THE EMPORIA STATE
Research Studies

...IATE PUBLICATION OF THE KANSAS STATE TEACHERS COLLEGE, EMPORIA

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The Emporia State Research Studies

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VOLUME 3 JUNE, 1955 NUMBER 4

THE EMPORIA STATE RESEARCH STUDIES is published in September, December, March and June of each year by the Graduate Division of the Kansas State Teachers College, Emporia, Kansas. Entered as second-class matter September 16, 1952, at the post office at Emporia, Kansas, under the act of August 24, 1912.

KANSAS STATE TEACHERS COLLEGE
EMPORIA · KANSAS

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THE GRADUATE DIVISION
ORVILLE L. EATON, *Director*

This publication is a continuation of "Studies in Education" published by the Graduate Division from 1930 to 1945.

A Proposed Course of Study For Driver Education

by Richard A. Valyer*

During the past few years, automobile accidents and fatalities have increased, and the situation has steadily become alarming. There is a need for more training and skill in driving, and people must be informed of ways of decreasing the yearly fatality rate. One aid which would greatly relieve the situation is that of driver education, offered to students of high school age, in order that they might be trained properly before obtaining their driver's license.

It is the purpose of this study to show (1) the importance and need for driver education in high schools; (2) to examine and compare the driver training programs offered in selected states; (3) and to present a proposed course of study suitable for use in class work and behind-the-wheel training.

In 1953 in the United States, 38,300 people were killed in automobile accidents. In the past few years, fatalities have increased and reached an alarming figure. There is an urgent need to educate people as to the need for skillful driving. To accomplish this, an educational program in driver education must be presented to new, as well as experienced, drivers.

In order that the accident rate can be decreased in future years, there is an urgent need for young drivers to be trained properly in skills, attitudes, habits, and safe driving. Attitude is the biggest target.

In this study, an attempt has been made to offer a proposed plan for a high school driver education course of study. It does not attempt to answer questions regarding various local situations, nor is it limited to any given situation or regional problem.

Definition of Terms

For the purpose of this study, the following terms are defined:

Driver education. Driver education includes all phases related to learning driving procedures, skills, attitudes, habits, and general knowledge of the automobile, as well as understanding enforcement of traffic regulations. It includes both classroom instruction and practice driving. Driver training will be used as a synonomous term.

Classroom work. Classroom work includes all work and time spent in the classroom, discussing traffic problems, textbook instruction, audio-

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visual materials, and any or all individual or group projects which may be used in connection with classroom work.

Behind-the-wheel training. Behind-the-wheel training consists of actual driving, practice-time, and the learning of fundamental skills in controlling the car. It includes actual driving by the student, as well as observation time.

Observation time. Observation is that time spent by each student in the car, observing another student's driving and traffic conditions occurring during that time.

Dual-control. The term, dual-control, refers to the extended clutch and brake pedals, located on the right side of the automobile, and used by the instructor in the teaching processes of behind-the-wheel training, and for all emergencies resulting from the inexperienced driver's errors.

Learner's permit. A learner's permit is a temporary driving license issued to a student learning to drive.

Psychophysical equipment. Psychophysical equipment includes all testing devices which aid in determining student abilities and limitations in connection with driving and controlling an automobile.

AAA. AAA is the recognized standard abbreviation for the American Automobile Association, an organization which has endorsed and promoted driver education.

Stanchions. These are up-right stands constructed of wood used in practice training as guides during the various driving lessons.

Methods

Data for this study came from three main sources:

Letters requesting general and specific information concerning driver education were sent to the State Department of Public Instruction of the following states: Colorado, Illinois, Iowa, Kansas, Missouri, Nebraska, New York, Ohio, Oklahoma, and Pennsylvania.

Letters were sent to the Traffic Engineering and Safety Department of the American Automobile Association, Washington, D.C., and the National Safety Council, Washington, D.C. These letters asked for general information concerning driver education.

