Driver Education in Tennessee Public Schools: An Appraisal of Administration, Instruction and Personnel

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To the Graduate Council:

I am submitting herewith a dissertation written by Earl W. Henry entitled "Driver Education in Tennessee Public Schools: An Appraisal of Administration, Instruction and Personnel." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Education, with a major in Educational Administration.

John W. Gilliland, Major Professor

We have read this dissertation and recommend its acceptance:

Orin B. Graff, E. S. Christenbury, L. M. DeRidder, Howard F. Aldmon

Accepted for the Council:

Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)
May 16, 1961

To the Graduate Council:

I am submitting herewith a thesis written by Earl W. Henry entitled "Driver Education in Tennessee Public Schools: An Appraisal of Administration, Instruction and Personnel." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Education, with a major in Educational Administration and Supervision.

John W. Heiland
Major Professor

We have read this thesis and recommend its acceptance:

Howard M. Oldman

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Accepted for the Council:

[Signature]
Acting Dean of the Graduate School
DRIVER EDUCATION IN TENNESSEE PUBLIC SCHOOLS:
AN APPRAISAL OF ADMINISTRATION,
INSTRUCTION AND PERSONNEL

A Thesis
Presented to
the Graduate Council of
The University of Tennessee

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

by
Earl W. Henry
June 1961
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CHAPTER I

INTRODUCTION

Since primitive travel caused few traffic problems, simple, unwritten rules of the road remained sufficient for many centuries. It is interesting to note, however, that in 396 B.C. the Romans felt compelled to write traffic laws for the city of Rome. One of these early ordinances written in 205 B.C. stated that women were forbidden to drive vehicles within the city of Rome. During the rule of Julius Caesar congested traffic conditions necessitated a regulation that vehicles could not enter the city during business hours and in 50 B.C. a Roman law was passed against "truckin."1

Traffic regulations changed little up to modern times and in 1900 in the United States the methods of handling traffic were essentially the same as they had been in Rome some 2,000 years ago.2 However, with the arrival of the automobile new traffic problems demanded new solutions.

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2Ibid., p. 22.
In 1894 there were only four automobiles in the United States but by 1900 eight thousand existed. From 1903 to 1917 automobile registrations doubled every two years. Between the years of 1917 to 1924 the total number of motor vehicles in the United States was about eighteen million. This rapid increase of motor vehicles created new and unique problems. By 1924, approximately twenty thousand deaths were occurring on the highways each year. As a result of these traffic accidents, many people became concerned about traffic safety. One of the first efforts to improve highway traffic safety occurred in the year 1924 when Herbert Hoover,\(^3\) as Secretary of Commerce of the United States, called a National Conference concerning street and highway safety. As a result of this conference, the Uniform Vehicle Code appeared in 1926. During the late twenties considerable progress was made in the area of traffic engineering but education for traffic safety was not prevalent until about 1936.

Between the years of 1936 and 1956 the total number of eligible students enrolled in driver education courses in the nation's high schools increased approximately 5 percent per year. This rapid increase in driver education has occurred because of an increasing need for adequate

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\(^3\)Ibid., p. 23.
instruction. Present day driving is more complicated than it was when most drivers first began to hold the wheel. Learning to stop, start, and steer is not sufficient preparation for efficient driving in today's traffic. The majority of our seventy million drivers learned to drive in a haphazard fashion. If instruction was provided, it was usually given by "instructors" who generally passed on to their pupils many of their own bad habits and poor attitudes. Many studies have indicated that drivers themselves, not acts of chance or bad roads, are primarily responsible for over 85 per cent of all traffic accidents. Each year approximately forty thousand persons are killed in traffic accidents and many others crippled for life. In a study concerned with the tabulation of accidents by age groups and estimates of mileage driven per year by 5,451 drivers, it was found that persons sixteen to nineteen years of age, inclusive, drove only one-fifth as far per fatal accident as did the drivers in the safest group, age forty-five to forty-nine. According to the National Safety Council, about 94 per cent of the vehicles involved in fatal accidents had no defect, but seventy-six out of every one hundred drivers

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involved in fatal accidents were guilty of some violation.5

Many studies have measured the results that high school driver education courses have produced. All of the studies indicate that accidents have been reduced substantially. One of the first studies, which was made in Cleveland, Ohio, showed that high school boys who had completed a course in driver education had only one-half as many accidents as their untrained classmates.6 In Racine, Wisconsin, the untrained boys had four times as many accidents and over twice as many arrests as a comparable group of trained boys. The accidents and arrests were only about two to one in favor of the trained group of girls. All studies seem to indicate that states with better driver education programs have lower traffic death rates among all age groups.7

Since driver education and allied traffic safety programs were introduced in the early thirties, the motor vehicle death rate has been reduced by more than one-half.8


6Ibid., p. 2.


8Amos Neyhart, lecturer on driver education, Iowa State College, 1958.
If the 1935 traffic fatality rate of 15.9 deaths per one hundred million vehicle miles existed in 1960, over one hundred thousand people would die on the highways each year instead of approximately forty thousand. In spite of this evidence, the following questions are often asked: Why teach driving in the public schools? Why can't the parents teach their children how to drive? One might also ask: Why teach reading in the public schools? Why can't parents teach their children how to read? If the accident records of young drivers are an indication of the ability of parents as driving instructors, one might surmise that parents are more qualified to teach reading than driving. A great deal has been said as to why Johnny can't read. Perhaps the question as to why Johnny can not learn to drive and survive is of greater importance.

When the Union of Soviet Socialist Republics sent Sputnik 1 into orbit and achieved other triumphs in the satellite space race, many educators and laymen attacked the frills in our curriculum. Oftentimes, driver education was referred to as a frill course offering and safety education leaders feared that driver education programs would lose ground in the nation's public schools. In the 1958-59 school year this fear did not materialize. There were 1,338,246 pupils enrolled constituting 67.7 per cent of the potential number of eligible students and a 10 per cent
increase in total enrollment over the previous year.

However, the percentage of annual eligible students enrolled in all driver education courses dropped 11 per cent during the 1959-1960 school year—from 68 per cent to 57 per cent.⁹

Therefore, it is important to convince the public of the need for and the benefits of a complete course in driver education for every high school student in our nation.

A. THE PROBLEM

**General Statement**

The problem of this study was to analyze and appraise existing driver education programs in Tennessee secondary schools.

**Sub-problems**

1. To establish the philosophical and psychological bases of driver education.

2. To identify acceptable criteria from current national standards for adequate driver education programs.

3. To determine the nature and adequacy of driver education in Tennessee secondary schools.

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B. DEFINITIONS

Complete course is one which includes the two parts, classroom and practice driving instruction. Some schools offer only classroom instruction while others offer only practice driving instruction.

Classroom instruction in driver education programs refers to those learning experiences which are provided elsewhere than in a motor vehicle.\(^{10}\)

Classroom and practice driving instruction are a sequence of interrelated learning experiences involving both classroom and practice driving instruction.\(^{11}\)

Driver education refers to all those learning experiences provided by the school for the purpose of helping students learn to use motor vehicles safely and efficiently.\(^{12}\)

Driver simulator. A device similar to the cockpit of an automobile designed to teach students basic driving skills.\(^{13}\)

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\(^{11}\) Ibid.

\(^{12}\) Ibid.

\(^{13}\) Ibid.
Dual control car. An automobile used for practice driving equipped with an extra clutch and brake for use by the instructor.\textsuperscript{14}

Multiple-car plan. Having more than one car for learners in an off-street driving range.

Practice driving instruction refers to learning experiences in driver education provided for the student as an observer and student-driver in a motor vehicle.

Psychophysical testing. Tests designed to give the student some knowledge of personal characteristics, such as reaction time, visual acuity, distance judgment, peripheral vision and color discrimination.

C. LIMITATION AND SCOPE OF STUDY

This study was based primarily on a review of authoritative literature pertaining to driver education, interviews, and a questionnaire survey made in cooperation with the Tennessee State Department of Education. A complete return (100 per cent) of the questionnaires insured a comprehensive overview of driver education practices in the state. There was the impediment inherent in a questionnaire survey of obtaining accurate communication between the investigator and his respondents. However, this difficulty

\textsuperscript{14}Ibid.
was offset to some degree by the investigator's personal investigation of several driver education programs offered by school systems across the State.

The present study was limited to a consideration of practices found in the public secondary schools of Tennessee and did not attempt to analyze the programs of private secondary schools, commercial fleets or private driving schools in the State.

D. BASIC ASSUMPTIONS

1. The public school is the most appropriate agency or institution to teach driver education.

2. Quality driver education reduces economic loss and bodily injury, increases chances of survival, and improves the opportunity to enjoy greater adventures and progress in a more useful, abundant life.

E. SIGNIFICANCE OF THE STUDY

Since driver education has not acquired academic respectability in some parts of our nation, the importance of such a program needs to be considered. Oftentimes, the purposes of driver education are misunderstood. The misinformed assume that the purpose of driver education is to teach people how to drive. This is partly true but is not an adequate statement of purpose. The purpose of driver
education is not only to help students develop basic skills involved in driving but also to help them become responsible citizens so that they can better perform as intelligent people in the striking social phenomena of a nation on wheels.¹⁵

In the process of awaiting some uncertain future catastrophe as a result of modern warfare, the steady depletion of our human and material resources is often forgotten. The high death, injury and property damage rates are astounding. In recent years, approximately 40,000 people have been killed annually and 100,000 seriously injured in traffic "mishaps" at a cost estimated to be between five and seven billion dollars. Many of these people killed and injured were outstanding teachers, physicians, and engineers who spent a lifetime being educated, but their talents were wasted because of the advent of injury or death. If the school is the agency most responsive and adequate to meet socially established needs, it behooves our educational system to do something about this problem. The public school is the only institution that has shown either the capacity or the inclination to do anything about the traffic problem. Some responsible citizens state that they taught

their children how to drive and suggest that this function should be returned to the home. Amos Neyhart, an authority on traffic safety, makes the following statement to students as a rebuttal to this idea. He says to them, "Don't let your parents teach you to drive, because it's murder."\(^\text{16}\)

Neyhart points out that few parents have had adequate driver education themselves and will pass on the same haphazard type of education to their off-spring. Evidence gathered from all over the nation substantiates this contention. There is little doubt that well-prepared teachers of driving can do a better job than most parents. Studies concerning the driving behavior of adult motorists have shown that only 7 per cent are excellent drivers, 24 per cent good, and the other 69 per cent average, poor, or very poor.

Investigations of fatal accidents in various parts of our nation have indicated that the dangerous practice of a parent was the same practice that caused an accident for a son or daughter who learned how to drive from the parent. Taking a curve wide, starting in the wrong gear, holding a car stationary on a hill with the gears and clutch are examples of poor procedures which have resulted in sudden

\(^{16}\text{Amos E. Neyhart, "Don't Let Your Parents Teach You to Drive," The American Magazine, XIV (November, 1953), p. 25.}\)
death or injury. How many parents dangle their arms out of windows, ride the clutch or brake, weave in traffic, speed or drive more slowly than the normal traffic flow, follow other cars too closely, overtake vehicles improperly, ignore stop signs, drive when in poor physical condition, overeat, or drink alcohol before driving? How many parents are competent teachers? If teaching is a science in itself, an automotive engineer with a Ph. D. degree might be incompetent to teach his children about driving automobiles. Should he start out by delivering a lecture on automobile engineering, the relation of speed to stopping distance, or show them how to start the engine and shift gears? How many parents can be calm and objective while dealing with their own flesh and blood? One girl has made the following statement which is similar to many related by this writer's former students.

I never realized that my Dad was such an old meanie. He went into a perfect rage when I forgot to release the handbrake before starting down our driveway, he swore terribly when I clashed the gears, and when I parked a couple of feet away from a curb he treated me like a moron. "Until today," he said sarcastically, "I always thought I had an intelligent daughter." 17

Most parents are less courteous and law-abiding on the highway than anywhere else. A high percentage of otherwise good citizens violate traffic regulations and regard policemen

as their natural enemies. These inadequate skills and attitudes are learned by children. On the other hand, quality high school driver education emphasizes desirable attitudes, good manners, and consideration for others. Good sportsmanship is stressed and the student is taught that driving, like any other game, requires fair play and adherence to the rules. Teaching aids such as motion pictures, psychophysical equipment, books, pamphlets, and charts, help the student learn about his physical and emotional limitations so that he may better compensate for them while driving. Resource speakers such as police officials, traffic engineers, and insurance representatives can help the student develop a point of view concerning solutions to our traffic problems based on intelligent processes rather than the haphazard judgment often expressed by citizens swept amiss on the sea of emotions.

What about commercial driving schools? Can they do the task properly? A few states have a few commercial driving schools that are honest and competent. However, in most instances it is impossible for commercial schools to do the same job as the public schools because of the prohibitive cost involved when adequate standards are met.¹⁸

¹⁸Rogers and Cutter, op. cit., p. 25.
Driver education includes many areas of knowledge. It attempts to blend skill, knowledge, and constructive attitudes in a way that will help the student develop as a responsible driver and pedestrian. The content of such a discipline includes the driving act, preparation for it, the care and maintenance of vehicles, a knowledge of physical science and regulatory statutes, the relation of physical and emotional conditions to safe driving, and the importance of disciplined attitudes and cooperation. Material from many subject areas can be introduced in driver education, such as physics-friction, power, and electricity, chemistry-combustion; economics and mathematics; the economics of the automobile and the automobile industry; the effects of the automobile on population mobility, and family life.

If the present rate of motor vehicle accidents continues, a million lives will be needlessly lost between the years 1951 to 1978.\(^{19}\) For these reasons, the schools of Tennessee should and can help turn the future army of drivers into competent drivers with the ability to solve traffic problems in an intelligent manner.

It is hoped that this study will make possible the promotion and improvement of driver education in the public schools of Tennessee.

\(^{19}\)Ibid., p. 26.
F. RELATED STUDIES

A search of research bibliographies such as the Phi Delta Kappan, The Education Index and studies in the field of driver education indicated few closely related in scope, nature, or pattern. However, in order to supplement and support the assumption found in this study that driver education has value and should be taught in the public schools, the nature, limitations and conclusions of several studies pertaining to driver education are considered.

Numerous studies have been made in an effort to ascertain the value of driver education. The National Education Association Research Division in collaboration with the NEA National Commission on Safety Education has critically analyzed driver education research. This NEA report deals with previous evaluations of driver education research, reviews the organization and procedures used in the many experimental studies showing the value of driver education, and evaluates these studies by applying basic criteria of experimental design. These criteria included a consideration of basic criteria of scientific research, criteria for optimum driving performance, specific control

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factors, sampling design and the statistical treatment of results. Since the many experimental studies showing the value of driver education have presented prima facie evidence that the desirable results have been considerable, the problem of experimental design is of primary importance. A unique phase of this report which evaluates the experimental studies is that criteria are set up to judge the studies and then these same criteria are condemned. Questions concerning the reliability of basic accident data, optimum sample size, and the inadequacy of statistical treatment make it impossible to accept face value results of the studies evaluated. New statistical techniques and experimental designs are needed to measure so complex an activity as human traffic behavior.21

However, the NEA report of the studies concluded that it is empirically justifiable to say that traffic safety education has considerable accident-reduction value, but the exact extent of this reduction is indeterminate. It was also concluded that more practical advances in driver education may result by diverting research energy into ways of improving the existing program of instruction along with research toward acquiring a better understanding of culturally operative human factors which create accidents.

21Ibid., p. 55.
A pioneer study of driver education in Tennessee was made by Tinnell. Tinnell investigated high school driver education programs in Tennessee for the period of time since their approval for credit by the State Board of Education on August 30, 1948. Emphasis was given to a description and appraisal of high school driver education programs which existed during the 1951-52 school year. The major purposes of the study were:

1. To determine the circumstances associated with the State Board of Education's approval of high school driver education in Tennessee.

2. To ascertain the extent of high school driver education in Tennessee from the 1948-1949 school year to the school year of 1951-1952.

3. To describe existing programs of high school driver education in Tennessee.

4. To appraise existing programs of high school driver education in Tennessee.

Techniques used in conducting the study included personal visitation and interviews, library research, and correspondence. Sources used in appraising the 1951-1952 school year programs included (1) the Tennessee State Board of Education's "Requirements for Driver Education in Tennessee High Schools," and (2) the publication of the

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23 Ibid., pp. 1-8.
National Education Association entitled **High School Driver Education, Policies and Recommendations**. Tinnell concluded the following:

1. The State Board of Education approved the offering of driver education for credit in Tennessee high schools following recommendations of members of the State Department of Education, who, in turn, were influenced by high school principals offering driver education courses on a non-credit basis.

2. Although the number of Tennessee high schools that offered instruction in driver education in the 1948-1949 school year has tripled during the last four school years, the percentage of all Tennessee high schools now offering instruction in driver education remains far lower than a similar percentage on a nation-wide basis.

3. The organization and administration of driver education programs in Tennessee high schools is characterized by a diversity of patterns and practices.

