DRIVER EDUCATION: A CRITIQUE

Thesis written in partial fulfillment of the requirements for the degree of Master of Arts.

HOWARD LAUCHLIN MOFFATT
THE SCHOOL OF EDUCATION
SAINT MARY'S UNIVERSITY
May 31, 1964.

TABLE OF CONTENTS

Chapter Page

PREFACE

This thesis has been written to meet an obvious need in Nova Scotia and elsewhere - an analysis of the merits of including driver education in the school curriculum. Many people, especially school administrators, are asking whether or not driver education is a responsibility of the school. This thesis attempts to answer their questions.

Assistance was received from many sources, and I would like to acknowledge the substantial help offered by Doctor M. E. Keating, C. C. Holman, Professor Harry Fletcher, William H. Murray and Larry Delbridge. Finally, this paper would not have been possible without the guidance and patience of my thesis director, Professor Donald Weeren, to whom I am sincerely grateful.

LIST OF TABLES

INTRODUCTION

A perennial concern of educators is to see clearly what the school should be trying to achieve and what are the limits of its responsibility. Any decision must take into account differences in student's abilities, interests, and educational expectations. It must also take into account the requirements of life - with its changing conditions and problems.

One of these problems is the dilemma presented by the automobile, which, while contributing immeasurably to our civilization, is causing many injuries and deaths.

Well over a million North Americans have lost their lives on streets and highways since the Automotive Age began and every year the total is increased by more than 40,000, while nearly 2,000,000 are injured each year. At the present rate, one person out of every two in the United States will suffer death or injury on the highways during his life span; in Canada more than 75,000 Canadians will have died in traffic accidents in the decade ending in 1967.

Society's problems must be faced by a co-operative effort of all the formal and informal

agencies of education. The school's responsibility in regard to the nation's traffic problem would appear to be heightened because the young, society's prime natural resource, are involved in automobile accidents out of proportion to their numbers. But the determination of the nature of the school's responsibility is no easy matter.

The purpose of this study is to assit administrators in deciding whether or not to include driver education courses in the curriculum. Documentation in support of driver education can easily be obtained, but most of it can be traced back to several types of organizations which directly or indirectly owe their existence to the automobile. The apparent scarcity of objective studies of the issue and the need for administrative decisions in regard to driver education prompted this thesis.

To assess the actual driver education course described in Chapter II, I qualified as an instructor in a course offered by the All-Canada Insurance Federation and then taught a driver education course. Further information was readily available from various sources such as the Nova Scotia Highway Safety Council, the Safety Division of the Nova Scotia Department of Highways, other provincial Motor Vehicle Departments

(especially Saskatchewan and Ontario), automobile manufacturers, insurance companies, the American Automobile Association, the Insurance Institute for Highway Safety, State Departments of Public Instruction or State Departments of Education, the National Commission on Safety Education (National Education Association), and through personal interviews and correspondence with automobile dealers, school administrators, motor vehicle authorities, Department of Education (Nova Scotia) officials, doctors, insurance agents and public relations personnel, and a Professor at the Institute of Public Safety, Pennsylvania State University, where Amos E. Neyhart, the father of driver education is the director.

The promoters of driver education, whose case is presented in Chapter II, acclaim the high school driver education course as a means of reducing traffic accidents by as much as one-half. They point to the high accident involvement of youth and argue that, since the teenager is in school when he comes of legal driving age, and since the school has the personnel and environment for effective teaching, the school should therefore undertake to teach him to drive safely. They contend that a driver education course should be

an integral part of the school's curriculum because it contributes to the attainment of the objectives of education.

The assessment of the driver education course involves an examination of certain administrative, financial, but especially personnel problems. These are dealt with in Chapter III, where reference is also made to the question of the effect of the course on students' academic achievement.

The crux of the problem, however, is what is the responsibility of the school in this area of education. This question cannot be answered without reflecting on the aims and objectives of the school and considering how additional burdens might affect the achievement of the prime educational goal. These aims are not ready-made but must be derived philosophically. Since this philosophical task underlies the whole study and determines its direction it is undertaken in Chapter I.

The basic ideas in that chapter were chiefly suggested to me by reading some of the works of Jacques Maritain, Father H. Labelle, S.J., and R. M. Hutchins. It would be presumption on my part to say that I have grasped all the significance of the ideas of these writers, but on the other hand that was not

my intention. My intent was to seek direction from these authorities in formulating a defensible set of objectives for the school.

The purpose of this study is to determine the place of driver education in our educational system as indicated by the objectives of the school. In the final chapter, certain recommendations are made by which the school might, along with other agencies in society, do its share in solving the nation's traffic problem. These recommendations are based on the view that the school, while remaining true to its primary objectives, can accept the responsibility of assisting other educative institutions in the solution of the social problems of the day.

CHAPTER I

AIMS OF EDUCATION

Sources of Knowledge

To the Christian seeking to know the objectives towards which education should move one thing is clear: namely, that education must be related to the Christian's final end.

To understand this end we must have a knowledge of the principal truths of theology, which are beyond the grasp of unaided reason and have been made known to man through Divine Revelation. Theology, then, is one of the disciplines from which Christian educational aims are derived.

The second principal discipline is philosophy. Philosophy is the science which is concerned with primary causes. A philosopher seeks to know the "whatness" of a thing, its origin and destiny.

Theology runs the risk of being a very abstract study and without formative effect on mind and will, if, for the assimilation of the truths it proposes, the way has not been prepared by a thorough initiation into the science of philosophy in all its branches. Yet philosophy is not merely a tool of theology, for

it is pursued for its own sake. Through philosophy man can discover what human reason, by its own unreinforced light, is capable of revealing of the nature of the universe he lives in, and his place in it.[1]

Education is not a science like philosophy or theology and cannot establish its own principles, but receives them from philosophy and theology. A philosophy of education, in other words, is derivative from theology and philosophy.

Nature of Man

Education presupposes an educand. The view one holds of the nature of such a being will largely determine one's philosophy of education. It is first necessary, therefore, to consider what kind of a being man is and how he is different from other living creatures.

In defining man and distinguishing him from other living creatures, we term him a rational animal. That he is rational means that he has spiritual power of intellect and will which enable him to reign over the material universe and to control his own destiny.

Man is not free to make his own end, for by the very fact that man has a created nature he has an

end determined for him; but he is free in the sense that he may accept or reject the end of human nature, i.e., accept or reject eternal happiness, which consists of unity with God through knowledge of His Absolute Truth and through the love that inevitably accompanies that knowledge.

Man's intellect before being fecundated by sense-perception and sense-experience is but a "tabula rasa", as Aristotle put it. But its object is all being and it always seeks the true, as long as the true purpose of life (the good) dominates the will.

Though by his very nature man is oriented towards goodness and truth, we are not always agreed as to what is true and what is good. All is not well in the world that man rules, and even an examination of ourselves will show the disorder within our own being. Throughout history thinkers have been trying to explain this disorder in our lives. As Christians we know from Revelation contained in the Bible that man lost the gift of integrity through original sin, so that now the proper relationship between body and soul is not always maintained. Through original sin man also lost the preternatural gifts, which included the fullness of knowledge. The little that man now

learns in a lifetime requires much concentration and effort on his part. In a Christian educational system it is realized that man has a nature which has fallen and that his capacities are limited.

Man, then, is a creature composed of body and soul, possessing a nature which, though glorious, is weak and in need of development and order. Education is a process of developing man's latent powers or potentialities and imposing order on his being.

Hierarchy of Values in Education

The whole man must be educated, not just the intellect and the will. Man is animal as well as rational, and we cannot ignore the animal side of man's nature, because he is one being. Saint Thomas referred to this unity when he taught that the human intellect needs the cooperation of the senses in order to carry on its work as intellect.

While it is true that man's various powers manifest a unity in their purpose and end, and man fulfills the end of his being through the harmonious development of his powers, nevertheless, these powers are arranged according to a hierarchy of values:

> Supernatural values are obviously of more importance than the natural; spiritual values of greater

import than the bodily; and eternal of more significance than temporal.[2]

The attainment of supernatural values requires the special aid of God because by definition they are beyond man's natural powers. This help is not imposed on man because man is a free being; therefore, he must himself undertake the perfection of which he is naturally capable, approaching his supernatural objective through the highest development of his spiritual powers of intellect and will.

The material part of human nature is under the governance of the intellect and will for its development. Physical growth follows from proper nourishment, exercise and rest, all of which presuppose intelligence and control. The development of man's external senses is determined by guidance and consistent effort - in other words, by man's rational powers of intellect and will.

The intellect has primacy over the will in the sense that decisions of the will are confined by the ideas presented to it by the intellect. An issue must be known before a rational decision can be made.

Since decisions of the will are made solely by the individual, the will cannot be directed by another person: it must be self-trained. It is possible, how-

ever, to communicate by education with the child's intellect and thereby furnish the ideas which conduce to proper decisions by the will. It is not denied, however, that educators do, in guiding the child's intellectual growth, impose discipline on him which furnishes the will with opportunities for development. But this discipline is exercised not strictly to achieve the development of the will but as a means to achieve intellectual objectives.