A letter requesting permission to use material gathered on driver education was sent to Mr. Delbert M. Means, Driver Education Instructor, Wichita North High School, Wichita, Kansas. This material was collected by Mr. Means and presented during the summer of 1953 at the Wichita University driver education seminar.

Review of Literature

Driver education originated in 1932 when the Accident Prevention Department of the Association of Casualty and Surety Companies began a campaign to include driver training in the high school curriculum. AAA

joined the sponsorship in 1934, and has spent well over $1,000,000.00 during the last nineteen years in assisting with training programs and developing teaching materials. Studies made by the National Safety Council and various insurance companies have aided in the development of this program.[1]

In 1953, 38,300 persons were killed in automobile accidents.[2] In 1952, *Accident Facts* pointed out that speed, alcohol, driver age, physical defects, and the condition of the car were the top killers in all automobile fatalities.[3] Substantial evidence indicates that indifferent attitudes and ignorance toward driving are the two main factors which cause accidents.

Three main problems need to be attacked by driver education:

1. *Psychological.* The accident problem is psychological in that it involves faulty understandings and attitudes which are likely to result in dangerous acts. Therefore, the nation's educators should inculcate good attitudes in the young people who come under their charge—attitudes which they will express in safe acts.
2. *Sociological.* The problem is also sociological, in that any social factor which has had as profound an influence on habits, customs and practices as the automobile, must be carefully studied with a view to aiding in its more satisfactory inclusion and use in the total complex of living.
3. *Educational.* The problem is also educational, and thus inclusive of both of the foregoing, because education provides the best means for generating good attitudes, teaching the proper place of the automobile and traffic in those skills necessary to drive automobiles safely.[4]

A. W. Whitney states:

> The need and value of driver education and training lie squarely in the facts that traffic accidents are not the result of some unavoidable occurrence, but are caused. The automobile is an inanimate machine. It has never of its own volition collided with another object. Traffic accidents result from failure of the automobile driver to adhere to physical and man-made laws, hence, traffic accidents are preventable.[5]

The high school can provide an ideal learning situation for a driver education program. Actual classroom time under competent supervision is available for studying the various phases of driving. Students are acquainted with the methods of formal lessons, and, as a rule, are at the beginning of their driving careers. It is also a time in the student's life that interest is keen and the individual is more capable of forming good habits and correct attitudes.[6]

1. Regina Z. Kelly, "Let's Make Teen-age Driving Safe," *Family Circle*, August, 1952, p. 6.
2. Associated Press, "Traffic Deaths Third Highest in U.S. History," Emporia *Gazette*, February 4, 1954.
3. "While You Speak!" Statistical Division, *Accident Facts* (1952 edition), p. 20.
4. A. W. Whitney, ed., *Teacher's Manual, Man and the Motor Car* (New York, 1945), p. 8.
5. *Ibid.*, p. 3.
6. *Ibid.*, p. 4.

Sufficient evidence indicates that the objectives of a driver education program are: sportsmanlike driving, proper attitudes, the development of personal responsibility toward driving, an understanding of the mechanics of the automobile, skillful driving, and a thorough understanding of traffic laws, regulations, and enforcement.

The responsibility given the driver education instructor is tremendous. How well he impresses and instructs his students will greatly determine the attitudes and skills found in future drivers. The instructor must be an individual who is capable of exerting enthusiasm, hard work, long hours, and ample patience. He must also possess the ability of working independently, as there is little supervision offered in this field.[7]

According to a recent study conducted by the NEA, it was found that 47 percent of the schools surveyed included driver education in their course of study. Only one of every six high school students is getting driver education training. The course requires one semester, credit is given at the completion of the course toward graduation requirement hours, and the typical average grade level participating is Grade XI. The teachers instruct on a part-time basis, must be certified and participate in an intensive training program, and the time spent in instruction parallels that of other teaching subject time.[8]

The training car is rented or borrowed, equipped with dual controls, and properly marked. The average car maintenance cost is $350.00 per year, and the pupil cost per year is $27.00. The program is usually financed by the district and included in the school budget expenses.[9]

Driver Training Programs in Other States

Letters requesting general and specific information were mailed to ten State Department of Education offices to determine the status of driver education in these states. Answers were received from Colorado, Illinois, Iowa, Kansas, Missouri, Nebraska, New York, Ohio, and Pennsylvania.