4. A majority of the Tennessee high school driver education programs meet a large percentage of the criteria used in appraising these programs.²⁴

In 1956, Henry²⁵ attempted to determine the essentials of driver education and to evaluate existing programs in Tennessee schools. Methods used in making the study consisted of reviewing authoritative publications and the evaluation of questionnaires sent to all secondary schools in the State. The following conclusions and recommendations seemed

²⁴Ibid., p. 8.

to be warranted by the data obtained:

Conclusions

1. Driver education in Tennessee is very inadequate. Approximately 18 per cent of the public high schools in Tennessee offer driver education. Approximately 20 per cent of the eligible pupils are enrolled in these courses.

2. Approximately one-half of the students taking driver education in Tennessee high schools which offer the course are receiving a course which does not meet nationally recommended standards of thirty clock hours of classroom instruction plus six clock hours of practice driving.

3. The use of classroom trainers, off-street driving ranges, and multiple-car plans enable one teacher to carry a normal teaching load and thereby reduce the cost of the course per student.

4. Seventy-two per cent of the teachers in the field of driver education meet the state certification requirements. Tennessee does not require submission of the personal driving record by the teacher as a qualification.

5. Sixty-eight per cent of the high schools offering driver education give credit toward graduation for the course.

6. The driver education teachers of Tennessee have no state association which could provide open forums, discussions, and other aids to teachers with mutual problems.

7. There is no full-time supervision of driver education in Tennessee.

Recommendations

1. All Tennessee public high schools should offer driver education to all students at or near the legal driving age.

2. Provisions should be made so that all driver education courses would meet nationally recommended standards.
3. Each high school should continually study and develop plans that would include the use of classroom trainers, off-street driving ranges, multiple-car plans, or other methods which would reduce the cost for each student and provide more effective training for greater numbers.

4. A certified and qualified instructor should be acquired before attempting to offer a course in driver education.

5. Driver education should carry credit toward graduation.

6. A state-wide professional organization should be formed to assist driver education teachers.

7. A full-time state supervisor should be provided to establish and promote driver education.

One of the most important and current studies in the area of driver education was made by Key. In studying the status of driver education in the United States, he determined and described administrative and instructional practices, professional personnel and course standards as found throughout the nation. Sources of data used in the study were the state education departments of forty-eight states and 301 local school systems. Two questionnaires were used to collect this data. All of the state departments and 51 per cent of the local school systems answered the questionnaires. Therefore, the conclusions of this study are

representative of a majority of the school systems in the United States. The following recommendations were offered to expand and improve driver education in the nation:

1. The supervision of driver and safety education at all levels should be assigned to qualified personnel.

2. Teacher education institutions and state teacher certification agencies should cooperate in establishing standards for college personnel who prepare driver education teachers and for the teacher preparation offerings.

3. A minor in driver and safety education should be the minimum certification requirement for high school driver education teachers.

4. Thorough studies of the content of basic and advanced driver education teacher preparation courses should be made to better delineate and articulate the basic and the advanced courses.

5. Strong educational leadership, strong public support, and adequate financing, are urgently needed to extend driver education.

6. Experimentation and research is needed to develop plans for greatly increasing the number of students a teacher can handle in practice driving instruction.

7. Efforts should be made to improve the current ratio of approximately one full-time to one part-time teacher so as to have more full-time teachers.
8. Many school systems should face up to the danger of lowering the efficiency of some teachers due to their excessive after-school, evening, and week-end teaching duties.

9. More school systems should offer driver education in summer in order to teach students who can not take the regular semester instruction.

10. Studies are needed to validate various materials and teaching methods for driver education.

11. Plans for financing driver education should include adequate funds for school system ownership of practice driving cars and other special facilities.

12. Since an increasing number of automatic drive practice driving vehicles are being used, an extensive study is needed to determine the relative emphasis on the use of the two types in teaching and on the arrangement of lesson sequences.

13. An extensive study is needed to provide an adequate cost comparison of regular semester, summer courses, and courses for adults and out-of-school youth.

14. High school credit should be given to students who successfully complete quality courses.

15. State and local school systems should study the accident experience of practice driving cars to find if a lower insurance cost is warranted.
16. State level administrative authority to approve courses and certify teachers should apply to driver and safety education in the same way as to other subject fields.

G. SOURCES OF DATA AND PROCEDURES

The sources of data used in developing this study included a review of authoritative publications and research studies, personal visitation and interviews, and the evaluation of questionnaires sent to all secondary school principals in the State. Considerable information was derived from the following sources: The Tennessee State Department of Education, the Insurance Institute for Highway Safety, the Commission on Safety Education of the National Education Association, the Center for Safety Education of New York University, the Highway Traffic Center of Michigan State University, national conferences concerning driver education, and the four conferences of the American Driver and Safety Education Association held each year from 1957-1960.

The procedure used in treating each of the three sub-problems was as follows:

1. **Sub-problem 1. To establish the philosophical and psychological bases of driver education.** These data were designed to set the stage for action which followed. Considerable confusion in the thinking of people has resulted from inconsistent notions concerning the nature
and purposes of education. The relation of driver education to the various philosophies and psychologies of learning and the psychology of accident prevention indicated foundations upon which effective programs of driver education may be built.

Sub-problem 2. To identify acceptable criteria from national standards for adequate driver education programs. Criteria for adequate driver education programs were identified from the 1960 publication of the National Education Association entitled Policies and Practices for Driver Education. Criteria were based on recommendations made by the most recent national conference on driver education held at Purdue University in 1958.

Sub-problem 3. To determine the nature and adequacy of driver education in Tennessee secondary schools. Sources of data for sub-problem 3 included the following: (a) a questionnaire sent to all secondary school principals in the state; (b) records kept by the Tennessee State Department of Education; and (c) personal investigation of selected driver education programs.

A questionnaire survey form prepared by the Insurance Institute for Highway Safety was sent to each public secondary school in the state of Tennessee. After sending two follow-up letters all of the 467 secondary schools in the state responded. The questionnaire survey report form was entitled "School Report to State Department on Driver Education" and is included in Appendix E. Each year a national high school driver education award program is sponsored by the Insurance Institute for Highway Safety. The purpose of the award program is to promote driver education in the nation's high schools. Data gained from this questionnaire survey dealt with administration, supervision, and professional personnel phases of all the driver education programs. Mr. T. Wesley Pickel of the Tennessee State Department of Education sent the questionnaires to each school in the state. Records kept by the Tennessee State Department of Education supplied additional data.

In order to gain greater insight concerning the nature of instruction and related matters in Tennessee driver education programs, several special investigations were conducted. The method of selecting schools for special investigation consisted of determining the percentage of schools offering driver education located in each of the three geographical divisions of Tennessee. A random sample from each geographical division was made by arranging
alphabetically and numbering serially all of the schools in each region. These numbers were scrambled and the designated number of schools from each region were selected. The fifteen schools selected were as follows:

**East Tennessee**
- Bluff City High School, Sullivan County
- Chattanooga High School, Hamilton County
- Cocke County High School, Cocke County
- Holston Valley High School, Bristol
- Jacksboro High School, Campbell County
- Lynnview High School, Kingsport
- Morristown High School, Morristown
- Slater High School, Bristol

**Middle Tennessee**
- Ashland City High School, Cheatham County
- Dibrell High School, Warren County
- Goodlettsville High School, Davidson County
- Mt. Juliet High School, Wilson County
- West End High School, Nashville

**West Tennessee**
- Central High School, Benton County
- Dyersburg High School, Dyer County

This procedure resulted in finding out about the course offerings of twenty-two schools instead of only the
selected fifteen because some of the teachers taught driver education in more than one school. Only fourteen people were interviewed since these fourteen taught the courses found in twenty-two schools.

A copy of the interview guide, questionnaire report form, and a listing of all schools that offered some type of program in driver education are included in Appendixes D, E, and F.

An analysis of the adequacy of driver education was made in sub-problem 3 by comparing the questionnaire and interview data with criteria identified in sub-problem 2.

H. ORGANIZATION OF THE STUDY

This study has been organized into five chapters. The problem, definitions, limitations, scope, basic assumptions, significance of study, related studies, sources of data and procedures, and the organization of the study are included in Chapter I.

Chapter II deals with the philosophical and psychological bases of driver education.

Chapter III identifies acceptable criteria from established national standards for adequate driver education.

Chapter IV makes an analysis and appraisal of the adequacy of the present driver education programs in
Tennessee.

The final chapter includes the summary and conclusions of the study.
CHAPTER II

PHILOSOPHICAL AND PSYCHOLOGICAL BASES OF DRIVER EDUCATION

There are many persons involved in education who believe that philosophical problems have been neglected. If this be true, the neglect means that decisions have been made about the curriculum in a haphazard manner without proper attention to the basic aims, purposes, and meaning of education. Educational leadership requires the ability to assist the public to see educational problems in perspective and to think clearly about them. Administrators and teachers cannot do this unless they have a clear understanding of the philosophical issues underlying educational decisions. A philosophical point of view implies the nature of human knowledge and how such knowledge is developed and transmitted. Since the growth of knowledge has been rapid, inconsistent philosophical and psychological notions are prevalent in our educational system. The following examination of philosophical and psychological concepts attempts to indicate the confusion that exists concerning the nature and purposes of education. The purposes of driver education as they relate to the various philosophies and psychologies of learning are also considered.

The latter part of this chapter deals with the origin and development of personality traits that affect safe
behavior. Educational methods that may be effectively used to develop attitudes conducive to safe behavior are discussed.

A. BASIC PHILOSOPHICAL AND PSYCHOLOGICAL CONCEPTS

In order to clarify ideas concerning the nature of education, basic philosophical and psychological categories will be used. The philosophical categories are called Idealism, Realism, and Pragmatism. The psychological categories are known as Faculty, Mental States, Behaviorism, and Gestalt psychologies. These theories indicate the evolution of the philosophical and psychological concepts of learning. The philosophical categories will be discussed first.

Idealism includes all theories which regard reality as essentially spiritual or the embodiment of mind or pure reason.1 The idealists postulated that another world of perfect ideas existed. Since human experience did not always fit the rule the idealist devised a perfect and non-material world of ideas. This other world was a place composed of perfect ideas and the mind came from this perfect world to enter the body at the time of its birth. This

beautiful system was an easily defended philosophical point of view. Experiences of this world which did not seem to fit the eternal concepts were relegated to the perfect and nonmaterial spiritual world. Therefore, it was unnecessary and illogical to try to prove the validity of an eternal concept by using earthly material ideas. Revelation and pure reason were relied upon to determine the truth. Historical and modern examples of the results of determining the truth by such armchair speculation are numerous. In the middle ages scholars held long debates in an effort to determine how many angels could stand on the point of a needle or to determine the number of teeth in a horse's mouth. Theologians in Western Europe developed the idea that the abasement of man added to the glory of God. Hence, indignity to the body would help secure salvation for the soul; therefore, holy men regarded living in filth as an evidence of sanctity. St. Anthonasius glorifies St. Anthony because he has never washed his feet. St. Sylvia never washed any part of her body except her fingers. St. Simon Stylites lived in ordure and stench intolerable to his visitors and this was his most striking evidence of holiness.

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Unnecessary plagues, poverty, suffering, and death have resulted because man has relied upon other world rigid concepts purporting absolute truth. While historical examples of the consequences of reality determined by experiences which transcended human experience may seem absurd, this type of thinking is still common.

Today, there are those who continue to rely upon revelation and pure reason to obtain truth and direction for the activities associated with living. By listening carefully to certain East Tennessee prophets, it becomes obvious that accidents, earthquakes, plagues, and other tragedies are still considered evidences of Divine wrath and retribution. The idea that accidents occur or are prevented from occurring as a result of cosmic influence is prevalent in the thinking of such people. Perhaps this notion explains to some extent why the majority of people refuse to wear seat belts or use other simple safety procedures validated by considerable empirical evidence.

Oftentimes, educators who criticize driver education as having no intellectual value are often those who reject empirical evidence in favor of "rational thought." Therefore, they will tend to ignore experimental evidence showing the need for driver education and the value of such an offering.

Realism includes those theories which hold that reality exists independently of the mind, and that these
realities or universal laws can be discovered through scientific study.\textsuperscript{3} The realists assume that comprehensive and unchanging natural laws exist but have had considerably difficulty in establishing immutable laws. In an application of the philosophy of realism to education, the schools and other training agencies have had the job of finding out what each person was born to do. This philosophy has prescribed a rigid robot-like existence for man since his capacities were determined by natural laws and the accident of his birth. Scientific testing has been used to determine the type of job each person was born to do.

In applying realism to the problems of education, the misplaced educational objective of having all students participate in the same activities at the same time has occurred. This sort of deterministic thinking is also reflected by people in our society who believe that you will have an accident when your number is up. Similar notions imply that accidents occur according to the law of averages and cannot be stopped. Therefore, safety education would be of little value.

The trouble with Idealism and Realism is that they are rigid concepts which give rise to a rigid system in dealing with the affairs of this world. In other words,

\textsuperscript{3}Graff and Street, \textit{op. cit.}, p. 107.
the rules are eternal, and it is the duty of man to play
the game and to fit new experiences to the old rules. These
theories lead to the establishment of authorities. For this
reason, ancient writings have a particular value and the test
of truth is not found in experimental verification but in
how well it conforms with the opinions of the authorities.

Pragmatism is the third philosophic category. It de-
notes those theories which hold that the meaning of ideas is
to be sought in their practical bearings, and that truth is
to be tested by the practical consequences of belief. New
ideas are cherished because they may improve understanding.
Pragmatism also provides an open-end concept of knowledge as
contrasted to the closed-end concept of Idealism and Realism.
In other words, Pragmatism is like a pyramid turned upside
down in that new discovery opens new avenues of learning and
as blocks are added it is never completed. If the pyramid
is constructed upright from the eternal and spiritual truths
of idealism or the immutable natural laws of realism, finally
the blocks will meet at the top and knowledge will be com-
plete. Therefore, the idealist or realist must look with
distrust upon any new item of knowledge or novel theory.

Pragmatic thinking represents man's efforts at
successful problem solving and is nothing more than an ab-
straction derived from human experiences.
Pragmatic implications. Combating the ignorance of drivers is one problem that may be solved by taking human experience and knowledge for a guide. This point of view is expressed by the advocates of safety education. They consider a philosophy of safety to be closely interwoven with a philosophy of life. If safety leads to a more abundant life, it is deep rooted in life itself. This idea is built upon the conception of a world order; a world that is not the plaything of chance but the expression of an unfolding purpose which man, as artist and creator, must shape into a pattern. The following verse expresses such an idea:

... Pause and consider men, their various minds,
Their values quick in life, the bitter waste
When they fall broken; and the women's tears
That may not save them.... Chance is not supreme,
However man be bounded by himself.
Life may be moulded--taken warm and young;
Life may be shaped to new endurance.
Fate leaves the choice to us.... Shall we choose Chance, or visioning farther, staunch
her bleeding stroke,
Take knowledge for our guide, and give the race
Far in the future, deeper potencies?

In the evolution of our species many different elements have fitted man for survival. The survival of the fit has been essentially the survival of the safe. Therefore, it is not surprising to find that children often appreciate

the intrinsic importance of safety. This situation provides considerable opportunity in the field of education. Since the current educational system was designed to fit different conditions from those that exist today, it is not adequately preparing children for the life of today with its amazing mechanical efficiency and serious hazards.\(^5\)

Many safety slogans seem to imply a different concept of safety from that expressed by men like Albert Whitney and other pioneers in the field of safety education. In the use of the slogan safety first some assume that safety first is being applied as an individual and personal rule of conduct. It may be proper for a school superintendent to indicate that the safety of children is of first importance or that it is better to have children safe and sound than to have them educated. However, safety is not the prime object in life. The most important thing in the world is adventure, and adventure means a fresh, first-hand experience of life. Shall a boy be taught to think of his own safety first if he is picked to help rescue a family in a burning house? It is evident that safety first, in its literal sense, is not an adequate guide in such situations. However, safety for more and better adventures is an important objective for life.

All that is worth while in life--love, friendship, loyalty, knowledge, art, religion--are adventures

\(^5\)Ibid., p. 34.
in which the human spirit goes out to experience the realities of life.⁶

The prime quality in safety, therefore, is not the removal of danger but an improvement in the quality of adventure.

**Psychological concepts.** The concepts of psychology, like other areas of knowledge, are continually making progress and changing. However, new knowledge is slow to be accepted and ideas of living and learning are inconsistent, to say the least. For this reason, different ideas concerning what should be taught and how it should be learned exist in educational systems today.

In the nineteenth century the basic theory of human personality was faculty psychology.⁷ It was believed by the faculty psychologists that the human mind was made up of a number of specific and separate faculties. This dualistic theory held that the body was material and the mind nonmaterial. The body served as housing and transportation for the mind. Since the body sometimes rebelled against the dictates of the mind it was necessary to rigorously discipline and train the various faculties of the mind. Subject matter was studied to exercise the mind. Doctors, teachers, and lawyers were all educated in about

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⁶Ibid., p. 45.