The Role of the School

Education embraces all those experiences which shape an individual, and the school is only one of the formal agencies of education; others are the home, the church and the state. Informal agencies also play a part in man's education and both formal and informal have obligations to the child and each should assume its appropriate responsibilities.

The school is the formal educative agency "par excellence", being specifically designed to concentrate on developing the intellect. The attainment of this primary aim cannot be left to chance. Therefore, society has made it the school's particular responsibility.

> ...the main duty of the school is not to shape the will and directly to

> develop moral virtues in the youth, but to enlighten and strengthen reason; so it is that an indirect influence is exerted on the will, by a sound equipment of knowledge and a sound development of the powers of thinking.[3]

The school deals, then, with man's root faculty - the intellect - the perfection of which is that knowledge called wisdom - the ultimate goal of education.

Hierarchy of Values in the School

The Primacy of wisdom. -- Man's intellect is perfected by virtues that are acquired rather than inborn. The virtue of prudence perfects the practical intellect in making concrete judgments. There is truth that is self-evident - that is, truth that is capable of being understood in itself. The virtue that perfects the intellect in the recognition of such truth is understanding. Truth can also be known through rational enquiry into each of the many aspects of human knowledge: each of these many sciences constitutes a virtue. Wisdom is the supreme virtue and implies the highest exercise of all man's faculties. Man achieves wisdom when he is knowledgeable about all aspects of his existence, and able, in their interrelationships, to perceive what is of ultimate significance and value. He may never achieve this ideal but must attempt to approach it.

> Man attains his ultimate end by developing his potentialities in harmony with what he primarily is, an intellectual being. But man's ultimate end will be the fullness of wisdom - contemplation of absolute truth. Therefore, the terminus of this development or his ultimate end, is wisdom.[4]

Wisdom, therefore, not only perfects the intellect; it goes beyond this, for through wisdom man achieves happiness in relation to his final end. Therefore, the first question that must be asked about an activity in the educational system is: Is it conducive to the development of wisdom?

Wisdom is not essentially developed by subjects whose value is primarily one of training, e.g., developing dexterity in operating machinery. Nor is wisdom essentially developed through mental gymnastics - it is by truth that the mind is set free.

Theoretically, man can know everything which exists, but by his nature he is limited and therefore must choose what he wants to learn. Though he choose a field of concentration, to be truly educated, i.e., educated for wisdom, he must be able to relate this field to other aspects of his being.

Proximate aims. -- Since man is a material as well as a spiritual being both these aspects of his nature must be recognized. Man must live in a world which is

but a preparation for eternal life but in which, nevertheless, he must earn a living. He is a member of the world, a state, a community and a family unit as well as being a person destined for a supernatural end. These social and temporal aspects of man's nature necessitate proximate or secondary aims for education, which do not, however, negate or alter the primary aim of education.

> Man evolves in history. Yet his nature as such, his place and value in the cosmos, his dignity, rights and aspirations as a person, and his destiny do not change. Consequently, the secondary aims of education have to be adjusted to changing conditions in successive historical periods; but as concerns the primary aim, as well as the intrinsic domination it exercises on the secondary aims, it is sheer illusion to speak of a ceaseless reconstruction of the aims of education.[5]

How different from Dewey who, reasoning from Darwinian evolution, stated there are no final educational ends in and of themselves! The ends of education, he thought, are always subject to further reconstruction in the light of an uncertain and contingent future. Aims of education do not need constant reconstruction because not only are there aims that are merely proximate and transitory, but there are aims that are ultimate and perennial.

The proximate aims of education are potentially innumerable. Educational administrators have the problem of selecting from the many subjects vying for a place in the curriculum. The pressure to include certain courses is not always indicative of their merit, but a decision must be made.

Hutchins points out that purpose (aims) is a principle of distribution,[6] inasmuch as it tells us where our efforts should be directed; and it is also a principle of limitation, showing us what we should not do. To choose and order our efforts in education is nothing more than to recognize our limitations in not being able to do everything at once.

The application of Hutchins' principle simplifies the problem of selecting the more salient proximate aims. The most salient proximate aims will be those which not only have social or material value but in addition best subserve the primary purpose of education - growth in wisdom.

As an illustration of this let us consider the presence of physical education in the curriculum. Physical education which is merely for muscular development would not have any place in our school in view of the fact that proximate aims must support our primary

aim. Physical education, however, has merit inasmuch as it is useful in the development of certain of man's higher powers. Social and aesthetic values can be inculcated by the use of games and dancing. The moral obligation of caring for the body can be implicitly and explicitly recognized in a physical education program. Considering the child's, and even the adolescent's, physical exuberance, and his limited capacity for sustained intellectual activity, there have to be within his school day periods of play. Physical education takes advantage of this necessity and utilizes part of this play time for profitable educational experiences.

Our educational system should therefore provide:

> ...first of all, what corresponds to the primary aims of education, that is both truth to be known at the various degrees of the scale of knowledge and the capacity to think and make a personal judgement, to be developed, equipped, and firmly established; then, what corresponds to the secondary aims of education, especially the heritage of a given culture, to be conveyed.[9]

Universal Education

It is possible to have true education for everyone in a country desiring to educate all its citizens.

This can be done in the light of our aims if society would look upon the school as the primary agency in education and not assign it tasks that should be given to other agencies.

Moreover, schools find themselves impelled, by sheer economics and by sheer numbers of students, to concentrate on their primary role and to what is common to all. Modern schools must give large numbers of children uniform instruction, and must attempt to combine under the name of education many diverse objectives.

> The school is a.....mass productive agency, aimed chiefly at instruction and the development of mental skills, habits and attitudes. As such it should concern itself with objectives which, first of all, are common to all its pupils, and secondly are best achieved by mass methods. It is a freeing of the school to have to leave to the family, to apprenticeship, to the church, to the larger education of life outside the school, the task of aiding in the detailed objectives which unquestionably are needed in the complete education of each human being. Thus it may engage in its propor work.[8]

That the school must cope with the facts of individual differences in mental capacities, in home backgrounds, in future occupational status, does not require or justify overlooking the fact that all children are human beings with a common ultimate goal,

destined also to be politically and economically free men and, as such, citizens with ample time for leisure, "that leisure....that is suitable to what is most human in man and is of greater worth than work itself, which consists of an expansion of our inner activities in enjoying the fruits of knowledge and beauty."[9] Our schools must provide the common man with the means for his personal fulfillment, not only with regard to work but also, in view of our primary aim, with regard to the formation and the inner liberation of the human person. Such a means is liberal education.

"A truly liberal education is a product of a lifetime of learning, study, reflection."[10] Taking all knowledge as Bacon did as one's province is impossible today. Man's education never ceases, but the foundation of a sound and comprehensive organization of universal knowledge can be laid early in life. The school can foster proper habits of mind, breadth of interest, and enlargement of spirit, which, when continued and enriched during the later years, can result in a truly liberal education.

A liberal education is required for everyone prior to his specializing to avoid the danger of turning out highly trained specialists who are fundamentally

uneducated men, inadequate for the varied responsibilities of life. If we remember that education is not the same as "vocational training", and that a student might end up in any one of a dozen different jobs, even if he remains in the same occupational field, then education must provide a broad base from which the student can proceed in any one of many directions.

Educating for "felt needs" as a preparation for life may appear to be pragmatically justified, but should new situations and new needs arise in later life one would be obliged to work out other responses to one's needs by trial and error. Therefore, prior to specialization - which is just as much vocational education when it is designed to produce a doctor as it is when designed to produce a plumber - a liberal education centered on the educand rather than on his future needs must be pursued.

Individual Differences

But even if one is satisfied that the best preparation for life is a basic liberal education followed by specialization one may not be convinced that every individual is capable of receiving a liberal education. In other words, it is necessary to face the fact that "God does not seem to be a good

democrat or a good American, since He continues to distribute intellectual endowments unequally."[11] When we have education for all, as we must in our complex world, we must be practical and keep this inequality of talents in mind.

What is required is some practical manner of implementing universal education, yet avoiding what R. M. Hutchins refers to as "accommodation" and the transformation of the schools into "custodial institutions." C. E. Phillips would place all pupils in four broad categories and thereby provide the diversity required because of individual differences.

1. The all-inclusive group enrolled in basic or general education at a lower level (roughly to or through grade ten)
2. the majority of pupils in higher secondary grades, who are continuing a general education and those in higher secondary grades who are specializing
3. in an academic program or
4. in some non-academic vocational program.[12]

A comprehensive and feasible plan advanced by Paul Woodring in A Fourth of A Nation[13] incorporates many of the best features of proposals for dealing with the problem of individual differences.