I was found that the states surveyed employ like objectives and purposes in their driver education courses, namely:

1. To prepare and aid youth to assume the responsibilities involved in competent driving.
2. To aid in reducing the accident toll.
3. To prepare youth with a greater understanding of traffic rules, enforcement, and engineering.
4. To develop proper attitudes toward safe driving.

7. Charlotte Eck, "Driver Education Is A Life-Saving Course," *Safety Education*, May, 1952, p. 14.
8. NEA Research Bulletin, *The Status of Driver Education in Public High Schools, 1952-53*, Vol. XXXII (Washington, D.C., April, 1954), p. 95.
9. *Ibid.*, p. 95.

5. To develop, encourage, and aid in the formation of safe driving habits.
6. To develop an understanding of the limitations of the automobile and its driver.
7. To develop an understanding in the student of the mechanics of an automobile.
8. To train students to drive properly.
9. To help the student understand the causes of accidents.
10. To help the student understand traffic laws.

Table I includes the answers received from the states surveyed to the questions asked in the letter.

Educational rquirements for instructors were found to be somewhat the same. All states answering the survey required the instructors to be competent drivers and hold a secondary teaching certificate. Special training was needed in all cases. Pennsylvania required six semester hours in safety education and two years of successful teaching in the driver education field in order to qualify for a permanent certificate. Iowa required ten semester hours; New York, sixty classroom hours; and all other states at least three hours of special training.

The minimum age for students enrolling in driver education varied from fourteen to sixteen years of age. Learner's permits were required in all instances, and most of the states recommended written permission from the parents of students who were taking driver education.

The standard length of the course was found to be one semester. Colorado and Nebraska did make provision for a six week's course as do some cities in Kansas.

The number of hours required for the course varied from twenty-four to ninety hours classroom work, and five to fourteen hours behind-the-wheel traininging.

Textbooks recommended for the course of study were left to the option of the instructor. *Sportsmanlike Driving* and *Man and the Motor Car* were preferred. Equipment used included audio-visual aids, psychophysical testing, form and teacher-made tests.

The number of schools offering driver education ranged from sixty-seven to 676, Colorado being the lowest and New York the highest. Students receiving the training varied from 1,000 to 100,000 in number. Few statistics were available concerning the effect of driver education in reducing fatalities due to recent adoption of driver education in school curricula and to incomplete records of the number of driver trained persons involved in accidents.

TABLE I

Summary of Answers Received from Letter of Inquiry

Name of State	Special Teacher Requirements	Minimum Age	Length of Course	Class Hours Required	Behind Wheel Hours Needed	Textbook Used	Testing Program	No. Sch. Having Dr. Ed. Course	Pupils Enrolled	Decrease in accidents from course	Car Obtained Through
Colo.	Yes	Varies	6-week Sem.	Varies	6	Varies	Varies	67	1,005	*	AAA, Local Dealer
Ill.	Yes	14	Sem.	24	8	Varies	Varies	*	*	*	AAA, Local Dealer
Iowa	Yes	15	Sem.	36	5	Varies	Varies	172	12,000	*	AAA, Local Dealer
Kans.	Yes	14	Sem. 6-week	90	8	Varies	Varies	250	*	*	AAA, Local Dealer
Mo.	Yes	15	Sem.	90	8	Varies	Varies	*	10,750	*	AAA, Local Dealer
Nebr.	Yes	15	Sem. 6-week	30	8	Varies	Varies	*	*	*	AAA, Local Dealer
New Yk.	Yes	16	Sem.	38	14	Varies	Varies	676	101,164	*	AAA, Local Dealer
Ohio	Yes	15	Sem.	36	8	Varies	Varies	*	*	*	AAA, Local Dealer
Penn.	Yes	16	Sem.	36	8	Varies	Varies	413	*	*	AAA, Local Dealer

* Statistics not available.