⁷Graff and Street, *op. cit.*, p. 122.
the same way. Faculty psychology has not been replaced altogether in our modern school system. Some opponents of driver education operate according to the ideas of faculty psychology. For example, Arthur Bestor and Robert Hutchins state that the proper role of the schools is intellectual development and that the most effective way to develop intellectual excellence is through the academic disciplines taught as separate subjects. A study of the classics is considered to be especially valuable. In the November, 1958, issue of Traffic Safety, Professor Bestor of the University of Illinois claimed that professional educationists are not competent to teach traffic safety and driver education. He suggests that taxi drivers, bus drivers, garage mechanics, police, and other public authorities could do a much better job than public school educators. ⁸

Professor Hutchins, President, Fund for the Republic, Inc., says that driver education has nothing to do with education. His statements are as follows:

1. I do not feel driver education should be taught in the high schools. It has nothing to do with education.

2. I do not feel that the country's youth learn accident prevention outside the schools.

3. The question is not whether people should be taught to drive, but where they should be

taught. I suggest that they be taught by the
traffic squad.9

It is useless to attack statements made by Bestor and
Hutchins concerning the fitness of public school educators
to teach driver education or the proper role of the schools
without considering their beliefs concerning the nature of
education. Professor Bestor tends to reject empirical evi-
dence in favor of "rational thought," and Professor Hutchins
assumes that only the traditional academic disciplines
should be taught in order to develop "intellectual excellence"
by exercising the mind. However, Professor Hutchins presents
a very consistent point of view. According to his beliefs
concerning the nature and purposes of education, driver edu-
cation is not education. The Hutchins concept of education
fails to consider that the complex demands of modern living
make it impossible to maintain a system of education that
trains only classical scholars. Unfortunately, modern man
does not live as long as Methuselah and can not be concerned
only with inert knowledge. As Whitehead said when speaking
of the place of the classics in education, "Humpty Dumpty
was a good egg so long as he was on the top of the wall, but
you can never set him up again."10

9Ibid., p. 11.

10A. N. Whitehead, The Aims of Education and Other
The most important development which followed faculty psychology was probably the introspective psychology of structuralism and its theory of mental states. Herbart developed a concept of apperception as it related to learning. He denied the existence of faculties and emphasized subject matter. His view was that education consisted of learning content by means of subject matter presented from outside the organism. The teacher selects the material to be learned, prepares the learner, presents new material and allows it to interact and become integrated with the old and then applied to understand some task. Therefore, according to the psychology of mental states the aim was to impart to the learner a great many facts to be stored in his apperceptive mass and called forth whenever he needed them (the walking encyclopedia type).

The Herbartian steps as used in lesson plans are still in wide use. The five steps are called Preparation, Presentation, Comparison and Abstraction, Generalization, and Application. No new material must be introduced in the preparation step and the instructor must ask questions to determine the state of readiness of his pupils. If the instructor is careful in constructing his questions, he can control the answers of his pupils.

Bode and others have pointed out that this rigid and formal method makes indoctrination the normal aim of
teaching. The teacher is the important person who takes
the learners, controls their thinking and gets from them
the answers he desires. Deviation is not permitted from
the set routine and there is little resemblance to the way
learning takes place outside the classroom. This procedure
produces a stultifying sort of education that would be diffi­
cult for adults to withstand even with the aid of alcohol and
cynicism. Furthermore, it is incompatible with the purposes
of democratic education.

Democratic education implies faith in the wishes of
the majority while totalitarian education prepares an elite
who may maintain their eliteness by an indoctrinational type
of education for the subservient masses. The difference in
the two types of education is based on the principles of
democracy as opposed to the principles of authoritarianism.
Alf Ross suggests the following democratic ideas along
with their autocratic opposites: (a) respect for man versus
contempt for man, (b) recognition of the individual's auton­
omy versus assertion of authority, and (c) the wish for sup­
port versus the wish to dominate.

If the reconstruction of experience with reference to

11Boyd Henry Bode, How We Learn (Boston: D. C. Heath
and Company, 1940), p. 158.

12Alf Ross, Why Democracy (Cambridge: Harvard Uni­
democracy as a standard of value is the concern of education, youth must be given an opportunity to consider the purposes for traffic laws, safe practices, and related matters so as to become more intelligent with regard to the solution of traffic problems.

Behaviorism was the next movement to seriously affect education. The S—R bond theory was evolved largely through the influence of Thorndike and Watson. Learning, according to this view, was a process of stamping in a new connection in the nervous system. For each stimulus received through the bodily organs there was a specific and direct response. The Thorndikian laws of learning grew from this theory. Drill was employed until the desired response was a non-thinking habit or until the learner could respond correctly to a specific stimulus.

Behaviorism has relieved psychology of some of its mysticism and the dualistic concept of mind versus body and without a doubt has been very useful in forming needed skills. However, the behaviorists never talked a great deal about where the right habits come from and who decided the right and wrong responses. In the area of driver education there is no person who can take the learner and give him the correct answers for all situations. Consider the many types of vehicles on today's highways, with their variation of manipulative controls. If the driver becomes only an
automaton he may experience some confusing situations as he changes from one type of motor vehicle to a completely different type. An article in the December 26, 1960, issue of Newsweek expresses a behavioristic concept of learning when it states that teaching a child arithmetic is no different from training a laboratory rat to scrabble through a maze. Moreover, continued the article, when the learner responds correctly, reward him—if the learner is a rat, give him cheese; if he is a child, tell him the right answer.13

Driver education must consist of more than giving the learner the correct habits for manipulating a particular vehicle. The competent driver must not only have good habits but, of more importance, skill in solving problem situations. The more modern psychologies referred to as Gestalt or Organismic are especially concerned with an individual's skill in problem solving. Although these theories are far from perfect and do not explain many kinds of human behavior, actions of a higher mental level than those of purely habit response are given consideration. These theories have brought to light information and concepts which show that learning is a result of activities engaged in by the human organism as it attempts to achieve purposes and solve problems. This consists of getting meaning through the seeing

of relationships. The seeing of relationships between the factors as they are arranged in a particular situation and gaining some insights as to how the factors can be manipulated to improve the situation is a high order of learning.

According to the precepts of organismic psychologies the individual can decide in considerable degree upon the purposes he desires to pursue and is able to select appropriate stimuli and shut out those that are not relative to the problem under consideration.

The Gestalt psychologies rather closely approximate the scientific method of problem solving, an ability that can be learned. These theories also imply that experiences based upon problem solving are more effective in producing the desired kind of learning that will be more readily available when other problem situations come along than knowledge learned purely as a rote exercise. The value of any bit of knowledge lies not only in its intrinsic worth, but in the manner in which it was acquired, because the manner of acquisition determines to a large extent the way in which it will be used. Therefore, driver education needs to provide learning experiences which will help the students see relationships and gain understanding using problem solving methods.
B. THE PSYCHOLOGY OF SAFE BEHAVIOR

Knowledge and skills which pertain to driving are obviously necessary for good driving performance. However, research has shown that attitudes and other psychological factors are more significant in accident causation than lack of knowledge or inadequate skills. In order to understand the nature and development of attitudes affecting safe behavior, it is necessary to review the findings of research regarding personal characteristics of accident repeaters.

Much research indicates that offenders and accident repeaters are more distractible than non-offenders. The attention of the offender is readily drawn away from the task immediately before him. This distraction may be caused by external events, or by a concern with personal problems. Daydreaming is common. Accident repeaters have less personal restraint than do non-repeaters. They act impulsively and are inclined to take risks. Safety rules and regulations are regarded casually.

Many chronic offenders seem to be characterized by anti-social attitudes. They are aggressive, non-conforming, and intolerant. Aggressiveness has shown up in many group...
studies. It seems that the accident becomes a means for turning one's aggressive drive against himself as a self-punishment or against others to get even with them. Emotional instability is common among chronic offenders. They cannot control their feelings. Accident repeaters show a high level of excitability or tension with little ability to tolerate or sustain this tension. Therefore, they tend to act out their emotions, tensions, or impulses in their driving behavior. Offenders also tend to lack insight into their feelings or actions. They are likely to feel confident that they can cope successfully with the job of driving a car under any condition. Apparently they have an unhealthy emotional need to feel and act superior to other people which may account for their reckless behavior. 15

These findings represent only a synthesis of research. Not every offender has all of these characteristics, and no single trait or factor or variable is likely to be significant in itself. There is considerable interdependence. However, these factors may count in large measure for the violations and unsafe practices that sooner or later cause accidents.

Evidence also suggests that there is no clear-cut difference between safe and unsafe people. The critical

15Ibid., p. 125.
factors in the unsafe behavior of offenders tend to appear in the performance of average people. Average people have the great majority of accidents and violations. Mathematicians estimate that removing accident repeaters from the road would not have any great effect on the mass of accidents. Fifty per cent of our drivers would have to be taken off the road to reduce the accident rate by 20 per cent. This situation may be explained in part by two considerations: (1) the role of chance in accident occurrence; and (2) the effects of temporary emotional stress.\textsuperscript{16}

There are many uncontrollable environmental factors in accident occurrence. Most unsafe practices or violations never become accidents because other conditions necessary to precipitate an accident are not in play at the precise moment of time. This partly explains why accident repeaters are not a constant group, but rather a changing population, with old members dropping out and new ones joining the ranks periodically.

Brody has made the following statement about temporary emotional stress:

\begin{quotation}
Personal problems affect nearly all individuals daily. Under certain conditions such stress may result in temporary accident proneness. That is to say, anyone may become temporarily preoccupied, less alert to environmental hazards, and less able to
\end{quotation}

\footnote{\textit{Ibid.}, p. 126.}
utilize effectively the knowledge, judgment, and skills which he has previously utilized for safety--on the road and off. Of course, under sufficiently strong and repeated stress, he may eventually respond with a neurosis or even psychosis of a more or less enduring nature. In any case emotional disturbance may result in one or more accidents during a period of stress--or in no accidents at all, because the situations encountered by the individual did not present the other critical elements that contribute to an accident, elements like a suddenly approaching vehicle, or slippery terrain, or a pedestrian darting into the path of the driver's car.\textsuperscript{17}

To the average person safety seems to lack real significance. An accident is just a momentary news item. He has no sense of personal involvement or moral responsibility.

Brody indicates that 82 per cent of drivers involved in auto accidents blame the other motorist; 80 per cent consider themselves good or excellent drivers; only one in one hundred admits he is a poor driver; only 5 per cent think their driving could be improved through a refresher course; and 53 per cent feel there is nothing that they could do to avoid another accident.\textsuperscript{18}

It would seem, then, that offenders and non-offenders differ principally in degree and pattern of such characteristics, that safe and unsafe behavior are not discrete things but belong on the same continuum; that certain basic characteristics of personality dynamics apply in the

\textsuperscript{17}Ibid., p. 127.
\textsuperscript{18}Ibid., p. 128.
explanation of accident involvement. How do these attitudes or personality patterns come about? It is generally accepted that many influences reach man's mind without his being aware of them, and that they may affect or mold him without his conscious awareness. Experiences which occur early in life are especially important factors that shape an individual's personality.\textsuperscript{19}

Certain needs must be filled, if people develop and mature healthily. The particular needs that are relevant are: (1) the need for affection, paramount in infancy; (2) the need for personal security, which is especially important during childhood; and (3) the need for self-esteem or personal significance, which in our culture, becomes particularly prominent in adolescence. Failure of life experience to fulfill these emotional needs may seriously distort personality development in a manner somewhat analogous to the effects of nutritional deficiencies. Accident-repeating children have more unsatisfied emotional needs than children who are accident-free. Accident-repeating children are also more emotionally unstable, tend to feel inadequate, and behave immaturely.\textsuperscript{20}

As part of growing up, today's adolescent is likely

\textsuperscript{19}Ibid., p. 129.

\textsuperscript{20}Ibid., p. 130.
to have witnessed an estimated twenty-two thousand homicides and acquired quite a know-how in the techniques of shooting, stabbing, maiming, and stealing. These lessons do not come from a network of crime schools but are brought via mass media: comic books, pocket books, television, radio, and the movies. Traffic violations of juveniles tend to be associated with a record of delinquent behavior, symptomatic of deeper-lying maladjustments within the home and community. Dunbar,\textsuperscript{21} studying fracture patients and delinquents, found no clue to explain why one broke a leg and the other broke a law.

\textbf{Educational Methods}

The problem of accident prevention does not involve just the psychology of safe behavior, but the psychology of human behavior generally. It is not the exclusive problem of driver educators, but the problem of all educators, and society. Thus, all educators should be part-time safety educators.

Various methods are used in educational programs. These include logical appeals, admonition, humor, fear, group discussion, group discussion-decision, and role playing. The logical appeal in safety education puts everything on the basis of reason. It rests on the

assumption that if reasonable explanation is given for a recommended safe practice, people will put it into effect. This is not enough. Admonition and exhortation by preaching or warning has little success. To say to a person, "Don't have an accident" is like telling somebody not to drink or not to have stomach ulcers. If a person could consciously exercise control over himself, then he would not be having an emotional problem or an emotional disorder. Humor has been an historic means of influencing people. Certainly it can stimulate interest, but humor per se should not be the end product. The fear approach is still utilized a great deal to impress upon people the painful consequence of failure to observe recommended safe practices. Oftentimes, pictures are shown of the accident occurring, the resulting injury, and, in the case of some films, the pains individuals suffered are described in words designed to make people cringe.

The Industrial Health Research Board has concluded that in safety education the gruesome should as far as possible be avoided since it is unwise to engender a feeling of fear. Dread of having an accident is just the frame of mind likely to involve one. The fear approach is a limited, delicate method.22

22Brody, op. cit., p. 132.
There is a wealth of evidence which indicates that the group is a powerful motivating force. Group acceptance and group recognition motivate every individual. And as an inevitable consequence the individual subjects himself to the regulations of the group. This applies perhaps equally to gangs and to student groups.

Group processes may be the most effective means for developing or modifying attitudes and behavior. Personal involvement of the individual members of the group is the key to this activity. Such involvement means, participation in group thinking, group planning and group decision. After the individual has committed himself before the group he is likely to be reluctant to deviate from the standards or decisions upon which they have generally agreed.

C. SUMMARY

In order to deal with problems philosophically, it is necessary to organize, interpret, clarify, and criticize ideas. Considerable confusion in the thinking of people has resulted from inconsistent notions concerning the nature and purposes of education. The confusion is lessened if clear ideas about the nature of education are developed by considering basic philosophical and psychological theories. The critics of driver education have a different concept of the nature of education than the advocates of driver education.
The psychology of safe behavior is no more or no less than the psychology of human behavior generally. Driving a motor vehicle is essentially a social undertaking where cooperative behavior and social responsibility are needed. In order to perform the social roles involved in driving, a person has to have some measure of satisfaction in his need for affection, personal security, and personal significance. The problem of effecting safe behavior is not the exclusive concern of safety educators but of all educators. Obviously, no single course of study will do the job. No attitude toward safety is sound if it fosters an unhealthy fear of an activity. The dread of having an accident is the frame of mind likely to involve one. Finally, it is through the processes of group dynamics that attitudes may be most effectively improved.

The following chapter will identify acceptable criteria from current national standards for adequate driver education programs.
CHAPTER III

ACCEPTABLE CRITERIA FOR ADEQUATE
DRIVER EDUCATION

The previous chapter explained the reasoning of those who favored and opposed the teaching of driver education. Ideas were also developed concerning the psychology of accident prevention, the nature of education, and the methods used to achieve educational purposes which provide foundations for the specific objectives of driver education. The purpose of Chapter III will be to review briefly the objectives developed by three national conferences on driver education and to identify criteria for adequate driver education from the most acceptable policies and practices.

Since the growth of driver education has been rapid, research in working out solutions to many instructional problems has been inadequate. For this reason three national conferences have been held to develop objectives and policies for high school driver education.¹ The First National Conference was held at Jackson's Mill, West Virginia, in October, 1949. Safety authorities from many states served as consultants and established five broad general objectives

with appropriate specific learnings. The first general objective was to develop in young people a strong sense of personal and social responsibility for the common welfare, particularly as it is affected by and involved in the operation of motor vehicles. Specific learnings related to this objective included an awareness of man's social responsibility in relation to the changes that have come with the power age and an understanding and awareness of the historical, social, and economic aspects of the highway traffic control problem. Since the present status of highway traffic accident problem is an example of man's failure in his social responsibility to control the power he has developed, adequate highway traffic control and a realistic philosophy to guide individual and group thinking in working toward a solution of the traffic control problem were also considerations basic to the first general objective.

The second general objective was to develop pride in maintaining high standards of performance, particularly in the operation of motor vehicles. Learnings specifically related to this objective included a recognition of the psychophysical factors affecting performance, an understanding of the techniques of developing skills, and the formulation of a code of behavior which constituted good sportsmanlike driving.

The third general objective was to promote the safe, efficient, and enjoyable use of equipment. Specific
learnings involved included an understanding of the capacities and limitations of the car and driver, an appreciation of environmental factors affecting motor vehicle operation and the development of important skills necessary for efficient driving.

The fourth general objective of promoting effective habits of cooperation in meeting problems of the common welfare involved learning about laws and regulations, the study of accident records, considering potential new laws, and participating in practical efforts to improve enforcement of existing regulations.

The fifth general objective was to prepare young people for socially useful vocations resulting from the motor vehicle transportation. Learnings appropriate for meeting this objective included an understanding of the nature and requirements of the various types of job opportunities available and an evaluation by the individual of his own interests, aptitudes, and abilities, in terms of the requirements of various job opportunities.