Woodring recommends using the ungraded primary school where a child remains for an unspecified period. The decision for his advancement to elementary school is made in terms of physical, emotional and social maturity, as well as learning readiness. One evidence of this maturity and capacity for learning would be the child's ability to read at some predetermined level.

A child would advance into graded elementary classes. Since entrance to the elementary school is on the basis of total maturity and readiness for learning rather than age, it may be expected that nearly all children can proceed through the four year elementary school at the same pace.

The average child should reach high school about the time he now enters junior high school. Some students would be older because of longer than average periods spent in primary school; but the group would be more homogeneous in terms of readiness than is customary today.

The students would have some experiences in common; each grade would be grouped together in a home room for social purposes, and for those academic activities which do not make rigorous demands on intellectual capacity. But when studying mathematics, science, history or literature, these same students

would be regrouped for each such activity on the basis of demonstrated ability in that particular subject.

The high school would have three streams: the vocational, general and the academic. The graduate of such a system would have three courses open to him - work, trade school, or further education in a junior college or, if he can pass the entrance examinations, a liberal arts college.

That some students go into the vocational stream either because of interest or inability to attain intellectual standards set for the average student is not inconsistent with our philosophy or aims when we consider the dignity of manual activity. In manual activity, body and mind are at work, but, as Maritain points out, the body plays the part of the principle agent, activated by the mind, whereas in intellectual work, the body is merely an instrumental agent moved by the mind. "So both are, like man, made of flesh and spirit; manual work and intellectual work are equally human in the truest sense and directed towards helping man to achieve freedom."[14]

If vocational education is conceived of in a human rather than a mechanical fashion it can thereby subserve the primary aim of education - the growth of

wisdom. Moreover, vocational education may be supplemented, according to Maritain, by using a bi-poplar concept of liberal education. Subjects with intellectual content could be given to vocational students profitably by making use of the activities of play, whereby the vocational student could learn informally and unsystematically what the academic student acquires through activities of learning. Maritain submits that even "training in matters which are of the most worth and have primary importance may take place through the instrumentality of the activities of play as well as the activities of learning."[15]

Summary

A true philosophy of education is impossible without taking into account man's ultimate end which is the fullness of knowledge and love of God. Education for this ultimate end consists primarily in the development of man's intellect, both for the attainment of the object of the intellect - the knowledge of God, or Absolute Truth - and as a means of developing the other human faculties, principally the will by which man loves God. This primary aim, which can simply be expressed as growth in wisdom, acts both as a principle of distribution and of limitation for

the subservient proximate aims of man, which change with changes in man's historical context.

The advent of universal education is not an insurmountable problem if the school can concern itself with its primary objective. Other agencies, both formal and informal, must accept their responsibilities or the school will become hopelessly specialized. Giving to everyone the broad base of a sound comprehension of universal knowledge - that is, a basic liberal education prior to specialization - can be achieved by modification of the school's organization.

For those students not interested or unable to cope with the intellectual aspects of such an education there is the vocational stream which can be equally human and satisfying. The vocational students, through the use of "play" techniques, may be introduced to ideas and values developed in the other streams through "work" activities.

FOOTNOTES

[1]W. Kane, Some Principles of Education, (Chicago: Loyola University, 1938), p. 11.

[2]Jacques Maritain, "Thomist Views on Education," Modern Philosophies and Education, ed. Nelson B. Henry, The Fifty-fourth Yearbook of the National Society for the Study of Education, Part I (Chicago: University of Chicago Press, 1955), p. 65.

[3]Jacques Maritain, Education at the Crossroads (New Haven: Yale University Press, 1943), p. 27.

[4]H. J. Labelle, S.J.,"A Philosophy of Education," Saint Mary's University, Halifax, n.d., p. 86. (Mimeographed)

[5]John Wild, "Education and Human Society: A Realistic View," ed. Nelson B. Henry, The Fifty-fourth Yearbook of the National Society for the Study of Education, Part I (Chicago: University of Chicago Press, 1955) p. 30.

[6]Robert Maynard Hutchins, University of Utopia (Chicago: University of Chicago Press, 1953)

[7]Francis H. Horn, "Higher Learning and Work of the World," Crucial Issues in Education, ed. Henry Ehlers and Gordon C. Lee, (New York: Henry Holt and Company, 1960), p. 289.

[8]Robert Maynard Hutchins, Some Observations on American Education (Cambridge: Cambridge University Press, 1956), p. ix.

[9]Maritain, Education at the Crossroads, p. 90.

[10]Alfred North Whitehead, Aims of Education (New York: The New American Library of World Literature, Inc., 1949), p. 55.

[11]Douglas Bush, "The Case for the Special Education for An Intellectual Elite", ed. Ehlers and Lee, Crucial Issues in Education, p. 316.

[12]C. E. Phillips, "Effective Aims in Public Education," The Aims of Education, ed. Freeman K. Stewart (Ottawa: Canadian Conference on Education, 1961), p. 6.

[13]Paul Woodring, A Fourth of A Nation (New York: McGraw-Hill Book Co., Inc., 1957).

[14]Jacques Maritain, "On Some Typical Aspects of Christian Education," The Christian Idea of Education, ed. Edmund Fuller (New Haven: Yale University Press, 1957), p. 94.

[15]Ibid., p. 197.

CHAPTER II

DRIVER EDUCATION: PREMISES AND PRACTICES

The intent of this chapter is to indicate what the advocates of driver education see as the purpose of such a course. The actual two-phase course referred to as a "qualifying course" is described. Inasmuch as the advocates of driver education base their case largely on the high incidence of traffic accidents, statistical data on accidents has been included in this chapter. Some idea as to the present status of driver education courses, with attention to certain financial aspects, is also given, with specific reference to Nova Scotia.

Purpose and Content of the Course

That driver education has a place in the high school curriculum is the belief of safety groups, automobile manufacturers, and the Insurance Institute for Highway Safety, to name a few. These organizations claim that the driver is the key factor in traffic safety and that high school driver education will best teach adolescents the art and science of safe driving.

The contention is made that parents, police, and motor vehicle officials are not effective teachers,

and further that they would pass along to learners their own poor driving habits. Therefore, only qualified teachers working with students in the school's learning climate can assure adequately qualified drivers. Students reach the legal driving age while at school and, since that is the best environment in which to teach them to drive safely, the school should undertake the task.

It is pointed out that if driver education is not established as a separate subject in the high school curriculum there exists the danger of insufficient emphasis on the part of the instructor and the school administration. Advocates claim that, while extra-curricular driver education activities may serve desirable supplementary purposes, alone they are not adequate.

The recommended driver education course is divided into two phases. The classroom instruction phase utilizes effective teaching methods - such as lecture and discussion -, audio-visual aids and laboratory exercises. The second phase, usually called the "practice driving phase," provides actual driving instruction in an automobile, used on an established driving range or on public streets and highways.

In the United States the time allotment for the classroom phase, as well as for the actual driving time, must conform with the standards recommended by the Third National Conference on High School Driver Education to qualify for State recognition. This conference, initiated by the National Commission on Safety Education, recommended that the driver education course consist of a minimum of thirty class hours of sixty minutes each for the classroom instruction phase and a minimum of six clock hours per individual student for the practice driving phase. This six hours is exclusive of time spent by students in the car observing another student's practice driving ("observation time"). Thus, on the basis of the recommendations, with a group of forty students thirty hours would be spent in the classroom phase plus a minimum of two hundred and forty hours in the practice driving phase.

The student driver is expected to learn the importance of the motor vehicle in modern life and its significance to the economy. He also is to learn the fundamentals of motor vehicle laws and codes and the importance of driver attitudes, emotions and physical fitness for safe driving.

Other units are concerned with friction, centrifugal force, inertia, momentum, force of impact

and gravity - the natural laws related to motor vehicle operation - and with the internal combustion engine, and the construction and maintenance of streets and highways.

The minimum of six hours of practice driving gives students an opportunity to apply what they have learned in the classroom as well as to learn basic and advanced driver techniques.

The immediate practical purpose of driver education is to develop the learner's ability to operate an automobile safely and efficiently. The ultimate goal is to provide the learner with a sound basis for a lifetime of safe and efficient motor vehicle operation. The achievement of these goals by large numbers of students would promote the efficiency of motor vehicle movement on streets and highways and help greatly to reduce the number of accidental deaths and injuries.

The contribution that driver education makes to the basic purpose of education, according to one writer, consists of

1. promoting the safe, efficient, and rewarding use of the automobile,
2. fostering a strong sense of personal responsibility for traffic conditions and improvements,

3. encouraging cooperation in solving public problems,

4. developing pride in high standards of performance and conduct.[1]

The educational benefits of driver education have been conceived somewhat differently by another writer who sees driver education as helping students:

1. to learn how to live democracy on our highways,

2. to improve their critical thinking in real life problems,

3. to grow in social maturity and responsibility,

4. to increase their power of self-discipline,

5. to have real respect for natural and man-made laws.[2]

It is claimed, then, that driver education helps to develop the attitudes that are basic to traffic safety and efficiency and are of the essence of maturity and good citizenship.

