen; for that is the nature of the mechanized society in which we live.[1]

As conditions change and new hazards are created, the problem of obtaining increased knowledges and developing proper attitudes, habits, skills, and emotional stability that prevent accidents becomes extremely difficult. All community groups must share in this all-important problem if an improvement is to be made in the present accident situation.

Industry Pioneers the Safety Movement

Public consciousness of the need for some control of accidents was first realized because of the terrible working conditions of the industrial workers in Europe during the eighteenth century. Because of the expansion of industry in England, men and women flocked from the agricultural areas into the cities, searching for new employment. People who had pursued their trade and crafts in the home or small workshops were now working under crowded and hazardous conditions. Accidents and disease took the lives of many.

Most of the employers were not concerned about these

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[1]Don Matthews, "Research," The Journal of Educational Sociology, New York (Dec. 1951), 229.

awful conditions. They knew that labor was plentiful and when a workman was injured another was standing by to take his place.

The injured had no recourse to the law. He could sue the employer on the charge of negligence, but the burden of proof rested on the injured person. Most of the cases were decided in favor of the employer because he was able to convince the courts that the employee had contributed to his own injury.

Women and children were employed in large numbers during this industrial expansion. They were subjected to much suffering and abuse. This drastic treatment by employers finally aroused the public to action.

Laws were enacted in 1802 in England to improve working conditions and to shorten the hours of labor. This was followed by government factory inspection in 1833.

The "Great Factory Act," which required the safeguarding of all moving machinery, was passed eleven years later. England's first Compensation Act was passed in 1897, which gave adequate redress for physical suffering and financial loss.

The living conditions in the United States were much better than those in Europe. However, the accident toll became steadily worse, with thousands of workers being killed and many more injured.

Industrial leaders had not given any time to solving

the accident problem. They accepted the premise that loss of life and limb was the price that must be paid for progress.

The steel industry, which had piled up the greatest accident records, was credited with the first activity in plant safety. In 1906, the United Steel Corporation issued instructions to the effect that every plant make optimum effort to prevent injury to workmen. Money for this expenditure was authorized by the company.

The employer later learned that, contrary to his former belief, accident prevention increased industrial efficiency. These employers had learned that accidents were caused, and that with concentrated and appropriate methods, they could be reduced.

The Employer's Liability Laws prompted the industrialists to seek coverage by insurance against injuries to workers. This step gave impetus to the improvement of working conditions. While protecting the interests of their companies, insurance inspectors were able to expand their work to the extent that they were allowed to help in the educating of the workers.

The Workmen's Compensation Laws placed a definite responsibility on management. Great Britain passed a workmen's compensation act in 1897. Germany had actually pioneered a compensation act covering sickness only. France and Italy passed similar laws in 1898. Maryland was the

first state in the United States to enact this legislation, but the law was inadequate and had little effect. New Jersey's law, passed in 1911, is the oldest now in force in the United States.

Some of the first mechanical safeguards were as follows: the Locomotive Steam Whistle, 1833; the Westinghouse Air Brake, 1868; and the Automatic Coupler, 1885.[1]

Disasters Show Need for Safety Education

Disaster and tragedy have caused many important advances in safety in this country. One example is the Great Chicago Fire on October 8, 1871, which took the lives of 200 persons and caused a large amount of property damage. The people of Chicago realized that this great catastrophe was not an Act of God, but was due to their own negligence. Many hazardous conditions had been known to exist prior to the fire. Building codes and fire-control regulations had been ignored.

Other tragedies which have awakened the public to action are as follows: Chicago Iroquois Theater Fire, the Johnstown Flood, the Morro Castle Fire, the school explosion in New London, Texas, the Texas City disaster, the Winecoff Hotel Fire, and many others. Each of these has brought about safeguards and greater public attention to the accident

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[1]Herbert J. Stack, Elmer B. Seibrecht, and J. Duke Elkow, op. cit., pp. 4-5.

problem. The daily accident toll in our country should be viewed as a great disaster.

Safety education[1] has proved to be not only a barometer of good management, but has brought an increase for human and emotional appeal that otherwise might not have come. Today industrial safety is on the way toward disappearance as a separate activity. It is taking its place as an effective element in the science of management. The industrial worker is learning how to use tools more safely and more effectively. The relationship between safety and efficiency, which has proved to be significant in industry, no doubt will be just as helpful in the other fields.

The problem of the factory and railroad were relatively easy, because in each of these fields there was centralized executive control that made it possible to make policies and put them into effect as soon as executive approval was received. Some other fields lacked this organization. This presented the chance for testing the effectiveness of democratic procedures. The problem then becomes one that must be educational. The schools should be responsible for developing proper attitudes of mind and for stressing the technics of safety in pupils. The public also needs to be made aware of the seriousness of the accident problem.

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[1]American Association of School Administrators, Safety Education, Eighteenth Yearbook (Washington: National Educational Association, 1940), pp. 12-27.

The possibilities for solving such problems concerning the public must also be the concern of education.

The Association of Iron and Steel Engineers called the first Cooperative Safety Congress. This Congress met in Milwaukee in 1912. Action at this meeting led to the organization of the National Safety Council, the first permanent body with a program devoted entirely to the prevention of accidents. The membership of this council was made up of representatives of industrial corporations, government departments, and insurance companies. This first council was called the National Council for Industrial Safety. The council expanded the scope of its activities to include the field of public safety.

Industry had found that engineering, alone, would never solve the problem of accident prevention. It realized that education of the worker in safe work habits and the developing of proper attitudes were the most essential factors.

The question was then raised, why not include safety instruction in the general program of education? Men of vision began discussing this question soon after the organization of the National Safety Council, and it was recurrently brought up at each Annual Congress from 1913 to 1917.

Improved and expanded means of transportation made public safety more important. The great increase in numbers of automobiles on the streets and highways resulted in an

alarmingly high rate of accidents. Because of the thousands of school children who were victims of accidents, the schools could no longer ignore this tragic situation.

Pioneer Efforts in School Safety

Two outstanding leaders[1] in the field of safety education, Albert W. Whitney and E. George Payne, were responsible for inspiring and guiding the early efforts of programs of instruction in safety. Dr Payne, then president of Harris Teachers' College in St. Louis, through extensive study proved that safety education could be effectively correlated with every subject in the curriculum. Many teachers who visited the school were also convinced that the plan would work. However, many administrators objected to this plan on the grounds that additional money and teachers would be needed.

A. W. Whitney, Associate and General Manager of the National Bureau of Casualty and Surety Companies, was determined to launch the program of safety instruction on a positive and constructive basis. He was successful in securing financial support to develop materials and to supply advisory service. His philosophy of "safety for more and better adventures" captured the interests of educators, industrialists, and businessmen alike. This was in a great measure

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[1]Herbert J. Stack, Elmer B. Seibrecht, and J. Duke Elkow, op. cit., pp. 6-7.

responsible for the survival of the movement in the schools.

The Education Division, now the School and College Division, was established by the National Safety Council, under the leadership of chairman E. George Payne, Council Vice-President Albert W. Whitney, and the following educators: Charles H. Judd, William McAndrew, A. B. Meredith, Harold Rugg, Zenos O. Scott, Payson Smith, Ellwood P. Cubberley, Stephen P. Duggan, Burton P. Fowler, and Thomas W. Gosling. Field services were established, publications issued, and activity programs were developed in many cities.

Experimental work indicated that safety instruction in the secondary school could best be included in such courses as civics, sociology, chemistry, industrial arts, home economics, and other courses in the curriculum. Because of the large number of accidents in sports, physical education offered an excellent approach to safety instruction. The program of safety education did not progress very rapidly in the high school until the inception of the driver education program.

Since World War II, driver education had grown rapidly until there were 8,734 high schools in the nation offering instruction in driving.[1]

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[1]Association of Casualty and Surety Companies, Report of the Seventh Annual National High School Driver Education Awards Program (New York: Casualty and Surety Companies, 1954), pp. 42-43.

First National Conference on Driver Education[1]

The first National Conference on High School Driver Education was held at Jackson's Mill, West Virginia, October 2-5, 1949. This conference was planned by the National Commission on Safety Education of the National Education Association, Washington, D. C.

Forty-five states were represented at the conference by one hundred and fifty persons. These persons were from state departments of education, colleges and universities, city and county school systems, the National Safety Council, and other organizations interested in the improvement of the driver education program. All conferees were present by invitation.

The sponsors of the conference were: National Council of Chief State School Officers, National Association on Safety Education, American Association of School Administrators, Department of Rural Education, National Association of Secondary School Principals, and American Association of Health, Physical Education, and Recreation.

The purpose of the National Conference on High School Driver Education was to develop a set of policies and recommendations that could be used as a guide for improving and expanding the driver education program in the high schools

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[1]William H. Foltysek, "Jackson's Mill Grinds," Safety Education Magazine, National Safety Council, Chicago (Jan. 1950), 11-40.

throughout the United States.

The conference made several recommendations to strengthen and improve the driver education program. Among the recommendations made by the conference delegates and approved by the conference were; (1) that an effective program of high school driver education should include not only proper driving techniques, but also, the development of a general sense of responsibility in the young driver, (2) specific instructional suggestions were not considered advisable at this time because of the variation in traffic regulations, but general areas of instruction were considered necessary, (3) contests which pitted the skill of one individual against another as an instructional method should be discouraged, (4) commercial supplementary material for use in the high school driver education program should be used only when it had educational value for students, (5) there should be no legislation that would require schools to provide driver education, (6) financial support for driver education should come from the same sources as those that support the school's total program, (7) a well qualified person should be designated, in both local school systems and education departments, to be responsible for the safety education program, including driver education.

Other recommendations adopted by the conference were: the driver education program should include both classroom and behind-the-wheel instruction; the driver education

program should be a regular part of the curriculum; the minimum time for a complete program should be 45 to 60 hours, with an average minimum per student of 30 hours of classroom instruction and six hours of behind-the-wheel practice. The teacher education program for prospective teachers of driver education should be improved relative to the qualifications, preparation, and certification. There is a need for constant evaluation and research in the field. The conference strongly urged the cooperation of research centers and research-minded individuals to appraise the many unanswered problems in the field of driver education.

National Conference on Safety Education in Elementary Schools

The needs which gave rise to the National Conference on Safety Education in the Elementary School was the realization that attitudes and abilities, the patterns of thought, and the action of adults which contribute to safe living have their beginning in early childhood.[1] For this reason, programs of safety education in the elementary school are of great importance. Elementary children need to learn how to cope adequately with the hazards to which they are exposed.

Several organizations belonging to the National Education Association sent representatives of their group to

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[1] National Commission on Safety Education, They Found a Way (Washington: National Education Association, 1953), p. 3.

serve on a planning committee to Fredricksburg, Virginia in 1951 to plan for the conference on safety in elementary schools.

The conference was held at Bloomington, Indiana August 18-22, 1952, for persons interested in improving and expanding safety education in the elementary schools.

Delegates to the Bloomington Conference came only by invitation. The persons in attendance included the following: representatives of the National Association for Curriculum Development and the Commission on Safety Education of the National Education Association, representatives of Teacher-Training Institutions, County Superintendents, County Supervisors, State and Local Directors of Safety Education, General Supervisors, Elementary Principals, and Elementary Teachers.

Other organizations represented at the Bloomington Conference were, National Parent-Teacher Association, National Safety Council, U. S. Office of Education, National Fire Underwriters Association, Girl Scouts, Boy Scouts, State Federation Clubs, Federal Civil Defense, Casualty and Surety Companies, American Automobile Association, Automotive Safety Foundation, U. S. Children's Bureau, American Academy of Pediatrics, American Junior Red Cross, International Chiefs of Police, and Society of Safety Engineers.

When the reports and conclusions of the various discussion groups had been compiled, it was felt that a mere

listing of the outcomes could not convey effectively the thinking of the group that met at Bloomington. Therefore, to add vividness and meaning to the outcomes they have been presented in fictionalized form in the book entitled, They Found a Way.[1]

Second National Conference on Driver Education

The second national conference on driver education was held at the Michigan State College in East Lansing, Michigan, November 15-18, 1954. The three-day conference, administered by the National Commission on Safety Education, was called to evaluate and to revise the policies and recommendations which had been formulated at the first national conference in 1949.

Two hundred twenty-five selected representatives were present by invitation. Each representative had been chosen because of his interest or his ability to contribute to the driver education program. Among the delegates were classroom teachers, school administrators, college professors, officials of state departments, and representatives from some 30 national organizations.

The topics discussed at the conference were secured by sending a questionnaire to each potential participant, several months in advance of the conference, and asking each of them to submit topics that they would like to have

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[1]Ibid., p. 7.

discussed.

Six specific areas, with three groups working on each area, were considered. They were: driver education for adults and out of school youth; general supervision, program standards, and teacher certification; driver education for college students; research in driver education; preparation of driver education teachers; and driver education for secondary school students.[1]

The conference was conducted on a workshop basis, with a leadership team in charge. Each group averaged from 12 to 14 members. Six work sessions were held.

The recommendations and policies approved by members of the second national driver education conference were: (1) synthetic training devices should be used only as a supplement to the basic experiences of behind-the-wheel driving; (2) teen-age conferences were a good method to use for changing the attitudes of young drivers and should be encouraged; (3) educators should utilize the services of community groups in the driver education program; (4) a national agency should be designated to complete a list of needed research topics in driver education, distribute the list, stimulate interest in research, and publish the findings; and there should be more and better driver education

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[1]Russell Brown, "Second National Conference Maps Route of Driver Education Improvement," Safety Education Magazine, Chicago: National Safety Council (Feb. 1954), 18-19.

courses in college and universities to improve and increase the qualifications of high school driver education instructors. The in-service programs suggested by the conference for schools and colleges were: extension courses, seminars, conferences, clinics, institutes, workshops, and more advanced courses in driver education.

This conference went on record as re-affirming the statement made at the first conference, which was held at Jackson's Mill, West Virginia, that continuous evaluation of the driver education program was of utmost importance.

CHAPTER III

PROTECTION FOR CHILDREN IN THE PROXIMITY OF SCHOOLS

These data relative to the protection provided for children were obtained by use of a questionnaire which was sent to the chief of police in each of the selected cities. Later supplemental information on some points which had been overlooked originally was obtained by follow-up letters. All of these cities replied to both questionnaires. This would seem to indicate that the police department in each of these cities has an interest in the problem.

All of the cities indicated that some kind or type of protection is provided for school children enroute to and from school. The kinds and types of protection afforded are usually referred to as crossing guards, markings, signs, and signals.

Crossing Guards

The replies show that crossing guards are used in all of these cities. They consisted of regular police, safety patrol, and/or special crossing guards. Special crossing guards are employed to serve only for the purpose

of helping pupils to make safe crossings enroute to and from school. In the cities where special crossing guards were employed, men are used in 15 cases; women in 9 cases, and both men and women in 11 of the cases. Five of the cities indicated that special crossing guards are used but did not state which kind is used for this. Table 3.1 shows the type of crossing guards used and the number of cities that use each kind.

TABLE 3.1

TYPE OF CROSSING GUARDS USED IN 47 CITIES IN THE UNITED STATES

Number of cities	Crossing guards used
34	Special crossing guards
9	Safety patrol only
3	Regular police only
1	Regular police, safety patrol, and special guards
Total 47	

Salaries for crossing guards. The salaries of the special crossing guards and the regular police were paid by the city in 37 cities and by some other organization in the other cities where they are used. The nine cities which used the safety patrol for crossing guards did not incur any expense for this job.

Proper placement of the crossing guards. The school

crossing guards should be placed so as to give protection to the largest number of pupils at hazardous crossings. Some cities have developed a formula to use as a guide for deciding where the crossing guards should be placed to give the most protection. For example, the city of Chicago has adopted the following formula: When there are 0-125 cars per hour that pass a location where children cross a street, education in how to make safe crossings is sufficient protection; at pedestrian crossings where 126-350 cars per hour pass, education plus the services of a safety patrol is sufficient protection; and at pedestrian crossings where more than 350 cars per hour pass the location, an adult crossing guard is needed.[1]

The data in Table 3.2 show that the location for crossing guards was determined by the representatives from many organizations and agencies in these cities. Better observance is usually obtained when community groups share in making a decision of this kind. The local police made or shared in the decision in most of the cities. It was also shown that school officials shared in deciding the location of crossing guards in 15 of these cities. School officials are in a position to know where the crossing guards can be placed to serve the largest number of pupils at the most hazardous crossings and should assist others in this

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[1]Chicago Motor Club, School Crossing Protection (Chicago: Chicago Motor Club, 1953), pp. 1-8.

important job.

TABLE 3.2

ORGANIZATIONS IN 49 CITIES THAT DECIDE THE LOCATION OF THE CROSSING GUARDS

Number of cities	Organizations
14	Local police
7	Local safety council
6	Traffic engineer
4	School officials
4	Traffic engineer and local police
4	Traffic engineer, local police, and school official
3	School officials and local police
1	Local police, traffic engineer, and school officials
1	Local police and local safety council
1	Local police, traffic engineer, school officials, and local safety council
1	Local police and parent-teacher association
1	Local safety council and school officials
1	Local police, traffic engineer, local safety council, and parent-teacher association
1	Local police, school officials, and local safety council
Total 49	

Crosswalks

The National recommendations show that the crosswalks facilitate pedestrian cooperation in the observance of traffic regulations. Pedestrians should know exactly where they are to cross the street and should feel reasonably secure, not only against the vehicles approaching the intersection, but also against those that are turning within it.

The cross-walks should be marked at all intersections where there is conflict between vehicular and pedestrian movement. Marked cross-walks should also be provided at other appropriate points where there is much pedestrian movement, such as long loading islands, where pedestrians are permitted to cross between intersections, or where pedestrians could not otherwise recognize the proper place to cross.

Cross-walks should be solid white or yellow lines, marking both edges of the area. The lines should be not less than four inches nor more than twelve inches wide.[1] However, if no advance "stop line" is provided, it may be desirable to increase the width of the cross-walk lines on the approaching side to as much as twenty-four inches. This will add to its visibility for the motorists.

The width of the cross-walk between lines is usually determined by the width of the sidewalks which connect them. The width between lines should in no case be less than six feet.

The data from the chief of police show that all of the selected cities in the United States used in this study provided cross-walks for pupils to use enroute to and from school.

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[1]American Association of State Highway Officials Institute of Traffic Engineers, Manual on Uniform Traffic Control Devices for Streets and Highways (Washington: Public Roads Administration, 1942), pp. 91-92.

Materials that are used for cross-walks. Lacquer, paint, and plastic strips are used for marking cross-walks. This study shows that 55 of these cities used paint or lacquer for cross-walks and that five of them used the plastic strips in addition to using paint and lacquer.

Paint and lacquer wear off in a short period of time and must be painted or lacquered two or three times per year to serve the purpose for which they are used. Officials who are responsible for installing them are experimenting with a new material, small plastic strips, in an effort to find a material which will be more permanent. Oklahoma City has been using some of the plastic strips for the past four years in the proximity of the schools. These have proved to be much more lasting than paint and lacquer when they are properly installed. The best time to install them is during the summer when the pavement is hot. The heat causes them to set or shape to the pavement when it is hot and insures a more permanent installation. Much care is necessary for installing them correctly.

The color of cross-walks lines may be either yellow or white. The replies in this study show that 33 of these cities use white for the color of cross-walks and 15 use yellow. Eight cities that provide cross-walks did not indicate which color is used.

Thirty-two of these cities place the cross-walks at intersections only. Twenty-three use them at the inter-

section and for mid-block crossings. Most traffic engineers feel that cross-walks should be placed at mid-block only on one-way streets.

There are two schools of thought concerning the placement of cross-walks. Some believe they should be used only at intersections, others believe that each situation should be surveyed and studied to see which location will serve the most pupils to the best advantage.

Three factors to consider in locating cross-walks are: geographical location, an ordinance which would make it illegal to park adjacent to the schoolground, and pick-up drives which might be provided for parents to use when picking up their children at the school. Cross-walks should be placed so that motorists will see them for at least one hundred feet in each direction. When the ordinance prohibits parking adjacent to schoolgrounds, cross-walks should be provided for pupils to use in making crossings to the opposite side where they can be picked up. When pick-up drives are provided, the cross-walks should be placed at some other locations. This will help to separate the pedestrian traffic from the vehicular traffic, thus making a safer situation for each.

Forty-one of these cities have ordinances which make it illegal to park adjacent to the schoolgrounds. Where such a restriction is in force, it is usually good safety practice to place cross-walks in such manner that they will lead

directly from the entrances to the grounds to the opposite side of the street for use by those pupils who are to be picked up by their parents at dismissal time.

Deciding the location of the cross-walks. The data in Table 3.3 show that the decision relative to where cross-walks are to be installed is made by the city engineer, the traffic engineer, the local police, the school officials, and/or the parent-teacher association. In many cities the decision is made by more than one organization. The local police and the traffic engineer assume most of the responsibility in 53 of these cities.

TABLE 3.3

ORGANIZATIONS THAT DETERMINE THE LOCATION OF CROSS-WALKS IN 53 CITIES

Number of cities	Organizations
14	Local police
10	Traffic engineer
10	Traffic engineer and local police
6	Local police, traffic engineer, and school officials
4	School officials
4	Local police and school officials
2	City engineer and traffic engineer
1	City engineer
1	Traffic engineer, local police, school officials, and P.T.A.
1	Traffic engineer, city police, and P.T.A.
Total 53	

Payment of materials for cross-walks. The replies show that in most of these cities the materials that were used for installing the cross-walks were paid for by the city. In some cities the police paid for them. Since the funds for the city police department usually come from the city budget, it may be assumed here that all expenses for cross-walk material are paid for by the city. Eight of these cities did not reply to the question.

TABLE 3.4

ORGANIZATIONS THAT INSTALL THE CROSS-WALKS IN 50 CITIES

Number of cities	Organizations
27	Traffic engineer
9	Local police
7	Traffic engineer and local police
4	City engineer
2	Other (organization not given)
1	Local police, traffic engineer, and school officials
Total 50	

Installing the cross-walks. The replies show that the cross-walks are installed by the city police, the traffic engineer, the school officials, and some other organizations. In some of these cities this installation is shared in by more than one organization. The data in Table 3.4 show that the traffic engineer assumes the full responsibility for

installing cross-walks in 27 cities and that he shares in the job in eight other cities. The police assumed this responsibility in nine cities and shared in it with other groups in eight cities. The school officials shared in this with other groups in one city. Six cities did not show who does this work.

Pick-up Areas

The data in Table 3.5 show that pick-up areas were provided in 20 of these cities. Pick-up areas consisted of cut-backs, circular drives, drives across the schoolground, painted curbs, and curbs that are striped with paint or lacquer. Eight cities provided pick-up areas but did not indicate the kind that was used.