In November of 1953 a second national conference on driver education was held in East Lansing, Michigan. Michigan State College was the host for the sponsors which included nine National Education Association groups and the National Council of Chief State School Officers. The conference participants dealt with six major problems, namely:
(1) driver education for adults and out-of-school youth, 
(2) general supervision, teacher certification, and program 
standards, (3) driver education for college students, (4) 
research in driver education, (5) preparation of driver edu-
cation teachers, and (6) driver education for secondary stu-
dents.

The conference urged that driver education be a part 
of the high school program at a grade level nearest to the 
legal driving age and that it be offered as a separate 
course on a full-semester basis with the same status as 
other subjects acceptable for college entrance. Recommenda-
tions were also made that would provide driver instruction 
for college students and adults.

Two hundred devoted educators and consultants took 
part in developing policies formulated at the Third National 
Conference. To a greater extent than in 1949 and 1953, the 
Third National Conference, held in 1958 at Purdue University, 
represented the collaborative efforts of many departments of 
the National Education Association. This conference was co-
sponsored by eleven NEA Departments, as well as by the 
American Driver and Safety Education Association, the Coun-
cil of Chief State School Officers, and the National Associa-
tion of State Directors of Teacher Education and Certifica-
tion.
The 1958 Conference re-emphasized the recommendations made in 1953, and stated that driver educators should refrain from endorsing or participating in automotive clubs or activities involving motor vehicles where such clubs or activities place a premium on speed, acceleration, or speed competition.

As a result of the three national conferences, the National Education Association has stated policies for driver education in its publication entitled Policies and Practices for Driver Education. While research has been inadequate in establishing the validity of some of these policies this publication represents the best available authority for driver education. The remainder of this chapter will identify criteria from this publication by which to judge the programs of driver education in Tennessee public schools.

**Criterion Number 1**

**Driver education should be offered to all regular high school students and to out-of-school youth and adults.**

Since driving is an integral part of life, it is an essential phase of education. Driver education helps students to develop a high degree of competence in traffic as drivers

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and pedestrians and contributes significantly to the purposes of general education. Driver education promotes the safe and efficient use of the tools for living by developing pride in maintaining high performances of conduct by developing personal responsibility and habits of cooperation for the common welfare.

**Criterion Number 2**

The minimum legal age for obtaining a driver's license should be eighteen years, with the exception that students who have successfully completed a driver education course approved by the state department of education be eligible to apply for a license at age sixteen. Students who successfully complete a driver education course approved by the State Department of Education should be eligible to apply for a driver's license at the age of sixteen. Legislation to accomplish this purpose is desirable. However, in considering legislation all official state agencies (educational, driver licensing, traffic law enforcement) should be involved in the initial planning. Interested non-school groups should be invited to participate in developing support for the proposals and in interpreting them to the public and the legislature. A legislative search should be made to determine how a new law may relate to, affect, and be affected by existing statutes. Legal advice should assure that what is desired is translated into appropriate
terminology. Another important consideration prior to any legislation is to set the effective date of the bill far enough in advance to assure time for "tooling up" by local school systems and the state department of education.

**Criterion Number 3**

The state should provide additional money for financing driver education through special appropriations. Nearly one-third of all the states now reimburse local school systems for part of the cost of driver education. The Insurance Institute for Highway Safety has stated that a lack of funds is one of the major problems confronting the expansion of driver education. The Institute states that the most logical answer to this problem is state legislation to provide money for driver education course offerings. States with quality driver education receive special financial appropriations while states with poor and inadequate driver education programs receive no aid. Appendix C indicates various methods that are used to finance driver education in several states.

**Criterion Number 4**

A complete driver education course is composed of both classroom and practice driving instruction. Practice driving instruction should be given only to students who have recently taken or are currently taking classroom
instruction. Several plans may be used for teaching practice driving. The single car plan involves three or four students at a time in a car with one teacher. Usually, most of such instruction takes place on public streets and highways. This means that large schools must employ several teachers if they accommodate a large number of students.

The method of instruction used with this plan involves the teacher directing the individual practice of each student in the group. The students who are not driving observe the student who is driving as well as pedestrians and other drivers and may list important changes in road conditions, traffic conditions, and spot hazards ahead.

The so-called multiple car plan provides instruction for a greater number of students. In this plan each student drives one of several cars on an off street area. This type of program reduces the per pupil cost of practice driving instruction. However, this experience must be supplemented by actual traffic practice driving experience.

Since driver education consists of both classroom and practice driving instruction, unique problems are presented. These varied and comprehensive tasks dealing with the teachers' instructional and administrative problems are included in a job analysis of driver and traffic safety education found in Appendix A.
Criterion Number 5

Each student should receive at least thirty class hours of sixty minutes each in classroom instruction and at least six class hours of sixty minutes each in practice driving instruction. Individual differences among students make it necessary to provide more practice time for some students. A variety of exposures to driving and traffic situations should occur during this time. A complete course is usually offered over a one semester period of eighteen weeks. The minimum length of time for the course should be no less than one-half semester or nine weeks.

If driving simulators are used as a means of providing part of the practice driving instruction, it is recommended that not more than one-half of such instruction be provided on a simulator. Furthermore, there should be four hours of simulator experience to each one hour of actual practice driving in an automobile. Further experience and research is needed to evaluate the effectiveness of driving simulators.

Students should have the same teacher for both classroom and practice driving instruction. Close correlation should exist between the two phases of the program. If a teacher of the regular high school course also teaches the adult and out-of-school courses, care should be taken in scheduling his time so as not to impair his efficiency in either program.
Criterion Number 6

Areas for practice driving instruction should be available. Early instruction may be given on streets carrying only light traffic while later instruction may be given on streets and highways that are heavily traveled. If an area on the street is marked off for practice driving instruction appropriate and official arrangements should be made prior to using the area. In planning campus areas attention should be given to possible practice driving areas. Parking lots are sometimes used as areas for practice driving. The areas should be selected to enable the instruction to take place as near the school as possible.

Criterion Number 7

All driver education programs should include provisions for evaluating the extent to which its objectives are being achieved. Each program should have clear objectives consistent with sound administrative provisions. Attitudinal, skill, and knowledge evaluative procedures may be used to determine how well the driver education program is meeting its objectives. Attitudinal evaluation may consist of written tests, observations of pupil behavior (including anecdotal records), simple ratings by teachers and student self-appraisals. Skill tests may consist of driving performance exercises and psychophysical examinations. An evaluation of knowledge may be determined by written tests.
of general information, traffic rules and laws; hazard recognition tests; performance tests; and tests of recognition of traffic control devices (signs, signals, and markings).

Teachers of driver education should know the purposes of evaluation, the problems involved in measuring safe behavior and know how to use a variety of evaluative procedures. Furthermore, teachers should be able to appraise the scientific worth of tests and measuring instruments and realize that many currently used tests have not been subjected to scientific validation research. Considerable use should be made of student self-appraisal techniques, since the student will need to appraise his driving performance after completing the course.

Criterion Number 8

State departments of education should provide leadership in matters of administration, consultant services, instructional materials, research and evaluation. The state department should encourage development of safety education as part of the total educational program in all grades of all schools, provide advisory consultant services to help local school systems intensify and extend education for safe living, and aid local school systems in developing patterns of administration for driver education.

The state department should also establish and
promulgate standards for driver education courses; develop meaningful teacher certification requirements; and distribute resource materials such as curriculum guides, administrative handbooks, and other pertinent information. They should also assist local school systems in obtaining automobiles for practice driving instruction with adequate insurance and maintain close working relationships with agencies interested in contributing to the success of traffic safety and driver education in the schools.

The state department should also encourage teacher education institutions to offer a minor in safety education and aid in conducting needed research studies in driver education.

Many other state level problems which relate to driver education and traffic safety are often assigned to a state department of education official for his consideration. These responsibilities entail matters pertaining to private driving schools, programs in non-public schools, programs for adults and out-of-school youths, improving driver licensing, promoting observance of legal driving age, uniform traffic laws, and driver education as a prerequisite to licensing.

Criterion Number 9

Local boards of education should provide their own equipment and automobiles by the regular purchase of such
items. Since studies have shown that automatic transmission vehicles are as effective for instruction as standard transmission vehicles, this factor should be considered when selecting vehicles. The automobiles used should be equipped with a dual control brake (or clutch, where applicable), and exterior rearview mirrors on both sides. It is also recommended that all vehicles contain the following safety equipment: (1) seat belts; (2) padded dashboard and sunshields; (3) steering wheel with recessed steering column; (4) extra inside rearview mirror for the instructor; (5) windshield washers; and (6) emergency equipment such as chains, fire extinguisher, flares, reflectors and a first-aid kit. As new safety devices are developed, they should be used in programs of driver education.

If an automobile is used on a lease, loan, or rental basis, officials of the school and the agency furnishing the car should have a written agreement specifying the responsibilities of both parties. Liability and insurance factors should also be considered. The board of education has the responsibility for developing clear policies governing the use of automobiles procured for driver education purposes. This policy should insure that extreme care be taken to prevent these automobiles from being used in unusual places at unusual times by unauthorized persons. In case a school owned automobile is occasionally used for other school
purposes, the signs which identify the automobile with
driver education should be covered or removed. The prac-
tice vehicles should be adequately insured to protect both
students and teaching personnel. Preventative maintenance,
inspection, servicing, and repair of driver education ve-
hicles should be carried out in accordance with the manu-
facturer's recommendations.

Criterion Number 10

The recording of significant information is necessary
for efficiently conducting a driver education program and
for making possible year by year improvement. Report forms
should help to: (1) facilitate administration of the pro-
gram; (2) measure results and improve instruction; (3) ap-
praise and control costs; and (4) protect students and
teachers from accidents.

Parental approval for each student should be ob-
tained before he enrolls for practice driving instruction.
Such approval will not absolve school personnel of lia-
bility, but might help show in case of litigation that the
school is prudent in its undertakings. Reports concerning
the use of practice driving cars should show how much time
the car is used, how much time each student spends at the
controls, the mileage operated during instruction, and
items concerning preventative maintenance and operating ex-
penses. Accurate and complete records of cost make possible
comparisons of the costs of driver education among schools in the same systems, in different systems within a state, and in different states. In case of accident, prompt reports should be made to police, school authorities, owner of the car, state education department, and insurance company.

Criterion Number 11

Desirable community relations for driver education are especially important. This relationship depends to a considerable degree upon the benefits received by those who have taken the course. Therefore, a high quality program is of vital importance. Driver education is in the public eye because citizens see student groups and the instruction daily in the practice driving car. Community safety organizations often discuss driver education at their meetings. Insurance companies charge a lower premium to males under twenty-five who have completed an approved course in driver education. This practice appeals highly to parents. For these reasons the values of driver education must be continually interpreted to the public.

Desirable community relations may depend to a considerable extent on the teacher. No amount of effort can long overcome the drag of an incompetent teacher. The board of education and the school administration have the responsibility to make sure that those who teach driver education are
qualified. Community relations efforts in behalf of driver education should be carried out within the framework of the school's public relations program, and be consistent with school policies.

Driver education is of widespread interest to many community groups. Police departments and highway patrols, insurance organizations, traffic courts, driver licensing authorities, automobile clubs, public safety departments, safety councils, automobile dealers, women's groups, fraternal organizations, and others frequently express great interest in driver education. This can be a definite advantage, but at the same time it can create problems. Therefore, these community groups need to be provided with up-to-date, accurate information. A lay committee is one means of obtaining better understanding and support for driver education. This committee should be appointed by the board of education to study the driver education program over a period of time and to report its recommendations back to the school board. All teachers and supervisors of driver education should cooperate with all school community groups interested in traffic safety.

Criterion Number 12

Methods of instruction should vary in terms of student needs, group size, type of learning experience, ages of students, teacher strengths, available facilities, daily
purpose, organization of the school program, and other local conditions. Some methods and techniques which may be appropriate include teacher presentations, directed group discussions, classroom forums or panels, and visiting resource persons. Demonstrations of skills for use in emergencies might be valuable. Other methods could include dramatizations; cooperative problem-solving tasks, projects involving student use of survey-interview techniques, and opinion polls. Psychophysical equipment, driving simulators, models and mock-ups, and comparable aids to supplement basic instruction should be made available. Filmstrips, motion pictures and other audio-visual resources are usually easy to obtain. Field trips to traffic courts, highway departments, driver licensing bureaus, and motor vehicle inspection stations often provide excellent learning experiences. Evaluation should be designed to aid both teacher and students in measuring progress and in setting new goals.

Today, effective education must not only develop the highest capacities of each individual, but also stimulate cooperation among individuals and groups. Cooperation should be stressed in driver education. The objective of a driver education course is not to determine who is best, because all drivers and pedestrians share our streets and highways. Since the spirit of competition exists among individuals in any group, the teacher must recognize that
this factor can provide an incentive for learning. However, undue emphasis on competition may submerge the purposes of driver education.

The teacher's challenge is to obtain through any method used the direct involvement and participation of all students and to develop in each student an attitude of responsibility for the learning objective. Traffic safety conferences can be considered a method of instruction. However, in the planning and carrying out of a student traffic safety conference, student groups should have major responsibilities for leadership. To assure that the conference will have a broad impact, student participation should extend beyond driver education classes, and teachers other than those in driver education should contribute to the conference experiences.

**Criterion Number 13**

*Free and low cost supplementary teaching materials related to driver education and traffic safety should be utilized.* There are few, if any, other areas in the high school curriculum with as many published teaching aids as those available for the driver educator. The importance placed on driver education by various associations, businesses and other interested groups is indicated by the free and low cost driver education materials that various organizations have developed. Appendix B contains a listing of
free and low cost materials dealing with the car, community tasks, the driver, natural laws, other highway users, traffic laws, and the magnitude of the traffic problem. A list of the addresses of organizations through which the materials may be obtained is also included in Appendix B.

Without a doubt, the planned use of such free and low cost materials along with the many excellent textbooks could improve any driver education course.

**Criterion Number 14**

Adequate equipment should be utilized in order to provide effective instruction for all students. Psycho-physical devices can help students understand the meaning of driver reaction time, functions of the eyes, and other physical and psychological factors. Audio-visual equipment, including models and mock-ups of vehicle parts can bring to students certain experiences and information not easily available otherwise.

Practice driving areas (off-street) should be equipped with signs, signals, stanchions, and comparable items, to aid in teaching certain fundamental skills to groups of students, provide for individual student practice, and at the same time avoid the risks present in actual street traffic.

Practice driving simulators can conserve teacher time, teach certain procedures for meeting emergencies with emphasis on defensive driving techniques, and provide more
practice for student groups. Classroom equipment, such as magnetic boards, flannel boards, and parking boards, can assist the teacher and students in visualizing traffic situations.

Criterion Number 15

If a school can not provide instruction for all students, preference should be given to students needing preparation because of personal or family reasons, vocational needs, the immediacy of opportunity to drive, the immediacy of leaving school, or similar reasons verified by parents. In grouping students for practice driving, consideration should be given to such factors as sex, chronological age, emotional stability, experience, and physical, mental or emotional characteristics.

Driver education is most effective when a student is at the height of his motivation to learn. However, motivation is seriously weakened when students have driven cars prior to formal instruction. Therefore, the greatest motivation for learning occurs just before students reach legal driving age. For these reasons, driver education should be offered at the grade level where most of the students are approaching the legal driving age.

Criterion Number 16

A teacher of driver education should hold a bachelor's degree, have a secondary teaching certificate, and possess
the basic qualities necessary for effective teaching. A teacher of driver education should have broad knowledge in the field of safety education and accident prevention. Specific qualifications would include a valid teaching certificate in the field of driver education, a valid driver's license, and a strong desire to set a good example by his own driving and safety habits. The driver education teacher should have an extensive driving background including (a) at least three years of satisfactory driving experiences; (b) a driving record, state and local, free from repeated accident experience and traffic law violations; and (c) experience in driving different makes or types of vehicles in cities and on highways under various traffic, weather, and road conditions.

A teacher of driver education should possess good physical and mental health evidenced by (a) even temperament, (b) sympathetic attitude, and (c) a high degree of patience in working with students. Physical qualifications appropriate to the demands of teaching driver education should include the normal use of both eyes, ears, hands, and feet, normal motor coordination, and the absence of uncorrected limitations related to vision and hearing. All teachers should have an interest in using research findings applicable to driver education and in conducting or contributing to special studies in driver and safety education.
Criterion Number 17

The minimum pre-service preparation of teachers of driver education should include completion of a teaching minor or its equivalent in driver and safety education. The recommended pattern of required and elective courses for such a minor is as follows:

Required courses totaling nine semester hours

Introduction to safety education (three semester hours)

Driver and traffic safety education (six semester hours)

Related elective courses for acquiring the remaining eighteen semester hours credit from the following:

Psychology and safety education
Organization and administration of safety education
Problems in safety education
Methods and materials in safety education
Child growth and development
Guidance
Understanding group behavior
Sociology
Occupational safety
Recreational safety
Home and community safety
Automotive mechanics
Traffic law enforcement
Traffic engineering
Audio-visual and other teaching aids
Evaluation and research in safety education
Other courses related to safety

This recommended pattern of courses for pre-service preparation is designed to give the prospective teacher competence in providing necessary learning experiences and in handling administrative aspects of the program. Pre-service preparation should include laboratory experiences to help the prospective teacher (1) determine and improve his driving ability, (2) learn teaching techniques for practice driving instruction, and (3) gain skills through supervised practice teaching. Teachers need in-service preparation which may be given through extension courses, seminars, conferences, clinics, institutes, workshops, and advanced courses. All driver education teachers should have an opportunity each year to participate in a conference or workshop where problems suggested in advance by teachers who attend and the latest research are discussed.