Statistical Justification

The concern over traffic safety is justified by statisfical data. It has been estimated that one out of every two people in the United States will be injured or killed in an automobile accident during his lifetime. The National Safety Council estimates that traffic accidents take a life every thirteen

minutes and cause serious injury every twenty-three seconds in the United States.

In sixty years of vehicle use, 1,300,000 people were killed in traffic accidents; in the eight major military conflicts in the 185-year history of the United States total military deaths from all causes were 1,128,000.

Using figures for 1959, economic estimates of property damage would provide 295,000 families with new $25,000 homes or the 3,068 counties in the continental United States with a new $2,000,000 hospital each. Yet, in spite of the great human and economic toll, in the United States only $1,000,000 was spent in the same year for research on accidents - traffic accidents included - while $600,000,000 was spent on cigarettes.

Statistics on drivers under twenty-five years of age show that in the United States there are 15.4 million licensed drivers in that category, or 18.4% of the total number of drivers. This 18.4% has been involved in 28.4% of all fatal accidents and in 28% of all motor vehicle accidents.

The teenage (under twenty) drivers, totalling less than 8% of all drivers, are involved in more than 11% of the fatal and 14% (2.5 million) of all motor

vehicle accidents. According to the Allstate Insurance Company, the teenage accident involvement rate is about twice as high as the above-twenty group and the average severity of their accidents is considerably higher.

In the United States an approximately estimated 2,750,000 young people reached eligible driving age in 1961. Of the 2,085,596 "annual eligible students" (students reaching legal driving age during the year) enrolled in the public high schools in 1960-1961, 1,172,607 or 56% took a course in driver education during the school year. Only 814,114 or 39% took courses that met with the standards of the state educational boards and insurance companies.[3]

In Canada in 1961 there were 3,390 deaths in 2,912 fatal traffic accidents and a total of 97,703 accidents in which injuries were sustained. The economic loss to Canada because of these accidents well exceeded $400,000,000. Canada's record is proportionately worse than that of the United States, and traffic accidents are on the increase. There was an increase of 8.1% in the number of persons injured in traffic from 1960 to 1961.

Canadians drive more than 5,000,000 vehicles,

over three-quarters of them automobiles. There are approximately 6,000,000 licensed drivers, 350,000 of these being teenagers.

In 1961-1962, of approximately 530,142 Canadian students enrolled in high schools, roughly only 0.01%, or 6,000, were taking a driver education course. This means that out of the 1,432,559 teenagers between fifteen and nineteen years of age in Canada (1961 figures) only some 0.004% were taking a driver education course.

Current Practices

The history of driver education for high school students begins in 1924 when the first National Conference of Traffic Safety was held in Washington. Driver education was discussed at this conference which, in the interest of achieving uniform practices for vehicle safety, formulated a safety code for the whole of the United States.

In 1933 the first high school driver education course was taught in the United States. The first course in Canada was given at Kitchener, Ontario, in 1946.

The father of driver education is recognized as being Professor Amos E. Neyhart, Director of the

Institute of Public Safety, Pennsylvania State University and driver consultant to the American Automobile Association. Through his efforts and those of men like him, there are now 12,751 high schools in the United States teaching driver education (9,786 or 53% of all high schools giving qualifying courses). In Canada there are approximately 125 high schools giving courses.

The largest hurdle for driver education was, and is, financial. In 1952 Pennsylvania began state reimbursement to school districts for students trained, a policy now followed by nineteen states. This was a significant step in motivating schools to adopt driver education. The same year some insurance companies began to offer premium reductions for teenagers successfully completing a qualified course.

In 1955 automobile manufacturers began to offer $125.00 to dealers for each car made available to high schools for the practice driving phase of driver education (now $250.00).[4] The prevalent idea that cars are available free of charge from major manufacturers through their local dealer is erroneous. The $250.00 reimbursement the dealer receives from the manufacturer does not cover his costs. Nevertheless,

community-minded dealers have lent and are lending cars, absorbing the difference. This happy situation does not usually remain after a course has run several years, as attested by the increasing ownership or rental of cars by high schools in the United States (See Table 1.)

TABLE 1.

SOURCE OF CARS USED FOR PRACTICE DRIVING INSTRUCTION

SOURCE OF CAR	PUBLIC SCHOOLS *		PRIVATE SCHOOLS **	
	1959-60	1960-61	1959-60	1960-61
Free Loan by Dealer	8225	6578	190	133
Free Loan by Others	1102	133	3	9
Purchased by School	2721	3321	55	43
Rented or Leased	1489	2003	20	26

* Ford Motor Company, Driver Education News, (Vol. 1, No. 14) Sept. 1960.

** Statistics supplied by State Department of Education as part of the National High School Education Award Program sponsored by the Insurance Institute for Highway Safety.

The trend is to school-owned or rented vehicles and today only 54% of the total number of automobiles used in the United States for student practice driving are contributed by interested dealers. The

reason for their reluctance to continue to loan cars can be seen when one considers the valuation of $17,072,784.00 placed on these 6,711 automobiles by the National Automobile Dealers Association.

The policy statement of the Nova Scotia government on driver education in high schools reports on a pilot course run in Digby, Nova Scotia in 1957.[5] The Department of Education and the Motor Vehicle Branch of the Department of Highways with the cooperation of the Board and staff of the Digby Regional High School ran a course to determine:

1. if a program of driver education could be carried on without affecting adversely the regular school program,
2. the cost per pupil of such instruction,
3. if the instruction could normally be given by a staff member as an extra-curricular activity.

They concluded from the experience in Digby that a course could be instituted in a school as an after-school activity without affecting the regular school program. The practice driving instruction would be carried on after school and on Saturday mornings.

This conclusion was reached even though, as stated in the report, it was not possible to instruct all forty pilot students because the instructor could

not find enough post-school time to give forty pupils six hours each of practice driving instruction. The report does not mention if, or when, the additional thirty hours of classroom instruction, necessary to meet the conditions of a provincial grant, was given. The cost of a driver education program was estimated at twenty-five dollars per pupil. Having run such a course, I am of the opinion that the costs laid down in the report from which the figure of twenty-five dollars is derived are unrealistic, to say the least. According to the Canadian Highway Safety Council, if these costs can be demonstrated, they are far below quotations now being made to some schools by automobile associations.[6]

The Nova Scotia government, nevertheless, acting on this experience, approved a policy whereby local school boards which offer a driver education course in their high schools would receive an assistance grant of ten dollars per student who successfully completes both phases of the course, provided certain conditions are met.[7]

The recommended instructor's fee is an honorarium of $300.00. Thus the high school teacher would be paid the princely sum of $1.12 per hour for his

driver education duties. The figure becomes lower if we take into account the extra time which is necessary for the preparation of classroom lectures, servicing of the car and setting up driving ranges.

In Nova Scotia an Order in Council was passed in September, 1959, by which vehicles used in driver education in high schools were to be registered at a nominal fee.[8] In 1960, the Motor Vehicle Act was revised (Section 59, subsection 1(B)) allowing three observers to be seated in the back seat while practice driving instruction is taking place.

The training of instructors is now being carried on in the Maritimes. In 1962 a two-week course was held at the University of New Brunswick by which teachers could become qualified as driver education instructors. The course in the summer of 1963 was held in Amherst, under the direction of Mr. M. Wagstaff of the Department of Highways, Motor Vehicle Branch.

School boards desirous of introducing a driver education course in their schools may obtain "application to conduct driver education course" and "application for driver education course grant" forms from the Department of Education.[9]

There are now some forty-one teachers qualified as instructors in Nova Scotia. In the fall of 1963 thirteen communities were offering a course in driver education. (See Table 2.) These courses qualify for the Department of Education grant of ten dollars per student. It must be remembered that approximately forty students a year are enrolled in each course, a very small percentage of the total school enrollment.

Truro and Kentville are running more than the usual single course. Truro is exceptional not only in having three instructors, but also for another important reason: this year (1963-1964) the classroom instruction phase of driver education is being given during regular school time.

One wonders about the liberal interpretation being given to the Department of Education's provision that "the scheduling of time for such a course must be such that it will not take time from the regular academic program of the school".[10] The intent[11] of the Department is that such courses are to be extra-curricular and not impinge on the regular school time.

Summary

Driver education advocates claim the course has certain educational benefits and further maintain that

TABLE 2.

NOVA SCOTIA COMMUNITIES WITH DRIVER EDUCATION COURSES

LOCALITY	YEARS COURSE WAS OFFERED
Auburn	1963
Bible Hill	1963
Bridgetown	1963
Brookfield	1961, 62, 63
Digby	1957, 58, 63
Dominion	1963
Kentville	1959, 63
New Glasgow	1963
Parrsboro	1963
Truro	1960, 61, 62, 63
Weymouth	1960, 61, 62, 63
Wolfville	1962, 63
Yarmouth	1963
East Pictou	1959, 60
Springhill	1961

it is the answer to our nation's traffic safety problem. They believe only qualified teachers working with students in the school's learning climate can assure

adequately qualified drivers; therefore, the school should perform this public service.