TABLE 3.5

TYPES OF PICK-UP AREAS THAT WERE USED IN 20 CITIES

Number of cities	Types of pick-up areas
6	Circular drives
6	Painted curbs
4	Cut-backs
2	Drives across the schoolground
1	Curbs striped
1	Other restricted areas
Total 20	

Design of pick-up drives. Pick-up drives may be designed to permit one or two lanes of traffic. This study shows that 17 of these cities constructed the drives wide enough to permit only one lane of traffic at a time and one city, Oklahoma City, constructed the drives wide enough to permit two lanes of traffic at a time, one lane to be used as the pick-up lane and the other to be used as a passing lane. Drives which are designed to carry only one lane of traffic do not prove to be adequate. One car can remain in a drive of this kind andprevent other traffic from having access to it. Experience has shown that oftentimes the first person to park in the drive has to wait for pupils long after the cars directly behind are loaded and ready to leave. The two-lane drives make it possible for a driver to pull over into the passing lane and leave as soon as the pupils have been picked up.

One rule should be strongly urged for two-lane drives. The lane that is the closer to the school building should always be used as the lane for the cars to be in when pupils are being picked up or discharged from the car. This plan removes any necessity for pupils having to walk across or between cars to get into other cars. All parents should be informed of the rule and their cooperation in the observance of it stressed continuously.

Special School Lights for School Crossings

Special school lights have been found to be quite effective as traffic control devices for school crossings. A special school light is a device used in the proximity of schools to give protection at school crossings. Different types of lights are in use at the present time. A standardization in type would do much to make them a more effective device. The traffic engineers are very much opposed to the use of special school lights for pedestrian crossings. The lack of standardization is no doubt the reason why they object to the use of them. It was found in this study that special school lights were used in 29 of these cities.

TABLE 3.6

ORGANIZATIONS IN 26 CITIES THAT DECIDE THE LOCATION OF SPECIAL SCHOOL LIGHTS

Number of cities	Organizations
6	City police
6	Traffic engineer and city police
4	Traffic engineer
4	Traffic engineer, city police, and school officials
2	Traffic engineer, city police, school officials and P.T.A.
1	City engineer and traffic engineer
1	Traffic engineer and school officials
1	City engineer, city police, and school officials
1	Traffic engineer, city police, P.T.A., school officials, and local safety council
Total 26	

The decision for the location of the special school lights was made by the representatives of several organizations and agencies in these cities as shown in Table 3.6 The city police took full responsibility for making the decision in some cities and shared in it in other cities. The traffic engineer assumed the full responsibility for locating them in a few cities and shared in it in others. The school officials and the city engineer assumed the least responsibility in locating these special school lights.

Expense of the special school crossing lights. The replies show that the city paid the expenses of the special school crossing lights in 22 of these cities. In one city the school system shared in the expense with the city, in another the parent-teacher association shared in this expense with the city, and in one city the parent-teacher association and civic organizations paid for the special lights.

School Signs

School signs should be used only at locations where the school building or grounds are adjacent to a street or highway and where passing traffic creates a hazard for the pupils who attend the school.[1] The school sign should be used only during the school term. It should be removed from the street at the end of each year, except where the school-

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[1] American Association of State Highway Officials Institute of Traffic Engineers, op. cit., p. 50.

grounds are used throughout the summer for play areas.

The school signs should be erected not to exceed 500 feet in advance of the schoolground or crossings used by pupils. Although a specified distance is established for the placement of school signs, there will be many instances where physical conditions will require different distances.

In some locations where the hazard is particularly great, it may be best to use a portable type sign set up in the center of the roadway. Portable signs should be used in the roadway only during the time of day when traffic hazards are the greatest for pupils while enroute to and from school. They should be placed in position a short time before the pupils are to cross and removed shortly after the crossings have been completed. Better observance of signs by motorists results when this practice is carried out.

The replies show that 55 of these cities used a special sign in advance of school zones to inform motorists that they are approaching a school.

Shapes of school signs. The manual on uniform traffic control devices for streets and highways recommends that the school sign be diamond shaped. This shape can be used very easily as a permanent type sign but not as a portable type because it occupies too much space and when used on narrow streets there is not enough room for cars to pass.

The data in Table 3.7 show the different shaped signs used in advance of school zones in these cities to

inform motorists that they are approaching a school. Shapes of signs used in these cities are diamond, octagonal, round, rectangular, conical, square, Safety Sally,[1] outline of a policeman, and a picture of a school child. The diamond shaped signs were used in more cities than any of the other shapes. The rectangular and square shaped sign ranked second in the number of cities that used them. Fifteen cities used two different shaped signs for schools and two cities used three different shaped school signs. Three cities did not reply to the question.

TABLE 3.7

SHAPE OF SCHOOL SIGNS THAT ARE USED BY 53 CITIES

Number of cities	Shapes of the school signs
13	Diamond only
9	Rectangular only
9	Square only
4	Diamond and rectangular
3	Round only
2	Round and rectangular
2	Rectangular and conical
1	Safety Sally only
1	Oblong
1	Octagonal and round
1	Diamond and round
1	Rectangular and square
1	Rectangular and a picture of a school child
1	Diamond and square
1	Diamond, round, and square
1	Round and square
Total 53	

[1]This sign is a silhouette of a school child.

Some cities used the rectangular shaped sign as a portable sign because it requires less space on the street. Where the rectangular sign was used for this purpose the longer distance is placed in a vertical position. Oklahoma City is one of the cities where this sign is in use.

Thirty-five of these cities used the same shape sign regardless of whether it was a permanent or a portable type. Five cities did not reply to the question.

Types of school signs used. Table 3.8 shows the type of school signs in use and the number of cities that used them. The two types used were permanent and portable. Some of these cities use both types. The portable sign is generally used in the center of the roadway and the permanent sign is erected on the parking.

TABLE 3.8

TYPES OF SCHOOL SIGNS THAT ARE USED BY 52 SCHOOLS

Number of cities	Types of school signs
24	... Portable and permanent
20	... Permanent only
7	... Portable only
1	... Other (not known what type this is)
Total 52	

Placing and removing the portable type signs. One of the problems which arises in the use of the portable sign is, who will assume the responsibility for placing it in the street and removing it from the street? This problem seems to be prevalent in almost every city that used them. This study shows that several individuals and organizations shared in the caring for these signs. Cities with a population of the ones used in this study cannot assign the regular police to this duty because of other assignments. Some crossings are too hazardous for the safety patrol to assume the duty of placing and removing portable signs. In still other places the use of the school custodial staff is limited because of school duties and/or an affiliation with an organization which prohibits them from doing this kind of work. The parents cannot accept the full responsibility for caring for these signs, but can assist in facilitating the use of them. The special crossing guards can assist with the signs, but they are not able to assume full responsibility for them because they may be used several blocks from the assigned location of the special guards.

The data in Table 3.9 show who is responsible for placing and removing these portable signs in the selected cities. They were cared for by the special crossing guards, the school custodian, the school safety patrol, and the parents. In some cities all of the groups shared in caring for the portable signs. The police assumed full

responsibility for this job in some cities and assisted in the care of them in others. The safety patrol assumed all of the care for these signs in some cities and assists other organizations in others. The school custodian either assumed the care of these signs or assisted others in the care of them in some cities. Three cities did not show who cared for portable signs.

TABLE 3.9

PERSONS AND ORGANIZATIONS WHO TAKE CARE OF THE PORTABLE SCHOOL SIGNS IN 28 CITIES

Number of cities	Persons and organizations
7	School safety patrol only
6	Regular police only
4	School custodian only
4	School police and safety patrol
3	School police only
1	Regular police, school police, custodian, safety patrol, and parent
1	Custodian, safety patrol, parents, and others
1	Regular police, school police, custodian, and safety patrol
1	Regular police, custodian, and parents
Total 28	

Colors used for school signs. Table 3.10 shows the color combinations used on school signs and the number of cities that used each of them. The colors were black letters on a white background, black letters on a yellow background, and red letters on a white background. Forty cities used

the colors, black on white only. Six other cities used the black on white combination and some other color combination on signs. The color combination was not given for the other signs.

TABLE 3.10

COLOR COMBINATIONS THAT ARE USED ON SCHOOL SIGNS IN 51 CITIES

Number of cities	Color combinations
40	Black on yellow
4	Black on yellow and white on red
2	Black on white only
2	Red on white only
1	Black on white and black on yellow
1	Black on white, black on yellow, and red on white
1	Black on white and red on white
Total 51	

Forty-four cities used only one color combination for school signs, six cities used two different color combinations, and one city used three different color combinations for school signs.

Who decides where the school signs are to be placed? The data in Table 3.11 show that the city police, the city engineer, the traffic engineer, the school officials, the local safety council, and the parent-teacher association decided where the school signs are to be used. In some cities more than one group assumed this responsibility.

The city police assumed full responsibility in saying where these signs were to be used in 23 cities and helped to decide where they were to be used in 15 other cities.

The traffic engineer either decided where these signs were to be used or helped others to decide.

TABLE 3.11

AGENCIES AND ORGANIZATIONS THAT DECIDE WHERE THE SCHOOL SIGNS SHOULD BE USED IN 53 CITIES

Number of cities	Agencies and organizations
23	City police
12	Traffic engineer
5	City police and traffic engineer
5	City police, traffic engineer, and school officials
1	City engineer
1	School officials
1	City police and school officials
1	City police, traffic engineer, school officials, and safety council
1	City police, traffic engineer, school officials, safety council, and parent-teacher association
1	Traffic engineer, school officials, and safety council
1	City police, city engineer, and traffic engineer
1	City police and city engineer
Total 53	

Expense of school signs. The data in Table 3.12 show that the school signs were paid for by the city, the local safety council, the civic groups, the Coca Cola com-

pany, and a local bakery. In some cities more than one agency or organization contributed to the expense of these signs. The city paid for them in 43 cities and shared in the expense in three others. The civic groups paid all the expenses for the school signs in three cities and shared in the expenses in three others.

TABLE 3.12

AGENCIES AND ORGANIZATIONS THAT PAY FOR THE SCHOOL SIGNS IN 54 CITIES

Number of cities	Agencies and organizations
43	City
3	Civic groups
3	City and civic groups
1	Coca-Cola company
1	Local bakery
1	City and Coca-Cola company
1	City, school, and safety council
1	City and schools
Total 54	

Parking Adjacent to the Schoolgrounds

The replies to this study show that 41 of these cities have an ordinance which makes it a violation to park adjacent to schoolgrounds. The principal reason for this regulation was to give protection to the pupils when they were leaving the schoolground. An unusual amount of pedestrian traffic is present at dismissal time. This creates an abnormal situation which requires that the side of the street

next to the schoolground be left free from all obstruction, including parked cars. When this side of the street is free from obstruction, pupils are able to see approaching cars and the drivers of these cars have a clear view of the pupils who are crossing the street.

The writer interviewed two taxi-cab drivers, two drivers of milk trucks, and eight drivers of other kinds of delivery service in Oklahoma City to get their opinion of the ordinance which prohibits parking adjacent to the schoolgrounds in this city. These drivers were chosen because the kind of work in which they were engaged required them to pass several schools each day in making deliveries to all areas of the city. They were asked, "Do you think the ordinance which prohibits parking adjacent to the schoolgrounds should be changed?" They all agreed that the ordinance should be left as it is. The gist was, "Keep the side of the street clear so that I can see the pupils who are leaving the schoolground to cross a street."

The Way Motorists Are Informed about Parking Adjacent to Schoolgrounds

The data given in Table 3.13 show the methods that were used to inform the motorists that they were not to park adjacent to the schoolgrounds. The methods used were by installation of signs on the parking adjacent to the schoolground and/or by painting the information on the curb on the side adjacent to the school property. The area between the

curb and the sidewalk is called the parking.

The shapes of the signs which are used to indicate no parking. The replies show that rectangular shaped signs, with the longer distance placed horizontally, were used in three of these cities, rectangular shaped signs, with the longer dimension in a vertical position, were used in 29 of these cities, and the square-shaped signs were used in four of these cities.

Most traffic engineers and police officials think that the signs are the better way of doing this job. They contend that if the information is stenciled on the curb it cannot be seen as well by the motorist. The signs installed on the post place the information in full view.

TABLE 3.13

METHODS THAT ARE USED IN 41 CITIES TO INFORM MOTORISTS THAT THEY ARE NOT TO PARK ADJACENT TO SCHOOLGROUNDS

Number of cities	Methods
29	.... Signs erected on posts
4	.... Painted curbs
3	.... Letters stenciled on the curb
3	.... Letters stenciled on the curb and signs
2	.... Painted curbs and signs
Total 41	

Legend or wording used on the signs which indicate no parking. Table 3.14 shows the legend that was used to

TABLE 3.14

LEGEND OR WORDING THAT IS USED ON THE NO PARKING SIGNS IN 27 CITIES

Number of cities	Legend or wording
3	No parking - 8:00 A.M. to 4:00 P.M.
2	No parking at anytime
2	No parking between signs
1	School no parking
1	No parking - 8:00 A.M. to 4:30 P.M.
1	No parking school days only
1	No parking 8:00 A.M. to 5:00 P.M.
1	No parking school hours
1	No parking during school hours 8:00 A.M. to 5:00 P.M.
1	No parking or standing
1	No parking school days 7:00 A.M. to 4:00 P.M.
1	No parking on this side during school hours
1	During school crossing hours
1	No parking during school hours 7:30 A.M. 4:30 P.M.
1	No parking this block
1	No parking 7:00 A.M. to 5:00 P.M.
1	No parking 7:00 A.M. to 6:00 P.M.
1	No parking 8:30 A.M. to 5:30 P.M.
1	No parking on school days 8:00 A.M. to 4:00 P.M.
1	No parking school days
1	No parking this side of street
1	No parking 7:00 A.M. to 4:00 P.M. school days Monday through Friday
1	No parking 8:00 A.M. to 5:00 P.M. Saturdays and P.M.'s excepted
Total 27	

inform motorists of the parking regulations adjacent to schoolgrounds. Twenty-seven of these cities reported that 23 different wordings or legends were used on these signs. The largest number of times the same legend is used is three.

In two cases the same legend is used by each of two cities. The other cities each use a different legend for this purpose.

The legend or wording that is used on the school signs. The data in Table 3.15 show that 51 of these cities used 50 different legends on the school signs. One city used four different legends; four cities used three; 19 cities used two; and 26 cities used only one legend. Eight cities used the word "school" on the signs; six used "slow-school zone"; five used "slow-school"; four used "school crossing"; three used "slow-school-crossing"; and the other legends or wordings were used by two or fewer of these cities.

TABLE 3.15

WORDING THAT IS USED ON SCHOOL SIGNS IN 51 CITIES

Number of cities	Wording
8	School
6	Slow-school-zone
5	Slow-school
4	School crossing
3	Slow-school-crossing
2	Cross-school-walk
2	20 mph school
2	15 Miles per hour
2	School caution
2	School slow
2	School stop crossing
2	School caution crossing
2	School 20 mph zone
2	School zone 15 mph
1	School zone 20 mph

TABLE 3.15--Continued

Number of cities	Wording
1	School zone 15 mph-7:30-4:00
1	Slow-school-crossing - 15 mph
1	Slow school children crossing
1	Slow school (placed vertically)
1	Stop when occupied
1	Stop for pedestrians
1	Children crossing
1	Speed limit in school zones 20 mph
1	20 mph speed
1	Speed 15 miles mph
1	End 15 mile zone
1	School day 8 to 9 A.M. 2 to 4 P.M.
1	Stop for foot traffic
1	School zone (the word school is shown vertically)
1	School zone 15 mph.School days
1	School slow crossing
1	S-C-H-O-O-L Zone
1	School zone (conical in shape)
1	Caution school children
1	Caution school zone
1	Caution school crossing ahead
1	No parking-School days 8:00-4:00
1	School zone speed limit 15 mph
1	School stop zone
1	School 15 mph
1	School zone use caution
1	School-children-slow-crossing
1	School zone
1	School crossing ahead
1	School-caution school crossing
1	School crossing stop when occupied
*Total 81	

*Since several cities use more than one legend the total will exceed 51.

Speed in School Zones

The data in Table 3.16 show the number of these cities that allow each speed in a school zone. Wide variations of speed were established to regulate traffic in these zones. The specified speed ranged from 10 miles per hour to 30 miles per hour. In addition to specified speeds the data show that some of these cities used such limitations as, reasonable and safe, prudent speed, safe and prudent speed, speed of the street, and slow down and use caution.

TABLE 3.16

SPEED THAT IS PERMITTED IN SCHOOL ZONES IN 56 CITIES

Number of cities	Speed
28	15 miles per hour
14	20 miles per hour
4	10 miles per hour
3	25 miles per hour
2	Reasonable and safe
1	30 miles per hour
1	Prudent speed
1	Safe and prudent
1	Speed of the street
1	Slow down-use caution
Total 56	

This study shows that 28 of these cities had a speed of 15 miles per hour in the school zones; 14 had a speed of 20 miles per hour; four cities had a speed of 10 miles per hour; three had a speed of 25 miles per hour; one, 30 miles

per hour, and the others did not use stated speeds but instead used some statement for regulating speed in school zones, such as: prudent speed, safe and prudent, and speed of the street.

Underpasses and Overpasses

The replies show that 16 of these cities had underpasses for pupils to use for making street crossings enroute to and from school. Only four of these were controlled after school hours.

Some of the problems that arise from the use of underpasses are keeping them clean, sanitary, and well lighted. These problems can be overcome usually by closing and locking the exits and entrances during the night, weekends, and holidays. Underpasses which are not well lighted sometimes create fear in small children that does more harm than the hazard would be at a common crossing.

Only four of these cities provided overpasses for pupils to use for making street crossings enroute to and from school. Overpasses are usually better than underpasses for this purpose because they are less expensive and more easily maintained and can be better supervised.

Fenced Playgrounds Adjacent to Heavily Traveled Streets

The replies show that 48 of these cities had fenced the playgrounds which were adjacent to heavily traveled

streets. The principal purpose of this fencing was to keep pupils from running into the street from play areas to retrieve articles which might have rolled or been thrown into the street and also, to help direct pedestrian traffic to crossings which had been designated for pupil use.

One-way Traffic Adjacent to Schoolgrounds

Twenty-one of these cities had one-way traffic on streets that were adjacent to schoolgrounds. Seventeen of the 21 cities had an ordinance which regulated the direction that traffic was to flow.

Nineteen cities had one-way traffic by the school during the entire day and one city had it only during the time that pupils were enroute to and from school.

Traffic on one-way streets was regulated by the use of informational signs in five cities and by the local police in two cities. The other cities did not show how this is handled.

Off-street Parking for School Personnel

Off-street parking areas for the use of school personnel helps to reduce traffic congestion on the streets which are adjacent to the school property. This study shows that 33 of the selected cities provided off-street parking areas for the cars that belonged to the school personnel.

CHAPTER IV

SAFETY EDUCATION AS IT IS INCLUDED IN THE TOTAL SCHOOL CURRICULUM

Pupils between five and 19 years of age spend an ever-increasing percent of their time under school jurisdiction. Over 50 percent of the accidents which happen to pupils in this age bracket, happen while they are at school. Teachers have a tremendous responsibility in providing for the conservation of these lives.[1]

Safety education in the schools is not to be considered apart from other areas of instruction, but as an area of education to be fitted into the school program at whatever place it meets the needs and interests of the pupils.

Modern engineering has done much toward the saving of lives and enforcement has made much progress in providing protection for all people and in devising object lessons for those who ignore the rights of others. Safety education in schools is far behind in its effort to prepare individuals

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[1]Kent H. Farley, "Safety Education--An Urgent Need," The Journal of Teacher-Education (Dec. 1952), 288-290.

in ways of living comfortably, yet safely and adventurously in this present mechanized and scientific society.

Continuous education in safe living should be provided throughout the pupil's school life, with experience and activity designed to create a respect for and an understanding of his total environment. This education should provide the individual with a broad perspective that will be conducive to safe living and the increase and enjoyment of adventure.

Repetitive instruction, in many areas of the school safety program, with continuing emphasis on personal responsibility for one's own life and property and for the lives and property of others, may well include a promise to the pupil for a long life, well lived. It also should help to insure one the opportunity for living out a full life so far as accidents are concerned.

The daily practice of safety in life activities, learning to do by doing and learning to live safely by living safely, should result in desirable habits and skills, together with improvement of attitudes and increased understandings. In no way should this lessen the enjoyment of life. Rather it should provide a better and more adequate life with the probability of accidents being reduced in direct proportion to individual safety practices.

Since it is generally believed that education in safe living can greatly reduce accidents an investigation is

being made here to determine at what grade level the emphasis is placed on this phase of the educational program. A survey was made of the school systems of the 56 selected cities. Fifty-one of them replied to the inquiry. These replies indicated that safety was stressed by some of these school systems in all grades, kindergarten through the twelfth. The data in Table 4.1 gives detailed information on the number of school systems that stressed safety at each grade level.

TABLE 4.1

GRADES IN WHICH SAFETY IS STRESSED IN 51 CITIES

Number of cities	Grades in which safety is stressed
45	Kindergarten*
51	First
51	Second
41	Third
49	Fourth
49	Fifth
51	Sixth
49	Seventh
46	Eighth
37	Ninth
39	Tenth
38	Eleventh
38	Twelfth

*It is not known how many of these school systems have the kindergarten.

The next question considered is, how is safety included in the school curriculum? This is one of the major

problems confronting most of the school officials who are interested in adding it to the school program.

The way a safety program is organized in any school system depends upon the organization of the curriculum in general and upon the conduct of other activities which comprise the school program. In some schools the safety program is established as a separate course and is given the same status in the curriculum as any other subject. In other schools, safety instruction is integrated into the existing subjects and activities in the curriculum. This instruction varies from incidental teaching in safety, as events happen, to systematic procedures, such as supplementary readings on the subject of safety. The advocates of this method for teaching safety claim that the curriculum is already so overcrowded that it is impossible to add a new subject.

Others think a satisfactory safety program can be provided through correlation with the other subjects already in the curriculum. Safety relates itself naturally and effectively to the various subjects in the curriculum and to the life activities which make up the community. Some subjects afford more and better opportunities for correlation than others. Care should be exercised to avoid forced relationships in the use of this method. Physical education, social studies, science, industrial arts, home economics, reading, and English offer frequent opportunities for

worthwhile and natural correlation with safety.

Safety may also be included in the school curriculum as a unit of study or as a unit in another course. When it is taught as a unit, the instruction is generally geared to meet the needs of a particular group of pupils. When the instruction is given as a unit in another course, it is usually given in a specific area. The driver education course is an example of the way this may be done. Some schools offer the classroom phase in connection with or as a special unit in another course.

Perhaps in no other part of the school program are there more opportunities for pupils to take an active part than there are in safety. Pupil safety organizations afford opportunities for pupils to participate in problem solving activities related to safety. These pupil organizations are known as safety patrols, safety councils, safety committees, and safety clubs.

An increase in the number of schools using pupil organizations as a means of teaching safety is evidence of their value in the over-all school safety program. Many educators believe that safety should be the concern of pupils as well as of the faculty. If safety is studied only in the classroom, pupils may get the impression that responsibility for safety belongs to adults. A democratically operated pupil safety organization will help to originate and develop many plans to improve safety conditions, plans

which have a real meaning for the participants. In addition, the pupil safety organization offers an effective way of developing leadership.

The safety patrol has been in operation since 1913. The American Museum of Safety advocated the organization of schoolboy patrols to protect children from traffic hazards while enroute to and from school. In that year, an organization was established in Tacoma, Washington and in New Jersey.[1] These patrol organizations have been expanded to all parts of the country through the special effort of the American Automobile Association and the National Safety Council.