Read the table thus: Colorado has special teacher requirements; minimum driving age for student varies.

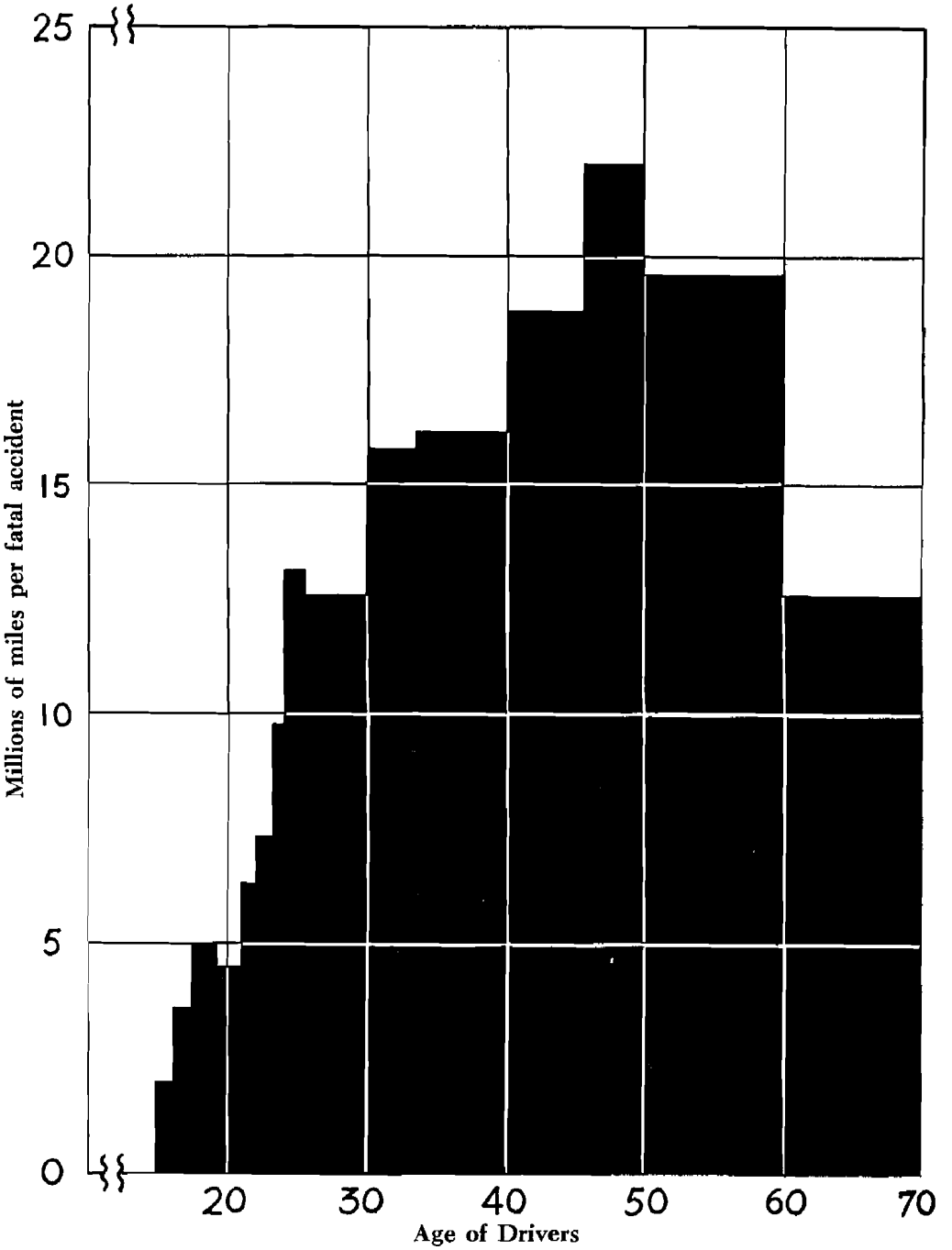

Figure 1[10]

Age-Group Fatalities

Read the graph thus: Persons sixteen years of age drive approximately 2,350,000 miles per fatal accident while drivers in the forty-five to forty-nine year age group drive 21,900,000 per fatal accident.