The statistics on accidents clearly indicate the magnitude of this modern day dilemma and apparently, as the number of drivers and vehicles increase, the problems will also increase. The number of students receiving a qualifying driver education course is approximately one-third of the total teenage population in the United States.

Schools have found that once they are committed to such a course, the promoters usually withdraw their aid, thereby increasing the demand on the educational dollar. It would appear that the government of Nova Scotia has made some ill-advised decisions on the strength of an incompleted pilot course. It is apparent also, that if school boards are allowed to put their own interpretation on the policy of the Department of Education, some enthusiastic boards will soon be incorporating the whole course into their regular school schedule instead of maintaining its extra-curricular character.

FOOTNOTES

[1]Driver Education Specialists, American Automobile Association, Teacher's Handbook for Sportsmanlike Driving (4th ed.; New York: McGraw-Hill Book Company, Inc., 1962), p. vii.

[2]Lynn N. Bartlett, Driver Education Support Material (Michigan: Department of Public Instruction, 1959).

[3]Appendix A, p. 86.

[4]Appendix B, p. 88, 89, 90, 91, 92.

[5]Appendix C, p. 94, 95, 96.

[6]Appendix C, p. 97.

[7]Appendix C, p. 98.

[8]Appendix C, p. 99.

[9]Appendix C, p. 100, 101.

[10]Appendix C, p. 95.

[11]Interview with Doctor A. Morrison, Director of Curriculum, Department of Education, Nova Scotia, April 19, 1964.

CHAPTER III

EVALUATION OF PREMISES AND PRACTICES

The high accident involvement rate of teenagers is an important premise in the argument for driver education, and therefore merits attention in this chapter. In addition, the claim that driver education reduces accident involvement will be assessed with reference to the method of research typically used to measure the success of driver education. Finally, this evaluation will focus on the role of the driver education teacher, upon whom the success of a course must ultimately depend; and upon the student, to determine whether it is sound policy to give a course which might, in the long run, be detrimental to his academic grades.

The Problem of Youth

Accident involvement.--If the accident statistics for teenagers are compared with the accident experience of the total public, it becomes apparent that, while teenage accident involvement is high, it is not the highest of all age groups. Studies conducted by the Centre for Safety Education at New York have found that:

> ...while teenagers are over-involved, it is not as great an over-involvement as that of the group aged twenty through twenty-four. Performance does not become "normal" until age thirty. This is somewhat contrary to the implications of the use of such a term as teenicide in traffic safety propaganda.[1]

Support for this finding is given by research done by A. R. Lauer,[2] which showed that the teenage involvement, although considerable, is being misrepresented. It appears that the teenager is being maligned in driver education promotional literature and that a more serious problem is being posed by the older out-of-school group. However, it might well be that the teenager has an equal or greater accident proneness than his older brothers. The suppression of this potential might be accounted for by his relative immobility, greater dependence, less freedom, less money and restricted access to alcohol.

Style of life.--An important concept in the study of accident repeaters is that accidents are related to an individual's "style of life". Wong and Hobbs, in a safety study of a high accident group concluded that:

1. The accident-prone can be identified by a simple analysis of the frequency of superficial injuries.
2. This tendency toward accidents tends to be a stable characteristic.

3. Those who have the most frequent accidents have a disproportionate number of major accidents.

4. The personal history of the high-accident group differs from the low by being marked by evidences of aggression and intolerance for family, social or work discipline.[3]

The youthful accident repeater goes beyond the bounds of the assessment of the young driver given by W. A. Tillman, now head of psychiatry at the Saint Joseph's Hospital, London, Ontario, when he says:

> Impulsiveness and unwillingness to accept responsibility are characteristic of immaturity. There is a moderate disdain toward the boundaries set down by child-like life. He drives as he lives and where is there a better place to attempt thrills and adventure than behind the wheel of an automobile?[4]

Tillman points out that the accident repeater is frequently a skilled manipulator of his vehicle. But, as Allgaier and Lauer observe, "safe driving as evaluated by freedom from accidents and good driving as evidenced by adeptness at the wheel are not the same."[5]

The personality sketch drawn here of the teenager most likely to be involved in an accident is the sketch of an actual or potential delinquent in many areas of living. The possibility that this type of student would be among the early drop-outs in any school system has to be considered. It is not unlikely that

those who most require driver education would not be available for instruction in a high-school driver education course.

Also, in the light of these findings, a program that restructures his total social attitude and directs the individual to better adjust his behavior to his environment rather than one which attempts to teach skills may be the best approach to the problem. This possibility will be explored in the next chapter.

The Problem of Validity

Nevertheless, the claim is made that driver education does produce safer drivers. To assess this claim we must turn our attention to the techniques that have been used to measure this alleged outcome. Evaluations in driver education have been, for the most part, done by the controlled univariate design. The thesis of this approach is that one, and only one, of a cluster of potential variables may be allowed to vary; in this case, a formal course in driver education. The fact that univariate measurement in the social sciences is passé and invalid apparently does not concern the lobbyists who are strongly advocating driver education.[6]

Raymond Cattell states: "The controlled,

univariate experiment, in which nothing but the independent variable alters to an important degree, becomes inapplicable and obsolete - if only because of the limits to our right of major interference in human lives."[7] He adds that the multivariate statistical designs provide an effective way of handling what used to be called the uncontrollable variables in situations where control is impossible. Traffic safety research needs to create and use research designs which are more adequate to measure such an incredibly complex and subtle thing as driver behaviour.

The wide variations in findings are due to the many uncontrolled variables. The variable of sex was not controlled in the earlier studies; thus it is not known whether their findings were due to driver education or to the wide differential in accident proneness between boys and girls. Today it is also realized that there must be homogeneity of educational background and intelligence in groups compared. The time driven and miles driven will differ from driver to driver; the condition of the road and the weather will vary; urban traffic is different from rural driving, day from night driving, peak traffic from light traffic:

and all these variables have a bearing on accident incidence. The "degree of exposure" to an accident-breeding environment, age, socio-economic background and psychophysical factors are other variables that have typically been left uncontrolled in safety studies.

Most of the studies have been measuring the driver's performance by means of accident and/or violation records. These records will vary, of course, in the bases of reporting and the consistency of reporting. There will be variations in what is legally reported (insurance rate structure affects accident reporting) and in the uniformity and comprehensiveness of the record-keeping system. Added to this is the variable of car design changes, and the quality of the car involved in an accident. Another variable is introduced by inflation; an accident that did not need to be reported in 1954 may be an accident statistic in 1964.

Perhaps the most important variable that has been left uncontrolled is the attitude of the student towards his responsibility for traffic safety. Are those students who elect to take a driver education course simply overtly expressing their prior interest in safe driving? The converse could also be true, namely, that the accident-prone student avoids the

course. Indeed, the presence of a student in an elective driver education class is primarily, according to insurance companies, an index of his safety attitude.

No researcher has designed a procedure for conducting an evaluation of the experience of trained and untrained drivers which will take into account all the relevant variables.

The Cleveland study of trained and untrained drivers is the major source of the frequently repeated statement: "Driver education reduces accidents by one-half."[8] The trained group had a superior performance of 48.0% with respect to accidents and 16.5% with respect to convictions.

The subjects graduated from high school from June 1939 to June 1941. An equal proportion of trained and untrained were selected from high school classes. It was assumed that the drivers faced similar driving conditions and that those trained had the same quantity and quality of instruction.

Because of regional differences in traffic law enforcement, the ratio between convictions and accidents in a given jurisdiction - the so-called enforcement index - was taken into consideration in the Cleveland study. Another variable, the economic status

of those in both groups, was also allowed for.

> The economic level had no appreciable effect on either group with respect to those with clear records and those with accidents and violations. However, the untrained men with clear records had a slightly higher economic level than trained men with clear records.[9]

The following table compares the accidents and violations of male drivers in the Cleveland study. The rate is expressed as the number per 100 months of driving:

TABLE 3.

COMPARATIVE RECORD OF TRAINED AND UNTRAINED DRIVERS

(CLEVELAND STUDY)

Types of Drivers	No. of Drivers	Months Licensed Since Graduation	Accidents Rate	Accidents Index	Convictions Rate	Convictions Index
Males, untrained	1,151	14,164	5.3	100.0	12.1	100.0
Males, trained	1,273	17,166	2.80	52.0	10.6	83.5

The Cleveland study is one of the eight official and semi-official studies conducted entirely or in part by government agencies. The Camden, New Jersey, report is not used by the promoters of driver education,

but it also was one of those studies.

Table 4 compares the accident and violation experience of untrained and trained drivers in a study done in 1950 in Camden, N. J. The results in this study would not do much to encourage schools to adopt driver education.

TABLE 4.