The safety patrol program is related to the total curriculum and is an important phase of safety. While school safety patrols do not constitute a complete program of safety education, they do supplement and implement safety instruction in the classroom and serve as a highly useful device for enriching the learning experiences of pupils in life-like situations. The school patrol as a part of the school safety program can be fully justified on the basis of educational values alone. Members of the patrol usually are chosen from the intermediate and the junior high school grades.

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[1]Herbert J. Stack, Elmer Seibrecht, and Duke Elkow, Education for Safe Living (New York: Prentice-Hall Inc., 1949), pp. 364-365.

The student safety council is perhaps the most popular and the most comprehensive pupil organization in the school.[1] It can be used quite effectively in either the elementary, the junior high, or the senior high school grades. It is composed usually of representatives from the homeroom, the subject areas, and/or from other safety groups in the school. The size of the school usually determines the number of pupil representatives that each room group will have on the council. Meetings are held at regular scheduled times, under the guidance of a teacher sponsor.

Council meetings are conducted according to parliamentary procedure. They include reports on the work of various committees, items brought from the room group to the council, and a program designed to help meet the needs of the pupils in a particular school. The representatives take notes of each meeting to be used in reporting back to their homerooms, subject area groups, and other pupil groups which they represent. The minutes of each meeting are usually reproduced in quantity and a copy of them given to each member of the teaching staff.

The safety council may have several committees such as: traffic patrol, accident reporting, fire inspection, publicity, program, and playground. Each of these committees

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[1] American Association of School Administrators' Yearbook, Safety Education (Washington: National Education Association, 1940), pp. 94-96.

may have a teacher to serve as sponsor. This not only lightens the work of the school-wide teacher sponsor, but also creates interest among other members of the teaching staff by involving them in the activities of the safety council.

The safety committee or safety commission is an organization which fits into the pattern of the student council, especially in the high schools. Its purpose is to make surveys of conditions in the community and to propose remedies or solutions to the various safety problems which are found. The committee submits the proposals to the student council for consideration. The student council then develops an action program based on the committee's findings.

The safety club is usually organized on a room basis, the membership of such organization being composed of the entire room group. This organization may be patterned after the school-wide safety council. All business matters which originated in the safety council may be discussed by the safety club. Similarly, ideas which originate in the safety club may be taken to the school-wide safety council by a room representative.

Methods Used to Teach Safety in Selected Cities

The next part of this study shows the methods that were used by the selected cities of the United States to teach safety education. Fifty-one of the school systems

returned the questionnaire on the methods used at the various grade levels in the school.

Methods used to teach safety in the primary grades of these schools. The data given in Table 4.2 show that safety was taught in the primary grades of these school systems by one or more of the following methods: correlation, integration, safety club, safety committee, safety council, safety patrol, separate course, unit study, and/or a unit in another course.

TABLE 4.2

METHODS THAT WERE USED TO TEACH SAFETY IN THE PRIMARY GRADES IN 51 SCHOOL SYSTEMS

Number of school systems that used each method in these grades				
Kinder-garten	First grade	Second grade	Third grade	Methods used to teach safety
25	31	32	31	Correlation
21	27	26	26	Integration
1	2	3	3	Safety club
3	4	3	6	Safety committee
6	10	12	15	Safety council
13	23	25	29	Safety patrol
2	2	3	1	Separate course
8	11	12	12	Unit study
1	2	3	3	Unit in another course

The methods used for teaching safety by the largest number of school systems were correlation, integration, and the safety patrol. The methods used least in these grades

were the safety club and a unit in another course.

The safety patrol when used as a method for teaching safety in the primary grades in these cities was done by inviting patrol members who came into the classroom and talked with the pupils about their safety. The primary teachers gave the invitation to patrol members. This procedure is followed in many cities including Oklahoma City. Pupils in the primary grades are too immature to assume the responsibility of serving as a member of the patrol organization.

Methods used to teach safety in the intermediate grades. The data in Table 4.3 show that the methods used for teaching safety in the intermediate grades are identical to those used in the primary grades which are given in Table 4.2. However, there are some changes in the number of school systems which report the use of each method. The method used in these grades by the largest number of schools is by correlation with other subjects. The use of a safety patrol ranks second in number of school systems that use it and integration ranks third. The method used the least for teaching safety in these grades is through a safety club.

It is noted here that the use of the safety patrol as a way of teaching safety in the intermediate grades gradually increases in the number of school systems using it as the grade advances. This increase is perhaps due to the fact that pupils in these grades are being involved as members of the organization.

TABLE 4.3

METHODS THAT WERE USED TO TEACH SAFETY IN THE INTERMEDIATE GRADES IN 51 SCHOOL SYSTEMS

Number of school systems that used each method in these grades			
Fourth grade	Fifth grade	Sixth grade	Methods used to teach safety
32	31	32	Correlation
28	28	29	Integration
	1	1	Safety club
5	8	8	Safety committee
17	19	21	Safety council
28	37	40	Safety patrol
2	2	3	Separate course
13	13	14	Unit study
3	5	4	Unit in another course

Methods used to teach safety in the junior high school grades. The data in Table 4.4 show a gradual decrease in the use of the safety patrol, the safety council, and the safety committee as methods for teaching safety in the junior high school grades when compared with the primary and intermediate grades. On the other hand there was an increase in the use of some of the other methods. Teaching safety as a unit in another course showed some increase here and teaching it as a separate course showed a marked increase especially, in the ninth grade. This is no doubt due to the offering of the driver education program in this grade.

Driver education is usually taught as a separate

course in the curriculum and given the same status as other courses.

Teaching safety by correlation and integration are used by more school systems in these grades than any of the other methods.

TABLE 4.4

METHODS THAT ARE USED TO TEACH SAFETY IN THE JUNIOR HIGH SCHOOL GRADES IN 51 SCHOOL SYSTEMS

Number of the school systems that used each method in these grades			
Seventh grade	Eighth grade	Ninth grade	Methods used to teach safety
32	26	22	Correlation
28	26	22	Integration
3	3	4	Safety club
12	11	10	Safety committee
23	20	18	Safety council
32	29	21	Safety patrol
3	1	8	Separate course
15	15	13	Unit study
9	12	13	Unit in another course

Methods used for teaching safety in the senior high school grades. The data in Table 4.5 show that each of the methods listed for teaching safety was used by some of these school systems. The replies indicated an increase in the number of school systems that taught safety as a separate subject in the senior high school grades. Most school systems offer the driver education course to senior high school pupils, which perhaps accounts for the increase in the use

of this method in these grades. Teaching safety by correlation and integration still ranks as the methods used in the senior high school grades by the largest number of school systems.

A change is noted in the number of schools that use student organizations for teaching safety. More school systems use the student safety committee and fewer use the safety council at these grade levels. The increase in the use of student safety committees is perhaps due to the preference of school officials for having the student safety organization under the leadership of the student council, a most important student organization in the school.

TABLE 4.5

METHODS THAT WERE USED TO TEACH SAFETY IN THE SENIOR HIGH SCHOOL GRADES IN 51 SCHOOL SYSTEMS

Number of school systems that used each method in these grades			
Tenth grade	Eleventh grade	Twelfth grade	Methods used to teach safety
22	19	17	Correlation
23	23	21	Integration
3	5	5	Safety club
14	13	15	Safety committee
12	13	11	Safety council
13	12	11	Safety patrol
12	14	14	Separate course
11	6	6	Unit study
7	9	7	Unit in another course

Areas of Safety Included in the School Curriculum

The safety program should be sufficiently broad to include both specific and general instruction. Specific instruction should be given to meet the needs of the individual learner; general instruction should be included to give the learner an adequate understanding of the total field of safety thus supplying him with the necessary knowledge, correct habits, and proper attitudes that prepare him to live safely now and in the future. There are two criteria which generally determine the nature and scope of the school safety program. They are the activities in which pupils participate and the hazards to which they are exposed, both in and out of school.

Areas of safety included in the primary grades. At the primary level, instructional content should be concerned principally with the development of precautions which the pupils should take in school activities, in traffic, and in the home. Emphasis should be placed on the personal safety of the pupil.

The data in Table 4.6 show the areas of safety included in the primary grades are pedestrian, fire, schoolground, schoolbuilding, home recreational, bus, holiday, water, firearms, tornado, farm, civil defense, railroad, explosives, hurricane, and first aid. When an average is taken of the number of school systems offering each area in

all the primary grades, the range is from a high of 42 to less than one school system offering an area. For example, hurricane safety is offered in the first, second, and third grades of one school but is not offered in the kindergarten grades.

TABLE 4.6

AREAS OF SAFETY INCLUDED BY 51 SCHOOL SYSTEMS AT THE PRIMARY GRADE LEVELS

Number of school systems that included each area of safety in these grades				
Kinder-garten	First grade	Second grade	Third grade	Areas of safety included
15	19	15	15	Animal
22	28	28	27	Bus
6	14	15	24	Bicycle
5	7	8	9	Camping and hiking
2	5	5	4	Civil defense
0	0	0	0	Driver education
1	1	1	1	Explosives
4	7	6	6	Farm
35	43	43	41	Fire
6	7	7	7	Firearms
12	18	19	18	Fireworks
1	0	0	0	First aid
19	25	24	24	Holiday
28	36	38	36	Home
0	1	1	1	Hurricane
0	0	0	0	Industrial
35	45	44	43	Pedestrian
6	8	8	11	Plant poisoning
1	2	2	1	Railroad
21	32	31	32	Recreational
31	41	39	36	School building
31	44	43	41	Schoolground
7	8	1	8	Tornado
0	0	0	0	Two-wheeled motor vehicle
12	18	20	21	Water

Each area of safety offered in the primary grades was included by approximately the same number of school systems. However, some areas were given by a very small number of schools. For example, we find that pedestrian safety is included in these grades by more school systems than any of the other areas and hurricane safety in included by the least number of schools.

The greatest change in offerings in any area was the increase in the number of school systems offering instruction in bicycle safety as the grade advanced. The largest increase was shown in the third grade, with 24 of the school systems providing instruction in this area.

Two unusual areas were included for these grades, hurricane and explosive safety. Miami, Florida provided instruction in hurricane safety in all grades, kindergarten through the twelfth. This was no doubt due to an environmental hazard which existed in this section of the United States. Portland, Maine provided instruction in safety as it relates to explosives. This instruction was given in all the grades in the school. The reason for this area being included in the curriculum of this school system is not known.

Areas of safety included in the intermediate grades. At the intermediate grade level the pupil's personal safety should be considered further and his responsibility for the safety and welfare of the group should be stressed.

The areas of safety included in the curriculum of the intermediate grades and the number of school systems offering each area are given in the data in Table 4.7.

Seventy-five percent or more of these school systems offered instruction in schoolground, bicycle, fire, and pedestrian safety. Fifty to 74 percent offered instruction in home, school building, recreational, water, bus, and holiday safety. From 25 to 49 percent offered instruction in fireworks, camping and hiking, plant poisoning, animal, and firearms safety. Less than 25 percent of them provided instruction in farm, tornado, civil defense, explosives, railroad, hurricane, industrial, and two-wheeled motor vehicle safety. The greatest increase shown when compared with other areas was the number of schools giving instruction in bicycle safety. The data in Table 4.7 show that 38 of the school systems offer instruction in bicycle safety in the fourth grade with an increase to 44 offering it in the sixth grade. The bicycle affords cheap transportation for pupils enroute to and from school and the need for good instruction in the proper use of it is essential in an accident prevention program.

Areas of safety included in the junior high school grades. At the junior high school level the individual's personal, as well as group safety should be expanded and continued. The data in Table 4.8 show the number and the areas of safety that are included by the school systems in

TABLE 4.7

AREAS OF SAFETY INCLUDED BY 51 SCHOOL SYSTEMS AT THE INTERMEDIATE GRADE LEVELS

Number of school systems that included each area of safety in these grades			
Fourth grade	Fifth grade	Sixth grade	Areas of safety included
14	12	13	Animal
29	26	30	Bus
38	42	44	Bicycle
16	19	21	Camping and hiking
4	3	3	Civil defense
0	0	0	Driver education
1	1	1	Explosives
3	5	4	Farm
42	41	43	Fire
14	11	13	Firearms
21	20	20	Fireworks
0	0	0	First aid
27	25	26	Holiday
39	38	36	Home
1	1	1	Hurricane
1	1	1	Industrial
41	38	39	Pedestrian
17	20	20	Plant poisoning
2	1	1	Railroad
34	36	36	Recreational
37	36	37	School building
42	42	44	Schoolground
8	10	9	Tornado
0	0	1	Two-wheeled motor vehicle
29	30	33	Water

these cities.

The areas of safety instruction included in the junior high school grades by the largest number of school systems were fire, bicycle, recreational, pedestrian, water, home, school building, schoolground, bus, plant poisoning, camping and hiking, firearms, fireworks, industrial, and holiday. Other areas were taught by fewer schools. When an average was taken for the three grades, seven through nine, it was found that from 50 to 75 percent of these schools offered instruction in fire, bicycle, recreational, pedestrian, and water safety. From 25 to 49 percent offered instruction in home, school building, schoolground, bus, plant poisoning, camping and hiking, firearms, fireworks, industrial, holiday, and two-wheeled motor vehicle safety. Less than 25 percent of the schools offered instruction in animal, tornado, farm, civil defense, driver education, hurricane, explosives, first aid and railroad safety.

The data in Table 4.8 showed a gradual decrease, as the grade advanced, in the number of school systems that offered instruction in bus, bicycle, fire, home, school building, schoolground, tornado, recreational, and water safety. Others showed an increase in the number of schools that include instruction in industrial and two-wheeled motor vehicle safety as the grade advanced. Five school systems show that driver education is taught in the seventh grade, none includes it in the eighth grade, and only one teaches

TABLE 4.8

AREAS OF SAFETY INCLUDED BY 51 SCHOOL SYSTEMS AT THE JUNIOR HIGH SCHOOL GRADE LEVEL

Number of school systems that included each area of safety in these grades			
Seventh grade	Eighth grade	Ninth grade	Areas of safety included
13	14	9	Animal
26	24	18	Bus
39	37	28	Bicycle
4	4	4	Civil defense
21	23	17	Camping and hiking
5	0	1	Driver education
1	1	1	Explosives
7	8	5	Farm
39	36	35	Fire
18	23	17	Firearms
18	21	17	Fireworks
1	0	0	First aid
24	21	20	Holiday
36	35	29	Home
1	1	1	Hurricane
19	21	28	Industrial
29	28	24	Pedestrian
20	23	21	Plant poisoning
1	1	1	Railroad
35	35	33	Recreational
34	32	32	School building
37	33	28	Schoolground
13	12	9	Tornado
10	16	18	Two-wheeled motor vehicle
33	30	29	Water

it in the ninth grade. A larger number of these school systems offered instruction in the areas of animal, camping and hiking, firearms, fireworks, and plant poisoning safety in the eighth grade than offered them in either the seventh or ninth grades. The other areas of safety were included by about the same number of school systems for these grades.

Areas of safety included in the senior high school grades. On the high school level, pupils were introduced to new and varied activities which call for an expanded safety program that will assure personal as well as group safety.

The data in Table 4.9 show the number of school systems that included each area of safety in the senior high school grades. Fifty to 75 percent of these school systems included safety instruction in driver education, recreational, fire, industrial, and home in the senior high school grades. School building, water, firearms, schoolground, pedestrian, holiday, plant poisoning, two-wheeled motor vehicle, bus, bicycle, camping and hiking, and fireworks safety were included by 25 to 49 percent of these school systems. Less than 25 percent of them offered instruction in animal, tornado, civil defense, farm, railroad, explosives, first aid, and hurricane safety. The range in the number of schools offering each area of safety is from 36 offering driver education to one each offering instruction in explosives, first aid, and hurricane safety.

It is shown here that very little is done in first

TABLE 4.9

AREAS OF SAFETY INCLUDED BY 51 SCHOOL SYSTEMS AT THE SENIOR HIGH SCHOOL GRADE LEVEL

Number of school systems that include each area of safety in these grades			
Tenth grade	Eleventh grade	Twelfth grade	Area of safety included
8	8	7	Animal
14	13	12	Bus
14	14	11	Bicycle
14	14	10	Camping and hiking
3	2	1	Civil defense
36	35	38	Driver education
1	1	1	Explosives
3	3	2	Farm
31	31	25	Fire
22	23	21	Firearms
15	14	11	Fireworks
0	0	2	First aid
19	18	15	Holiday
29	27	25	Home
1	1	1	Hurricane
28	29	28	Industrial
19	19	17	Pedestrian
17	15	14	Plant poisoning
1	2	2	Railroad
32	33	29	Recreational
26	26	24	School building
21	21	19	Schoolground
8	7	6	Tornado
19	13	13	Two-wheeled motor vehicle
25	24	19	Water

aid instruction by these schools. First aid is an area which may be useful to all pupils and should be given more attention than was shown here.

A marked increase in the number of schools offering driver education in these grades is shown here over what is offered in the junior high school grades. Driver education was included in the senior high school grades by more school systems than any other area of safety. Industrial safety shows a marked increase in these grades over what is shown for the junior high. This is perhaps due to the industrial arts and trade classes which are offered for these students. A gradual decrease is noted from the tenth through the twelfth grade in the number of schools that offered instruction in bus, bicycle, camping and hiking, civil defense, farm, fire, fireworks, holiday, home, pedestrian, plant poisoning, school building, schoolground, tornado, two-wheeled motor vehicle, and water safety.

The next part of the chapter shows the number of school systems that included each area of safety and the grade level at which each area was taught.

Animal safety. Table 4.10 shows that animal safety was taught in each grade by some of these school systems. This area of instruction usually deals with the care and treatment of household pets and the proper conduct to observe while visiting a zoo or other similar places. This study shows that the most attention is given to this area in

the first grade. The range is from 19 offering it in the first grade to seven schools offering it in the twelfth grade.

TABLE 4.10

GRADES IN WHICH ANIMAL SAFETY WAS INCLUDED IN THE CURRICULUM OF 51 SCHOOL SYSTEMS

Grades	Number of school systems
Kindergarten	15
First	19
Second	15
Third	15
Fourth	14
Fifth	12
Sixth	13
Seventh	13
Eighth	14
Ninth	9
Tenth	8
Eleventh	8
Twelfth	7

Bus safety. Today the bus is the chief form of public transit in American cities. Over 4,000 communities are entirely dependent on buses for local transportation. Buses handle 36 percent of all inter-city travel by public carrier. This does not include the nation's 100,000 school buses, which transport 6,000,000 school children to and from school daily.[1]

[1]Leon Brody and Herbert J. Stack, Highway Safety and Driver Education (New York: Prentice-Hall Inc., 1954), p. 15.

Table 4.11 shows that bus safety was included in the curriculum of all grades by some of these school systems. The largest number of school systems included bus safety from kindergarten through the eighth grade. There was a gradual decrease in the number offering this area from the ninth grade through the twelfth.

TABLE 4.11

GRADES IN WHICH BUS SAFETY WAS INCLUDED IN THE CURRICULUM OF 51 SCHOOL SYSTEMS

Grades	Number of school systems
Kindergarten	22
First	28
Second	28
Third	27
Fourth	29
Fifth	29
Sixth	30
Seventh	26
Eighth	24
Ninth	18
Tenth	14
Eleventh	13
Twelfth	12

Bicycle safety. The data in Table 4.12 show that instruction in bicycle safety was included in all of the grades, kindergarten through the twelfth. A gradual increase is noted in the number of schools which offered this instruction from the kindergarten through the sixth grade. From the sixth grade through the twelfth a gradual decrease was shown in the number of schools which included this area

of safety. Forty-four schools included it in the sixth grade.

TABLE 4.12

GRADES IN WHICH BICYCLE SAFETY WAS INCLUDED IN THE CURRICULUM OF 51 SCHOOL SYSTEMS

Grades	Number of school systems
Kindergarten	11
First	14
Second	15
Third	24
Fourth	38
Fifth	42
Sixth	44
Seventh	39
Eighth	37
Ninth	28
Tenth	14
Eleventh	14
Twelfth	11

Many persons who are interested in safety feel that by reaching pupils during their formative years with a good bicycle safety instructional program, improvement will be realized in driver efficiency for the future.

Camping and hiking. In Table 4.13 it is shown that the largest number of school systems placed emphasis on camping and hiking safety from the fourth through the ninth grade. The largest number of schools included this area in the eighth grade. The largest number of schools taught this area in the kindergarten and the twelfth grade.

TABLE 4.13

GRADES IN WHICH CAMPING AND HIKING SAFETY WAS INCLUDED IN THE CURRICULUM OF 51 SCHOOL SYSTEMS

Grades	Number of school systems
Kindergarten	5
First	7
Second	8
Third	9
Fourth	16
Fifth	19
Sixth	21
Seventh	21
Eighth	23
Ninth	17
Tenth	14
Eleventh	14
Twelfth	10

Civil defense. The data in Table 4.14 show that very few of these school systems included instruction in civil defense in the curriculum. The range in the number of schools including this area was from five each in the first and second grades to one in the twelfth grade.

Many safety educators do not consider civil defense to be an area of safety education. This is perhaps the reason why such a small number of the school systems included it in the curriculum.

Driver education. The driver education program is offered in the curriculum for students in the secondary schools. Every student in the secondary school should have

TABLE 4.14

GRADES IN WHICH CIVIL DEFENSE WAS INCLUDED IN THE CURRICULUM OF 51 SCHOOL SYSTEMS

Grades	Number of school systems
Kindergarten	2
First	5
Second	5
Third	4
Fourth	4
Fifth	3
Sixth	3
Seventh	4
Eighth	4
Ninth	4
Tenth	3
Eleventh	2
Twelfth	1

the opportunity to enroll in the driver education course whether he possesses a driver's license or not.[1]

The data in Table 4.15 show that driver education was given, beginning in the seventh grade and gradually increasing as the grade advanced, except in the eleventh grade, where a slight decrease was noted. Driver education was offered by the largest number of schools to tenth, eleventh, and twelfth grade pupils. Since the age for securing a driver's license is not the same in all states, it may be assumed here that this factor had something to do with when the course was offered. Pupil interest is perhaps

[1]National Conference on Driver Education, Policies and Practices for Driver Education (Washington: National Education Association, 1954), p. 45.

keener as he approaches the legal driving age than at any other time.

TABLE 4.15

GRADES IN WHICH DRIVER EDUCATION WAS INCLUDED IN THE CURRICULUM OF 51 SCHOOL SYSTEMS

Grades	Number of school systems
Seventh	5
Eighth	6
Ninth	13
Tenth	36
Eleventh	35
Twelfth	38

Explosives safety. Only one school reported that this area of safety is included in the curriculum. Portland, Maine indicated that instruction was given in this area in all grades, kindergarten through the twelfth.

Farm safety. The data in Table 4.16 indicated that very few of these school systems included farm safety in the curriculum. This is probably due to the fact that most of the pupils attending the schools in these selected cities live in urban areas.

The replies show that the largest number of these schools included farm safety in the first, second, third, seventh, and eighth grades. The least number of schools included it in the twelfth grade.