Supervisors and college teachers who prepare driver education teachers should have extensive professional preparation verified by an advanced degree. Key makes the following recommendation concerning supervisors:

The supervision of driver and safety education at the state and local levels should be assigned
to personnel qualified by virtue of their adequate personal characteristics and specialized training and experience in this field. Such professional staff should be assigned to full-time driver and safety education supervisory duties, except in some local systems which may be too small to justify supervisors in any single subject field.3

College instructors who are responsible for preparing driver education teachers should hold at least a master's degree with a major or its equivalent in safety education. The background of the college instructor should include (1) the teaching of beginning drivers, and (2) several years experience in teaching or administration, preferably at the secondary level.

CHAPTER SUMMARY

Chapter III has identified criteria for driver education programs from the 1960 publication of the National Education Association entitled Policies and Practices for Driver Education. This publication was primarily based on recommendations made by the most recent national conference held at Purdue University in 1958.

Criteria were identified pertaining to driver education for all, minimum legal age, financing, practice driving, minimum time standards, areas for practice driving, and

evaluation. Additional criteria identified related to the role of State Department of Education, adequate records and reports, desirable community relations, methods of instruction, supplementary teaching materials, adequate equipment, and selecting students. Criteria pertaining to professional personnel dealt with minimum standards and pre-service preparation.

The next chapter will consider the nature and adequacy of driver education in Tennessee secondary schools.
CHAPTER IV

THE NATURE AND ADEQUACY OF DRIVER EDUCATION

IN TENNESSEE SECONDARY SCHOOLS

Data in this chapter concerning driver education in Tennessee will be compared with previously identified criteria. Sources of information concerning driver education in Tennessee included the following: (a) a questionnaire sent to all secondary school principals in the state; (b) records kept by the Tennessee State Department of Education; and (c) personal investigation of selected driver education programs.

A 100 per cent return of the questionnaires from 467 secondary schools insured a comprehensive overview of prevalent course offerings throughout the state. Mr. T. Wesley Pickel of the Tennessee State Department of Education sent the questionnaire to each high school in the state. Two follow-up letters helped secure a complete return. Interviews with members of the Tennessee State Department of Education and records kept by that office supplied additional information. In order to gain greater insight concerning the nature of instruction and related matters, several special investigations were conducted. Fifteen schools were selected by a random sample technique for special investigation. Since some teachers taught in more than one
school, the course offerings of twenty-two schools were
determined. However, only fourteen people were interviewed
since these fourteen taught the courses found in twenty-two
schools. Of the fourteen interviewed, two admitted when
the writer arrived on the scene that they really didn't have
driver education. One said the school did not offer driver
education and had never offered the course. This same per­
son reported on the questionnaire pertaining to the 1959-1960
driver education program that his school provided classroom
instruction for ninety-one students. The second interviewee,
the principal, stated that his school did not and had never
offered driver education, but had reported on the question­
naire that classroom instruction was provided for thirty-two
students. During the interview, it was learned that traffic
safety was mentioned in the health course. The principal
believed that the schools were trying to do too much and
that the intelligence of students was insulted by allowing
them to do over and over the things that were easy. In
discussing the status of education in general, the inter­
viewee also mentioned that guidance was a waste of the
school's time.

One other interviewee, who was also a school prin­
cipal, stated that his school no longer offered driver edu­
cation but hoped to start it again. The course was discon­
tinued because the teacher moved to another school. However,
the students, patrons, and school administration thought that the course was worth-while and efforts were being made to re-establish a driver education course.

The remainder of this chapter will compare the questionnaire data and the information, given by the eleven interviewees who offered the course, with criteria previously identified in Chapter III. Some of the information determined by the questionnaire survey was not reported in this study because it did not apply to the specific criteria identified in Chapter III. Ten of the eleven interviewees who offered driver education offered a complete course consisting of both classroom and practice driving instruction. One interviewee offered classroom instruction only as a phase of health education.

The questionnaire used in this study dealt with the 1959-60 school year. The interviews were conducted in the 1960-61 school year. Therefore, some schools that offered driver education in the 1959-60 school year did not offer the course in the 1960-61 school year while other schools had added the course.

**Driver Education for All (Criterion Number 1)**

Driver education should be offered to all regular high school students and to adults and out-of-school youth.

A historical summary (Table I, page 82) of the number of schools in Tennessee that have offered driver education
TABLE I

TENNESSEE HIGH SCHOOLS OFFERING DRIVER EDUCATION
1948-1949 TO 1958-1959

<table>
<thead>
<tr>
<th>School year</th>
<th>Number of schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>1948-1949</td>
<td>18</td>
</tr>
<tr>
<td>1949-1950</td>
<td>22</td>
</tr>
<tr>
<td>1950-1951</td>
<td>22</td>
</tr>
<tr>
<td>1951-1952</td>
<td>18</td>
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<tr>
<td>1952-1953</td>
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<td>1953-1954</td>
<td>177</td>
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<td>1954-1955</td>
<td>58</td>
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<td>1955-1956</td>
<td>78</td>
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<tr>
<td>1956-1957</td>
<td>101</td>
</tr>
<tr>
<td>1957-1958</td>
<td>90</td>
</tr>
<tr>
<td>1958-1959</td>
<td>94</td>
</tr>
</tbody>
</table>
from 1948-49 to 1959-60, inclusive, indicated that the growth of driver education has been erratic and slow.

The Tennessee Safety Council, the Governor's Emergency Traffic Safety Committee, newspapers, and other organizations concerned about the traffic problem gave increased emphasis to driver education programs between the years of 1952 and 1954. In the 1956-57 school year this emphasis was again prevalent but in other years no organized effort was made to promote driver education. For these reasons, the number of schools that have offered driver education has varied considerably through the years.¹

In the 1959-60 school year 107 schools offered some type of driver education. Twenty secondary schools in the Memphis City System reported courses in driver education. All of these 20 schools held assembly programs pertaining to traffic safety with special resource speakers. The 20 schools did not offer either a regular classroom course or a complete course. The assembly programs were designed to encourage students to participate in a driver education summer program sponsored by civic clubs and taught by policemen. Since this investigation was limited to a study of driver education in public schools, no attempt was made to appraise the

Memphis summer program. Tennessee had 467 potential schools that could offer driver education. The term potential schools refers to those high schools which include the grade level in which most students reach the minimum legal driving age of sixteen years. These 467 schools contained 45,775 students that were eligible to take a course in driver education. This figure was obtained by averaging the 50,450 students in grade ten and 41,100 students in grade eleven. These were the grade levels where most students reached the legal driving age of sixteen years. Twenty-three per cent of the schools offered some type of driver education for 27,850 students. Seventy-nine adults and out-of-school youth received courses provided by four Tennessee high schools.

Minimum Legal Age (Criterion Number 2)

The National Commission on Safety Education recommends that the legal minimum age for obtaining a driver's license should be eighteen years with the exception that students who successfully complete a driver education course approved by the state department of education be eligible to apply for a license at the age of sixteen years. Tennessee had no requirements concerning driver education as a prerequisite to licensing. The lowest age or minimum legal driving age for obtaining a regular and unrestricted permit
to operate a motor vehicle on public streets and highways in the state of Tennessee was sixteen years. 2

Financing Driver Education (Criterion Number 3)

The National Commission on Safety Education recommends that the states should provide additional money through special appropriations for driver education, if local and state funds for the foundation program of education are not sufficient for this purpose.

One of the questions considered in the interview concerned special problems that the interviewees had in teaching an effective course of driver education. Seven could not accommodate all the students who wanted to take the course. Three had inadequate materials and equipment and one had "no problems." Furthermore, when asked how the driver education program might be improved, six reported that more materials and increased financial support would improve their course offering, four stated that fewer students per instructor for practice driving would improve the course while one stated that the state should give a stricter examination for driver licenses. None of the interviewees received any local financial support. Tennessee does not provide any special appropriation for driver education. In March of 1961 state

officials estimated that approximately three and one-half million dollars would be required to provide driver education for all students in grade ten throughout the state. The sum of approximately one million dollars was spent in the 1960-61 school year in all schools of the state for driver education. Most of the money was spent for the salaries of teachers.\(^3\)

**Practice Driving (Criterion Number 4)**

A complete driver education course is composed of both classroom and practice driving instruction. In the 1959-60 school year only seventy-two schools offered a complete driver education course consisting of both classroom and practice driving. Thirty-five courses consisted of classroom instruction only. While it is not possible to state the exact value of such courses, it is evident that the thirty-five courses offered by Tennessee schools in the 1959-60 school year did not meet the national recommendation that driver education courses should consist of both classroom and practice driving instruction. Twenty of these thirty-five classroom courses were really assembly programs.

**Minimum Time Standards (Criterion Number 5)**

Minimum time standards are necessary for a complete course in high school driver education. Each student should

\(^3\)Pickel, loc. cit.
receive at least thirty class hours of 60 minutes each in classroom instruction, and at least six class hours of 60 minutes each in practice driving instruction.

The schools of Tennessee offer driver education as an elective half-unit course, as a phase of the unit course in health education, and as a phase of an integrated program of health education. The schools that offer only classroom instruction as a part of health education are supposed to spend a minimum of twenty classroom periods for the driver education phase of the course. In the 1959-1960 school year sixty-three courses constituting 3,852 students met the nationally recommended minimum time standards. Only 8 percent of the eligible students received a course that met nationally recommended minimum time standards.

Areas for Practice Driving (Criterion Number 6)

Areas for practice driving should be available. Early instruction may be given on streets carrying only light traffic while later instruction should be given on streets and highways that are heavily traveled.

All of the interviewees except one that offered practice driving used streets that were not busy, city parks, parking lots, or ball parks for the early phases of instruction. These interviewees also stated that heavily traveled streets and highways were used for the final phases of practice driving instruction. The sampling of the schools that
offered practice driving instruction indicated that suitable areas for practice driving instruction were available throughout the state.

**Evaluation (Criterion Number 7)**

All driver education programs should include provisions for evaluating the extent to which its objectives are being achieved. Knowledge tests were used by all interviewees that offered any type of driver education. Both knowledge and skill tests were used by all interviewees that offered a complete course. However, none of the driving teachers interviewed seemed to be aware of the various attitudinal scales and personality inventories available for use in driver education. In view of the fact that the driver's attitude is the vital link in the highway safety chain and that a tremendous amount of literature has been published on the subject of evaluating driver attitudes, a weakness in a driver education program exists when such instruments are not used even though the validity of some attitudinal scales has not been established.

**Role of State Department of Education (Criterion Number 8)**

State departments of education should provide leadership in matters of administration, consultant services, instructional materials, research and evaluation. The Tennessee State Department of Education has no full time state
supervision of driver education. The director of driver education spends approximately 20 per cent of one person's time supervising driver education. Because of extensive duties relating to school buildings and pupil transportation the director and his aids cannot provide the help needed to supervise and promote driver education throughout the state. However, their present activities concerning driver education are outstanding considering the limited time and resources available. The department maintains state records with a list of schools offering courses, supplies local schools with supplementary instructional materials, makes provision for the schools to grant credit, and assists local schools in obtaining practice driving automobiles.

**Obtaining and Using Automobiles and Equipment** (Criterion Number 9)

For many years, automobile manufacturers, dealers, and others have been very generous in providing automobiles for use in practice driving instruction. Today, it is recommended that local boards of education provide equipment and automobiles by the regular purchase of such items.

The questionnaire survey indicated that seventy-four cars were used in the state for practice driving instruction. All of the cars used by the schools except one were loaned by dealers (Table II, page 90). Only one vehicle was purchased in the 1959-60 school year by a local board of
## TABLE II

**MOTOR VEHICLE USE IN DRIVER EDUCATION**  
1959-1960

<table>
<thead>
<tr>
<th>Source of vehicle</th>
<th>New</th>
<th>Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of free-loan cars from dealers</td>
<td>64</td>
<td>8</td>
</tr>
<tr>
<td>Number of free-loan cars from other sources</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Number of cars purchased by school agencies</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Number of cars rented or leased</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>
education. However, all of the interviewees considered the borrowing of a dealer's automobile a very satisfactory practice.

If an automobile is used on a lease, loan, or rental basis, officials of the school and the agency furnishing the car should have a written agreement specifying the responsibilities of both parties. Liability and insurance factors should also be considered. The board of education has the responsibility for developing clear policies governing the use of automobiles procured for driver education purposes. Seven of the interviewees stated that their school had a policy with regard to the use of vehicles. Two interviewees said their school did not have a policy regarding the use of vehicles and one did not know. Only two interviewees knew the insurance coverage of the vehicle used for practice driving. All school systems maintained the vehicle and furnished fuel except in one case where the students paid a fee for such purpose. Therefore, local boards of education in Tennessee were not providing automobiles and equipment for driver education courses by the regular purchase of such items. Furthermore, policies regarding the use of borrowed vehicles and insurance coverage were inadequate.

**Records and Reports (Criterion Number 10)**

The recording of significant information is necessary for efficiently conducting a driver education program
and for making possible year by year improvement. Report forms should help to (1) facilitate administration of the program; (2) measure results and improve instruction; (3) appraise and control costs; and (4) protect students and teachers from accidents. All of the interviewees kept parental approval forms because this is required by Tennessee law regarding driver licensing. Only four interviewees kept student progress records and two kept cost records. None of the interviewees kept records pertaining to accidents. Adequate records and reports were not kept by any of the interviewees.

Community Relations (Criterion Number 11)

Since driver education is a relatively new offering in the public schools, desirable community relations are especially important. This relationship depends to a considerable degree upon the benefits received by those who have taken the course. One interviewee appeared on panel discussions, drove the car in parades and kept it clean. Another made speeches to civic groups, but other interviewees had not given much thought to community relations. The teachers of driver education did not seem to be aware of the importance of desirable community relations.

Methods of Instruction (Criterion Number 12)

Methods of instruction should vary in terms of student
needs, group size, type of learning experience, ages of students, teacher strengths, available facilities, daily purpose, organization of the school program, and other local conditions. All of the teachers interviewed used teacher presentations, directed group discussions, classroom forums or panels, visiting resource persons, skill-developing exercises, drills, filmstrips, motion pictures, and audio-visual aids as methods of instruction.

Four of the interviewees used demonstrations such as the skills used in emergency situations. None of the interviewees used dramatizations and role-playing techniques. Only two of the interviewees used cooperative problem-solving tasks or projects involving student use of survey and interview techniques and opinion polls. Eight made field trips to traffic courts, highway departments, driver licensing bureaus, and motor vehicle inspection stations. None of the interviewees stated that the students participated with adults in community and statewide safety conferences. Several desirable methods of instruction were being used but cooperative problem-solving tasks and dramatizations were not employed as methods of instruction.

Supplementary Materials (Criterion Number 13)

Free and low cost supplementary teaching materials related to driver education and traffic safety are available from many sources and should be utilized. Materials were
inadequate in quantity and quality in all schools investigated except one. All interviewees used films and the Tennessee Drivers Manual but one interviewee used only horror films. Only one interviewee possessed adequate supplementary materials. All of the interviewed teachers except one were not aware of and were not using the many free and low cost materials available for use in driver education courses.

Desirable Equipment (Criterion Number 14)

Adequate equipment should be used for teaching driver education. Nine of the interviewees used audio-visual equipment. Five used psychophysical devices to help students understand the meaning of driver reaction time, functions of the eyes, and other physical and psychological factors. Four interviewees used equipment such as signs, signals and stanchions in practice driving. The Nashville city system used practice driving simulators in all city schools. All of the programs investigated needed more adequate equipment for providing quality driver education courses.

Selecting Students (Criterion Number 15)

Preference should be given to students needing preparation because of personal or family reasons, vocational needs, the immediacy of opportunity to drive, the immediacy of leaving school, or similar reasons verified by parents. Ten interviewees used the immediacy of leaving school as a
criterion for selecting students for the course. One interviewee took all students who wanted to take the course. This procedure meant that each student received approximately three hours per person practice driving time prior to taking a test for a state driver's license. All interviewees except one used acceptable criteria for selecting students.

**Minimum Standards (Criterion Number 16)**

A teacher of driver education should hold a bachelor's degree, have a secondary teaching certificate in the field of driver education, and possess the basic qualities necessary for effective teaching in any other field. In order to be certified to teach driver education in Tennessee, a teacher must complete one three-quarter hour course in general safety education and one three-quarter hour course in methods of teaching driver education. However, one forty-clock hour workshop course, such as those offered by American Automobile Association educational consultants, may be substituted for the certification requirements.

All of the interviewees met the minimum state standards except one who had not received any sort of a course that pertained to methods of teaching driver education. Questionnaire data indicated that only 80 teachers out of the 179 were certified to teach driver education in the 1959-60 school year. Less than one-half of the driver education teachers held a teaching certificate in the field
of driver education.