COMPARATIVE RECORD OF TRAINED AND UNTRAINED DRIVERS (CAMDEN, NEW JERSEY, STUDY)

Types of Drivers	No. of Drivers	Months of Driving	Accidents Rate	Accidents Index	Violations Rate	Violations Index
Males, untrained	134	3,431	2.0	100.0	2.9	100.0
Males, trained	101	2,078	4.3	215.0	4.3	148.3
Females, untrained	22	490	0.0	-	0.0	-
Females, trained	18	436	0.0	-	0.0	-

Various agencies have endeavoured to evaluate driver education. All appear to accord driver education accident-reduction value but differ as to whether the value has ever been objectively demonstrated. The alacrity of some to consider the hypothesis of accident reduction proved may be accounted for by the nature of the agency doing the research.

There is a possibility of bias because of ulterior interests. For instance, the sale of new cars is dependent on the buoyancy of the used-car market, which in turn is in the main supported by teenagers.[10] The efforts on the part of car manufacturers to have schools teach driver education courses may be more than a desire to solve the accident problem of youth since these courses will tend to introduce more customers to their product.

In spite of the serious reservations expressed above, one can agree that driver education has accident-reduction value on the gross level. However, when all the relevant variables are taken into account, this accident reduction value may prove to be of very limited significance.

Everyone is for education in any field, but this certainly should not win driver education a place in an already demanding curriculum preparing students for a society requiring more and more academic content in education.

The Problem of Teaching Personnel

Should a driver education course be placed in the curriculum, its success with any age group depends heavily on the personality and ability of the teacher.

The qualifications that are normally expected in an instructor have been expressed in the list adopted by the Saskatchewan Safety Council as the basis for personnel selection:[11]

General Qualifications:

1. Good health and emotional stability.
2. Honesty and integrity.
3. Respect for the personality of others.
4. Skill in motivating students to learn.
5. A knowledge and understanding of student growth and development.
6. Interest in the total educational program.

Special Qualifications:

1. Interest in and enthusiasm for possible accomplishments in safety education.
2. Even temperament, sympathetic attitude, and a high degree of patience.
3. Sufficient maturity to command the respect of students.
4. Exemplary personal driving habits.
5. Neat in appearance, courteous and polite.
6. An investigative attitude.
7. Ability to organize and present driver education materials with skill and imagination.
8. Ability to analyze and classify the problems of student drivers.
9. Ability to maintain neat, efficient, accurate and up-to-date records.

10. Interest in keeping abreast of new developments in the mechanical and driver education fields.

To compare the above stringent qualifications with those of fifteen states in the United States where the only requirement is a driver's license is to go from the sublime to the ridiculous.

Even if the stringent qualifications are required, as they are in Nova Scotia, is it possible for teachers to live up to them in view of their other duties? The province of Nova Scotia has stipulated that the driver education course must be run after school and not conflict with the regular academic schedule.[12] A teacher would thus give driving instruction for a minimum of two hundred and seventy hours (forty pupils) besides doing his regular job. Mr. W. H. Murray and I ran a course in 1963 for the Y. M. C. A. in Halifax. The course was given after school and on Saturdays. Our experience convinced us that such an endeavour is too demanding for a teacher with a full-time job. The task of a high school teacher comprises not only his hours in classes but also certain duties that must be performed after school, i.e., preparation of classes, individual help for students, in-service training and extra-curricular ac-

tivities that are a part of the school program and learning process. Mr. Murray and I both found that we could do justice either to our full time teaching job or the driver education course, but not both. It is particularly the practice driving part of the course that makes heavy demands on instructors. It seems clear that on top of an already heavy schedule, this added work at the end of the day places an excessive load on the teacher. The National Education Association warns that:

> Administrators and driver education teachers should recognize the exacting nature of practice driving instruction, and the lowering of overall efficiency resulting from after school, evening and weekend teaching duties.[13]

In 1959-1960 approximately 80% of the instructors in American high schools giving driver education courses were regular full-time teachers. The shortage of teacher-hours available for driver education has been demonstrated in some schools where many students have had to forego the practice driving phase even though it is a required part of their course.

The experience in the United States is that those teachers presently giving the driver education courses are becoming unwilling to carry this added

responsibility and that among university students preparing to be teachers fewer are taking the necessary qualifying courses. This does not conflict with a recent study by Norman Key in which he reports on the increased number of teacher education institutions offering "credit courses in Driver and Safety Education",[14] because many taking these courses are just desirous of a college credit, or are people entering the industrial safety field. Many automobile driving schools, taxi and trucking firms are now offering these graduates lucrative positions and are also sending employees back to college to take courses in driver and safety education.

The statistics show that there has been no expansion in the United States driver education program whereas the number reaching legal driving age in 1963 was approximately 3,700,000, as compared with 2,750,000 in 1961. Doctor Cutter, director of the Center for Safety Education, New York University, noting an annual drop in eligible students enrolled in all driver education courses, has estimated the decline for 1960-1961 to be 11%.

Driver education has not been as widely accepted in Canada as in the United States. Moreover, some

cities have discontinued classes because of the increased costs of operation and the difficulty in obtaining instructors. This is understandable when we consider the demands that the extended day makes on the teacher.

The Problem of Student Grades

If we assume the driver education course will encourage greater use of the car by the student, then we must ask if the student and the car is a compatible combination. In today's space age, with the advance of technology and the concomitant upgrading of jobs, and with the need for students to achieve academic excellence in order to get into college, the automobile's effect upon scholastic standing must not be overlooked, nor must the effect of student jobs: the former because school grades may be affected by the position the automobile occupies in the life of the student; the latter because the job may be obtained and held in order to purchase or maintain an automobile.

A study of 20,000 high school students by the Allstate Insurance Company examined the interrelationship of their grades, cars and jobs and came to this conclusion: "In the final analysis this study neither

castigates cars nor jobs - but under certain circumstances we can find little good in the combination of the two."[15]

The study found that those students who were licensed were more likely to be poorer scholastically than those who were unlicensed. In addition, ownership of a car was associated with poor marks. Of the total number of students 18% were car owners; only 12% of the "A" students and 14% of the "B" students owned cars, contrasting with 21% of the "C" students, 27% of the "D" students and 29% of the "F" students. Junior boys presented the most unfavourable picture with 16% of the "A" students having cars, and 42% of the "F" students.

The school tends to be relegated to a position of secondary importance by those students who hold a job to support a car. The effect on their attitude towards school and the curtailment of study time created by the job-car combination leads to a vicious circle. As more of the student's time is spent in car usage, it appears that more time is necessarily spent earning money to cover car expenses.

The degree of parental latitude given to the teenager turned out to be the most significant factor

affecting the extent of his driving and accordingly his academic achievement. In most cases, the acquisition of a car was indicative of the lack of effective parental restraint on the student. Since, apparently, the problem is one of parental laxity, the solution would be one of more parental control.

The study was conducted by means of questionnaires using the non-driving students as a control. Essentially a univariate procedure was followed. In view of the limitations of this method, which were discussed earlier in this chapter, the findings of the Allstate study are not considered conclusive, but are useful as indicators of possible dangers.

If cars are detrimental to the student's academic achievement, should we encourage the introduction of a type of course which will acquaint more students with cars? The survey claims that the earlier the student is given car privileges (or ownership) the more detrimental is the effect on scholarship, yet driver education advocates are desirous of enrolling the student in such a course as soon as he reaches legal driving age.

Summary

While the high accident involvement rate of

teenagers is undeniable, one does well to bear in mind the findings of the Center for Safety Education in New York that the twenty to twenty-four age group rather than the teenagers pose the greatest threat to traffic safety. More important than the accident rate itself is the teenage behavioral pattern of which accident proneness is a part. That teenagers are immature and therefore require control is self-evident. The teenager who is an accident repeater exhibits more than the usual lack of responsibility and is a potential delinquent in many areas of living. This suggests that some attempt should be made in his formative years to combat this general intolerance for social disciplines.

The research designs that have been used in traffic safety studies are not adequate, and proposals based on the studies should be scrutinized for ulterior motives on the part of those presenting them.

The onus for the success of a driver education course is on the regular high school teacher. What is expected of him is incompatible with the conscientious fulfillment of his full-time teaching duties. The toll of the extended day, added work and responsibility is already being felt in the fact that fewer teachers are willing to give driver education courses. It is apparent that those courses are in effect no

different from "moonlighting" in any other occupational area, which is discouraged by school boards because it affects the teacher's efficiency.

The conclusion of the survey cited on the interrelationship of car usage, ownership, parental latitude and academic achievement should serve to caution educators and especially parents. Driver education courses, by introducing more students to the automobile, would aggravate the suggested negative effect of driving on achievement. Since the "gentleman's C" no longer opens the door to college, it would be best to put first things first.

FOOTNOTES

[1]National Education Association Research Division, A Critical Analysis of Driver Education Research (Washington: National Commission on Safety Education, National Education Association, 1957), p. 55.