Farm safety is helpful to those students who spend

week-ends, holidays, and vacation periods in the rural areas. Many fatalities are suffered each year from these activities simply because the pupils are not adequately prepared for participating in them safely.[1]

TABLE 4.16

GRADES IN WHICH FARM SAFETY WAS INCLUDED IN THE CURRICULUM OF 51 SCHOOL SYSTEMS

Grades	Number of school systems
Kindergarten	4
First	7
Second	6
Third	6
Fourth	3
Fifth	5
Sixth	4
Seventh	7
Eighth	8
Ninth	5
Tenth	3
Eleventh	3
Twelfth	2

Fire safety. This area of safety should give particular attention to fire prevention, fire protection, and fire control. Used correctly, fire is a valuable servant; used incorrectly, it exacts an exorbitant toll of human life and property; out of control, it threatens the destruction of entire cities and lays waste millions of acres of timberlands. Its prevention is one of the major responsibilities

[1] This refers only to urban youth.

of society today.[1]

The 1954 edition of Accident Facts shows that there were 550 fatalities to pupils in the five to 14 age group because of fire. These facts alone should be sufficient evidence to justify the teaching of fire safety.

TABLE 4.17

GRADES IN WHICH FIRE SAFETY WAS INCLUDED IN THE CURRICULUM OF 51 SCHOOL SYSTEMS

Grades	Number of school systems
Kindergarten	35
First	43
Second	43
Third	41
Fourth	42
Fifth	41
Sixth	43
Seventh	39
Eighth	36
Ninth	35
Tenth	31
Eleventh	31
Twelfth	25

The data in Table 4.17 show that the majority of these school systems included instruction in fire safety in the curriculum. These replies showed that the largest number of schools teach this area in grades first through sixth. The twelfth grade is the only one that shows less than 50 percent of the school systems teaching it.

[1]Stack, Seibrecht, and Elkow, op. cit., p. 140.

Firearms safety. Statistics show that 40 percent of all fatal accidents resulting from the use of firearms happen in the home.[1] They also show that the largest number of fatalities from firearms occur to the five to 14 age group, 200 during the year 1953. One hundred sixty fatalities were recorded for the 15-24 age group.

Table 4.18 shows the number of school systems and the grade levels that included instruction in firearms safety. These data show that the largest number of schools included this area in grades seven through twelve. However, some of these schools included it in all of the grades.

TABLE 4.18

GRADES IN WHICH FIREARMS SAFETY WAS INCLUDED IN THE CURRICULUM OF 51 SCHOOL SYSTEMS

Grades	Number of school systems
Kindergarten	6
First	7
Second	7
Third	7
Fourth	14
Fifth	11
Sixth	13
Seventh	18
Eighth	23
Ninth	17
Tenth	22
Eleventh	23
Twelfth	21

[1]National Safety Council, Statistical Division, Accident Facts (Chicago: National Safety Council, 1954), pp. 87-89.

Instruction in firearms safety should include the precautions to observe concerning the storage of firearms and the proper use of them. Firearms are made for the purpose of killing something. Pupils need to be impressed with the dangers which could come from handling or using any kind of firearms.

TABLE 4.19

GRADES IN WHICH FIREWORKS SAFETY WAS INCLUDED IN THE CURRICULUM OF 51 SCHOOL SYSTEMS

Grades	Number of school systems
Kindergarten	12
First	18
Second	19
Third	18
Fourth	21
Fifth	20
Sixth	20
Seventh	18
Eighth	21
Ninth	17
Tenth	15
Eleventh	14
Twelfth	11

Fireworks safety. The data in Table 4.19 show the number of school systems that included fireworks safety in the curriculum of each grade. The largest number of schools included instruction in this area in the first through the eighth grade. The least number of schools included it in the twelfth grade. Perhaps the reason so few schools give

instruction in this area is that many cities have an ordinance which makes it illegal to sell or use fireworks within the limits of the city. However, this does not always remove the hazard. Pupils need to be taught the dangers which may result from the use of fireworks.

First aid. The replies show that one school system included instruction in first aid in the kindergarten and seventh grades. Two schools included this instruction in the twelfth grade.

Holiday safety. Instruction for safety in holiday activities can be helpful to pupils in all grades because all of them participate in some of the many activities which are carried on during these periods.

TABLE 4.20

GRADES IN WHICH HOLIDAY SAFETY WAS INCLUDED IN THE CURRICULUM OF 51 SCHOOL SYSTEMS

Grades	Number of school systems
Kindergarten	19
First	25
Second	24
Third	24
Fourth	27
Fifth	25
Sixth	26
Seventh	24
Eighth	21
Ninth	16
Tenth	19
Eleventh	18
Twelfth	15

Table 4.20 shows that holiday safety is included in all of the grades of some of these school systems. The most of these schools gave instruction in this area from the first through the eighth grades. A gradual decrease is noted in the number that included it in the other grades. Most schools taught this area in the fourth and sixth grades.

Home safety. The 1954 edition of Accident Facts shows that 29,000 fatalities occurred in the home during 1953, injuries totaled 4,350,000, the costs amounted to approximately $750,000.00 in lost wages, medical expenses, and overhead insurance costs. Twenty-five thousand and two hundred of these fatalities occurred in urban homes. Fifty percent of all the fatal accidents resulted from falls. Home accidents are not confined to any particular part of the home. Fatalities from falls occur in all rooms and all stairs in the home. Approximately 18 percent of all home fatalities are from burns, with 50 percent of them happening in the kitchen.

The data in Table 4.21 show that the largest number of these schools taught home safety in the first through the seventh grades. There was more consistency in the number of school systems which offered instruction in home safety in all grades than in any of the other areas. The range was from 39 in the fourth grade to 25 in the twelfth grade. Home safety was taught in all the grades, except in the twelfth, by more than one-half of these schools. Twenty-

seven of them included this area in the twelfth grade.

TABLE 4.21

GRADES IN WHICH HOME SAFETY WAS INCLUDED IN THE CURRICULUM OF 51 SCHOOL SYSTEMS

Grades	Number of school systems
Kindergarten	28
First	36
Second	38
Third	36
Fourth	39
Fifth	38
Sixth	36
Seventh	36
Eighth	35
Ninth	29
Tenth	29
Eleventh	27
Twelfth	25

Hurricane safety. Only one school system reported that instruction was given in hurricane safety. Miami, Florida indicated that this area was included in all grades, kindergarten through the twelfth. The geographical location of this city may make it necessary that pupils be prepared for coping with this environmental hazard, the hurricane.

Industrial safety. The data in Table 4.22 show that industrial safety was taught in the largest number of school systems in these cities from the seventh through the twelfth grades. This area of safety instruction is important for these grades because of the specialized courses that are

provided in the curriculum of the secondary schools. The courses, industrial arts and the trade courses, require pupils to use tools and equipment which are quite hazardous when used incorrectly. Instruction in the proper selection and correct use of these tools and equipment is most essential for the pupils enrolled in such courses.

TABLE 4.22

GRADES IN WHICH INDUSTRIAL SAFETY WAS INCLUDED IN THE CURRICULUM OF 51 SCHOOL SYSTEMS

Grades	Number of school systems
Third	1
Fourth	1
Fifth	1
Sixth	1
Seventh	19
Eighth	21
Ninth	28
Tenth	28
Eleventh	29
Twelfth	28

One school system reported that industrial safety was taught in all grades, third through the twelfth.

Industrial safety for elementary grades as low as the third seems unusual here, but many elementary schools have arts and crafts in this grade and the safety instruction is needed.

Good instruction in safety practices in the school shop program probably has some carry over value for those

pupils who will be employed in industries at some future time.

Pedestrian safety. The data in Table 4.23 show that pedestrian safety was taught in all grades by some of these school systems and in certain grades by others. There are more school systems that included this area of instruction in the curriculum of the first grade than included it in any other grade. The replies show an increase in the number of schools teaching pedestrian safety from the first through the fourth grade. From the fourth grade through the twelfth a gradual decrease was noted.

TABLE 4.23

GRADES IN WHICH PEDESTRIAN SAFETY WAS INCLUDED IN THE CURRICULUM OF 51 SCHOOL SYSTEMS

Grades	Number of school systems
Kindergarten	35
First	45
Second	44
Third	43
Fourth	41
Fifth	38
Sixth	39
Seventh	29
Eighth	28
Ninth	24
Tenth	19
Eleventh	19
Twelfth	17

The percentage of these schools which offered instruction in pedestrian safety in the kindergarten grade might be higher if based on the number of schools which have this grade in the school. It is not known here just how many of these school systems have a kindergarten grade.

Railroad safety. Only one school system reported that railroad safety was included in all grades in the school curriculum. Oklahoma City, Oklahoma offered instruction in this area in all grades.

The person conducting this study is the director of safety education in the Oklahoma City Public Schools and it is his responsibility to see that a complete safety education program is included in all the grades. The director and an all-school teacher committee decided that railroad safety was an important area of safety that should be included in the curriculum. Instructional materials were developed and channelled through the all-school teacher safety committee to each school. Also, educational films on railroad safety were secured from the various railroad companies for distribution to the schools.

One other school system reported that instruction was given in railroad safety in the first, second, fourth, and eleventh grades.

Poisoning by plants. The data in Table 4.24 show that the intermediate and the junior high grades had more school systems offering instruction in poisoning by plants

than either the primary or the senior high grades. The largest number of school systems included this phase of safety in the eighth grade.

TABLE 4.24

GRADES IN WHICH POISONING BY PLANTS SAFETY WAS INCLUDED IN THE CURRICULUM OF 51 SCHOOL SYSTEMS

Grades	Number of school systems
Kindergarten	6
First	8
Second	8
Third	11
Fourth	17
Fifth	20
Sixth	20
Seventh	20
Eighth	23
Ninth	21
Tenth	17
Eleventh	15
Twelfth	14

Recreational safety. The data in Table 4.25 show that there were more school systems that offer instruction in recreational safety in all grades than there are those that offer any other area of safety. The range is from 21 in the kindergarten grade to 36 in the fifth and sixth grades. Since it is not known here how many of these school systems have a kindergarten grade the range given here may not show the percentages in the true light. The range in the first through the twelfth grades is from 28 schools

including the area in the twelfth grade to 36 schools including it in the fifth and sixth grades.

TABLE 4.25

GRADES IN WHICH RECREATIONAL SAFETY WAS INCLUDED IN THE CURRICULUM OF 51 SCHOOL SYSTEMS

Grades	Number of school systems
Kindergarten	21
First	32
Second	31
Third	32
Fourth	34
Fifth	36
Sixth	36
Seventh	35
Eighth	35
Ninth	33
Tenth	32
Eleventh	33
Twelfth	28

School building safety. Many of the older school buildings that are in use today were constructed with little or no regard for safety. Because of these existing conditions and the limitations, financial or structural, which prevent the school systems from correcting them, it is of utmost importance that a good instructional program in school building safety be included in the curriculum of all grades to keep accidents at a minimum.

The data in Table 4.26 show that the largest number of school systems offered instruction in school building

safety in the first grade. Forty-one of them included the instruction in this grade. Most schools taught this area from the first grade through the sixth grade. Above the sixth grade a sharp decrease was shown until only 24 of these schools offered this instruction in the twelfth grade.

TABLE 4.26

GRADES IN WHICH SCHOOL BUILDING SAFETY WAS INCLUDED IN THE CURRICULUM OF 51 SCHOOL SYSTEMS

Grades	Number of school systems
Kindergarten	31
First	41
Second	39
Third	36
Fourth	37
Fifth	36
Sixth	37
Seventh	34
Eighth	32
Ninth	32
Tenth	26
Eleventh	26
Twelfth	24

Schoolground safety. Accidents on the schoolground outnumber all other kinds which happen to pupils while under the jurisdiction of the school.[1] These accidents usually can be attributed to one or more of the following factors: improper selection of equipment, improper placement of equipment, and/or incorrect use of equipment.

[1] Ibid., p. 92.

Selection of the correct size and kind of equipment, proper placement of it in relation to the building and other play areas, and good instruction in the use of it can do much to reduce accidents from these causes.

The data in Table 4.27 show that schoolground safety was included in the curriculum by the largest number of school systems, beginning with the kindergarten grade and continuing through the eighth grade. The largest number of these school systems offered this area of safety in the first and sixth grades. A gradual reduction is noted in the number of schools offering the instruction from the eighth through the twelfth grade.

TABLE 4.27

GRADES IN WHICH SCHOOLGROUND SAFETY WAS INCLUDED IN THE CURRICULUM OF 51 SCHOOL SYSTEMS

Grades	Number of school systems
Kindergarten	33
First	44
Second	43
Third	41
Fourth	42
Fifth	42
Sixth	44
Seventh	37
Eighth	33
Ninth	28
Tenth	21
Eleventh	21
Twelfth	19

Tornado safety. The area of instruction in tornado safety is more necessary in some sections of the United States than in others because of the number of storm conditions which occur there.

Table 4.28 shows the number of school systems which gave instruction in tornado safety. These data show that the largest number of schools included this area of safety in the seventh and eighth grades. The least number included it in the twelfth grade.

TABLE 4.28

GRADES IN WHICH TORNADO SAFETY WAS INCLUDED IN THE CURRICULUM OF 51 SCHOOL SYSTEMS

Grades	Number of school systems
Kindergarten	7
First	8
Second	7
Third	8
Fourth	8
Fifth	10
Sixth	9
Seventh	13
Eighth	12
Ninth	9
Tenth	8
Eleventh	7
Twelfth	6

Two-wheeled motor vehicle safety. Two-wheeled motor vehicle safety includes the best safety practices to observe in the use of the motor scooter, the motor-bike, the service-

cycle, and the motorcycle. These vehicles are used most preceding the time young people begin to drive the automobile.

The data in Table 4.29 show that the largest number of these school systems gave instruction in the correct use of these vehicles in grades eight through ten.

One school indicated that instruction in the use of two-wheeled motor vehicles is included in the sixth grade.

TABLE 4.29

GRADES IN WHICH TWO-WHEELED MOTOR VEHICLE SAFETY WAS INCLUDED IN THE CURRICULUM OF 51 SCHOOL SYSTEMS

Grades	Number of school systems
Sixth	1
Seventh	10
Eighth	16
Ninth	18
Tenth	19
Eleventh	13
Twelfth	13

Water safety. The data in Table 4.30 show that water safety was included in all the grades in some school systems and only in certain grades by others. Instruction in water safety began with the kindergarten grade and extended through the twelfth grade. A gradual increase in the number of schools including it is noted from the kindergarten through the sixth grade. From the seventh through

the twelfth grade a decrease was shown in the number of schools that included this area in the curriculum. The largest number of school systems offered this instruction in the sixth and seventh grades.

TABLE 4.30

GRADES IN WHICH WATER SAFETY WAS INCLUDED IN THE CURRICULUM OF 51 SCHOOL SYSTEMS

Grades	Number of school systems
Kindergarten	12
First	18
Second	20
Third	21
Fourth	29
Fifth	30
Sixth	33
Seventh	33
Eighth	30
Ninth	29
Tenth	25
Eleventh	24
Twelfth	19

In-service training for teachers of safety. One of the problems with which school administrators are constantly confronted is the lack of trained teachers for this rapidly growing field of safety education.[1] Only a small percent of the teachers in the field have had adequate preparation for teaching in this field.

[1]American Association of Teachers Colleges and National Commission on Safety Education, Safety Education for Teachers (Washington: National Education Association, 1947), pp. 37-38.

This part of the study was included to determine what the school systems in these selected cities were doing to assist teachers in establishing and carrying on a functional program of safety education in the school.

An inquiry in the form of a questionnaire was sent to the superintendent of schools in each of these cities asking for replies to the following questions: does the school provide an in-service training program for teachers who are interested in safety, what type in-service program, who conducts it, and when do the teachers meet for this program? Thirty-one of the 51 replies indicated that an in-service program was provided for teachers. Nineteen did not have the program and one superintendent did not reply to these particular questions.

Twenty of the replies show that the in-service program was sponsored by the local school system, one was sponsored by a college, and seven were co-sponsored by the school system and a college. Three schools did not indicate who sponsored the in-service program.

The types of in-service program that are provided. The data in Table 4.31 show the kinds of programs which were provided for teachers and the number of schools which used each kind. The special scheduled conference was used by the largest number of these schools. Twelve of the schools used it. The workshop type was used by nine of the schools. Called meetings were used the least for this program.

TABLE 4.31

TYPES OF IN-SERVICE PROGRAMS IN SAFETY EDUCATION THAT ARE PROVIDED FOR TEACHERS IN 28 SCHOOLS

Number of school systems	Types of in-service training service
2	Formal course
9	Workshop
2	Institutes
12	Special scheduled conferences
2	Regular faculty meetings
1	Called meetings

Meeting time for the in-service program. Table 4.32 shows that the teachers met after school for the in-service program in the largest number of cities. Fourteen of them met at this time. Eight of them are scheduled, so that a part of it was on school time and the other part was after school hours. Four of these school systems indicated that the program was scheduled on school time.

TABLE 4.32

TIME TEACHERS MET FOR IN-SERVICE TRAINING IN 31 SCHOOL SYSTEMS

Number of schools	Time teachers met
14	After school hours
8	Part on school time and part after school
4	On school time
2	On Saturdays
2	Pre-school workshops
1	Called meetings

Teachers who participate in the in-service safety program. The teachers who participated in the in-service safety programs were: new teachers, one teacher from each building, one teacher from each subject area, sponsors of student safety organizations, designated teachers, all teachers, and any teacher. Table 4.33 shows the number of school systems that assigned teachers to attend the in-service program. Several of these schools had teachers from more than one grade, subject area, or activity who took part in this program.

TABLE 4.33

TEACHERS WHO PARTICIPATE IN THE IN-SERVICE PROGRAM IN SAFETY

Number of school systems which have these teachers in the in-service program	The teachers who participate in the in-service program
13	Any teacher who cares to
10	New teachers
10	Sponsors of pupil safety organizations
6	One from each building
3	All elementary teachers
2	One teacher from each grade or subject
2	Teachers assigned by the principal

CHAPTER V

ACCIDENT REPORTING BY SCHOOLS

Accident records provide information which can be useful to all phases of the safety education program. Some activities of the program may be based entirely on accident records. Other activities may be based on the material into which accident information has been woven to show need and to create public interest.[1] Most individuals take more interest in carrying out safe practices when unsafe practices which result in accidents are known.

The school has an interest in accidents to its pupils from two points of view. On one hand the school is morally and in a number of places, legally responsible for the pupil while he is under school jurisdiction. On the other hand, the school has the responsibility for teaching the pupil to live more safely and to seek ever higher cultural levels.[2] In order that the school will be free from

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[1]American Association of School Administrators, Safety Education, Eighteenth year book (Washington: National Education Association, 1940), pp. 398-406.

[2]National Conference on Uniform Traffic Accident Statistics. Uses of Traffic Accident Records (Saugatuck: Eno Foundation for Highway Traffic Control, 1947), pp. 108-109.

liability suits and may help in planning the safety curriculum in line with student needs, a picture of student accident experiences is essential.

There are two distinguishable types of safety education programs: specific and general. The specific is highly directional and indicates specific groups in need of specific kinds of education. For example, in an elementary school the pupils have a general need for pedestrian safety practices, while in a high school, pupils have a specific need for driver education.

The general safety education program attempts to take a broad view of the situation and to reach all groups in general instruction in safety education. Accident records should be used to guide both types of educational programs.

Definition of a Reportable Accident

The National Safety Council defines a "reportable accident" as one in which the injured pupil requires medical attention by a physician and/or causes the absence from school of one-half day or more. Stack, Seibrecht, and Elkow[1] say that all accidents where injury occurs, no matter how minor, no matter who the victim is, are to be reported, provided the accident occurred on property over which the

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[1]Herbert J. Stack, Elmer Seibrecht, and Duke Elkow, Education for Safe Living (New York: Prentice Hall Inc., 1949), pp. 394-396.

school has jurisdiction, or occurred in connection with a school sponsored activity, or affected any rights of the school. Sometimes what seems to be a minor injury develops into something of major proportions. For example, a scratch or abrasion could develop an infection and become serious. Oklahoma City follows the recommendation of the National Safety Council.

Objectives of an Accident Reporting System

A comprehensive accident reporting system has at least four major objectives: preventive, defensive, protective, and constructive.[1]

Accident reporting is a preventive device because it alerts educators and other school personnel of hazardous conditions and provides clues to dangers which can be corrected or improved upon and thus avoid similar accidents. The program of preventive measures should be closely correlated with a well-planned periodic inspection program. This program includes the inspection of the total school plant, the grounds, and the play equipment.

Accident reporting serves as a defensive aid in judicial proceedings which come about from the result of an accident; the basic questions of negligence and liability revolve about the facts concerning the incident that is the basis of the lawsuit. Occasionally it takes months and

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[1] Ibid., pp. 394-396.

sometimes years after an accident has happened before the case is brought to trial. In this case memories have faded and prejudices and sympathies have been built in one way or another. The accident report that includes detailed information can be helpful here. Sometimes this is the only defense available.

Accident reports serve as a protective aid when a suit is brought against school personnel who have liability insurance. In this case the defense is usually taken by the insurance company's lawyers. Most insurance companies receive an immediate report of accidents to those for whom they are carrying insurance. The defense may need to photograph the scene, to communicate with witnesses, to secure other information which may be essential to them relative to the accident. The same general considerations apply whether the defense attorney is the lawyer for the insurance company, the schoolboard's council, or a teacher's personal attorney. The defense requires preparation, and preparation requires knowledge of facts which may be obtained from an adequate accident report.

Accident reports may serve as a constructive device in bringing about a natural and spontaneous motivation for safety education. They provide basic information for determining the area in which safety education needs to be stressed. It may be that only one school in the system has a need in a special area of safety at a particular time. If

the educational program is to provide for the needs of pupils in relation to safety, some method needs to be established for identifying these needs. The accident report can assist in doing this, because the information obtained from the accident report will serve as a guide in determining what procedure to follow to improve conditions.

Administering an Accident Reporting System

The accident reporting system should be carefully planned and properly executed and a continuous evaluation made. Administrators, teachers, pupils, and other interested personnel may be involved in working out a functional program of this kind.

Some of the decisions which will need to be made in establishing a workable plan of accident reporting are: (1) Who will make the report? (2) Who will supply the data for the report? (3) When will the reports be made? (4) What information will be needed about the accident? (5) How will the information be used? (6) What accidents should be reported? (7) Where should the reports be filed? and (8) Who will have access to these reports? Any other items which may be peculiar to the local situation should be included.

The present writer was responsible for establishing and setting into motion an accident reporting system in the public schools of Oklahoma City, one of the selected cities used in this study. Some of the findings which resulted

from the experiences in Oklahoma City may be helpful to those who are attempting to establish a reporting system in a school elsewhere.

One member of the school personnel should be assigned the responsibility for filling in the accident report. It is easier for the other members of the school personnel to get the information on accidents to the correct place when they know who is to receive it. This plan will also help to bring together the total accident experience of each school in a central place. The person assigned to do this job may be the driver education teacher, the teacher-sponsor in charge of student safety organizations, the teacher who is the building safety representative to all-school safety organization, the school nurse, or the administrator of the school. The teacher who is the safety representative from each individual school in the system and a member of all-school safety committee seems to be the logical person for this job in Oklahoma City. This person is generally the one who has the responsibility for directing the safety program in the individual school; therefore this information should be at her disposal.