10. AAA Traffic Engineering and Safety Department Research Bulletin 39 (Washington, D.C., February 8, 1952), p. 3.

All states answering the survey obtained their training car from AAA, local dealers, civic organizations, or purchase by the board of education.

A letter which requested general information concerning safety and driver education was mailed to the National Safety Council, Washington, D.C., and the American Automobile Association, Washington, D.C.

Figure 1 indicates the fact that young inexperienced drivers have been involved in more accidents. In a study conducted by AAA in 1952, persons between the ages of sixteen to nineteen drove one-fifth as far per fatal accident as did drivers betwen the ages of forty-five to forty-nine. At the age of fifty, the fatal accident record becomes greater, because of a decrease in reaction time of that age of driver.

The figure indicates that there is a steady improvement in the number of fatalities per million miles driven as the individual gains in experience, judgement, practice, caution, and attitude.

Again, carelessness plays a major part in the number of fatalities resulting from junior-age driving.

Table II includes the total number of deaths due to automobile accidents during the years from 1913 to 1951. The table is broken down further to reveal the number of persons who were killed according to age group. In most cases, there has been a steady increase in all age groups, except the period of years from 1941-1945, which is explained by the occurence of World War II, and less highway travel.

TABLE II

Motor-Vehicle Deaths By Age, 1913 to 1951[11]

Year	All Ages	Under 5 Years	5-14 Years	15-24 Years	25-44 Years	45-64 Years	65 Years and Over
1913-1917	6,700	450	1,600	950	1,700	1,400	600
1918-1922	12,500	950	3,100	1,650	2,900	2,500	1,400
1923-1927	21,700	1,300	3,800	3,500	5,400	4,800	2,900
1928-1932	30,900	1,500	3,600	5,600	8,200	7,500	4,500
1933-1937	36,313	1,273	3,054	6,790	10,224	9,521	5,451
1938-1942	33,549	1,187	2,453	6,705	9,173	8,594	5,437
1943	23,823	1,132	1,959	4,522	6,454	5,996	3,760
1944	24,282	1,203	2,093	4,561	6,514	5,982	3,929
1945	28,056	1,290	2,386	5,358	7,578	6,794	4,670
1946	33,411	1,568	2,508	7,445	8,955	7,532	5,403
1947	32,697	1,502	2,275	7,251	8,775	7,468	5,426
1948	32,259	1,635	2,337	7,218	8,702	7,190	5,177
1949	31,701	1,667	2,158	6,772	8,892	7,073	5,139
1950	35,000	1,800	2,200	7,900	10,100	7,700	5,300
1951	37,300	1,900	2,400	7,800	11,200	8,500	5,500

Read the table thus: During the years of 1913 to 1917, 6,700 persons were killed. Of this number, 450 persons were under five years of age; 1,600, five to eleven years of age, etc.

11. *Accident Facts* (1952 ed.), p. 59.

Most states print a course of study to be followed or used by schools including driver education in the curriculum. The syllabus is used as a source of supplementary material also.