[2]A. R. Lauer, Analysis of Age Groups in the Driver Population, Preliminary draft, (Ames: Iowa State College of Agriculture and Mechanics Arts, Driving Research Laboratory, 1955), p. 1.

[3]W. A. Wong and G. E. Hobbs, "Personal Factors in Industrial Accidents: A Study of Accident Proneness in An Industrial Group," Industrial Medicine, XVIII (July, 1949), pp. 291-294.

[4]William Anthony Tillman, "The Psychiatric and Social Approach to the Detection of Accident Prone Drivers" (unpublished Master's thesis, University of Western Ontario, 1948), p. 99.

[5]E. Allgaier and A. E. Lauer, "Preliminary Analysis of the Psychophysiological Correlatives of Automobile Manipulation," American Journal of Optometry, XVIII (February, 1941), p. 49.

[6]Leon Brody and Herbert J. Stack (eds.), Highway Safety and Driver Education (New York: Prentice-Hall, 1954), pp. 351-377.

[7]Raymond B. Cattell, "Learning Theory, Personality Theory and Clinical Research," The Kentucky Symposium; (New York: John Wiley and Sons, 1954), pp. 99-100.

[8]National Education Association Research Division, A Critical Analysis of Driver Education Research, p. 50.

[9]Ibid. p. 50.

[10]Canadian Broadcasting Corporation, "The Age of Wheels," "The Twentieth Century," (Television Series), April 19, 1964.

[11]Saskatchewan Safety Council, "Driver Education and Training: Policies and Practices," April, 1962, p. 8 (Mimeographed).

[12]Supra, Note 11, p. 42.

[13]National Conference on Driver Education, Policies and Practices for Driver Education (Washington: National Commission on Safety Education, National Education Association, 1953), p. 39.

[14]Norman Key, Status of Driver Education in the United States (Washington: National Commission on Safety Education, National Education Association, 1960), p. 7.

[15]Warren A. Kempster, A Teenage Pattern, Published by Marketing Research Division of Allstate Insurance Companies, May, 1960, p. 3.

CHAPTER IV

THE ROLE OF DRIVER EDUCATION IN THE EDUCATIONAL SYSTEM

The school must decide whether or not to include a driver education course in the curriculum in the light of its philosophy of education. It will be seen that the school has a part to play in solving society's traffic safety problem, and certain recommendations are offered in this chapter which utilize the services of the school without prostituting them. The responsibilities of agencies other than the school will be considered. These latter institutions must allow the school to perform its primary function and must work cooperatively with it towards a solution to the traffic problem.

The Choice

The question concerning driver education courses which school administrators must resolve is not their possible accident reduction value, or the soundness of the procedures used in evaluating them, but rather the feasibility of their inclusion in the school curriculum.

The driver education movement has powerful

allies who argue, urge, and even demand that driver education courses be given in our high schools. The school administrator might respond with such arguments as: the curriculum is too crowded with required subjects to introduce more; the complete driver education program represents an unjustifiable expenditure; or, it presents administrative problems and cannot be satisfactorily conducted, in view of a teacher's regular work load. But this type of opposition leads only to debate, and one in which school administrators can be at an unfair disadvantage.

"Proving the worth" of driver education can be a simple task for interested agencies with available publicity facilities. Motivated by possible commercial advantage, such groups can become strong pressure groups. Well-organized and financially strong, they can be vocal out of proportion to their actual numbers as they attempt to secure their selfish and sectarian objectives. Their one-sided approach seizes on one aspect of a complex situation and magnifies it out of all proportion to its true significance. The vigor with which a course of study is promoted is not always an index of its merit or of the extent of the demand for it by society.

A more valid index of whether a new subject is to gain a place in the school curriculum is: is the subject conducive to wisdom?[1]

It is true that the classroom phase of driver education does, in some small measure, conduce to the development of wisdom, but it is low in the order of universality of knowledge as compared to the subjects of study presently comprising the curriculum. The proper responsibility of the school is the development of man's intellect, and therefore the school must also deny the behind-the-wheel phase of a driver education course a place in the curriculum because its value is primarily one of training. Teaching skills and manual dexterity is not the same as "schooling" and can best be learnt by the individual outside of the school.

The school is concerned with the student's development but can best promote this many-sided development by adhering strictly to its primary function - the development of the intellect. The school can best contribute to such necessary and important objectives as good citizenship, preparation for family life, and vocational preparation by means of intellectual formation. The school does not possess

the time or the means to assume responsibility for anything but intellectual education, although it can contribute to the development of character and social effectiveness, for example, which are primary objectives of the Church and the home. The function of the school, however, cannot be determined by what other social agencies cannot do or refuse to do - this would make of the school a residual agency, rather than the principal formal educational agency.

Recommendations

The school, along with other social agencies, can help in solving the nation's traffic safety problem. However, the approach must be practical and realistic. Considering the scope of the problem and its various aspects, the following recommendations are made:

1. That a comprehensive safety course be interwoven into existing subjects, to begin in grade seven and continue to grade twelve inclusive. Since the core of the safety problem is people's attitudes, the major emphasis of such a course would be the inculcation of constructive attitudes. The course would

cover such elements (at whatever grade level suitable) as:

a. the responsibilities of the citizen in his various roles in society;
b. the reasons and necessity for the observance of the law;
c. the meaning of courtesy and fair play;
d. the effects of physical and mental conditions on the individual;
e. psychophysical tests and their meaning (each student should take the tests);
f. the effects of nature's laws on the automobile.

This course would not be a separate entity; its elements would be taught in the existing courses best suited for those elements. For example, since traffic citizenship is nothing more or less than a responsibility to community, family and self, and observance of traffic regulations is identical to voluntary respect for the law, these particular aspects could be emphasized in civics and history; in physics, the study of the laws which govern moving bodies could be more closely related to the automobile; man's

emotional, physical and mental characteristics, and the effects of alcohol and drugs could be taught in biology with reference to the individual as a driver.

Seeing the various elements of driver education in their respective theoretical contexts (e.g., physics and biology) can be more meaningful than studying them divorced from their contexts in a specialized course.

There is a further advantage in the integrated approach to driver education. The basic subjects taught in school do not exist in isolation from each other but together form the body of human knowledge. Each subject involves the other subjects in some degree. With good teaching and an awareness of purpose, school subjects are brought together in living reality. This integration and interdependence of school subjects exists on all grade levels and makes each subject more meaningful. The integrated approach can give the student deeper insights into the elements of driver education than could a highly specialized course which would be isolated because it would lack a clearly defined place in the body of human knowledge.

The school, offering as it should a liberal education, emphasizes human values and the personal development of the individual and assumes that knowledge

is but a means to attain wisdom. The school, through its way of life - the pursuit of wisdom - can enhance the values and dedication of those participating in that way of life. The student is in school during his most impressionable years and a communication of values, of attitudes, which will influence him for life cannot help but occur. Recognizing that the accident involvement of youth is a matter of an attitude that is closely related to juvenile delinquency in many areas of living, an effort by the school which utilizes the interrelationship and integration of curricular subjects in restructuring teenage attitudes would not only be profitable in creating a "driver conscience", but aid him in all aspects of life.

2. That courses in driver education be made available to adults, out-of-school youths, and regular high school students who desire to learn to drive safely or to improve their technique, or who feel the necessity of a driver education course because of their occupations. These courses, to be given in the evenings and during the summer, should be operated jointly by the Adult Education Department

and the Motor Vehicle Branch of the Department of Highways.

The experience in the United States with driver and safety education courses given for adults and out-of-school youth is that there is a popular demand to learn to drive safely. The primary purpose of these courses for adults and out-of-school youth is basically the same as that for any other adult education program: namely, self-improvement and/or occupational advancement. The school extends its facilities for this purpose, but does not consider the adult courses as part of its educational program. From 1947 to 1951, in the United States, there was a 601% increase in driver and safety education courses for adults and out-of-school youth.[2]

The summer school courses attract a great number of regular high school students and consequently, although attended by adults and out-of-school youths, the summer course has been designed primarily to meet the needs of the students.

High school students could also avail themselves of approved privately run driving schools. In the fall of 1963, one such firm made a special offer to all high school students in the Halifax-Dartmouth

area. This firm, which is unique in Nova Scotia in that it offers both the classroom and driving phases, has highly qualified personnel including an ex-chief examiner for the Safety Division of the Nova Scotia Motor Vehicle Branch. The student, by taking such a course, would learn to drive an automobile while acquiring the basic elements of driver education and a responsible attitude through a comprehensive safety course integrated into the school curriculum.

Extra-Curricular Activities

The hope of driver education advocates is that both phases of a course be offered as a regular part of the high-school curriculum during a full semester. They will settle for such a course being given as an extra-curricular activity, but claim that this is not adequate. However, if they mean by extra-curricular that this program is still within the jurisdiction of the school and operated by it, then again, the driver education course has no place in the school.

Extra-curricular activities should offer the students an opportunity to apply their knowledge, and they should also be developmental. They should be closely related to academic subjects which they are meant to supplement.