The information for the accident report may come from any reliable source. Among the sources are: pupils, teachers, parents, visiting teachers, counselors, attendance officers, local police, state police, and others. The more sources drawn upon for this information, the more complete

the accident reporting will be. The more complete the report of all accidents, the more information will be available for use in improving the safety program which will help to reduce them. It is important that every accident to a school-age child be reported in the reporting system of the school.

Accidents should be reported and recorded as quickly as the information can be made available to the person charged with this responsibility. An "on the spot" accident report is usually more reliable than the ones which are made later. Time seems to change opinions in relation to accidents. Prejudices and sympathies develop and may give a distorted report when time elapses between the accident and the report. Twenty-four hours is usually the maximum time which should be allowed for the report to be made.

The information needed for completing the report is: name of injured person, age, grade, sex, home address, home telephone number, date accident occurred, day of the week, time of day, location of accident (schoolground, school building, enroute to or from school, home, and elsewhere), who was in charge when the accident occurred, what was done, part of body injured, type of injury (cut, fracture, concussion, and others), what the individual was doing when the accident occurred, number of days absent, and the signature of the person filling in the report. Perhaps the most important information on a report is, "What was the pupil

doing when the accident occurred?" This is important because it gives some clue to the instruction needed to prevent similar accidents from occurring.

Educators in the safety field must have the essential facts about personal and mechanical failures to determine the cause of an accident. It then becomes their responsibility to determine what methods, educational or otherwise, can be used to lessen the accident occurrence. Frequently, an accident report may read, "stumbled and fell," which gives no indication as to why the pupil stumbled. A report of this kind has little value to the safety education program.

The information which is submitted on the accident report can be used to locate existing hazards which contribute to accidents. It supplies information for the teacher to use in the safety curriculum, and it serves as one criterion for making an evaluation of the safety instructional program. Let us consider each of these separately, to see the purpose each serves in the accident prevention program. Many of the existing school buildings and some of those which are now being built, do not make ample provisions for safety. For example, when a large number of accidents have occurred on a certain stair in a building, it is found from an inspection that the stairs were improperly constructed or the lighting was inadequate, or both, this gives a clue as to why the accidents happened. In either case the accident

report will show that the condition exists and will help to identify the cause of accidents at this location. With this information available, machinery may be set in motion for the purpose of obtaining some improvement in structural conditions or education in the proper use of the stairs until something can be done.

Another situation which is prevalent on many schoolgrounds is the improper placement of the play equipment. Consider the swing. Most of the accidents which occur to pupils relative to the swing happen not to the pupil using the swing but to another pupil who is struck by a swing which was left in motion by the last one to use it. Perhaps the swing was located incorrectly in relation to the entrances to the building or to other equipment. Once this information is known, immediate steps can be taken to improve the condition. The hazard of the swing can usually be corrected by locating it away from a route leading from other play areas to the entrance of the building and by installing it in such position that the line of travel of the swing will be at a right angle to the school building. The accident report should also furnish information which can be used as a means for getting the re-locating done.

From the summary report of accidents, the teacher can be made aware of the kinds of activities the pupils are engaging in when accidents occur. If the activities have educational value for the pupils, an instructional program

may be designed to prepare these pupils for having safe experiences as they participate in these "worthwhile" activities. If the activities do not have educational value, then the pupils' interests should be directed into those which are constructive.

All Accidents Are to be Reported

To do an efficient job in an accident prevention program, it is important that all accidents to school-age pupils be reported. This would mean 24 hours per day and seven days per week. Educators need a complete picture of accident experiences in which pupils are involved, in order to design the kind of prevention program needed.

Some school systems may supplement the school report by asking the local enforcement organization and the local fire department to give the school authorities any information which they may have which involved a school-age pupil in an accident. Thus, many accidents are reported which otherwise would not be made known to school officials. This plan contributes to a more comprehensive reporting of accidents and, also, helps to improve working relations between these organizations and the school personnel. All community groups should be led to have some interest as well as a responsibility for solving the accident problem.

At least one copy of each accident report should be sent to the central office of the school system, and one

copy should be kept on file in the local school. The central office personnel usually make a summary of the information from reports of accidents which occurred in all schools in the system and send a copy of this summary to each school.

Accident reports should not be released to any person not connected with the school, unless the superintendent gives his approval. There is some danger of outsiders asking to see these reports to obtain information to use in such manner that the school may become involved.

Predicting Accidents

There is a reasonably reliable method for estimating the number of school-jurisdiction accidents. On an average there is slightly more than one serious accident a month for every 500 pupils enrolled in the school.[1] A school with an enrollment of 1000 pupils might expect to have two reportable accidents per month. In addition, there will probably be four or five minor accidents for each serious one.

Securing Accident Report Forms

The National Safety Council of 425 N. Michigan Ave., Chicago, will provide, without charge, a sufficient number of report forms and summary sheets to cover all anticipated accident reports for the first year the school has a report

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[1] National Standard Student Accident Report Committee, Keeping Student Accident Records (Chicago: National Safety Council, 1947), p. 2.

system in operation. Thereafter, a local school system may purchase these supplies from the National Safety Council or have them printed locally.

The Council is interested in receiving a monthly summary of the accidents which occur in every school system, in the United States. These reports supply them with information for the national summaries which are included in the annual publication, Accident Facts. This statistical publication furnishes helpful data to a school system for making a comparison of the local accident experience with that of the national experience.

Accident Reporting in the School Systems of Selected Cities

A questionnaire was sent to the superintendent of each school system in the 56 selected cities for the purpose of obtaining information on the present practices in accident reporting in the schools. See Appendix C.

An accident report system was found to be in use in 52 of the 56 selected cities. Two indicated that such a system is not in effect in their schools and two did not supply information on the question.

Accidents reported. The data show that two types of accidents were reported, those which occur while the pupils are under the jurisdiction of the school and those which may occur to school-age pupils at any time or place and under any conditions. The second plan affords those who are

directly in charge of the safety education program an opportunity of knowing the total accident experience of school-age pupils.

Thirty of these school systems report only the accidents which occur to pupils while they were under school jurisdiction. This would include those which occur on the schoolground, in the school building, and enroute to or from school. Eighteen of the school systems asked that all accidents to school-age pupils be reported. This means a 24 hour day and a seven-day week reporting. Accidents which occur in these schools are generally reported from school building, schoolground, to and from school, home, and elsewhere. Six of the schools did not reply to this question.

A reportable accident. Reportable accidents in the school systems of the selected cities study included: those which are serious enough to require medical attention by a physician; ones which cause the injured pupil to be absent one-half day or more from school; ones in which any injury resulted, regardless of how minor; and those which resulted in some property damage. Some of the school systems use more than one of the above criteria to define a reportable accident.

The largest number of these school systems consider a reportable accident to be one in which any injury results to a pupil, regardless of how minor. Twenty-three of them used this as a basis for reporting accidents. Twelve of

these schools interpreted a reportable accident as one which would require the injured pupil to need medical attention from a physician and/or to be absent from school one-half day or more.

Table 5.1 shows which accidents were reported in these school systems. It is noted that some schools reported those accidents which result in property damage.

TABLE 5.1

DEFINITION OF A REPORTABLE ACCIDENT IN 48 SCHOOL SYSTEMS

Number of school systems	Definition
29	Only the ones which result in any injury regardless of how minor
12	Those which require medical attention by a physician or/and cause the pupil to be absent from school one-half day or more
2	Those which require medical attention by a physician and result in property damage
2	Only the ones which require medical attention by a physician
2	Those which result in a minor injury to pupil and property damage
1	Those which cause the pupil to require medical attention by a physician and one-half day or more absence from school, and property damage
Total 48	

Filling in the accident report. Fifty-one of the 54 replies show that the accident report is filled in by various individuals connected with the schools. Individuals who

made the reports were the principal of the school, designated teacher, any pupil, school nurse, and the person who is in charge when the accident occurs. Table 5.2 shows that the principal is the only person who makes out the reports in 13 of these school systems. He also shared in this responsibility with other members of the school personnel in 23 school systems.

TABLE 5.2

PERSONNEL WHO MADE THE ACCIDENT REPORT IN 51 SCHOOL SYSTEMS

Number of school systems	Personnel
13	The principal, only
7	Principal and any teacher
6	Principal, school nurse, any teacher
5	Any teacher, only
3	School nurse, only
3	Person in charge at time of accident
3	Principal and school nurse
3	Designated teacher and school nurse
2	Principal and designated teacher
2	Principal, designated teacher, and school nurse
1	Principal, school nurse, and person in charge
1	Principal, designated teacher, and any teacher
1	Principal, any teacher, any pupil
1	Called in by phone, no written report
Total 51	

From this we may conclude that the principal assumes the major responsibility for filling out the accident report. This is indicative of the principal's interest in knowing the accident experience of his student body. Table 5.2 shows the number of school systems and to whom the responsibility for filling out the accident report is assigned.

These schools were asked whether or not the local police department furnished a report to the schools of the accidents investigated by them which involved school-age pupils. Forty-eight replied to the question. Thirty-eight showed that the local police do not report accidents to school-age pupils to the school. Ten showed that the local police report the accidents involving school-age pupils investigated by them to the school.

Securing the information about pupil accidents. Securing the information about all pupil accidents is one of the most difficult things to accomplish in making the system effective, especially the accidents which occur away from school. Forty-seven of these school systems reported that the information concerning an accident to a pupil is obtained from one or more of the following sources: the homeroom teacher, the teacher present when the accident occurred, any teacher, any pupil, school nurse, local police, administrator of the school, and every other possible source available. In most schools more than one source is drawn upon for the information. Table 5.3 shows that the homeroom

teacher supplies the information in 10 school systems, the teacher present at the time of the accident in five schools, designated pupils in four schools, any teacher in 12 schools, parent of the injured child in eight schools, school nurse in 14 schools, the administrator in 15 schools, the local police in two schools, and from all sources in six school systems. Table 5.3 shows the number of school systems which used each of these sources to obtain the information about an accident.

Report forms used for reporting accidents. These school superintendents were asked whether the same form was used for reporting the accidents which occurred under school jurisdiction as was used for reporting non-school jurisdiction accidents. Twenty-three responses were received. Nineteen school systems used the same form for reporting all accidents. Three schools did not use the same form. Since it was shown earlier in this chapter that 30 of these schools reported only those accidents which occurred while pupils were under school jurisdiction, we may assume this to be the reason for so few responses to the question.

The form which has been developed by the National Safety Council can be used for reporting all accidents.

Filing accident reports. Accident reports to pupils should be filed in each school office in the school system. The reports are often needed for future reference. Forty-two of the 46 school systems reported that a copy of each

accident report was kept on file in the office of the school. Four schools indicated that such reports were not kept on file.

TABLE 5.3

PERSONS THAT SUPPLY INFORMATION ABOUT ACCIDENTS TO SCHOOL-AGE PUPILS IN 47 SCHOOL SYSTEMS

Number of school systems	Person or persons
7	Any teacher
6	All sources possible
4	Administrator of school
4	Parent of injured, school nurse
3	School nurse
3	Any teacher, school nurse, administrator of school
3	Any teacher and any pupil
2	Homeroom teacher, and teacher present at time of accident
2	Any teacher, homeroom teacher, and any pupil
1	Homeroom teacher
1	Teacher present when accident occurred
1	Local police
1	Homeroom teacher and any teacher
1	Homeroom teacher, school nurse
1	Teacher present at time of accident, any teacher and parent of injured child
1	Homeroom teacher, and designated pupil
1	Designated pupils, teacher, and parent of injured pupil
1	Homeroom teacher, teacher present at time of accident, designated pupils, parent of injured child and administrator
1	Homeroom teacher, teacher present at time of accident, any pupil and school nurse
1	Any pupil and school nurse
1	Homeroom teacher and administrator
1	Homeroom teacher and any teacher
Total 47	

Reports to central office. Forty-six school systems reported that a copy of each accident report was sent to the central office. Twenty-one schools sent the report to the superintendent of schools, 10 sent them to an assistant superintendent, 18 sent them to the director of safety education, 10 sent them to the health services department, two sent them to the director of instruction, and two schools sent them to the business office.

It was interesting to note that 18 of these school systems had a director of safety education in the central office.

The data in Table 5.4 show who received the accident reports in the central office of these school systems.

Policy for the care of injured pupils. Forty-six of the 48 schools which replied to this question reported that a policy governing the care of injured pupils was in force. Several provisions were included in the policy for these schools. They are: call the parent; when parent cannot be reached, call the family doctor; call the school nurse; if parent or doctor cannot be reached, call an ambulance and have the injured pupil taken to the hospital; call the person who has been designated previously by the parent; and/or call the superintendent of schools. The order in which the provisions of the policies are to be followed is not shown. Forty-six schools had the provisions in their policy that the parent was to be called; 30 schools had the

TABLE 5.4

PERSONNEL THAT RECEIVES THE ACCIDENT REPORT IN THE CENTRAL OFFICE IN 48 SCHOOL SYSTEMS

Number of school systems	Personnel
15	Superintendent of schools
11	Director of safety education
5	Assistant superintendent
5	Superintendent and director of safety education
4	Health department
2	Assistant superintendent and director of safety education
2	Superintendent and health service department
1	Business office
1	Superintendent, director of safety education and health department
1	Business office and assistant superintendent
1	Superintendent, director of safety education, director of instruction and health department
Total 48	

provisions that the family physician should be called when the parents cannot be reached; 23 provided that the school nurse be called; 34 stated that if neither the parent nor the school doctor could be reached, an ambulance should be called and the pupil taken to the hospital; 12 had a provision that a school doctor be called; two that a person previously designated by the parents be called; and in one school policy the superintendent of schools was to be called

when a pupil was injured while under jurisdiction of the school. Table 5.5 shows the number of school systems and the provisions included in the school policy regulating the care or attention which is to be given a pupil who is injured while at school.

TABLE 5.5

PROVISIONS FOUND IN THE SCHOOL POLICY WHICH GOVERN THE CARE THAT PUPILS WERE TO RECEIVE WHEN INJURED AT THE SCHOOL IN 46 SCHOOL SYSTEMS

Number of school systems	Provisions
11	Call parent, family doctor, if neither can be reached call an ambulance and send pupil to hospital
9	Call parent, when parent cannot be reached contact family doctor, call school nurse, and call an ambulance
4	Call parent and call ambulance
3	Call parent, school nurse, an ambulance and send pupil to hospital
2	Call parent, when parent cannot be reached call family physician when neither parent nor family doctor can be reached, call school doctor
2	Call parent, family doctor, school nurse and school doctor
2	Call parent, family doctor, school doctor and the ambulance and send pupil to hospital
2	Call parent, family doctor and school nurse
2	Call parent, family doctor and ambulance
1	Call parent and school nurse
1	Call parent, family doctor, previously designated person
1	Call the school nurse
1	Call parent and family doctor
1	Call parent, family doctor, school nurse, and doctor, ambulance, send pupil to hospital
1	Call the parents
1	Call parent, family doctor and school nurse
Total 46	

Treatment of minor injuries. Forty-seven school systems reported that all minor injuries to pupils were treated at the school. Thirty schools replied that the principal treated the minor injuries which were received by pupils; 11 schools show that any teacher may treat the injuries; 40 schools show the school nurse treats injuries; seven show that the school doctor gives the treatment; in eight schools the school secretary gives the treatment, and 30 schools reported that the person giving this treatment is one who has had training in first aid. Several of these school systems permit more than one individual to treat minor injuries.

Table 5.6 shows the number of schools which show or indicate how to treat minor injuries to pupils and who gives the treatment.

Reports made to the central office. The schools were asked how often the accident reports were sent to the central office. Forty-eight school systems replied as follows: in seven, the schools sent the accident reports weekly; 11 made monthly reports; two reported the accident to the central office within 24 hours after it occurred; 26 made them immediately; one school sent the report three times per year; and one school did not have a regular time for sending them.

Only 10 school systems made a summary of the accidents which occurred in all the schools in the system and distributed it to each school in the system.

TABLE 5.6

PERSONNEL IN THE SCHOOL OF 47 SCHOOL SYSTEMS WHO TREAT MINOR INJURIES TO PUPILS

Number of school systems	Personnel
8	School nurse or teacher with first aid training
7	School nurse
7	Principal, teacher who has had first aid, school nurse, and school secretary
6	Principal, school nurse, any teacher
3	Principal, teacher who has had first aid
2	Principal, teacher with first aid training and school doctor
2	Principal, school doctor and school nurse
2	Principal, any teacher, school nurse and secretary
2	Principal and school nurse
2	Any teacher and school nurse
1	Principal, teacher with first aid training, school nurse and another pupil
1	Teacher with first aid training
1	Principal and any teacher
1	Principal, school nurse and school secretary
1	Principal, teacher with first aid training
1	Principal, teacher with first aid training, school nurse and school doctor
Total 47	

Use of information obtained from the accident report. Thirty-seven of these school systems reported that the information from the accident report was used for various purposes. Among them were: to improve the safety instruc-

tion program; to locate existing hazards; to determine the number of accidents that occur; to find accident prone pupils; to convince the enforcement agencies that enforcement needed to be stepped up; and to obtain information for the insurance company which carried insurance on the pupils. Thirty-two of the schools used the information from the accident reports to improve the safety instruction program; 32 schools used them as a means of locating hazards; 15 used them to determine the number of accidents which occur; nine used them in an effort to get enforcement improved; one used them to obtain information for insurance companies; and one used them to discover accident prone pupils.

Table 5.7 shows the number of school systems which used the accident reports for each purpose. These reports should serve as a guide to improve the instructional program and to assist in locating hazards. The use of the school accident report to bring about improved enforcement is questionable from the viewpoint of educators.

Information needed for the accident report. There is a wide variation in regard to the information required for the accident report in the school system of these cities. Forty-eight of the 56 schools showed the following items on the accident report forms: 48 asked for the name of injured pupil; 48 the date the accident occurred; 47 the geographical location of the accident; 44 the nature of the injury; 44 the signature of the person making out the report; 43 what

was done when the accident occurred; 42 grade, address, and what the pupil was doing when the accident occurred; 41 part of body injured; 36 who was in charge at the time of the accident; 25 number of days absent; 23 the day of the week; and 22 the home phone of the injured pupil. Only one school system did not ask for the location of the accident on the report.

TABLE 5.7

HOW THE INFORMATION OBTAINED FROM ACCIDENT REPORTS IS USED IN 37 SCHOOL SYSTEMS

Number of school systems	Use
15	To improve instruction and to locate hazards
10	To improve instruction, to locate hazards, and to determine the number of accidents which occur
7	To improve instruction, to locate hazards, to determine the number of accidents, and to get the enforcement agency to step up their enforcement program
2	To improve instruction, locate hazards, and to supply information for insurance companies
2	To improve instruction, locate hazards, and to get the enforcement agency to step up their enforcement program
1	To improve instruction, locate hazards, to bring stepped up enforcement, and to discover accident prone pupils
Total 37	

Most persons in the accident prevention field feel that it is important to know where an accident occurred. When the location is known it is possible then for an inspection or investigation to be made. This will assist in determining the cause of such accident. Also, it will serve as a means for helping to get any hazard which exists removed or lessened. Another deficiency shown here in accident reporting is that only a small number of the school systems ask for the number of days the injured pupil was absent from school because of an accident. Absences oftentimes result in a financial loss to the school system, especially when the school receives state funds for operation, based on an A.D.A. basis. Also, this may cause pupils who are absent from school to fall behind in their school work. A good safety instruction program will help to overcome both of these conditions.

Table 5.8 shows what information was required on the accident report form and the number of schools which required such information.

Some schools sent monthly summary of accidents to the National Safety Council. The school officials in these cities were asked, "Does your school send a monthly summary of accidents to the National Safety Council?" Forty-three of the officials replied to the question as follows: 17 show that such a summary was sent to the Council and 26 reported that they did not send the summary to the Council.

TABLE 5.8

INFORMATION NEEDED FOR THE ACCIDENT REPORT IN 48 SCHOOL SYSTEMS

Number of schools requiring this information	Information*														
	Name	Grade	Address	Home phone	Date	Day of week	Time of day	Person in charge	What was done	Part of body injured	Nature of injury	What was pupil doing	Number of days absent	Location of accident	Signature of one making report
10	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
4	x	x	x	o	x	x	x	x	x	x	x	x	x	x	x
3	x	x	x	x	x	o	x	x	x	x	x	x	o	x	x
2	x	x	x	x	x	o	x	o	x	x	x	x	o	x	x
2	x	x	x	o	x	o	x	x	x	x	x	x	x	x	x
2	x	x	x	o	x	o	x	o	x	x	x	x	o	x	x
1	x	x	o	o	x	x	x	x	x	x	x	x	x	x	x
1	x	o	x	x	x	x	x	x	x	x	x	x	o	x	x
1	x	x	x	o	x	o	x	x	x	x	x	x	o	x	x
1	x	x	x	x	x	o	x	o	o	o	x	o	x	x	x
1	x	o	x	o	x	o	x	o	o	o	x	x	o	x	x
1	x	x	x	o	x	o	x	x	x	x	x	x	o	x	x
1	x	o	o	o	x	x	x	x	x	x	x	x	x	x	x
1	x	x	x	o	x	o	x	x	x	x	x	x	x	x	x
1	x	x	x	x	x	o	o	x	x	x	o	o	o	x	o
1	x	o	o	o	x	x	o	o	x	o	x	x	o	x	x
1	x	x	x	o	x	o	o	o	o	x	x	o	o	x	x
1	x	o	o	o	x	o	o	o	x	x	o	x	o	x	x
1	x	o	x	o	x	o	x	x	x	x	x	x	o	x	x
1	x	x	x	o	x	o	o	x	x	o	x	x	x	x	x
1	x	x	x	x	x	x	x	x	x	x	x	x	o	x	x
1	x	x	x	o	x	o	x	o	x	x	x	x	o	x	x
1	x	x	x	o	x	o	x	o	x	o	o	o	o	x	o
1	x	x	x	x	x	x	x	x	x	o	x	o	o	x	o
1	x	x	x	o	x	o	o	x	x	x	x	x	x	x	x
1	x	x	o	o	x	o	x	x	x	x	x	x	x	x	x
1	x	x	x	x	x	x	x	x	o	o	o	o	o	o	x
1	x	x	x	x	x	x	x	x	x	x	x	x	o	x	o
1	x	x	o	o	x	x	x	x	x	x	x	x	x	x	x
1	x	x	x	o	x	o	x	o	x	x	x	x	x	x	x
1	x	x	x	o	x	o	x	x	x	o	x	x	o	x	x
Total 48															

*x means the item is required and o means it is not.

CHAPTER VI

NON-SCHOOL ORGANIZATIONS AND AGENCIES AND THE SERVICES WHICH THEY CAN MAKE AVAILABLE TO THE SCHOOLS IN THE SAFETY EDUCATION PROGRAM

The safety movement has been confronted with many problems during the developmental period. A few years ago teacher-training institutions offered no programs in safety education; educational support and financial contributions from non-school organizations and agencies were scarce.[1] Resource materials and teaching aids were almost non-existent.