Pre-service Preparation (Criterion Number 17)

The minimum pre-service preparation of teachers of driver education should include completion of a teaching minor or its equivalent in driver and safety education. Seven of the interviewees had completed one workshop course as preparation for teaching driver education. One interviewee had not received any preparation courses. Two interviewees had completed six semester hours in methods of teaching driver education. One interviewee had completed three workshop courses. Nine of the interviewees had completed courses in child growth and development, guidance, and sociology. None of the interviewees had completed a minor or its equivalent in driver and safety education.

CHAPTER SUMMARY

This chapter compared data concerning driver education in Tennessee with the previously identified criteria of Chapter III.

The growth of driver education in Tennessee has been erratic and slow and only a small percentage of the eligible pupils have been enrolled in the course since it was started in the 1947-48 school year. In the 1960-61 school year, 23 per cent of the public high schools in Tennessee offered driver education, while approximately 13 per cent of these
schools offered a course which met nationally recommended standards of thirty hours per student classroom instruction and six hours behind-the-wheel practice driving instruction. Thus, only 8 per cent of eligible students received a course that met nationally recommended standards. Students in Tennessee were eligible to apply for a driver's license at the age of sixteen years. There was no financial support from the state level for driver education. In the 1959-60 school year only sixty-three courses comprising 3,852 students met minimum time standards. Adequate areas were available for practice driving instruction. The Tennessee State Department of Education did not provide a full-time supervisor of driver education. All vehicles except one used throughout the state were loaned by dealers. Adequate records and reports were not kept. Several desirable methods of instruction were being used, but cooperative problem-solving tasks and dramatizations were not employed as methods of instruction. Supplementary teaching materials and physical equipment were inadequate.

Acceptable criteria were used to select students for the course. Approximately one-half of the teachers did not meet general minimum teaching standards and none were found with a minor in driver and safety education.
CHAPTER V

SUMMARY AND CONCLUSIONS

A. SUMMARY

The problem of this study was to analyze and appraise existing driver education programs in Tennessee secondary schools. Sub-problems included the following:

1. To establish the philosophical and psychological bases of driver education.

2. To identify acceptable criteria from established national standards for adequate driver education programs.

3. To determine the nature and adequacy of driver education programs in Tennessee.

The sources of data and procedures used in developing this study included a review of authoritative publications and research studies, personal visitation and interviews, and the evaluation of questionnaires sent to all secondary school principals in the state.

In order to deal with problems philosophically, it is necessary to organize, interpret, clarify, and criticize ideas. Considerable confusion in the thinking of people has resulted from inconsistent notions concerning the nature and purposes of education. This confusion is lessened if clear ideas about the nature of education are developed by considering basic philosophical and psychological theories.
The critics of driver education have a different concept of the nature of education than the advocates of driver education.

The psychology of safe behavior is no more or no less than the psychology of human behavior generally. Driving a motor vehicle is essentially a social undertaking where cooperative behavior and social responsibility are needed. In order to perform the social roles involved in driving, a person has to have some measure of satisfaction in his need for affection, personal security, and personal significance. The problem of effecting safe behavior is not the exclusive concern of safety educators but of all educators. Obviously, no single course of study will do the job. No attitude toward safety is sound if it fosters an unhealthy fear of an activity. The dread of having an accident is the frame of mind likely to involve one. It is through the processes of group dynamics that attitudes may be most effectively improved.

Three national conferences have produced objectives and policies which may be used as guide-lines for quality driver education programs. Criteria for driver education programs were identified from the 1960 publication of the National Education Association entitled *Policies and Practices for Driver Education*. This publication was primarily based on recommendations made by the Third National
Conference on driver education held at Purdue University, in 1958.

Criteria were identified pertaining to driver education for all, minimum legal age, financing, practice driving, minimum time standards, areas for practice driving, and evaluation. Additional criteria identified related to the role of State Department of Education, adequate records and reports, desirable community relations, methods of instruction, supplementary teaching materials, adequate equipment, and selecting students. Criteria pertaining to professional personnel dealt with minimum standards and pre-service preparation. Data concerning driver education in Tennessee were compared with the identified criteria.

The growth of driver education in Tennessee has been erratic and slow and only a small percentage of the eligible pupils have been enrolled in the course since it was started. In the 1960-61 school year, 23 per cent of the public high schools in Tennessee offered some type of driver education and of these schools approximately 13 per cent offered a course which met the nationally recommended standards of thirty hours per student classroom instruction and six hours behind-the-wheel practice driving instruction. Only 8 per cent of the eligible students received a course that met nationally recommended standards. Students were allowed to apply for a driver's license at the age of sixteen years.
Financial support from the state level source was inadequate. In the 1959-60 school year only sixty-three courses comprising 3,582 students met minimum time standards. Adequate areas were available for practice driving instruction. The Tennessee State Department of Education did not provide a full-time supervisor of driver education. All vehicles except one used throughout the state were loaned by dealers. Adequate records and reports were not kept. Several desirable methods of instruction were used, but cooperative problem-solving tasks and dramatizations were not employed. Supplementary teaching materials and physical equipment were inadequate. Acceptable criteria were used to select students for the course. Approximately half of the teachers did not meet general minimum teaching standards and none were found with a minor in driver and safety education.

B. CONCLUSIONS

Based on the findings of this study, the following conclusions appeared to be warranted:

1. In the 1959-60 school year approximately 8 per cent of the eligible students in Tennessee received a course in driver education that met nationally recommended minimum standards of thirty hours per student classroom instruction and six hours behind-the-wheel practice driving instruction. Seventy-nine adults and out-of-school youth received driver
education courses provided by high schools in the state. Therefore, quality driver education programs for students and adults should be expanded.

2. Students in Tennessee were eligible to apply for a driver's license at the age of sixteen years. The recommended legal minimum age for obtaining a driver's license was eighteen unless students had successfully completed a driver education course. Students in Tennessee who receive a license to drive under the age of eighteen should receive a high quality course in driver education which meets nationally recommended standards.

3. There was no special state appropriation of funds for the financial support of driver education. Adequate financial support should be provided to improve driver education in Tennessee.

4. Thirty-five driver education courses offered in the 1959-60 school year consisted of classroom instruction only. Twenty of these courses consisted of pupils observing assembly programs which pertained to traffic safety. Practice driving instruction should be provided for students presently receiving only classroom courses.

5. Suitable practice driving areas were available for all stages of practice driving instruction. Thus, adequate areas for practice driving instruction were being used throughout the state.
6. The Tennessee State Department of Education did not provide a full-time supervisor of driver education. Therefore, the Tennessee State Department of Education did not provide adequate leadership for improving and expanding driver education.

7. Adequate knowledge and skill tests were being used for evaluation but attitudinal scales or personality inventories and other methods to assess personality traits were not utilized. Thus, teachers of driver education should use attitudinal scales available for use in driver education courses.

8. All vehicles except one of the seventy-five used for driver education in the 1960-61 school year were loaned by automobile dealers. Local boards of education should provide automobiles and other equipment by the regular purchase of such items.

9. Adequate records and reports concerning insurance coverage, the use of vehicles, accidents, and costs were not being kept. Accurate and complete records and reports should be maintained by all driver education teachers.

10. Teachers of driver education in Tennessee were not aware of the importance of maintaining and improving community relations.

11. Several desirable methods of instruction were used but cooperative problem solving tasks and dramatizations were
not employed as methods of instruction.

12. Supplementary free and low cost teaching materials were not being utilized by driver education teachers across the state.

13. More adequate physical equipment including psychological testing devices was needed for providing quality driver education courses.

14. Acceptable criteria were being used for selecting students who elected to take a course in driver education.

15. Approximately one-half of the teachers used in Tennessee to teach driver education did not meet general minimum teaching standards, and none had obtained adequate pre-service preparation.
BIBLIOGRAPHY
BIBLIOGRAPHY


APPENDICES
APPENDIX A

Job Analysis of Driver and Traffic Safety Education
Teaching

What the Driver Educator Does

Classroom Instruction

A. Plans for instruction by clarifying what to teach and how to organize meaningful experiences.

1. Course objectives.
2. Needs, interests, and vital problems of the particular group.
3. Concepts basic to producing safe and efficient drivers and good traffic citizens.*
4. The unit plan or other sound method of integrating the content and method.

B. Informs, explains, and "shows how."

1. Sound principles for communicating with students.
2. How to effectively blend the "telling" and "showing" techniques through use of the various visual aids.
3. The materials available to driver education teachers.

C. Develops good classroom morale.

1. How to establish a good physical setting.
2. How to create a pleasant and stimulating social-emotional climate conducive to learning.
3. The values of and how to use the democratic process in the classroom.

*These concepts will draw from social studies, physics, chemistry, mathematics, health, psychology, sociology, consumer education, etc.
D. Helps pupils clarify their aims, purposes, beliefs, interests, and attitudes.

E. Encourage critical and accurate thinking so insights and mature judgment toward driving practices will result.

F. Organizes, guides, and directs pupil activities which stimulate self-directed activity toward the solution of the traffic problem.

1. That you cannot force pupils to change their attitudes, but you can induce them to change themselves.
2. The value of providing alternative experiences for the individual to see differences, compare, examine, relate, and reconsider his own position in a climate of relative choice.
3. The strengths and limitations of group discussion.
4. How to control and guide group discussion.

1. Techniques to demonstrate the consequences of poor driving.
2. How to stimulate thinking and openmindedness.
3. What we know, and what we need to know regarding driver education.
4. How to teach students to find answers, to analyze and to sift the true from the false.
5. Advantages and limitations of the various teaching methods and techniques.

1. The many ramifications of the traffic problem.
2. The function of traffic enforcement and traffic engineering.
3. The role of a community safety council organization.
4. The individual differences of the students.
5. How to conduct fundamental traffic engineering surveys.
Behind-the-Wheel Instruction

A. Develops manipulative skills needed to effectively operate an automobile in routine and emergency driving situations.

B. Develops perceptual skills and judgment.

C. Seizes every opportunity to cultivate desirable attitudes and emotional stability while driving.

1. Routine Skills
   a. Purpose of driving controls, safety devices and instrument panels.
   b. The best practices of (1) preparing to drive, (2) moving the car (forward and backward) and stopping, (3) right and left turns, (4) adjusting to highway speed, (5) lane behavior, (6) turning around, (7) maneuvering and parking on grades, (8) angle and parallel parking, (9) passing and being passed, (10) city driving, (11) open highway driving, (12) night driving.

2. Emergency Skills
   a. Driving under adverse conditions
   b. Correct recovery techniques (1) skids (2) blow-outs (3) returning from off the road situations
   c. Towing and pushing.

3. Defensive driving techniques.

   a. The psychological factors related to perception and driving.
   b. The most effective films and other aids for achieving this objective.
   c. Unsafe attitudes and practices.
   d. How to help students utilize their observation time in the car to good advantage.
   e. Physical, mental, and emotional factors affecting the driver.
Evaluation

What the Driver Educator Does

A. Self - Constantly evaluates himself (attitudes toward self and others) and his teaching methods.

B. Students - Systematically uses the best available means of evaluating students in terms of the desirable behavior expected.

C. Program - Attempts to evaluate the contribution driver education makes to the total traffic safety program.

What He Must Know

1. Characteristics of teachers that facilitate communication and learning.
2. Purposes and goals of driver education. (What he is trying to do).
3. Strengths and weaknesses in his own makeup.
4. How to solicit and interpret the reactions of students toward the learning situation.

1. How to construct a valid and reliable test.
2. Available standard achievement tests in driver education.
3. How to observe and interpret pupil behavior.
4. Personality and attitude measuring devices for self-rating or rating of others.
5. Driving rating scales.
7. Psycho-physical tests.
8. Progress charts.

1. Follow-up studies evaluating the effectiveness of driver education.
2. Results of enforcement and engineering research studies.
3. Research techniques - especially how to make before and after studies.
### Organization and Administration

#### What the Driver Educator Does

<table>
<thead>
<tr>
<th>A. Program Planning</th>
<th>What He Must Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Helps determine most efficient type of program.</td>
<td>1. Various types of driving plans (dual-control, multiple car, etc.).</td>
</tr>
<tr>
<td>2. Helps establish school policy to guide the direction of the program.</td>
<td>2. State and local requirements, concerning classroom instruction and practice driving.</td>
</tr>
</tbody>
</table>

#### B. Scheduling

| 1. Determines enrollment qualifications. | 1. State laws regarding driver education |
| 2. Determines student schedules for driver education classes. | 2. Recommendations of national authorities related to the age and grade level for driver education students. |

2. Driver education in the over-all school program. |
3. The time allotments and minimum requirements for the various phases of the program.
C. Records and Reports

1. Maintains and keeps daily and permanent records for instructional and legal purposes.

2. Plans and supervises the issuance of permits, certificates, licenses, and fulfills other regulations required by the state.

D. Car Procurement, Care and Use

1. Assists in procuring car.

2. Checks for insurance, registration and other vehicle requirements.

3. Supervises maintenance of the car.

4. Effective practice driving groups.

1. The requirements for records of both the school and state.

2. How to maintain records that will appraise costs, control costs and protect school personnel.

3. Pupil progress records to show degree of proficiency acquired by each student.

1. The state and local laws.

2. Proper procedures and the offices which issue permits, licenses and certificates.

3. The requirements of licensing so that he may help pupils and parents understand and fulfill their obligations.

1. The procedures for obtaining cars.

2. The advantages and disadvantages of renting, purchasing, leasing and borrowing cars.

1. The possible legal liabilities which may incur in driver education.

2. Insurance types and limits to carry.

3. State laws regarding registration and other licensing procedures.

1. The principles of preventative maintenance as prescribed by the manufacturers.
2. Proper use of vehicle.
3. How to use the car so as not to incur unfavorable criticism.

E. Procuring teaching facilities and equipment (other than the vehicle)

<table>
<thead>
<tr>
<th>1. Selects text and reference materials and equipment.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The teaching materials which are the most valuable in teacher-learning situations.</td>
</tr>
<tr>
<td>2. The recommended texts for driver education.</td>
</tr>
<tr>
<td>3. Sources of free and inexpensive materials.</td>
</tr>
<tr>
<td>4. Persons, groups and organizations which are interested in driver education.</td>
</tr>
<tr>
<td>5. Special teaching aids available in driver education.</td>
</tr>
<tr>
<td>6. Uses of psychophysical testing devices.</td>
</tr>
<tr>
<td>7. Practice driving aids (other than the auto). (Stanchions, detonators, etc.).</td>
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<table>
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<tr>
<th>2. Selects and uses educationally sound audio visual aids.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The criteria for selection of audio-visual aids.</td>
</tr>
<tr>
<td>2. Sources of audio-visual aids.</td>
</tr>
<tr>
<td>3. Related radio and TV programs.</td>
</tr>
<tr>
<td>4. The operational techniques of various audio-visual equipment.</td>
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<tbody>
<tr>
<td>1. Resource people available.</td>
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<tr>
<td>2. Techniques for selecting and evaluating resource people.</td>
</tr>
<tr>
<td>3. Effective public relations.</td>
</tr>
</tbody>
</table>
Public Relations

Involves the creation of a favorable mental image of driver education by maintaining the highest standards of instruction and performance and by stimulating student interest and acceptance through motivating techniques which appeal to his needs and desires.

<table>
<thead>
<tr>
<th>What the Driver Educator Does</th>
<th>What He Must Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Works with parents and parent-teacher organizations.</td>
<td>1. Parents' attitudes towards driver education and the school.</td>
</tr>
<tr>
<td></td>
<td>2. Reporting students' progress through various communication media.</td>
</tr>
<tr>
<td></td>
<td>3. Availability and interest of parents.</td>
</tr>
<tr>
<td></td>
<td>4. Organizing parent visitations to classes.</td>
</tr>
<tr>
<td>B. Participates with service organizations and civic clubs.</td>
<td>1. Effective joint school and community projects in driver education activities.</td>
</tr>
<tr>
<td></td>
<td>2. Value of visitations by civic and service organizations to classes.</td>
</tr>
<tr>
<td></td>
<td>3. Uses of community personnel (talent) in resource and advisory capacities.</td>
</tr>
<tr>
<td></td>
<td>4. Values in working with community organizations in teen-age driving problems - clinics</td>
</tr>
<tr>
<td>C. Cooperates with driver improvement, traffic enforcement and engineering agencies.</td>
<td>1. Relationship of driver education to all the areas of traffic safety.</td>
</tr>
<tr>
<td></td>
<td>2. Basic philosophies and objectives of areas relative to traffic safety.</td>
</tr>
</tbody>
</table>
D. Utilizes the mass media (newspaper, radio and television) to inform and educate the public regarding driver education and traffic safety.

E. Contributes time and talent to community traffic safety council efforts.

1. How to establish an action program showing the results of driver education through regular reports (oral and written).

2. How to make clear and concise explanations of what driver education is, what it does, and how it does it.

3. Factors that can create unfavorable attitudes - public.

4. How to prepare a communication program (public relations) to act as a guide for public opinion.

5. The value of public information: how to present it, what is of interest and current events that are effective in creating a favorable impression of the activities incorporated into the driver education program.

1. How to identify the factors necessary in the control of traffic hazards.

2. How to acquire public trust and confidence in the role driver education plays in the prevention of traffic accidents.

3. Sources of information which indicate present or changing attitudes towards driver education.

4. What the driver education program contributes to the community traffic safety council efforts.
F. "Practices what he preaches"—sets a good example for others.