The Driver Training Program in Kansas

At the time of this study, Kansas required the following training for instructors teaching driver education:

> The teacher of this course must be a regularly certified high school teacher. His training should include work in safety education, and he should have some knowledge of the automobile. At the present time, those teachers are approved for teaching this course who hold the regular Kansas high school teaching certificate and have had a course in driver education in an accredited college.
>
> The State Board of Education has adopted a new regulation for the preparation of teachers of driver education beginning September, 1953. All new teachers of this subject at that time will be required to have three semester hours credit in Safety and Driver Education to qualify for the teaching of the course . . .[12]

Student requirements in Kansas. Each student receiving credit for driver education in Kansas shall attend at least ninety periods of classwork and behind-the-wheel instruction. The student must be at least fourteen years of age, the minimum licensing age. He will be required to participate in psychophysical testing which includes tests for reaction time, glare recovery, visual acuity, color blindness, and depth perception.[13]

Driver training car. A dual-control car can be secured by purchasing the car by the school board, or by securing a loan car from a car dealer through AAA. The school must assume the responsibility of insurance, maintenance, and housing. The car is to be used in the training of students only, and not for school or business purposes.[14]

The length of the course. The length of the course of study in Kansas is one semester, the student receiving a half-unit of credit.

Textbook and materials. *Sportsmanlike Driving*, published by AAA, and *Man and the Motor Car*, published by the Association of Casualty and Surety Companies, are the two most popular texts. Both textbooks are supplemented by related materials. At this date, no textbook has been adopted by the state.

Content of the course. The course in driver education includes two parts: regular classroom work and practice driving. Both phases are, as a general rule, supplemented by various activities and materials.

Student licensing. Each beginning student is required by law to obtain and have on his person at all times a learner's permit, which must be renewed at the end of a sixty day period. At the completion of the course, the student receives a certificate which, when presented with the learner's permit to the Kansas Vehicle Commission, entitles the student to a full

12. J. A. Nicholson, "Driver Education in High Schools," *Kansas State Department of Public Instruction*, July 19, 1952, p. 2.
13. *Ibid.*, p. 3.
14. *Ibid.*, p. 3.

driver's license without being examined further by the Commission.

If the student has not shown proficiency in his driving, he will be issued a certificate indicating completion of the course, but failure to pass the instructor's examination. In this case, the student must take a state driver's examination before issuance of a driver's license.

A Course of Study

In order that a complete and unabridged course of study can be offered, there must be two divisions in a driver education course: class work and behind-the-wheel study. It is the writer's purpose to discuss each of these sparatly in the following pages, and to propose a brief outline of each.

A Proposed Classroom Study

The textbook, *Sportsmanlike Driving*, will be used as a classrom basic text in this proposal, as the author feels it is more complete than other books reviewed in this field at the time of the study.

At the present time, *Sportsmanlike Driving* is divided into four main parts: Part I, *The Driver and the Pedestrian*; Part II, *Sound Driving Practices*; Part III, *How To Drive*; and Part IV, *The Motor Age Advances.*

In order to correlate classroom and behind-the-wheel instruction to a closer degree, the author would use the units in the following order: Chapter I, "The Automobile and Its Driver," as an introduction; Part III, *How To Drive*; Part II, *Sound Driving*; Part I, *The Driver and the Pedestrian*; and Part IV, *The Motor Age Advances.*

Part III, *How To Drive*, includes the following chapters: "Before You Start the Engine;" "How the Automobile Runs;" "Action!;" "Maneuvers;" "Solo Driving;" "Driving on the Highway;" "City Driving;" and, "Giving the Car a Square Deal."

This section includes the basic fundamentals of the automobile, and skills, knowledge, and facts concerning the driver in relation to traffic.

In developing Part III, the author, after teaching the course, believes that ample time should be spent in introducing the student to the automobile. It is equally important that he student be taught the preliminary steps and safety measures concerning the automobile before actual driving takes place. A thorough understanding of the need for good posture, use of gauges, safety aids, starting and controlling devices should be presented. Full explanation should be given as to the importance and function of each.

A simplified explanation, description of parts, and general presentation of the motor, transmission, differential, and units which affect the momentum of the car as a whole, should be given. The author has found both boys and girls are interested in the mechanics of an automobile, and would suggest at this point that a week or ten days be given in the de-