Today, a great many of these problems have been overcome, but new ones have arisen in their places. Non-school organizations and agencies are interested in helping the schools which are teaching safety education. In an accident prevention program, there are two points of view with respect to the school's relationship to other interested organizations and agencies in the community. Some school officials believe that the assistance of these groups is not needed in carrying on a safety program. These officials

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[1]Leon Brody and Herbert J. Stack, Highway Safety and Driver Education (New York: Prentice-Hall, Inc., 1954), pp. 317-325.

look with suspicion upon all outside agencies that offer to participate in the school program. It is true that many school officials have learned through sad experiences that some groups have used the schools for promoting their own selfish interests. On the other hand there are some who believe that non-school groups may have much to contribute to the school's safety program. They are glad to receive materials from these sources. They admit that materials supplied by a non-school organization or agency may carry a certain amount of advertising of the company or organization, but they are willing to use the materials when they have educational value.

School authorities should examine carefully all materials submitted for use in the school safety program. At the present time there is much safety material being developed by non-school groups which can be used by schools to enrich the instructional program. Some of these materials have very little advertising.

The school system should set up a committee to review the materials which are offered to the schools for use in the safety program. In large urban communities representation on this committee should include all of the schools in the system. Official agencies, such as the police department, the fire department, parent-teacher association and the traffic engineer should have representa-

tives on the committee.[1]

Since the school personnel should always compose the majority of the representation on this committee, they can safely control the actions and permit the committee to pass on proposals made by the various agencies in the community. The rule or decision made by the committee should be strictly followed on all proposals which come from outside agencies asking to engage in school activities. It is generally easier for a committee than for an individual school administrator to pass impartially upon a proposal made by an influential organization. The coordinating committee also serves to eliminate duplication of activities in school and it tends to bring all the community groups into a better working relationship in the total safety program. This committee should also let the non-school agencies know the kind of help in which the schools need assistance. Most community groups are eager to be of real service when the needs have been pointed out to them. The school people should assume a leadership role here and help to guide their efforts along desirable paths.

Cooperating Agencies

The cooperating agencies may be classified into four groups: local, county, state, and national.

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[1]Herbert J. Stack, Elmer B. Seibrecht, and Duke Elkow, Education for Safe Living (New York: Prentice-Hall Inc., 1949), p. 415.

Local organizations and agencies. The local agencies include tax supported agencies and others. Under tax supported agencies are the local police, the traffic commission, the fire department, the street department, the city engineer, the traffic engineer, and the city park department. In most cases all of these agencies are interested in assisting the school in the areas of safety which come within their jurisdiction. All of them except the fire department have some responsibility for providing protection for pupils enroute to and from school. Almost every branch of city government is interested to some degree in one of the three E's of safety: engineering, enforcement, and education. These agencies may provide assistance to the schools in any of the following ways: by providing school signs, painting crosswalks, furnishing crossing guards, making limitations by ordinance on parking and standing in the proximity of the school, supplying speakers on traffic safety for school assemblies, serving as consultants to school staffs and student safety organizations, furnishing films and other safety materials, and participating in special campaigns and projects. The fire department is usually concerned with the safety of the school plant and can be of valuable assistance to the schools in inspecting school buildings, helping to work out fire-exit drills, demonstrating fire extinguishers, and evaluating the total fire safety program in the school. Other organizations which have an interest in the school

safety program are local safety council, civic groups, fleet operators, local car dealers association, society of safety engineers, insurance companies, local units of the parent-teacher association, city-wide parent-teacher council, Business and Professional Women's Club, chamber of commerce, junior chamber of commerce, Young Men's Christian Association, and local chapter of American Red Cross.

The local safety council should provide leadership in the city-wide safety program. Behind every successful safety council will be found enthusiastic individuals with practical judgment who work hard year after year with continued determination to succeed in reducing accidents. This council can contribute much toward the safety program in the schools. Among the services which can be furnished by this organization are, consultant, teaching materials, safety films, safety posters, and financial aid. This organization can, also, do much to build public support for the school safety program by working with lay groups in the community.

Civic groups may supply materials and equipment for the school safety patrol.

Fleet operators can render a service to the school by serving as judges in the school sponsored driver education activities and by educating their own drivers in the safety precautions they should observe when making deliveries to the school.

The local car dealers association may participate in

the school safety program by making cars available for the driver education program and furnishing instructional films and other materials.

The Society of Safety Engineers may assist the schools in making inspections of the school plant and especially in supplying the school shops with safety goggles and other equipment which contribute to safety for the shop students.

The insurance companies in cities the size of the ones included in this study are usually organized into an association. This association may contribute to the school safety program by purchasing psycho-physical testing equipment for the driver education program, by paying the insurance on the driver education cars, by purchasing educational films and other teaching aids, by participating in special campaigns and special projects and by making scholarships available for teachers to attend safety conferences.

The local unit of the Parent-Teacher Association may well rank first among all the agencies participating in the school safety program. It can contribute to the safety program of the school by making funds available for the construction of off-street parking areas and pick-up drives, by keeping informed of the school's instructional program in safety so that conflicts will not develop because the teacher and the parent give contrary instructions to the children. They may assist by keeping the patrons informed of the best

safety practices to observe when bringing their children to school or calling for them at the school. We must all be aware that learning does not stop when the dismissal bell rings. It is for this reason that parents and teachers must plan and work closely together. The city-wide parent-teacher association may participate in special campaigns and projects which bring about an improvement in safety to all the citizenry.

Business and Professional Women's clubs may participate in special campaigns and supply safety materials for classroom instruction.

A chamber of commerce can make a contribution to the school safety program by building public support for the program, by supplying safety posters, and by participating in such special campaigns as national fire prevention week.

The junior chamber of commerce can contribute by making materials available for the instructional program, by participating in special campaigns, and by making awards available to students in special projects. The National Teen-age Road-e-o is a program by which this organization promotes the interest of safety in the school.

The local chapter of the American Red Cross can assist the schools by supplying materials, posters, and news-letters. Personnel for first aid training courses and for consultant services can be supplied by this organization. The Y.M.C.A. and other character building organizations can

assist the schools in special programs and campaigns that promote safety.

It is advantageous to the school safety program to find one or two special projects per year in which all local agencies can participate. A back-to-school safety program lends itself to such an activity. Oklahoma City has experienced two such programs with all of these local groups participating. The first back-to-school safety program was in 1953 and the second one was at the beginning of the school year in 1954. The results were amazing in reducing accidents to school-age pupils. During September 1954, 51 thousand pupils attended the Oklahoma City Schools with only one reported accident to a pupil enroute to and from school.[1] This compares with 14 for the same month the year before.

County organizations and agencies. County organizations and agencies which can lend assistance to the school safety program are commissioners, health department, and county chapter of the American Red Cross.

The county commissioners can be of assistance to the schools which are in the system, but located outside the city limits by furnishing materials and equipment that are needed to improve conditions which contribute to safety for pupils.

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[1]Safety Education Department, "Summary of Accidents for the Month of September," Oklahoma City (1954), p. 2.

The county health department may assist the schools in the safety program by helping them to bring about some control of stray animals found in the proximity of schools. Sometimes unwanted animals are dumped near the schools located outside the city limits. This practice creates a hazard for the pupils in the schools. Usually the only assistance the schools can obtain in the control of stray animals in outlying areas must come from the county health department. This organization may also provide safety films and teaching materials for use in the safety program.

The county chapter of the American Red Cross can supply instructional materials, teaching films, and consultant services to the school staff.

State organizations and agencies. Among important state organizations and agencies which can make their services available to the schools are, state department of public safety, state department of education, state safety council, and the state parent-teacher association.

The state department of public safety can assist the schools in almost all problems relating to traffic safety by assisting in student safety activities, by supplying materials for instruction, by furnishing speakers for assembly programs, and by providing consultant services.

The state department of education, although not an outside agency, has the responsibility of giving direction to the state-safety program. It can give guidance and

direction to the developing of instructional guides in safety education and it can be instrumental in bringing about improved standards of certification for teachers and standards on school bus operations.

The state safety council may assist the schools by providing instructional materials, films, and consultant services. They may also assist by sponsoring state-wide student safety activities such as driver education contests and teen-age safety conferences. The council can contribute much to the school safety programs by building public support for safety on a state-wide basis.

The state parent-teacher association may sponsor special state-wide projects, such as the driver education program, school safety patrols, and workshops. They may also lend their support on legislative matters which will bring about an improvement in general safety conditions throughout the state.

The national organizations and agencies. The national organizations which may contribute to the school safety program are: the National Safety Council, National Commission on Safety Education, Association of Casualty and Surety Companies, American Automobile Association, Inter-Industry Highway Safety Committee, Motor Vehicle Administration, American National Board of Fire Underwriters, and others.

The National Safety Council has a division known as

the School and College Division, which is especially designed to encourage and assist the schools and colleges in a comprehensive safety education program. This division has a director and a staff which maintain field services that are available to any school system or college which desires them. The National Safety Council sponsors the National Safety Congress which convenes in Chicago in October of each year. This Congress brings together school administrators, city safety directors and supervisors, state safety directors and supervisors, general supervisors, classroom teachers, college personnel and representatives from interested non-school groups from all parts of the United States and from some foreign countries. The Congress is organized with the following sections and committees: Safety Education Supervisors Section, Driver Education Section, Secondary School Committee, Elementary School Committee, and the Industrial Education Committee. By attending the Congress and participating in the section meetings and committee work it is possible for a person who is interested in school safety to find much help on local problems.

In addition to these services, this division of the Council publishes such materials as Accident Facts, Safety Education Magazine, and Graded Lesson Leaflets. The booklet, Accident Facts, is an annual publication which gives statistics on accidents from a national standpoint. The information used in this publication is collected from many sources

throughout the nation; among them are summaries of accidents sent to the Council by each local school system. The Safety Education Magazine is a professional magazine for use by any individual interested in school safety. It is published monthly during the school year. The Graded Lesson Leaflets are published on a monthly basis and are graded as follows: lower elementary grades, upper elementary grades, junior high, and senior high. Posters are designed to cover all areas of school safety. It is possible to secure posters which are directly related to the lesson leaflets. Handbooks and curriculum guides are among the other materials which are available from the Council.

The School and College Division also has a School and College Conference. The membership in the School and College Conference includes the staff of the School and College Division, the general chairman of the supervisors' section, general chairman of the driver education section, and the chairmen from elementary, secondary, and higher education committees. Non-school groups also send representatives to serve as members of the School and College Conference. This Conference serves as the coordinating group for the School and College Division. All items of importance must be submitted to this conference for approval before it can become effective. It is also possible to secure assistance on immediate problems by correspondence with this organization.

The National Commission on Safety Education is a department of the National Education Association and is composed entirely of educators. This organization has a strong influence on school administrators and school safety programs. It develops special materials for use in safety education. The Commission organized and administered the first National Conference on Driver Education, which was held at Jackson's Mill, West Virginia, in 1949. From this conference emerged the first nation-wide set of policies and recommendations acceptable to educators. The results were published by the Commission in a booklet entitled High School Driver Education Policies and Recommendations. The Commission organized and sponsored the National Conference on Safety Education in Elementary Schools which was held in Bloomington, Indiana, in 1952. The results were published by the Commission in a booklet entitled, They Found a Way. To evaluate the progress made in the field during the past four years, a second National Conference on Driver Education was held in Lansing, Michigan, in 1953. The Commission also makes field services available to state and local groups.

The Association of Casualty and Surety Companies is interested in all phases of accident prevention. Members of the Association's Accident Prevention Department staff conduct seminars, workshops, and short courses for high school and college teachers throughout the country. The Association originally published Man and the Motor Car, a driver

education textbook which is used by many school systems in the driver education program. The Association also publishes a variety of materials useful in all the areas of safety education in the school program.

The American Automobile Association supplies field services for school systems and colleges throughout the country. Field services consist of staff help in seminars, institutes, and workshops. This organization publishes Sportsmanlike Driving, a driver education textbook which is used in many school systems. They also publish a variety of other materials which can contribute to the school safety program. Many educational films on safety are sponsored or subsidized by this organization. Also, very valuable teaching aids in the form of Psycho-Physical Testing Equipment for use in the driver education program is available from this organization. Also it has worked out a plan with General Motors whereby cars may be obtained for use in carrying on the practice driving phase of the driver education program.

The Inter-Industry Highway Safety Committee is an organization which has been established for the purpose of helping schools to secure cars for the driver education program. This committee works directly with the local car dealers association to encourage them to make cars available on a loan basis to schools for driver education. In many instances, the efforts of this group have been instrumental

in helping the school administrator add a driver education program in the school curriculum. In other instances they have helped to maintain a program which has been in existence for some time. The committee also maintains field services which are available to schools. The specific activity in which this organization is interested in supplying staff help is the Teen-Age Safety Conference. This safety conference brings together teen-agers, on a local, county, or state-wide basis and affords them the opportunity of determining their responsibility in the safety problem and to help find ways of fulfilling these responsibilities.

The National Congress of Parents and Teachers as an educational organization is a trustee of children and their welfare, with special obligations in safety.[1] This group can help make safety a habit, a way of life. It stands ready to help parents and teachers acquire the needed information, skills, and attitudes, and to work with them for safer homes, safer schools, and safety in the communities through community efforts.

All adults who are responsible for the care of children and youth can learn to prevent accidents. It is an obligation they must not shirk. The war on accidents must be a total war. Who can tell before an accident occurs whether it will be serious or not. An effort needs to be

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[1]Mrs. Newton P. Leonard, Signals for Safety (Chicago: National Congress of Parents and Teachers, 1954), p. 4.

made to prevent all accidents.

There is no vaccine with which a child can be immunized against accidents, but there is a formula for safety.[1] The formula for child safety gives protection and education in proportions suitable to the stage of the child's development. It should be administered daily, 24 hours a day. Start the infant with a formula of 100 percent protection. Diminish this amount and increase the quantity of education gradually. The adolescent diet will be almost 100 percent education, with some protection still needed.

Protection means making safe living for the child by providing a safe environment at home, at school, and throughout the community. Education means making the child safe for living by helping him acquire information, gain skills, and develop attitudes that enable him to live zestfully, successfully, and responsibly. The very young child should be shown how to do things the desirable and satisfying way; he should be supervised until the safe way becomes a habit. This kind of training, provided by parents for children, will do much to help the schools in the school safety program. The Parent-Teacher Association issues handbooks and other materials which are useful to parents in knowing the kind of help that children need in safety. Among these are

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[1]Harry F. Dietrich, "A Practical Approach to Accident Prevention," The Crippled Child, Chicago: The National Society for Crippled Children (Feb. 1951), 4-5.

Safety to School and Signals for Safety.

The National Board of Fire Underwriters makes a sizeable contribution to safety education for all age groups. Each year the Board provides millions of pieces of printed materials on fire safety for use in the nation's schools. These include posters, comic books, and home inspection blanks. Recently they have produced two films for use in elementary schools, "Tony Learns about Fire" and "Fire in Their Learning." They maintain a free film lending library which books more than 15,000 prints of fire prevention films a year. These films reach a direct audience of nearly 10,000,000 persons, and a television audience of 50 to 60 million more.[1] This board produces two to four fire safety films a year and adds them to their library for distribution to those who desire to use them.

Services Rendered by Non-school Organizations and Agencies to the School Systems in the Selected Cities

This part of the study was conducted to determine what non-school groups make their services available to the school safety program in the school systems of the selected cities and to determine the kind of services they can supply to supplement the safety program. An inquiry was directed to the superintendent in each of these school systems,

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[1]A report given by J. Wendell Sether at the National Safety Congress in Chicago in 1954.

asking whether or not the services of non-school groups were being used in the school safety program. Fifty-two of the 56 school superintendents reported that the safety services of non-school groups were used in their program.

Contact Made between the School and the Non-school Organizations

The school officials were questioned concerning the procedure followed in bringing about the contact between the school and the non-school organizations for the purpose of improving the school safety education program. Forty-eight school officials replied to the question. Nineteen of them indicated that the school officials make the initial contact, six of them said that the non-school organization takes the initial step, and seven of them said the organization or the school may make this contact. Sixteen school superintendents did not reply to this question.

Most safety educators believe that any organization in the community which has a service that may be helpful to the school safety program should be involved in a constructive manner. The influence of school leadership may well be instrumental in alerting the non-school groups to improve and expand their own safety practices in addition to enriching the school safety program.

Non-school Organizations and Agencies Which Render a Service to the School Safety Programs

There are many non-school organizations and agencies in each of the selected cities that will make their services available to the school safety program. The school people should canvass the community and take inventory of the organizations and the kind of services each has that will contribute to the school safety program. Plans could then be developed for the utilization of these services.

Table 6.1 shows the organizations and agencies which aid the schools in their safety education program. More than 50 percent of these school systems used the services of the local police, local fire department, local P.T.A. unit, local safety council, American Red Cross, traffic engineer, insurance companies, state police, and the junior chamber of commerce. The services of the civic groups were used less than had been expected previous to this study. Another non-school safety organization, the state safety council, is a source of assistance in fewer than one-fourth of these schools. This may be accounted for because of the lack of a state safety council.

Services provided by non-school organizations and agencies. Table 6.1 shows the non-school organizations and agencies and also the number of schools that used the services of each. All of the school systems which replied to

the questionnaire used some of the services of the local police. Very few of them used the services of the state department of education to supplement the school safety program.

TABLE 6.1

NON-SCHOOL ORGANIZATIONS AND AGENCIES WHICH AID THE SCHOOLS IN THE SAFETY EDUCATION PROGRAM

Number of school systems	Non-school organizations and agencies
52	Local police
47	Local fire department
41	Local P.T.A.
36	Local Safety Council
32	American Red Cross
29	Traffic Engineer
29	Insurance Companies
28	State Police
26	Junior Chamber of Commerce
26	City P.T.A.
25	Local car dealers
22	Civic groups
16	Park Department
15	Traffic Commission
14	Chamber of Commerce
14	Boy Scouts
12	State Safety Council
12	Girl Scouts
10	Street Department
9	Fleet Operators
9	Society of Safety Engineers
8	American Legion
6	County Commissioner
6	Business and Professional Women
1	Young Men's Christian Association
1	American Automobile Association
1	Association of Casualty & Surety Companies
1	State Department of Education

Services which were provided by the local police. Table 6.2 shows the number of school systems and the kind of service received from the local police. Thirty-eight of these schools used the local police for consultant services and as speakers for assembly programs. Other significant services supplied by the police are safety films and instructional materials. They also assisted some schools in special safety campaigns.

TABLE 6.2

SERVICES THE LOCAL POLICE PROVIDED FOR THE SCHOOL SAFETY PROGRAM IN 52 SCHOOL SYSTEMS

Number of school systems	Kind of service
38	Consultant
38	Speakers for assemblies
20	Safety films
17	Instructional materials
16	Special safety campaigns
11	Safety posters
10	Equipment
9	Special projects on safety
6	Teen-age Road-e-o
6	Assist in workshops
5	Financial
5	Classroom teaching
4	Awards for achievements in safety
1	Testing materials
1	Checklists
1	News letters
1	Books
1	Accident reports
1	Teen-age conference

Some schools used the police for teaching in the classroom. Since police are not trained to do this type of work it seems a little unfair to them and to the pupils to ask them to assist in this way.

TABLE 6.3

SERVICES THE LOCAL SAFETY COUNCIL PROVIDED FOR THE SCHOOL SAFETY PROGRAM IN 52 SCHOOL SYSTEMS

Number of school systems	Kind of service
22	Material
20	Consultant
19	Posters
16	Special projects
15	Films
15	Special campaigns
14	Assembly programs
11	Equipment
10	Checklists
8	News letters
8	Safety magazines
7	Financial aid
7	Awards in safety activities
6	Assists in safety workshops
4	Teen-age Road-e-o
4	Books on safety
1	Testing materials
1	Accident reports
1	Teen-age conference
3	Classroom teaching

Table 6.3 shows the services which were provided by the local safety council and the number of school systems that used each of them. This organization usually keeps a supply of teaching materials in stock that can be used by the school people in the instructional program. Consultant

services on traffic problems around schools can also be obtained from the local safety council. This organization is in a position to influence other groups in the community for safety.

Services from the state police. The data in Table 6.4 show that the safety services supplied to the largest number of school systems by the state police were speakers for assemblies, consultants, instructional materials, and education films on safety. It is evident from this study that many school systems are overlooking the opportunity of obtaining many of the safety services which this organization could supply.

TABLE 6.4

SERVICES THE STATE POLICE PROVIDED FOR THE SCHOOL SAFETY PROGRAM IN 52 SCHOOL SYSTEMS

Number of school systems	Kind of service
18	Assembly program
17	Consultant service
11	Materials
10	Special campaigns
9	Films
6	Special projects
6	Teen-age Road-e-o
6	Classroom teaching
5	Testing materials
5	Posters
5	Checklists
4	Equipment
2	Assists in safety workshops
2	News letters
1	Awards in safety activities
1	Safety magazines

Safety services from insurance companies. Some of the best safety materials which can be obtained come from insurance companies. Most of these materials are made available to schools free of charge. Perhaps one of the reasons why more school systems do not use these materials is that school officials feel the materials carry too much advertising. This is a factor which must be considered to avoid criticism from the public. But on the other hand many of these materials have educational value for pupils that offset the advertising which they may carry.

TABLE 6.5

SERVICES THE INSURANCE COMPANIES PROVIDED FOR THE SCHOOL SAFETY PROGRAM IN 52 SCHOOL SYSTEMS

Number of school systems	Kind of service
16	Materials
14	Safety films
7	Safety posters
6	Financial aid
6	Assembly programs
5	Special projects
5	Checklists
4	Consultant service
4	Equipment
4	Special campaigns
3	Assistant in safety workshops
3	Awards in safety activities
3	News letters
3	Books
2	Teen-age Road-e-o
2	Testing materials
1	Safety magazines
1	Classroom teaching

The data in Table 6.5 show that the services from the insurance companies which were used by the largest number of school systems are as follows: safety materials, safety films, safety posters, financial aid, and assembly programs. One school system used representatives from insurance companies to teach safety in the classroom. All of the other services that were available from these companies were used by a small number of school systems.

TABLE 6.6

SERVICES THE AMERICAN RED CROSS PROVIDED FOR THE SCHOOL SAFETY PROGRAM IN 52 SCHOOL SYSTEMS

Number of school systems	Kind of service
16	Safety films
16	Materials
14	Consultant service
11	Posters
9	Special campaigns
8	Special projects
7	Checklists
6	Assembly programs
6	Classroom teaching
4	Testing materials
4	Books
3	Assist in safety workshops
3	Awards in safety activities
2	Equipment
2	Safety magazines
1	Financial aid
1	News letters

Services of the American Red Cross. All of the services which are available from the Red Cross were used by some of the school systems in these cities. The data in Table 6.6 show the services which were available to the

schools from this organization and the number of school systems that used each of them.

The American Red Cross has some good materials on safety which have been prepared to fit the various grade levels. These materials are most valuable to the person who is just beginning to teach school safety.

Services of the local fire department. The data in Table 6.7 show that the local fire department assisted in the largest number of school systems by making consultant services available to them. Thirty of the schools used these services. Among the other services which were supplied to the school by local fire department were speakers for assemblies, instructional materials, and help in special campaigns.