1. Instructor's limitations and how to compensate for them.
2. The application of both the scientific and philosophic concepts of the law, social sciences, physical sciences and the skills necessary to use them in the acquisition of public support and respect.

Promote Effective Relations with the School Administration and Other Staff Members in the School

The success of the driver education program in a community is contingent upon the individual instructor's ability to DO certain things; to accomplish these things he must also have knowledge of certain things; these requirements are listed below.

<table>
<thead>
<tr>
<th>What the Driver Educator Must Do</th>
<th>What He Must Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Keeps a proper perspective of the place of driver education in the total educational program.</td>
<td>1. School curriculum. Goals of driver education. Goals of general education.</td>
</tr>
<tr>
<td>B. Informs the administration and staff of the objectives of driver education.</td>
<td>1. Aims of driver education. 2. Techniques in reporting the accomplishments of driver education.</td>
</tr>
<tr>
<td>C. Suggests ways to integrate and correlate driver education with other subjects in the curriculum.</td>
<td>1. Principles and concepts of other courses that are utilized in driver education.</td>
</tr>
<tr>
<td>D. Encourages active participation by other staff members in the driver education program.</td>
<td>1. How to meet and modify existing attitudes towards driver education.</td>
</tr>
</tbody>
</table>
### Professional Obligations

**What the Driver Educator Does**

1. Participates in local, state and national organizations promoting traffic safety.

2. Maintains and improves his professional standing by attending workshops and refresher courses.

**What He Must Know**

1. The benefits and contributions such organizations can make to himself and the profession.

   a. These organizations strengthen him with the public.
   
   b. They can help improve teacher preparation standards and upgrade teacher techniques in classroom and practice driving.
   
   c. They can aid in improving teacher preparation and determining the requirements for certification.
   
   d. They can keep him up to date with new trends and developments.
   
   e. They can be a source of orientation for new teachers.
   
   f. They can suggest and promote proper legislation.
   
   g. They can make suggestions for needed research.
   
   h. He has a place to go to get answers to his problems.

1. That he should stay up to date on latest methods, materials and knowledge in his field.

2. Contact with others in the same field will give him ideas that will make his work more effective.

3. That a good general safety course will help him do a more complete job.
1. That the status and progress of any endeavor depends on the quality of research in that area.

2. That colleges and universities, the National Commission on Safety Education, automobile clubs, health and welfare organizations, automobile manufacturers, insurance companies, enforcement agencies, state departments of education and professional organizations carry on research programs and their findings are available.

3. Keeps abreast of current research and new developments in driver education.

4. Maintains an experimental and open-minded view toward his profession.

4. That supervised teaching experiences in classroom and practice driving will be meaningful and valuable to him.

5. That project work, experimentation and research will give him a better understanding of his work.

6. That continuous education helps develop leadership qualities, thus enabling him to be more effective in his school and community.

1. There is no set way of getting information and knowledge across to all students.

2. He must seek and accept the help and constructive criticisms of interested persons.

3. He must continually experiment to try to find "the better way" to teach and serve.

4. How to be amenable to change.

5. How to make use of action research.
<table>
<thead>
<tr>
<th>Guidance and Counseling</th>
<th>What He Must Know</th>
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<tbody>
<tr>
<td><strong>What the Driver Educator Does</strong></td>
<td><strong>What He Must Know</strong></td>
</tr>
<tr>
<td>1. Counsels students on personal problems which block learning.</td>
<td>1. Interviewing and counseling techniques.</td>
</tr>
<tr>
<td></td>
<td>2. Basic needs and drives of people.</td>
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<td>3. How to identify students with problems.</td>
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<td>4. How to recognize, record and interpret important facts on the anecdotal record.</td>
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<td></td>
<td>5. How to develop rapport--creating an atmosphere of trust and confidence--which encourages communication.</td>
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<td>6. How to be the type of person to whom students will come and confide.</td>
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<td>7. How to maintain the confidence of the student.</td>
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<td></td>
<td>8. How to keep confidential information.</td>
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<tr>
<td>2. Refers students with serious problems to appropriate personnel.</td>
<td>1. That he can't handle all problems.</td>
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<tr>
<td></td>
<td>2. Who in the school and community is qualified to help.</td>
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<td></td>
<td>3. How to bridge the gap between student and qualified personnel.</td>
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<tr>
<td></td>
<td>4. Knows when to refer persons needing help.</td>
</tr>
<tr>
<td>3. Helps students understand themselves and others so they can more effectively adjust to the driving situation and other aspects of their environment.</td>
<td>1. That all people have dominant wants and they will try to satisfy these wants.</td>
</tr>
<tr>
<td></td>
<td>2. How to point out strengths and weaknesses in a positive way.</td>
</tr>
</tbody>
</table>
4. Helps students eliminate or compensate for mental, emotional and physical deficiencies.

3. Effective techniques which will help students accept themselves and others.

4. How to help the student adjust to pressures of his environment, but not succumb to them.

5. That a student cannot do his best when emotionally disturbed and tense, especially when behind the wheel.

1. The physical, mental and emotional factors that affect driving.

2. How to recognize deficiencies in these.

3. What steps must be taken to arrange for dental, eye, and other physical examinations.

4. Available testing procedures and instruments that will help point out driver attitudes and personality problems.

5. The strengths and limitations of psychophysical testing equipment.

6. Home and parental influences must be considered in the total personality picture.

7. That it takes more time and patience to teach the physically handicapped, poorly coordinated and mentally retarded.

8. That praise and encouragement will do much to help the slow learner to respond.
General Safety Program

What the Driver Educator Does

1. Helps to promote a safe school environment according to his abilities and the needs of the school.

2. Cooperates with school safety organizations or committees.

3. Assists junior high and elementary teachers in promoting traffic safety (materials, demonstrations, ideas).

What He Must Know

1. Parking needs.

2. How to organize and control parking areas.

3. Methods of keeping buildings and playgrounds safe.

4. Liability aspects of school accidents.

5. School bus safety practices.

1. The work of the safety patrol and school bus patrol.

2. First aid.

3. Student traffic court procedures.

4. How to organize and coordinate teen-age traffic safety conference activities.

5. How to organize and supervise student safety council, or safety committee of student council.

6. How to conduct a school vehicle safety check.

7. How to plan and promote school safety assemblies.

1. Child and adolescent psychology.

2. Sources and materials to suggest (books, pamphlets, booklets, posters, safety lessons, playlets on their grade level).

3. That safety should be taught from kindergarten through 12th grade.

4. Bicycle safety.

5. Pedestrian safety.
4. Cooperates with other safety programs in the school, such as fire prevention, civil defense, national school honor roll and accident reporting.

6. How to integrate safety into all subject areas at all grade levels.

1. Procedure for making accident reports.
2. How to plan and carry out fire drills.
3. Plans for civil and disaster defense.
4. How to detect fire and other hazards.
5. If your building has sufficient fire fighting equipment, properly placed and in working order.
6. The National School Safety Honor Roll Program.
APPENDIX B

Teaching Aids for Driver Education Instructors
EXPLANATION

The following material has been broken down into two parts. The first part includes a series of units which concern the driver educator. Under each unit title free and inexpensive materials are listed alphabetically. Following each teaching aid, code letters indicate the address of the company through which the materials may be obtained. The code letters are listed alphabetically in Part II. Part II also contains addresses of sources of driver education materials and individuals in the driver education field. This list of addresses is in alphabetical order according to the information in the first line of the address. Thus, for example, the Ford Motor Company is found under Robert D. Bond (RDB) to whom you write for materials at the Ford Motor Company.
PART I

The Car

ABC's of Hydraulic Brakes  
Automobile User's Guide  
Average Stopping Distance  
Behind the Scenes in Scientific Car Testing ($2.00)  
Electricity and Wheels  
Fuel Economy Through Planned Driving  
How a Car is Assembled  
How the Wheels Revolve  
Manual of Cooling System Service  
Metallurgy and Wheels  
Operating Parts of a Car, The (from "Let's Drive Right")  
Optics and Wheels  
Power Goes to Work  
Power Primer, A  
Safety Belts Save Lives  
Seat Belts for Passenger Cars  
Storage Battery, The --Its Fundamentals, Use and Maintenance  
Story of Combustion, The  
Story of the Carburetor, The  
Truth About American Cars, The ($1.00)  
Truth About Carbon Monoxide, The
<table>
<thead>
<tr>
<th>Title</th>
<th>Publisher</th>
</tr>
</thead>
<tbody>
<tr>
<td>What It Takes to Make Your Car</td>
<td>(AMA)</td>
</tr>
<tr>
<td>What To Do When Your Car Conks Out</td>
<td>(PS)</td>
</tr>
<tr>
<td>Why Preventive Maintenance</td>
<td>(GMC)</td>
</tr>
<tr>
<td>Winning the Battle for More Tire Mileage on Passenger Cars</td>
<td>(PMA)</td>
</tr>
<tr>
<td>World Makes an Automobile, The</td>
<td>(AMA)</td>
</tr>
<tr>
<td>Your Automobile Dollar</td>
<td>(HFC)</td>
</tr>
</tbody>
</table>
Community Tasks

Action for Safety (NCSE)

Andy Larkin (NSC)

How to Attack the Traffic Accident Problem in Your Community (ACS)


Traffic Accident Problem in Detroit (TSA)
The Driver

Are You Fit to Drive ($4.60 per 100 copies) (ACS)

Deft Driving (RDB)

Development of Essential Skills in Meeting Driving Emergencies (Series of Practice Lessons) (CSE)

Eyes Have It, The (RDB)

Famous Last Words (ALA)

Good Driving Practices (ES)

Highway Zoo (NSC)

Improving the Attitudes of Young Drivers (CSE)

Improving the Behavior of Drivers (Address delivered by H. J. Stack, Ph.D.) (HJS)

Manual for Construction and Use Driver Testing Devices (APD)


Place of Alcohol in the Driver Education Curriculum, The (HTSC)

Plans for Building Driver Tests (AAA)

Super Highways--How to Drive Them (BCI)

Timer of Simple Reactions, A (NSC)

Traffic Factors and the Driver (RDB)

We Drivers (GMC)

You and Your Car (CLB)
Natural Laws

Average Stopping Distances (#818) (EML)

Bad Weather: Hazards, Precautions, Results (#39) (NSC)

Brakes and Stopping of Motor Vehicles (#22) (NSC)

Cold Facts About Winter Driving (ACS)

Motor Vehicle Speed (#55) (NSC)

You Can't Stop on a Dime (FBMI)
<table>
<thead>
<tr>
<th>Other Highway Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accident Facts</td>
</tr>
<tr>
<td>Action for Safety</td>
</tr>
<tr>
<td>Bicycle Riding Clubs</td>
</tr>
<tr>
<td>Bicycle Safety #1</td>
</tr>
<tr>
<td>Bicycle Safety in Action</td>
</tr>
<tr>
<td>Bicycle Safety Kit</td>
</tr>
<tr>
<td>Bicycle Safety Rules</td>
</tr>
<tr>
<td>Community Bicycle Safety Program</td>
</tr>
<tr>
<td>Do You Make These Mistakes on Walking</td>
</tr>
<tr>
<td>Good Driving Practices</td>
</tr>
<tr>
<td>Heroes of the Highway</td>
</tr>
<tr>
<td>Highway Transportation Story in Facts, The</td>
</tr>
<tr>
<td>Motor Driven Cycle Safety (#36)</td>
</tr>
<tr>
<td>Pedestrian Safety (#10)</td>
</tr>
<tr>
<td>Wacky Walkers</td>
</tr>
<tr>
<td>We Drivers</td>
</tr>
<tr>
<td>What We Really Know, Really Don't Know, and Really Ought to Know About Commercial Vehicle Drivers</td>
</tr>
</tbody>
</table>
The Problem

Accident Facts (NSC)
Alcohol and the Wheel (SCS)
Automobile Facts (AMA)
Automobile Facts and Figures (AMA)
Behind the Scenes in Scientific Car Testing ($2.00) (MVR)
Big 3 and 1 More Makes 4, The ($2.00) (MVR)
Bon Voyage (MIS)
Car Traveling People, A (AMA)
Chronicle of the Automobile Industry in America, A (AMA)
Cold Facts About Winter Driving (ACS)
Deft Driving (RDB)
Forecast of Motor Vehicle Registration, Travel and Revenue in Michigan to the Year 1985 (MSH)
Freedom of the American Road (RDB)
Highway Transportation Story in Facts, The (NHU)
Horses to Horsepower (AMA)
How to Attack the Traffic Accident Problem in Your Community (ACS)
Michigan Traffic Accident Facts (MSP)
Play Experts (LMC)
Road Toll, The (TI)
Safety Belts Save Lives (RDB)
Seat Belts Save Lives (RDB)
Seat Belts for Passenger Cars (AAA)
Traffic Factors and the Driver (RDB)
Transportation Progress (GMC)
Truth About American Cars, The World Makes an Automobile, The ($1.00) (MVR)
You Can't Stop on a Dime (AMA)
Your Own American Road (FBM)
Traffic Laws

48 States . . . United (NHU)

Mac Hines--Trooper (NSC)

Point System, The (CSE)

Road Toll, The (TI)

Rules of the Road for All 48 States (WHO)
**Additional Materials for the Driver Educator**

- Annual report: Learn and Life, 1958 (MIHS)
- Basic Driver Education (Kit A-3309) (AAA)
- Bulletins on driver education (Issued periodically) (ACS)
- Center Letter (HTSC)
- Criteria for Driver Education (NCSE)
- Curriculum for County Driver Safety Schools (HTSC)
- Driver Education for Adults (CSE)
- Drive Right Bulletin (SFC)
- Driver Education in the High School Curriculum (CSE)
- Driver Education News (RDB)
- Driver Training Kit for Teachers (GMC)
- Driver Laboratory News (ISC)
- Five Steps to Driver Education (FBMI)
- Instruction Manual for Driver Tests (AAA)
- Let's Talk Safety (flannel board presentation on traffic safety) (HTSC)
- Michigan Vehicle Code ($ .75) (SS)
- Motor Vehicle Traffic Accident Report for Michigan (MSP)
- Selected Sources of Literature on Alcohol Education (HTSC)
- Siebrecht Attitude Scale (CSE)
- Teacher Classroom Kit (RDB)
- Teacher's Manual for "Man and the Motor Car" (PH)
Selected lists of recent publications and "significant" acquisitions by the Driver Education library are available at the Highway Traffic Safety Center Library, Michigan State University.

See pp. 77-78 of the Michigan Driver Education Manual published by the Department of Public Instruction (1956) for additional sources of teaching aids.

The teacher's manual for "Man and the Motor Car" contains numerous teaching aid sources.

The Highway Traffic Safety Center and Audio-Visual Center of Michigan State University have combined their talents and published a catalog of film titles. The title of this catalog is: Highways, Law Enforcement, Driver Education, Traffic Administration, Bicyclists and Pedestrians.

"Teaching Judgment" is the title of a series of film strips recently published by the Shell Oil Company.

Safety Education Film of Minneapolis, Minnesota, contributed to the Driver Education field a visual aid entitled "Preception of Driving Hazards." It is available by writing to: Safety Education Film, Minneapolis, Minnesota.
There is a selected list of titles and sources of safety films connected and classified according to basic subject treatment on occupational, traffic and transportation, general and home safety. This listing is extremely good (published in June, 1958). Ask for Bulletin No. 12. (ACS)

The Highway Traffic Safety Center of M.S.U. has a series of tapes entitled "You Are the Jury." They are available for purchase at the 7½ or 3-3/4 speeds and are very reasonable. (HTSC)

SS Secretary of State
Lansing, Michigan

TC The Texas Company
Public Relations Department
135 East 42nd Street
New York 11, New York

TIC Travelers Insurance Company
Hartford, Connecticut

TSA Traffic Safety Association of Detroit
1902 Buhl Building
Detroit 26, Michigan

USBM U. S. Bureau of Mines
Graphic Services Section
4800 Forbes Street
Pittsburgh 13, Pennsylvania

VI Viking Importers
113 South Edgemont Street
Los Angeles 4, California

WE Walter Eaton, Executive Secretary
Michigan Inter-Industry Highway Safety Committee
Wells Hall, Section D
Michigan State University
East Lansing, Michigan

WHO Wolf's Head Oil Refining Company, Inc.
Oil City, Pennsylvania

WM Wendell Morris, Supervisor of Driver Education
Nationwide Insurance, 246 N. High Street
Columbus, Ohio
Part II

Sources of Driver Education Materials

AAA  American Automobile Association
      Traffic Engineering and Safety Department
      Washington 6, D. C.