TABLE 6.7

SERVICES THE LOCAL FIRE DEPARTMENT PROVIDED FOR THE SCHOOL SAFETY PROGRAM IN 52 SCHOOL SYSTEMS

Number of school systems	Kind of service
30	Consultant service
21	Assembly programs
18	Special campaigns
16	Materials
11	Checklists
10	Posters
9	Safety films
8	Special projects
4	Awards in safety activities
3	Classroom teaching
2	Equipment
2	Assists in safety workshops
1	Teen-age Road-e-o
1	Testing materials
1	News letter

Only two of these schools indicated that the fire department assisted in an inspection of the school plant. The firemen can render a valuable service to the school in this respect because they are trained to do this type of work.

Services of the local parent-teacher association. Table 6.8 shows that the services supplied to the largest number of school systems by the local parent-teacher association were assistance in special safety campaigns, assistance in special projects, consultant services, financial aid, and instructional safety materials. The other services which this organization made available to the schools were used by fewer than 10 school systems.

TABLE 6.8

SERVICES THE LOCAL PARENT-TEACHER ASSOCIATION PROVIDED FOR THE SCHOOL SAFETY PROGRAM IN 52 SCHOOL SYSTEMS

Number of school systems	Kind of service
14	Special campaigns
14	Special projects
13	Financial aid
12	Consultant services
10	Materials
9	Equipment
9	Assembly programs
4	Posters
4	Awards in safety activities
3	Safety magazines
2	Safety films
2	Assist in safety workshops
2	News letters
2	Books
1	Testing materials
1	Teen-age safety conference

Services from the city-wide parent-teacher association. The data in Table 6.9 show the services made available to the school systems by the city-wide parent-teacher association and the number that used each service. This organization contributed to the school safety program by assisting in special safety campaigns and special safety projects. They also furnished financial aid, instructional material, safety equipment, and consultant service that were used by the schools. Several other services which were available from this organization were used by some of these school systems.

TABLE 6.9

SERVICES THE CITY-WIDE PARENT-TEACHER ASSOCIATION PROVIDED FOR THE SCHOOL SAFETY PROGRAM IN 52 SCHOOL SYSTEMS

Number of school systems	Kind of service
12	Assist in special campaigns
9	Assist in special projects
8	Financial aid
7	Consultants
7	Materials
7	Equipment
2	Assist in safety workshops
2	Assembly programs
1	Safety films
1	Testing materials
1	Posters
1	Awards in safety activities
1	News letters
1	Books
1	Safety magazines

Safety services provided by the state council. The data in Table 6.10 show that the services of the state safety council were not used by a very large number of school systems. This may be due to the lack of a state safety council in some states. In 1954 there were between 25 and 30 state safety councils in the United States.

The largest number of school systems used a poster service from this organization. Checklists, instructional materials, and consultant services were among the other services which this organization furnished to these schools. Several services were available from the state safety council, but used by few of these schools.

TABLE 6.10

SERVICES THE STATE SAFETY COUNCIL PROVIDED FOR THE SCHOOL SAFETY PROGRAM IN 52 SCHOOL SYSTEMS

Number of school systems	Kind of service
9	Posters
5	Consultant service
5	Materials
5	Checklists
3	Safety films
3	Assembly programs
3	Assistant in special campaigns
3	News letters
2	Equipment
2	Special projects
2	Safety magazines
1	Testing materials
1	Classroom teaching
1	Assist in safety workshops
1	Awards in safety activities

Safety services provided by the junior chamber of commerce. The data in Table 6.11 show that the junior chamber of commerce assisted the largest number of these school systems in their Teen-age Road-e-o. This is an activity sponsored annually by the United States Junior Chamber of Commerce and participated in by the local organizations. This activity offered all teen-agers between the ages of 16 and 20 years the opportunity to participate in a program which was designed to test their skills, knowledge, and attitudes in driving.

TABLE 6.11

SERVICES THE JUNIOR CHAMBER OF COMMERCE PROVIDED FOR THE SCHOOL SAFETY PROGRAM IN 52 CITIES

Number of school systems	Kind of services
12	Teen-age Road-e-o
7	Assist in special campaigns
7	Special projects
6	Materials
5	Consultant service
5	Awards in safety activities
4	Financial aid
3	Equipment
3	Safety films
3	Classroom teaching
3	Posters
2	Testing materials
1	Assembly programs
1	Checklists

The other services which were available from this organization were used by very few of these schools. It is

quite likely some of these schools are overlooking a valuable safety service which could be supplied by the local junior chamber of commerce.

Safety services provided by the chamber of commerce. Many safety services are available to a school system from the chamber of commerce in a city the size of the ones included in this study. Among them are consultant service, instructional materials, financial aid, safety films, posters and checklists. This organization is also interested in assisting the schools in special campaigns and special projects on safety. Table 6.12 shows the number of school systems that used each kind of service from this organization.

TABLE 6.12

SERVICES THE CHAMBER OF COMMERCE PROVIDED FOR THE SCHOOL SAFETY PROGRAM IN 52 CITIES

Number of school systems	Kind of service
7	Materials
5	Consultant service
5	Assist in special campaigns
5	Assist in special projects
4	Safety films
4	Posters
3	Teen-age Road-e-o
3	Checklists
3	Awards in safety activities
2	Financial aid
2	Assembly programs
2	Assist in safety workshops
1	Equipment
1	Testing materials
1	Classroom teaching
1	News letter
1	Books
1	Safety magazines

This is another local group which needs to be used by the schools. Some of the most influential people in the community belong to this organization. Their assistance can be helpful in building public support for the program.

Services provided by the traffic engineer. The data in Table 6.13 show the kind of safety services supplied to the school by the traffic engineer and the number of school systems that used each service.

Perhaps the most valuable service the traffic engineer can make to the school safety program is to provide protective devices for pupils to use enroute to and from school.

TABLE 6.13

SERVICES THE TRAFFIC ENGINEER PROVIDED FOR THE SCHOOL SAFETY PROGRAM IN 52 SCHOOL SYSTEMS

Number of school systems	Kind of service
21	Consultant service
6	Materials
6	Assist with special projects
5	Equipment
5	Special campaigns
3	Assembly programs
1	Safety films
1	Teen-age Road-e-o

Services provided by civic groups. Many of the civic groups in these cities can render services to the school safety program. These groups need to be guided by

school people in order for their services to fit in with the philosophy of the school. Also the school people need to let the civic groups know what their needs are in relation to safety.

Table 6.14 shows the number of schools that used these services and also the kind of services supplied to the school by this organization.

TABLE 6.14

SERVICES THE CIVIC GROUPS PROVIDED FOR THE SCHOOL SAFETY PROGRAM IN 52 SCHOOL SYSTEMS

Number of school systems	Kind of service
8	Consultant
8	Materials
8	Safety films
8	Awards in safety activities
7	Assembly programs
7	Special campaigns
7	Special projects
5	Financial aid
5	Equipment
4	Posters
3	Teen-age Road-e-o
2	Checklists
2	Assists in safety workshops
1	Testing materials
1	Classroom teaching
1	News letters
1	Safety magazines

Services provided by the automobile club. Table 6.15 shows the kind of safety services which were supplied to the school systems by the automobile club and the number

that used each service. The service provided by this organization and used by the largest number of school systems was that of making arrangements for equipment to use in the school safety program. This organization has an agreement with General Motors Corporation to furnish automobiles to schools for the driver education program. They have teaching aids such as the psycho-physical testing equipment that can be used in this program. Many teaching materials are also available from this organization.

TABLE 6.15

SERVICES THE AUTOMOBILE CLUB PROVIDED FOR THE SCHOOL SAFETY PROGRAM IN 52 SCHOOL SYSTEMS

Number of school systems	Kind of service
7	Equipment
6	Materials
5	Consultant service
4	Financial aid
4	Assist with special projects
4	Posters
3	Classroom teaching
3	Safety films
2	Assembly programs
2	Assist in special campaigns

Services provided by the park department. Table 6.16 shows that a small number of school systems used the services of the park department for supplementing the school safety program.

TABLE 6.16

SERVICES THE PARK DEPARTMENT PROVIDED FOR THE SCHOOL SAFETY PROGRAM IN 52 CITIES

Number of school systems	Kind of service
6	Assist with special projects
5	Consultant service
5	Materials
4	Equipment
4	Assists with special campaigns
3	Teen-age Road-e-o
1	Safety films
1	Posters

Services provided by the local car dealers. The data in Table 6.17 show that some of the school systems in these cities used the services of the local car dealers to supplement the school safety program. The local car dealers

TABLE 6.17

SERVICES THE LOCAL CAR DEALERS PROVIDED FOR THE SCHOOL SAFETY PROGRAM IN 52 SCHOOL SYSTEMS

Number of school systems	Kind of service
10	Equipment
7	Safety films
5	Financial aid
4	Teen-age Road-e-o
2	Assembly programs
2	Assist in special campaigns
2	Assist in special projects
1	Posters

usually assist by loaning a car to the schools for use in the driver education program. Some dealers also supply safety films which are designed to supplement the driver education program.

Each of the services of the other non-school organizations listed in Table 6.1 was used by less than five of the school systems in these cities.

CHAPTER VII

FIRE-EXIT DRILLS IN SCHOOLS

The data included in this chapter were obtained from a study of the fire-exit drill regulations of the selected cities, from state fire-exit drill regulations from 37 states in the United States, and from the recommendations of the National Fire Protective Association. The superintendent of schools in each selected city was asked to send a copy of the current fire-exit drill regulations. Fifty-four replied to the inquiry by sending the regulations or by referring the writer to the state department of education for the information. Some cities used the state regulations in the local school system. Thirty-seven state departments supplied state regulations. In addition to the above material a copy of the Building Exits Code was secured. This code consists of recommendations which were developed by the National Fire Protective Association International. One section of the code outlines the common requirements which should be observed by educators in establishing school fire-exit drill procedures.

National Recommendations for Fire-Exit Drills

The first part of this chapter deals with the national recommendations that have been established by the National Fire Protective Association for fire-exit drill regulations in the schools. The recommendations are the minimum requirements that should be observed in every school system in these selected cities.

Definition. The school fire-exit drill is an instructional device to assure prompt, orderly, and safe evacuation of pupils and other persons from school buildings. It is also concerned with the development of knowledge, proper attitudes, and skill for the protection of human life and property in the event of fire. Through fire drills we obtain not only orderly and rapid dismissal of children and other school personnel, but we also teach self-control and the avoidance of panic in most emergency situations.

Drill Procedure. School fire-exit drills must provide for all circumstances. Pupils and teachers should know the most direct route to take in an exit drill from any part of the building, including the gymnasium, the locker rooms, the cafeteria, the lavatories, the auditorium, and the corridors. Pupils should be instructed so that they may respond to an exit-drill in the absence of their teacher. The route to be followed from each room should be posted in a conspicuous place in the room. It is highly important that all

exit drills be carefully planned and clearly understood by all persons housed in the building. Teachers and other school employees should be given definite assignments and should be instructed in the duties which they are expected to perform. Full knowledge of turning in an alarm should be given to the entire staff. It is fully recognized that no one code can meet all the conditions of the various buildings involved and it will be necessary for some school authorities to issue supplements to these requirements, but all supplements should be consistent with these requirements.

Frequency. There should be at least eight exit drills per year.[1] In climates where the weather is severe during the winter months, it is suggested that weekly drills be held at the beginning of the school term, thereby eliminating drills during severe weather which might endanger the health of pupils.

Time. Fire-exit drills should be held on different days of the school week, at different hours of the day, during the time classes are changing, when the pupils are in an assembly, during play periods and lunch hours, and in other situations which might improve the efficiency of the drill. Pupils will not be able to distinguish between drills and actual fires if they are held at irregular times.

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[1]National Fire Protective Association. Building Exits Code (Boston: Ninth Edition, National Fire Protective Association, 1948), pp. 51-52.

The building plan. In developing the fire-exit drill building plan, the principal of the school and his staff should prepare for all possible contingencies. No plan will fit all buildings. It is advisable to make a sketch of each floor level in the building, showing exits, exterior walls, stairs, and, in some cases, the location and arrangement of furniture. Exterior conditions which need to be considered are assembly areas for pupils, driveways which might be used for fire equipment, and fire hydrants. Some flexibility needs to be provided for the plan. On some occasions pupils may need to use an alternate exit and assemble in a different area. The plan should be uniform in general procedures so that pupils moving from one room to another will understand the pattern and will need to learn only the new exit routes. It is also desirable to have similarity in the plans for the various buildings in the school system so that pupils transferring from one building to another will not be unnecessarily confused by the change. The exit-drill plans for each building should be discussed with the local fire department officials. It is desirable to have a member of the fire department observe exit-drills and make an evaluation of the procedures followed.

The principal goal of the fire-exit drill plan for each building should be prompt, orderly, and safe evacuation. To attain this goal it is usually profitable to spend the time needed to develop a drill routine which makes it

possible for all pupils and other personnel to be evacuated in a minimum of time without injury. Teachers, pupils, and parents should be helped to realize that controlled drills are very important. Panic creating situations should be avoided. Each drill may be used as a teaching device in controlled, concerted action.[1]

Every fire-exit drill should be an exercise in school management for the principal and teachers. Much stress should be placed upon the execution of each drill in a brisk, quiet, and orderly manner. Strict discipline must be maintained during the drill. In cases where there are children that are physically handicapped and incapable of remaining in the line and moving at a reasonable speed, provision should be made to have them assisted by the more sturdy pupils, moving independently of the regular line of march.

Monitors and searchers. The monitors and searchers should be chosen from the more mature pupils to assist in the fire drills. At least two substitutes should be appointed for each regular monitor or searcher. All of these pupils must be instructed in the duties that they are to perform. Some of these duties are, to hold doors open in a line of march, to assist handicapped pupils, and to assist in any other way to insure an orderly and efficient drill.

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[1]N. E. Viles, School Fire Drills (Washington: U. S. Office of Education, 1948), pp. 4-6.

Clothing. Since all drills are to represent an actual fire condition, pupils should not be allowed to obtain clothing after the alarm has sounded. This hinders the forming of lines and there is also danger of falling by tripping over dragging apparel.

Drill lines. Pupils should be instructed to take a definite exit from the building to a predetermined area. This area should be located away from the building a distance equal to two times the height of the building. An alternate route should be planned for use in case the regular exit is blocked. If it is necessary for drill lines to cross the street or roadway, some adult should be on guard to control traffic during drills.

Recall signal. In order that pupils will not be returned to a building which is burning, a recall signal that cannot be mistaken for any other signals, should be worked out. Such signals may be given by distinctive colored flags or banners. If an electric signal is to be used, the buttons should be kept under lock and the key should be in the possession of the principal or other designated person.

Inspection. Exit facilities should be inspected daily to make sure that all stairways, doors, and other exits are in proper working condition. Particular attention must be given to keeping all exit doors unlocked while the school building is in use. Doors which have been installed to protect the safety of paths of egress, as on stairway

enclosures, should be kept closed. Outside stairways and fire escapes should be kept free from all obstructions which might interfere with rapid and orderly escape from the building.

Any condition which is likely to interfere with safe exits should be corrected immediately, if possible; otherwise it should be reported to the proper authorities at once.

Alarm systems. Every building should be equipped with a fire alarm system. Alarm sounding devices should be provided of such design and distributed in such a manner as to be audible in every room above all other sounds. These devices should be distinctive in pitch and quality from other sounding devices in the building. All alarm-sounding devices within a school system should be of the same type. All exit-drill signals should be installed on an independent signal system and not on the signal system which is used to dismiss classes. These signalling devices should be used only for fire alarm purposes. The alarm system should be checked daily by a responsible person. All persons in a building must be properly trained to recognize this signal and informed of their responsibilities when it is given.

Lighting and signs. All auditoriums, assembly halls, gymnasiums, stairways, corridors, and exits should have illuminating signs. Such illumination should be continuous during the time that the conditions of occupancy require

that the exit-ways be open or available. Artificial lighting should be used in such places and for such periods of time as are required to maintain the illumination to the full intensities specified. This intensity should be not less than 1.0 foot candle.

Exterior doors. The exit doors of schools and other places of assembly having capacities in excess of 500 persons, should be equipped with latches which release when pressure not to exceed 15 pounds is applied to the releasing device in the direction of exit travel. The length of such releasing devices should be not less than two-thirds the width of the door.

Fire-Exit Drills in the Selected Cities of the United States

The data used here were taken from the current fire-exit drill regulations of 54 of the 56 selected cities. Two school systems did not furnish their fire-exit drill regulations for use in this survey.

A diversity of regulations and practices was found to exist in the current fire-exit drill regulations which were obtained from each of the cities. Also, many of the cities show marked inadequacies, when compared with the recommendations of the National Fire Protective Association.

Frequency of fire-exit drills. Table 7.1 shows the frequency of school fire-exit drills as carried on by the school systems in 46 of the 54 cities which supplied the

data for this study. Eight cities did not show a requirement on this. The national recommendation is eight per year. Three cities show less than the recommendation, three observed the recommendation suggested, and 39 cities showed more than the recommendation. One city has a fire drill each week of the school term. Another has a drill every two weeks during September, October, November, and December.

TABLE 7.1

FREQUENCY OF SCHOOL FIRE-EXIT DRILLS IN 46 CITIES

Number of cities	Frequency of drills
2	10 per year
3	8 per year
1	3 per semester
1	2 per semester
10	2 per month
26	1 per month
1	1 per week
1	1 every two weeks - September through December
1	1 no definite number
Total 46	

Date of first fire-exit drill. It is important that plans for the fire-exit drills be planned and put into operation soon after the opening of school. Many educators support this point of view by making early preparation for emergency situations which might arise. Table 7.2 shows

when the first fire-exit drill was held in the 18 schools which showed a requirement on this. Thirteen of these schools had the drill during the first week of school.

TABLE 7.2

DATE OF FIRST FIRE EXIT-DRILL IN 18 OF THESE SCHOOL SYSTEMS

Number of cities	Date
13	First week of school
3	Second week of school
1	Third week of school
1	First month of school
Total 18	

Who develops the fire-exit drill plan for a school? The school fire-exit drill should be developed by mature, capable, and interested individuals. The administrator of the school is charged with this responsibility, but he may designate other persons to assist him in developing and putting a plan into operation. When teachers, pupils, custodians, and representatives from other school groups are invited to share in the development of these plans, a more constructive plan will evolve. It has been said that the more people we can get to work cooperatively, the better will be the results obtained. This is one situation which demands the utmost cooperation of all who are associated

with the problem. Table 7.3 shows the personnel that 30 of the 54 cities involved in planning a school fire-exit drill. Thirteen are developed by the principal and teachers. In seven schools the principal developed the plan by himself. Five schools had the teachers work out the plan. In only two cities were the local firemen asked to assist in developing a plan. Only one school involved the pupils. It seems reasonable to suggest that all groups which are to be affected by the plans should have representation in developing them.

TABLE 7.3

SCHOOL PERSONNEL THAT PLAN THE FIRE-EXIT DRILL IN 30 SCHOOL SYSTEMS

Number of cities	Personnel
13	Teacher and principal
7	Principal
5	Teachers
2	Teacher, principal, and superintendent
1	Teacher and superintendent
1	Teachers, principal, students, and fireman
1	Teachers, principal, and fireman
Total 30	

Provisions of the school fire-exit drill. Table 7.4 shows the provisions which were included in the school fire-exit drill in all of these cities. Provisions vary from

school to school. Many have inadequacies, as compared with those recommended by the National Fire Protective Association. On the other hand, some provisions which seem to be essential in all fire-exit drills were observed by these cities, but not recommended by the National Fire Protective Association. They were accounting for pupils during the exit drill and directing pupils to an alternate exit in case the main exit is blocked or shut off. Since these provisions were additions to the national recommendations and were not shown, it might be profitable to enumerate each of the additions included here. The schools which showed a requirement for the accounting of pupils during exit drills indicated that it was done by use of the class roll, by counting the pupils, by establishing a pupil organization and letting the pupils assist, and by having the names of pupils on a placard placed near the exit door of the room, so the teacher could take it as she left the room. It is advisable to employ more than one of these methods in order to prevent an error. Eighteen of the regulations out of the 54 obtained, showed this to be a requirement in the exit drill plan. The other provision for directing pupils to an alternate exit is required in the regulations by 11 school systems. This means that if the regular exit is blocked or shut off, pupils would take an alternate route from the building. Schools which used alternate routes usually have designated signals to inform pupils when to take an alternate

TABLE 7.4

PROVISIONS FOUND IN THE FIRE-EXIT DRILL REGULATIONS OF 54 SCHOOL SYSTEMS

Number of cities	Provisions
23	Each room has an alternate route
19	Pupils take the shortest route out
19	Each room has a definite route
19	Pupils are grouped a minimum distance from the building
18	All persons required to participate in drill
18	Pupils are accounted for during drills
13	Designated areas assigned to each room group
12	Drills conducted unannounced
12	Handicapped children are provided for
11	Signals for alternate routes
9	Hand signals for alternate routes
8	Teachers lead pupils out
7	Teachers follow pupils out
7	Exit drills are reported to the central office. Exit drills are evaluated
7	Driveways and entrances are considered a part of the building
5	Use recall signals (one school used a flag and four used a bell)
3	Teachers know where and to whom missing pupils should be reported
1	Teachers stay where they can do most good
1	Electric bell for alternate exit
Total 212*	

*Since several school systems use different provisions the total exceeded 54.

route. These signals were either by use of the hand or by an electric signal. Nine schools used the hand signal and one used an electric bell as the signal.

Many people working in the field of fire safety think it important that a plan for directing pupils to alternate exits be developed and practiced. One can never know where fire will break out. It could block the regular exit from a building. In this case pupils would need to use another route out of the building.

Authorities who investigated the Texas City disaster gave much credit to one school teacher for saving the lives of many of her pupils because she had developed a plan of this kind and had educated the pupils in the use of it.

Variety of drills. It is recommended by the National Fire Protective Association that fire-exit drills be held under all kinds of conditions, and from all areas of a school building, in order that pupils would be prepared in case of any emergency which made it necessary to evacuate the building. Table 7.5 shows the variety of situations under which school fire-exit drills were held in these cities. Twenty-one of the 54 fire-exit drill regulations showed that fire-exit drills were varied. The requirements were, that exit-drills were to be held when the regular exits had been blocked, exit drills were required from assembly, drills were required when a part of the pupils were in the building and others on the playground, and drills

were required while pupils were in the cafeteria.

TABLE 7.5

THE VARIETY OF FIRE-EXIT DRILLS REQUIRED IN 21 SCHOOL SYSTEMS

Number of cities that used this plan	Variety of drills used
1	From classroom only
5	From classroom and with blocked exits
6	From classroom, with blocked exits, and from assembly
1	From classroom, with blocked exits, with pupils on playground and in school building, and from assembly
5	From classroom, from assembly, with pupils on the playground and in school building, and with blocked exits
3	From classroom, from assembly, from cafeteria with pupils on playground and in building, and with blocked exits
Total 21	

Kind of alarm signals used. Fifteen of the 54 exit-drill regulations from these school systems showed that the fire-exit alarm signal was distinctly different in sound from other kinds of signals in the building. One regulation showed that no difference was made in the type of signal used. Thirty-eight of the fire-exit drill regulations did not include information concerning the kind of alarm

signal used in school buildings.

Table 7.6 shows the types of alarm signals used in 12 of these cities. Forty-two did not indicate the type used. Nine of these cities used the hand operated signal device in combination with some other type; three of these cities used the electric horn in combination with some other device; 11 cities used an electrical bell, and one city used an official whistle in combination with other types.

TABLE 7.6

KIND OF ALARM SIGNALS USED IN 12 SCHOOL SYSTEMS

Number of cities	Kind of alarm signals
7	Hand operated, electric bell
1	Electric bell, electric horn
1	Hand operated, electric horn and siren
1	Hand operated, electric horn, electric bell, and official's whistle
1	Electric bell and whistle
1	Electric bell only
Total 12	

Firemen and safety educators usually recommend that a hand operated and electric signal be used in all school buildings. The hand operated device is an added signal device to be used in case the electric current is cut off. Eleven exit drill regulations showed that the devices were

inspected daily to see that they were in working condition. Forty-three school systems did not show a requirement relative to signal devices.

This survey indicates that very little has been done to cause school administrators and boards of education to comply with the national recommendations in providing alarm signals for fire-exit drills.

Doors. Thirteen of the 54 school systems showed that all exterior exit doors were installed in such a manner as to open out; 15 required that they be kept unlocked during the time the school building was occupied; and nine required that panic bars be used on all exterior doors. Since these requirements are a part of the national recommendations, many of these schools show an inadequacy here. Perhaps many administrators are not aware of the need for carrying out these recommendations and some plan should be developed to inform them about this.

Inspection of school building. It is the responsibility of the school administrator and the inspection department of the local fire department to see that all school buildings are inspected at regular intervals. A checklist, which can be obtained from the Fire Underwriters, will serve as a valuable help for doing this. A copy of each completed inspection form should be kept on file in the administrator's office for future reference. Table 7.7 shows that the inspection was made by the principal, the custodian, the

designated teacher, the central office personnel, the local fireman, and/or state fire marshall. Eight of these cities indicated that the principal either made the inspection or assisted in it, four involved the custodian, two involved a designated teacher, and one had the central office personnel to assist. Ten involved the local fireman, and two asked the state fire marshall to assist. Only fifteen of the 54 cities indicated that an inspection of buildings was made.

TABLE 7.7

PERSONS WHO INSPECT SCHOOL BUILDINGS IN 15 CITIES

Number of cities	Persons
3	Fireman
2	Custodian, principal
2	Designated teacher, custodian, and principal
2	State fire marshall
1	Principal
1	Principal, custodian, central office personnel, and fireman
1	Fireman and state fire marshall
1	Principal, designated teacher, and fireman
1	Principal, fireman, and state fire marshall
1	Principal, custodian, and fireman
Total 15	

Fire-exit drills evaluated. The national recommendation indicated that fire-exit drills should be evaluated

from time to time for the purpose of detecting any deficiencies which occurred so they could be corrected. In Table 7.8 it was found that only seven of the exit regulations showed provisions were made for an evaluation of drills. The principal participated in the evaluation in six of these cities, the staff was involved in all seven of the cities, and the fireman was involved in three of the cities, which made an evaluation. Other cities did not show a plan for evaluating the fire-exit drills.

TABLE 7.8

PERSONS WHO EVALUATE FIRE-EXIT DRILLS IN 7 SCHOOL SYSTEMS

Number of cities	Persons
3	Principal and staff
2	Principal, staff, pupils, and fireman
1	Staff
1	Principal, staff, and fireman
Total 7	

We have but to consider the facts in relation to fire in schools to come to the realization that they do occur in school buildings. School fires are responsible for a property loss of more than $8,000,000.00 per year. There are three school fires every day.[1]

[1]National Fire Protective Association, International, Handbook of Fire Protection (Framingham: Lakeview Press, Tenth Edition, 1948), p. 1270.

Table 7.9 shows the principal causes of fire in school buildings. This record is based on a study which was made of 1,116 school fires by the National Fire Protective Association International.[1]

TABLE 7.9

COMMON CAUSES OF FIRES IN SCHOOLS

Causes of fires in schools	Rank in frequency
Heating defects	1
Misuse of electricity	2
Smoking and matches	3
Spontaneous ignition	4
Faulty equipment	5
Incendiary	6
Defective chimneys or flues	7
Miscellaneous	8
Improper disposal of rubbish	9
Liquids	10
Special hazards school shop	11
Open flame in laboratories and kitchens	12
Explosions	13
Lighting	14
Exposure	15
Improper disposal of hot ashes or coals	16

[1] Ibid., p. 1271.

CHAPTER VIII

SUMMARY STATEMENTS, CONCLUSIONS, AND RECOMMENDATIONS

The conclusions and recommendations given in this study were based in part upon information obtained from literature in the field of safety education. Other information gained from questionnaires to the chief of police and the superintendent of schools and from the current fire-exit drill regulations of each of the selected cities was also used. Where it was possible, the results of this study were compared with national recommendations which were applicable to the area.

Summary

1. This study shows that all of the selected cities provided some protection in the proximity of schools.

2. Types of protection provided by these cities were signs, markings, one-way streets, pick-up areas, restrictions on parking adjacent to schools, school crossing lights, and crossing guards.

3. School signs varied in shape, type, color, and legend. Two types of signs were used, portable and

permanent. The color combinations used on signs were black on white, black on yellow, and red on white. The legends used on signs were diversified.

4. A few cities provided underpasses or overpasses for pupils to use in making school crossings.

5. The crossing guards were regular police, special crossing guards, and school safety patrol.

6. The decision on placement of protection for pupils was made by police, traffic engineer, city engineer, safety council, and school officials.

7. Expenses for providing protection for children enroute to and from school were paid by the city.

8. Most cities had fenced the playgrounds adjacent to busy streets.

9. Speed limits in school zones were diversified. The stated speed ranged from 10 to 30 M.P.H. Other cities used a statement, such as "safe and prudent," to limit the speed in school zones.

10. Safety instruction in some areas was included as a part of the curriculum in 51 of the 56 school systems.

11. Methods used to teach safety were correlation, integration, safety unit, unit in another course, separate course, safety council, safety patrol, safety committee, and safety club.

12. Instruction in safety was included in the curriculum of the school systems in 51 of these cities.

13. An in-service training program in safety was provided by 31 of the 56 school systems.

14. Fifty-two of the 56 school systems had an accident report system.

15. Information from accident reports was used to improve instruction in safety, to locate hazards, to determine the accident rate, to secure information for insurance companies, and to bring about more rigid enforcement.

16. Thirty school systems required only the accidents which occurred to pupils while under school jurisdiction to be reported. Eighteen required that all accidents to school-age pupils should be reported.

17. Many organizations and agencies supplied services to the schools for use in the safety education program.

18. A diversity of regulations and practices of fire-exit drills was indicated by these school systems.

19. Several kinds of signal devices for fire-exit drills were reported. Among them were electric bell, electric horn, hand operated bell, and official's whistle.

Conclusions

Some of the most important conclusions based on this study are listed below.

1. From the literature in the field of safety it was shown that industry initiated the concept that accidents could be reduced by education.

2. Improved mechanization had increased the need for more education in accident prevention. This was shown in the literature on safety education.

3. The whole problem of traffic control in the proximity of schools has been given very little study. No standardization of school signs, signals, markings, and pick-up drives has been established.

4. Playgrounds located adjacent to heavily traveled streets have been fenced to give added protection to pupils.

5. Only a few areas of safety were taught by a large number of schools.

6. The methods used for teaching safety by the majority of these school systems were correlation, integration, and co-curricular activities at the primary and intermediate grade levels and by correlation, integration, separate course, and co-curricular activities at the junior and senior high grade levels.

7. The pupil safety organizations used for teaching safety by the majority of these school systems were the safety patrol at the primary and intermediate grade levels and the safety committee and safety council at the junior and senior high grade levels.

8. An accident report system was found to be in use in 52 of the 54 school systems that returned the questionnaire.

9. Non-school organizations and agencies had many

services that could be made available for use in the school safety program.

10. Fire-exit drill regulations were found to be in use in 54 of the 56 school systems in the selected cities.

Recommendations

In view of the findings revealed in this study, the recommendations enumerated below are in order.

1. Each school system should assign the administration, supervision, and coordination of the school safety program to a qualified member or members of the school personnel.

2. Safety education should be developed as part of the curriculum. This should include all of the areas that make a contribution toward safe living for school-age pupils.

3. The school safety patrol should conform to the National Rules and Regulations.

4. An in-service training program in safety should be established and maintained for teachers.

5. An accident report system should be established in all school systems of these cities. All accidents which occur to school-age pupils should be reported to a designated person in the school. Each school in a school system should send copies of all reportable accidents to the central office.

6. Definite policies for the care of pupils injured while under school jurisdiction should be established by the

school personnel and approved by the board of education of each school system.

7. Effective teaching aids and materials in safety should be provided for in every school budget.

8. The minimal standards for all fire-exit drills should conform to those recommended by the National Fire Protective Association.

9. An inventory should be taken of the local, county, state, and national non-school organizations and agencies to determine the kind of services each can supply for use in the school safety program. A committee consisting of school personnel and representatives of the non-school groups should be established for the purpose of evaluating the services of each non-school group.

10. The P.T.A. units should be organized and given responsibility for promoting safety with parents.

11. Criteria should be established for a continuous evaluation of the school safety program.

Suggestions for Further Study

1. Research is needed to determine the best type and kind of protection to provide for children in the proximity of schools so that signs, signals, and markings can be standardized. National standards need to be established on these.

2. Teacher-training institutions need to give fur-

ther study toward establishing high quality pre-service programs for the teachers of safety.

3. Experimentation is needed to determine the most valuable pupil activities to use in teaching each area of safety. The findings of such a study would bring about much improvement in the quality of safety in the schools instructional program.

Questionnaires listed below were used for obtaining a part of the data used in this study. The questionnaire shown under Appendix A was sent to the chief of police in each selected city. Those that are listed under Appendixes B, C, and D were sent to the superintendent of schools in each city.

APPENDIXES

APPENDIX A

TRAFFIC CONTROL FOR PROTECTION OF PUPILS GOING TO AND FROM SCHOOL

TRAFFIC CONTROL FOR PROTECTION OF PUPILS GOING TO AND FROM SCHOOL

This survey is being made to determine the kind of a protection program that is provided for children going to and from school.

Will you please complete this questionnaire and return it to Lonnie Gilliland, Director Safety Education, Oklahoma City Public Schools, 2317 North Western, Oklahoma City 6, Oklahoma.

_____ _____

Name of Respondent State

_____ _____

City Name of School System

1. Would you like a summary copy of the information received? Yes _____ No _____

2. Do you use signs in your city to control traffic near the schools?

Yes _____ No _____

3. What is the shape of the sign used? Square_____ Octagonal_____ Round_____ Hexagonal_____ Rectangular_____ Irregular_____ If an irregular shaped sign is used, please show the shape on the back of this sheet.

4. What is the exact wording used on the sign? _____

_____

5. Are the signs permanent_____, portable_____, both_____, or other_____, If other, please explain. _____

6. If portable signs are used, where are they placed? Center of street____ to the side of street_____ on the curb _____ Other (Explain)_____

_____

7. At what time of day are portable signs placed? _____

8. When are signs removed? _____

9. Are the portable signs left in the street during all the time school is in session each day? Yes_____ No_____

If you answered "No" to this question, please state procedure followed.

_____

10. Who places and removes the portable signs? _____

_____

11. Where are permanent signs located in relation to school grounds?

_____

12. Are signs over painted on the street (elongated letters) to regulate traffic? Yes_____ No_____

13. What kind of signs do you believe to be the most effective? _____

_____

14. Are crosswalks used at street intersections? Yes_____ No_____

15. Are crosswalks ever placed other than at the street intersections? Yes_____ No_____ Please explain. _____

_____

16. Do school officials and teachers park their cars in the street? Yes_____ No_____

17. Are off-street parking areas provided for school officials and teachers? Yes_____ No_____

18. Would you recommend off-street parking near a school? Yes____ No____

19. Parking adjacent to the school grounds.

a. _____Parents are permitted to park indefinitely to pick up their children.

b. _____Parents are permitted to park for a limited period of time to pick up children. State how long. _____

c. _____No one is permitted to park at any time for picking up children. Is this enforced? Yes_____ No_____

20. What is the speed limit in a school zone? _____Miles per hour.

21. Do you use policemen to assist children in crossing streets near the schools? Yes_____ No_____

22. What assistance do policemen give children? Check below.

a. _____Leads children by the hand across the street.

b. _____ Directs children by telling them what to do and what to watch for.

23. Are loading zones used for loading and unloading children at the schools? Yes_____ No_____

24. Where are the loading zones located relative to the school building? _____

_____

25. What changes could be made to improve conditions near the schools in your city? _____

_____

_____

_____

APPENDIX B

QUESTIONNAIRE ON SAFETY EDUCATION

QUESTIONNAIRE ON SAFETY EDUCATION

This study is being made to determine how Safety Education Instruction is being placed in the school curriculum and what In-Service Training the schools provide for their teachers.

A summary of these findings will be sent to those interested in receiving it.

_____ State _____ City _____ School System

_____ Would like a summary ____Yes ____No.

Please complete and return, as soon as possible, to Lonnie Gilliland, Director Safety Education, Oklahoma City Public Schools, 2317 North Western, Oklahoma City 6, Oklahoma. Thank you.

1. Yes____ No____ Is Safety Instruction provided for pupils?

2. In what grades is Safety Instruction stressed? Please check.

a. ____Kindergarten.
b. ____First
c. ____Second
d. ____Third
e. ____Fourth
f. ____Fifth
g. ____Sixth
h. ____Seventh
i. ____Eighth
j. ____Ninth
k. ____Tenth
l. ____Eleventh
m. ____Twelfth
n. ____Other _____

3. In what grades is emphasis placed on each phase of Safety? Please check.

	Kdg.	1	2	3	4	5	6	7	8	9	10	11	12
Pedestrian													
Bicycle													
Driver Education													
Two Wheeled M/Veh.													
Bus													
Schoolground													
Building													
Industrial													
Recreational													
Camping & Hiking													
Plant (Poisoning)													
Holiday													
Fireworks													
Firearms													
Fire													
Water													
Farm													
Animal													
Tornado													
Home													
Other													

Indicate

4. How is Safety Education Instruction placed in the curriculum for each grade level? Please check.

	Kdg.	1	2	3	4	5	6	7	8	9	10	11	12
Correlation with other subjects													
By integration into existing curriculum													
By unit study													
School Safety Council													
School Safety Patrol													
Student Safety Committee													
A Unit in Another Course													
A Safety Club													
A Separate Course													

5. Yes_____ No_____ Is an In-Service Training Program in Safety Education carried on for teachers?

6. Is the In-Service Program provided by public schools or by colleges?

a. _____ Public Schools. b. _____ Colleges. c. _____ Public schools or by colleges.

7. What teachers participate in the In-Service Training Program in Safety education:

a. _____ New teachers. b. _____ One teacher from each building.

c. _____ One teacher from each grade level or subject field.

d. _____ Any teacher who cares to participate. e. _____ Sponsors of pupil activities. f. _____ Other. List _____.

8. How is the In-Service Program in Safety Education conducted?

a. _____ A regular scheduled course in Safety Education.

b. _____ On a workshop basis. c. _____ A one day or two day institute.

d. _____ Scheduled conferences. e. _____ Other. List_____.

9. When do the teachers meet for the In-Service Training?

a. _____ On school time. b. _____ After school hours.

c. _____ Partly on school time, the remainder after school. d. _____ Saturdays. e. _____ Other. List _____.

10. Yes _____ No _____ Is each teacher responsible for providing the Safety Instruction necessary to meet the needs of the pupils in her room?

11. Additional Remarks: _____

_____

APPENDIX C

ACCIDENT REPORTING

ACCIDENT REPORTING

I am conducting this study for the purpose of securing information about what other school systems are doing in regard to the reporting of accidents to school-age pupils and, also, to see what community agencies are used to assist in the school safety program.

Will you please complete this questionnaire as soon as possible and return it to Lonnie Gilliland, Director Safety Education, Oklahoma City Public Schools, 2317 North Western, Oklahoma City 6, Oklahoma? Thanks for your help.

_____ Name of Respondent

_____ State

_____ City

_____ Name of School System

1. Yes ____ No ____ Do you have an accident reporting system in the school?

2. What accidents are reported?

   a. ____ Only those which happen while children are under school jurisdiction.
   b. ____ Only those that happen outside of school hours.
   c. ____ All accidents to school-age pupils are reported.

3. What do you consider to be a reportable accident? Please check the ones which apply.

   a. ____ One which requires medical attention by a physician.
   b. ____ One which results in an absence of one half day or more from school.
   c. ____ Ones in which any injury results, regardless of how minor.
   d. ____ Ones where there is some property damage.
   e. ____ Other. Please explain _____.

4. Who is responsible for filling out the accident form? Check those which apply.

   a. ____ Principal
   b. ____ A designated teacher.
   c. ____ Any teacher
   d. ____ Designated pupils.
   e. ____ Any pupils.
   f. ____ A designated patron.
   g. ____ Any patron.
   h. ____ School nurse.
   i. ____ Other _____.

5. Yes ____ No ____ Does the local police furnish the school a report of an accident investigated by them in which a school-age pupil is involved?

6. Who does the school personnel secure the information from that is needed for filling out the accident report?

   a. ____ Homeroom teacher.
   b. ____ Any teacher.
   c. ____ Designated pupil.
   d. ____ Any pupil.
   e. ____ Parent of injured pupil.
   f. ____ Any patron.
   g. ____ P.T.A. Safety Chairman.
   h. ____ School nurse.
   i. ____ Local police.
   j. ____ Administrator of school.

7. Yes ____ No ____ Is the same report form used to report those accidents which happen under school jurisdiction as for reporting those that happen outside school jurisdiction?

8. Yes____ No____ Is a copy of each report of an accident kept on file in the school office?

9. Yes____ No____ Are accidents reported to some central agency in the school systems?

10. Accidents are reported to whom in the central office? Check those that apply.

a. ____Superintendent of schools
b. ____Assistant superintendent
c. ____Director of pupil personnel
d. ____Director of research
e. ____Director of instruction
f. ____Director of safety education
g. ____Other _____

11. Yes ____ No ____ Does the school have an established policy stating what the school personnel is to do should a pupil be injured seriously while under school jurisdiction? Please send a copy of the policy.

12. The Board Policy mentioned in question number 11, has the following requirements. Number each one that applies, in the order followed.

a. ____Call the parent
b. ____If parent cannot be reached, call the family physician
c. ____Call the school nurse
d. ____If parent or family physician cannot be reached, call an ambulance and have child taken to hospital
e. ____Call the school doctor
f. ____Other. Please explain _____

13. Yes ____ No ____ Are minor injuries treated by school personnel?

14. Who treats minor injuries to pupils by accidents, while they are under school jurisdiction?

a. ____The principal
b. ____Any teacher
c. ____A teacher who has had first aid training and is designated by the principal
d. ____The school nurse
e. ____The school doctor
f. ____Another pupil
g. ____Other. Please explain _____

15. Reports of accidents to pupils are submitted

a. ____Weekly
b. ____Monthly
c. ____Each semester
d. ____Annually
e. ____Other _____

16. Yes____ No____ Does each school in the system receive a copy of the monthly summary of all accidents?

17. How is the information which is collected from the accident report used by teachers and principals?

a. ____To improve the instructional program
b. ____To locate existing hazards
c. ____To determine the number of accidents that happen in a given period.
d. ____To know what phase of safety education needs stressing
e. ____To convince the enforcement agencies that enforcement needs to be stepped up.
f. ____Other. Please explain _____

18. The accident report asks for the following information:

a. _____ Name of pupil.
b. _____ Grade pupil is in.
c. _____ Address.
d. _____ Telephone number.
e. _____ Date of accident.
f. _____ Day of week
g. _____ Time of day.

h. _____ Location of accident.

(1) Schoolbuilding.
(2) Schoolgrounds.
(3) Home to school.
(4) Home.
(5) Elsewhere.
(6) Other. _____.

i. _____ Who was in charge.
j. _____ What was done with or to the pupil involved.
k. _____ Part of body injured.
l. _____ Nature of injury.
m. _____ Wast pupil was doing when accident occured.
n. _____ Number of days absent from school because of accident.
o. _____ Signature of person making the report.

19. Yes _____ No _____ Is a summary of accidents sent into the National Safety Council?

Please send a copy of your accident report form. Thanks.

APPENDIX D

UTILIZATION OF COMMUNITY GROUPS IN THE SCHOOL'S SAFETY EDUCATION PROGRAM

UTILIZATION OF COMMUNITY GROUPS IN THE SCHOOL'S SAFETY EDUCATION PROGRAM

I am conducting this study for the purpose of securing information on what community groups make their services available to the schools for use in the safety education program.

Will you please complete this questionnaire as soon as possible and return it to Lonnie Gilliland, Director Safety Education, Oklahoma City Public Schools, 2317 North Western, Oklahoma City 6, Oklahoma? Thanks for your help.

Name of Respondent	State
City	Name of School System

1. Yes _____ No _____ Do representatives from community organizations assist the school in the Safety Education Program?

2. What organizations assist the schools in the safety education program?

a. _____ Local police
b. _____ State Police or highway patrol
c. _____ Local safety council
d. _____ State safety council
e. _____ Local fire department
f. _____ City traffic commission
g. _____ City traffic engineer
h. _____ County commissioners
i. _____ City parks department
j. _____ City street department
k. _____ Local P.T.A.
l. _____ City P.T.A.
m. _____ American Legion
n. _____ Civic groups
o. _____ Insurance companies
p. _____ Local car dealersassociation
q. _____ Junior Chamber of Commerce
r. _____ Chamber of Commerce
s. _____ Business and professional women's club
t. _____ American Red Cross
u. _____ Boy Scouts of America
v. _____ Girl Scouts
w. _____ Fleet operators group
x. _____ Society of safety engineers

3. How are these representatives chosen?

a. ____ School personnel contacting the key or top person in each organization, asking for a person to be assigned.
b. ____ By waiting for the representative of an organization to contact the school and volunteering his services.
c. ____ No definite plan is followed.

4. What assistance does the school system receive from each of the organizations?

COMMUNITY ORGANIZATIONS	Consultant	Materials	Financial	Equipment	Films	Assembly Programs	Road-E.O's	Special Campaigns	Testing Materials	Special Projects	Classroom Teaching	Posters	Checklists	Assist in Workshops	Awards for Outstanding Achievement	News Letters	Books	Magazines
Local Police																		
State Police																		
Local Safety Council																		
State Safety Council																		
Local Fire Department																		
City Traffic Commission																		
City Traffic Engineer																		
County Commissioners																		
City Parks Department																		
City Street Department																		
Local P.T.A. Units																		
City P.T.A.																		
American Legion																		
Civic Groups																		
Insurance Company																		
Local Car Dealers' Association																		
Junior Chamber of Commerce																		
Chamber of Commerce																		
Business and Professional Women's Club																		
American Red Cross																		
Boy Scouts of America																		
Girl Scouts of America																		
Fleet Operators Organization																		
Society of Safety Engineers																		

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