ACS  Association of Casualty and Surety Companies
      60 John Street
      New York 38, New York

ALA  Aetna Life Affiliated Companies
      Safety Education Department
      Hartford 15, Connecticut

AMA  American Manufacturing Association
      New Centers Building
      Detroit 2, Michigan

APD  Accident Prevention Department
      Association of Casualty and Surety Companies
      60 John Street
      New York 38, New York

AVC  Audio-Visual Center
      Michigan State University
      East Lansing, Michigan

BCI  Birk and Company, Inc.
      22 E. 60th Street
      New York 22, New York

BD   Ben Duguid
      Public Relations Mgr.
      All State Insurance Company
      16130 Northland Dr.
      Detroit 35, Michigan

BIA  Bicycle Institute of America, Inc.
      122 East 42nd Street
      New York 17, New York

BS   Bright Spot
      D. W. Pontious
      63 E. Royal Forest
      Columbus, Ohio
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Company Name</th>
<th>Address/Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLB</td>
<td>Channing L. Beta Company</td>
<td>Greenfield, Massachusetts</td>
</tr>
<tr>
<td>CSE</td>
<td>Center for Safety Education</td>
<td>New York University, Washington Square, New York</td>
</tr>
<tr>
<td>CSP</td>
<td>Champion Spark Plug Company</td>
<td>Toledo, Ohio</td>
</tr>
<tr>
<td>DLVS</td>
<td>Driver License and Vehicle Service</td>
<td>Lansing 18, Michigan</td>
</tr>
<tr>
<td>EAL</td>
<td>Electric Auto-Lite Corporation</td>
<td>Toledo, Ohio</td>
</tr>
<tr>
<td>EC</td>
<td>Ethyl Corporation</td>
<td>100 Park Avenue, New York 17, N.Y.</td>
</tr>
<tr>
<td>EDC</td>
<td>Educational Devices Company</td>
<td>Suffern, New York</td>
</tr>
<tr>
<td>EF</td>
<td>Eno Foundation</td>
<td>Saugatuck, Connecticut</td>
</tr>
<tr>
<td>EML</td>
<td>Employer's Mutual Liability Company of Wisconsin</td>
<td>Wausau, Wisconsin</td>
</tr>
<tr>
<td>EP</td>
<td>Edward Pepyne</td>
<td></td>
</tr>
<tr>
<td>ES</td>
<td>Education Service</td>
<td>Chrysler Corporation, Detroit, Michigan</td>
</tr>
<tr>
<td>ESB</td>
<td>Electric Storage Battery Company</td>
<td>Philadelphia, Pennsylvania</td>
</tr>
<tr>
<td>FBMI</td>
<td>Farm Bureau Mutual Insurance Company</td>
<td>Columbus 16, Ohio</td>
</tr>
</tbody>
</table>
FI  Florez Incorporated
     815 Bates Street
     Detroit 26, Michigan

GLB  George L. Bond
     Safety Projects
     542 Calle Santa Rosa
     Palm Springs, California

GMC  General Motors Corporation
     Educational Division
     Public Relations Department
     Detroit, Michigan

GWS  Gerald W. Shipman
     Executive Secretary
     Michigan State Safety Commission
     Stevens T. Mason Building
     Lansing, Michigan

HFC  Household Finance Corporation of America
     85 Bloor Street East
     Toronto 5, Ontario

HJS  Herbert J. Stock, Ph. D.
     Director, Center for Safety Education
     New York University
     New York 3, New York

HTSC  Highway Traffic Safety Center
      Wells Hall, Section D
      Michigan State University
      East Lansing, Michigan

IHS  Inter-Industry Highway Safety Committee
     1026 Seventeenth Street N.W.
     Washington 6, D.C.

ISC  Iowa State College
     Ames, Iowa

JHO  Jam Handy Organization
     2821 East Grand Blvd.
     Detroit 11, Michigan

LMC  Lumberman's Mutual Casualty Insurance Company
     Mutual Insurance Building
     Chicago 40, Illinois
MB  Martin Blied  
Supervisor Driver Education  
Automobile Club of Michigan  
Detroit, Michigan

MDW  Malcolm D. Whale or  
Robert R. Sternberg  
Consultants, Driver Education  
Department of Public Instruction  
Lansing, Michigan

MGH  McGraw-Hill  
New York, New York

MIHS  Michigan Inter-Industry Highway Safety Committee  
Michigan State University  
East Lansing, Michigan

MIIS  Michigan Insurance Information Service  
611 Bank of Lansing Building  
Lansing 16, Michigan

MSH  Michigan State Highway Department  
Stevens T. Mason Building  
Lansing, Michigan

MSP  Michigan State Police  
East Lansing, Michigan

MT  Max Tyler, Director  
National Teen-Age Road-e-o  
U. S. Junior Chamber of Commerce  
21st and Main Street  
Tulsa, Oklahoma

MVR  Motor Vehicle Research, Inc.  
Route 152  
South Lee, New Hampshire

NASP  National Association of Secondary Principals  
1201 16th Street, N. W.  
Washington 6, D. C.

NCC  National Carbon Company  
Division of Union Carbide and Chemical Company  
30 East 42nd Street  
New York 17, N. Y.
NCSE  National Commission on Safety Education  
National Education Association  
1201 Sixteenth Street N.W.  
Washington 6, D.C.

NHU  National Highway Users Conference  
National Press Building  
Washington 4, D. C.

NIC  Nationwide Insurance Company  
246 N. High Street  
Columbus 16, Ohio

NSC  National Safety Council  
425 N. Michigan Avenue  
Chicago 11, Illinois

NSDA  National Safe Drivers Association  
1025 Connecticut Avenue, N.W.  
Washington 6, D.C.

PC  Porto Clinic  
298 Broadway  
New York 7, New York

PCTS  The President's Committee for Traffic Safety  
General Services Building  
Washington 25, D.C.

PH  Prentice-Hall  
Englewood Cliffs, New Jersey

PMTA  Pennsylvania Motor Truck Association  
7th Floor, Telegraph Building  
Harrisburg, Pennsylvania

PPI  Purolator Products, Inc.  
970 New Brunswick Avenue  
Rahway, New Jersey

PS  Popular Science  
Popular Science Publishing Company  
357 Fourth Avenue  
New York 10, N.Y.

RDB  Robert D. Bond  
Traffic Safety  
Ford Motor Company  
The American Road  
Dearborn, Michigan
RMA  The Rubber Manufacturers Association, Inc.
444 Madison Avenue
New York, N. Y.

RRS  Robert R. Sternberg or
      Malcolm D. Whale
      Consultants, Driver Education
      Department of Public Instruction
      Lansing, Michigan

SCS  School and College Service
     Station B
     Columbus, Ohio

SD   Superintendent of Documents
     U. S. Government Printing Office
     Washington 25, D. C.

SFC  Scott Foresman and Company
     433 E. Erie Street
     Chicago 11, Illinois

SFP  Safety and Fire Prevention Division
     The Atlantic Refining Company
     Philadelphia, Pennsylvania

SLH  Stanley L. Heylmun, Inc.
     4945 Edgemore Avenue
     Baltimore 15, Maryland

SOC  Shell Oil Company
     50 W. 50th Street
     New York 20, N. Y.
APPENDIX C

States Providing Financial Aid for Driver Education
<table>
<thead>
<tr>
<th>State and Year Enacted</th>
<th>Amount Provided</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. California 1953 and 1957</td>
<td>75 per cent of excess cost, not to exceed $35 per student.</td>
<td>$1 of every $20 collected in fines for traffic violations goes into special fund.</td>
</tr>
<tr>
<td>2. Connecticut 1957</td>
<td>$10 per pupil enrolled.</td>
<td>Driver's license fee raised from $2 to $5.</td>
</tr>
<tr>
<td>3. Delaware 1947</td>
<td>$38 per pupil (1957-1959 estimate).</td>
<td>Appropriation from General Fund to Education Department.</td>
</tr>
<tr>
<td>4. Florida 1955 and 1957</td>
<td>Based on unit of 175 students trained--$3,400 for salary, $300 for auto expense, $400 for equipment.</td>
<td>25¢ increase in annual driver's license fee.</td>
</tr>
<tr>
<td>5. Illinois 1957</td>
<td>Up to $30 per trained student.</td>
<td>Three-year driver's license fee raised from $1 to $3.</td>
</tr>
<tr>
<td>6. Kansas 1959</td>
<td>$15 to $30 per trained student.</td>
<td>Driver's license fee raised from $1 to $2.</td>
</tr>
<tr>
<td>9. Michigan 1955</td>
<td>Up to $25 per trained student.</td>
<td>$1 added to each driver's license fee (every 3 years).</td>
</tr>
</tbody>
</table>
### STATES PROVIDING FINANCIAL AID FOR DRIVER EDUCATION (continued)

<table>
<thead>
<tr>
<th>State and Year Enacted</th>
<th>Amount Provided</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. New Hampshire 1957</td>
<td>Determined by commissioner--distributed to public, private and parochial schools on equal basis.</td>
<td>$5 fee charged to owners wanting initials on license plates.</td>
</tr>
<tr>
<td>11. North Carolina 1957</td>
<td>Available funds prorated to schools, based on enrollment.</td>
<td>$1 increase in Vehicle registration fee.</td>
</tr>
<tr>
<td>12. Oregon 1957</td>
<td>Up to $20 per student enrolled.</td>
<td>$1 increase in Driver's and chauffeur's license fees.</td>
</tr>
<tr>
<td>13. Pennsylvania 1951 and 1957</td>
<td>Maximum of $10 per trained student.</td>
<td>$2 increase in Learner's permit fee.</td>
</tr>
<tr>
<td>15. Utah 1957</td>
<td>Up to $20 per trained student.</td>
<td>$1 increase in Vehicle registration fee.</td>
</tr>
<tr>
<td>16. West Virginia 1957</td>
<td>Up to $20 per trained student.</td>
<td>Special appropriations.</td>
</tr>
<tr>
<td>17. Wisconsin 1958</td>
<td>Based on number of students enrolled and excess funds available.</td>
<td>Excess funds from administration of chauffeur's license law, allocated annually.</td>
</tr>
</tbody>
</table>
APPENDIX D

Interview Guide
INTERVIEW GUIDE

Name of School________________________________________________________

Location______________________________________________________________

Interviewee and position_________________________________________________

I. Which of the following methods of instruction do you employ?

1. teacher presentations____

2. directed group discussions, often involving action commitments____

3. classroom forums or panels____

4. visiting specialists and resource persons____

5. skill-developing exercises____

6. drills, in meaningful settings, to strengthen desirable habit patterns____

7. demonstrations, such as of skills for use in emergencies____

8. dramatizations and role-playing____

9. cooperative problem-solving tasks____

10. projects involving student use of survey, interview, and observation techniques and opinion polls____

11. psychophysical equipment, driving simulators, models, and mock-ups, and comparable aids to supplement basic instruction____

12. filmstrips, motion pictures, and other audio-visual resources____
13. Field trips to traffic courts, highway departments, driver licensing bureaus, and motor vehicle inspection stations

14. Student participation with adults in community and statewide safety conferences

15. Evaluation designed to aid both teacher and students in measuring progress and in setting new goals

II. Which of the following topics do you consider in planning learning experiences?

1. Traffic Citizenship: responsibility to other drivers and highway users... responsibility to community, family, and self... attitudes of safe living... courtesy and manners... intelligent support of public officials... understanding of enforcement policies... voluntary observance of signs, signals and markings

2. Laws and Regulations: knowledge of local traffic ordinances, state motor vehicle laws, Uniform Vehicle Code... understanding of physical laws that affect drivers and pedestrians

3. Characteristics of Drivers: social, mental, emotional, physical, and physiological... effects of alcohol and drugs... psychology of driving

4. Driving Skills: basic habits and maneuvers... making turns... parking... special skills for driving in the city, on the highway, on expressways... techniques for hazardous conditions and meeting emergencies... skills of defensive driving

5. Development of Judgment: vision and perception... knowledge and analysis of traffic situations... making decisions.
6. Role of Government: driver licensing ... vehicle registration and inspection ... financial responsibility laws ... equipment required on vehicles ... enforcement of laws through police and courts ... highway and traffic engineering ... official safety agencies

7. Automobile Use: economics of vehicle ownership and operation ... trip planning and map reading ... servicing, maintenance, and inspection of vehicle ... what to do in case of accident ... professional driving

8. The Traffic Problem: human and economic losses ... impact of accidents on the community, state, and nation

III. Do you utilize free or low-cost supplementary teaching materials related to driver education and traffic safety?

IV. Which of the following types of equipment do you have?

1. Psychophysical devices to help students understand the meaning of driver reaction time, functions of the eyes, and other physical and psychological factors.

2. Audio-visual equipment, including models and mock-ups of vehicle parts to bring to students certain experiences and information not easily available otherwise.

3. Practice driving area (off-street) equipped with signs, signals, stanchions, and comparable items, to aid in teaching certain fundamental skills to groups of students, provide for individual student practice, and at the same time avoid the risks present in actual street traffic.
4. Practice driving simulators to conserve teacher time, teach certain procedures for meeting emergencies with emphasis on defensive driving techniques, and provide more practice for student groups.

5. Classroom equipment, such as magnetic boards, flannel boards, and parking boards, to assist the teacher and student in visualizing traffic situations.

V. What special problems do you have?

VI. How do you think your program of driver education could be improved?

VII. Do you receive any local financial support?

VIII. Is anyone designated in your school with the responsibility for a comprehensive program of safety education? (grades 1-12)

IX. What criteria do you use for selecting students for the driver education course?
X. Obtaining and using the vehicle.

1. Do you consider the borrowing of a dealer's automobile a satisfactory practice?

2. Is the vehicle equipped with an automatic or standard transmission?

3. Does your school system have a policy with regard to the vehicle's use?

4. What is the insurance coverage?

5. Who maintains the vehicle and furnishes fuel, etc.?

XI. What areas are available for practice driving instruction?

XII. Which of the following records and reports do you keep?

1. Parental approval

2. Student progress

3. Use of cars

4. Cost records

5. Accident reports

6. Other

XIII. What methods do you use to maintain or improve community relations?

XIV. What methods of student evaluation are used?
XV. How many of the following courses have you completed as preparation for teaching driver education?

1. Introduction to Safety Education (3 semester hours)
2. Driver and Traffic Safety Education (6 semester hours)
3. Psychology and Safety Education
4. Organization, Administration, and Supervision of Safety Education
5. Problems in Safety Education
6. Methods and Materials in Safety Education
7. Child Growth and Development
8. Guidance
9. Understanding Group Behavior
10. Sociology
11. Occupational Safety
12. Recreational Safety
13. Home and Community Safety
14. Automotive Mechanics
15. Traffic Law and Enforcement
16. Traffic Engineering
17. Audio-visual and Other Teaching Aids
18. Evaluation and Research in Safety Education
19. Other courses related to safety

XVI. Are there any novel or unique features of your driver education program?
APPENDIX E

School Report to State Department
SCHOOL REPORT TO STATE DEPARTMENT

School Year: July 1, 1959 through June 30, 1960

Note: Please provide an accurate answer to each of the following questions and return the form immediately to the person from whom it was received.

Name of School

Address

Signature of School Official

Title Filing Date

Please encircle grade-levels provided in your high school

1. Did your high school provide a complete driver education course that met ALL of the following minimum standards:

(a) Classroom phase composed of at least 30 clock hours.
(b) Practice driving phase composed of driving experience and observation time in a motor vehicle.
(c) Students enrolled in both phases received at least six clock hours of driving experience (exclusive of observation) OR (1) 12 clock hours in a state-approved simulator and (2) 3 clock hours driving experience in a motor vehicle.
(d) Teachers of either or both phases were regularly certified high school teachers that have successfully completed at least one state-approved driver education teacher preparation course.

Please Check Yes____ No____
A. How many students received BOTH classroom and practice driving instruction?

Please Record Number

B. How many students received ONLY classroom instruction in this course?

Please Record Number

2. Did your high school provide a complete driver education course that did NOT meet the minimum standard for time allotment (30 and 6)?

Please Check  Yes   No

A. How many students were enrolled?

Please Record Number

3. Did your high school provide a complete driver education course in which either the classroom or the practice driving phase was taught by an instructor not meeting the standards outlined in Item 1 above?

Please Check  Yes   No

A. How many students were enrolled?

Please Record Number

4. Did your high school provide ONLY classroom instruction in driver education?

Please Check  Yes   No

A. How many students were enrolled?

Please Record Number
5. How many teachers were used for teaching driver education in your high school?

   Please Record Number _______

   A. How many of these met state requirements of driver education?

   Please Record Number _______

   B. How many of these taught driver education on a full-time basis?

   Please Record Number _______

   C. How many of these taught in both the classroom and the practice driving phase?

   Please Record Number _______

6. Did your high school grant credit for driver education?

   Please Check Yes____ No____

7. Did your school provide a driver education course for adults and out-of-school youths?

   Please check Yes____ No____

   A. How many persons were enrolled?

   Please Record Number _______

8. How many cars were used for practice driving in your school?

   Please Record Number _______
Note: Please record the number of practice driving cars by make in all applicable columns. To avoid duplication, cars shared with other schools should be listed by only one of the schools.

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APPENDIX F

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Driver Education Programs
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NOTE: Numbers at top leave refer to items on questionnaire survey form.
### Tennessee Public Schools Driver Education Programs

**Note:** Numbers at top of sheet refer to items on questionnaire survey form.

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### TENNESSEE PUBLIC SCHOOLS DRIVER EDUCATION PROGRAMS

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**TOTALS**

|        | 63 | 52 | 3,82 | 1,042 | 2 | 103 | 82 | 7 | 98 | 191 | 35 | 70 | 22,693 | 179 | 80 | 40 | 65 | 59 | 46 | 4 | 101 | 79 |