In addition to their intellectual function, extra-curricular programs provide the student with opportunities to develop useful social skills. The student attains both individual and social responsibility in the classroom, but extra-curricular activities can be more conducive to his achievement of social competence.

Students voluntarily enter extra-curricular activities whose success or failure is dependent in a large measure on the student's coping with the responsibilities connected with these activities. Thus these extra-curricular activities would be more conducive to the development of social responsibility than a prescribed course in driver education.

Vocational Schools

Vocational schools may desire to initiate courses for those students whose occupations will require the extensive use of a vehicle, but it would be best if these students were to avail themselves of the adult education courses or those offered by private firms.[3] A vocational student today must face the fact that he might have a dozen different jobs before retirement. Automation is making a tremendous impact on today's occupations by modifying them, or by

automating them out of existence altogether. The impact of automation on education has been the direct opposite of mass production where the skilled craftsman was replaced by an unskilled worker. These unskilled and semi-skilled workers are now being displaced with highly skilled workers who require a combination of manual skills and knowledge of scientific principles. This means that the requirements of vocational training will extend into the area of general education. "A narrow, specialized vocational education was never an adequate substitute for a liberal education. Under automation it will not even be good vocational training."[4]

In view of this, and the opportunity for students to acquire driving skills outside of school, driver education in the vocational school would only take up valuable time and energy required to effectively educate students to cope with modern technological advances.

Other Agencies

The school is a social institution created to fulfill a specific function which other institutions in society - for example, the home and the Church - and society itself cannot fulfill at all, or cannot

fulfill as well as a special educational institution. This does not mean that all educational tasks devolve on the school: "The school is one place where children may be educated, but it is not the only place and sometimes it is not even the best place."[5]

The school expects that the individual will be educated by his total social environment and will utilize all the educational experiences and opportunities afforded him outside the school, both formal and informal. If the school is to perform its proper intellectual role, it requires the cooperation of other agencies in supplying certain of the individual's needs. The school is not supposed to take over the functions of the Church, the State, the family, service groups or the community. For all these various groups to contract out and leave the school to be all things to all men would prevent the school from doing anything well.

There is no one solution to the nation's traffic problem but to expect the school to include in the curriculum a driver education course as its share in remedying the situation is not being realistic. The nature of the problem makes it the focal interest of many other groups, especially those with traffic safety

as their primary concern: i.e., the provincial Motor Vehicle Branches, the police departments, the R.C.M.P., insurance organizations, traffic courts, automobile clubs, public safety departments, safety councils and automobile manufacturers.

Each and every one of these groups falls down in its job in one respect or another. For instance, the licensing authorities in Nova Scotia allow people with a visual acuity of 60/20 to obtain licenses. This certainly is not good enough, according to two eye specialists consulted.[6] Many people who have had licenses for years now have visual shortcomings which would be unacceptable even under the present lax rule. In Nova Scotia during 1960-1961, 104,809 vehicles were examined by law enforcement agencies. A periodic check on drivers should also be done. The percentage of visual shortcomings by age is as follows:[7]

20% of all teenagers
30% of 20-year olds
48% of 40-year olds
71% of 50-year olds
80% of 60-year olds

Once a driver is made aware of his physical handicap, he should be obliged by law to correct it, or

at least compensate for it. In view of the above, and instances of severely handicapped persons continuing to hold a license, there should be stricter licensing policy with more emphasis on psychophysical testing and retesting.

The Safety Division of the Motor Vehicle Branch, with the necessary cooperation of the traffic courts, should run Driver Improvement Courses for frequent violators. The violator would be denied the privilege of a driver's license by the court until he had taken and passed such a course.

The automobile manufacturers support and encourage driver education courses and appear to be taking their moral obligations to heart, yet at the same time they place electric razors in cars to enable the driver to shave on his way to work. The construction of automobiles today leaves much to be desired from a safety point of view. Automobile manufacturers could standardize safety dashes, use rigid body compartments combined with an accordian type of front and trunk, build engines with a more reasonable horsepower, and introduce many other safety features.

Studies have been done to assess the value of seat belts by comparing the damage to dummies with and

without seat belts in accidents of identical severity. The conclusion drawn from these studies is that a reduction in injuries and deaths to those wearing seat belts is significant. Seat belts can be responsible for one-third to two-thirds fewer injuries and up to four-fifths fewer deaths,[8] yet only very few jurisdictions have made them compulsory.

Insurance companies could do more to help. Their agents, possibly through lack of time, do not always give proper examinations to those buying automobile insurance. Many teenagers insured today would not have been insured if agents had conscientiously checked on their habits and attitudes. This is not a general indictment of insurance companies, for Mr. L. Moir,[9] in addressing a group of teenagers, told just how carefully his particular company does check. Another company accepting its responsibility is the Employer's Mutual Casualty Company. This company has an agreement between the father and son, whereby the teenager in signing the agreement agrees to act in a responsible manner in return for the occasional use of the family car. Each year the father is kept informed of his son's driving record. If it is good, a premium discount is given. Not all insurance companies adopt

this responsible attitude towards their clients.

If all the groups with interest in the automobile would channel the energy they are presently using to promote high school driver education into developing more realistic solutions for the safety problem and at the same time would fully accept their responsibilities, much could be done to remedy the problem.

Summary

The school cannot follow a philosophy of need that would result in an expanded curriculum and thereby lose its identity as an academic institution. Because it is entrusted with the development of man's intellect, the curriculum must be limited to those studies most conducive to wisdom.

Doctor M. E. Keating, School Superintendent for Halifax schools, in reply to the demand for driver education in the high schools has stated:

> ...the primary purpose of our senior high schools is to provide training and instruction in the academic subjects. If this purpose is to be achieved satisfactorily, there is little opportunity to add another subject to an already heavy program.[10]

That the automobile and its usage presents a

social problem and that there is a need for citizens to learn to drive safely cannot be denied. However, the school's obligation in this area of social concern can best be fulfilled if society allows it to fulfill its primary aim. The school can go further than a driver education course in teaching safety education by introducing certain elements of safety education into appropriate academic courses and can, through the aid of the school's extra-curricular activities, also surpass a driver education course in inculcating favourable social attitudes.

According to Sir Richard Livingstone, the school is atmosphere as well as instruction, and there the student undergoes the formation, largely unconscious, of an outlook and an attitude. By making constructive use of this formation, the school could, as outlined in this chapter, do much to contribute to the solution of many of the present day social problems which stem from anti-social attitudes.

There is an inevitable reciprocal tension between the school and other formal and informal agencies of education and each must assume its own specific role and responsibilities. The school must be careful not to become a depository for the problems of

society which could be detrimental to its primary aim.

It would appear that organizations primarily set up to deal with the automobile and the problems related to it, and the huge corporations who benefit directly or indirectly from the automobile, are not fully accepting their responsibilities; worse, they are attempting to assign their responsibilities to the school.

FOOTNOTES

[1] Supra, p. 15.

[2] Norman Key, Status of Driver Education in the United States (Washington: National Commission on Safety Education, National Education Association, 1960), p. 25.

[3] Supra, p. 73.

[4] Irving Adler, What We Want of Our Schools, (New York: The John Day Company, 1957), p. 256.

[5] Edward J. Power, Education for American Democracy, (New York: McGraw-Hill Book Co., Inc., 1958), p. 21.

[6] Interview with Doctor James Hammerling and Doctor R. F. Hand, Eye, Ear, Nose and Throat Specialists, May 1, 1964.

[7] Driver Education Specialists, American Automobile Association, Teacher's Handbook for Sportsmanlike Driving, 4th ed.; (New York: McGraw-Hill Book Co., Inc., 1962), p. 40.

[8] Ford Motor Company, "Seat Belts," pamphlet, n.d.

[9] L. Moir, "Insurance," Talk given to Y.M.C.A. Driver Education Course, Halifax, Nova Scotia, October 12, 1963.

[10]Derm Dunsworthy, "Proud Teenagers and Their Wheels," Star Weekly Magazine, October 12, 1963, p. 3.

APPENDIX A.

Extent of Qualifying Driver Education Courses
In the United States

SCHOOL YEAR 1960-61

State	Number of Potential Schools	Total Driver Education Courses Number	%	Qualifying (30 & 6) Courses Number	%	Number of Annual Eligible Students	Total Driving Education Enrollment Number	%	Qualifying (30 & 6) Courses Number	%
Alabama	444	19	4	17	4	46,014	977	2	919	2
Alaska	30	2	7	2	7	1,859	136	7	126	7
Arizona	100	89	89	56	56	16,512	13,382	81	5,650	34
Arkansas	537	35	7	32	6	24,599	1,689	7	1,382	7
California	573	376	66	246	43	193,387	146,577	76	72,765	38
Colorado	243	130	53	101	42	19,155	7,742	40	5,585	29
Connecticut	101	146	100	89	88	26,274	13,577	52	9,402	36
Delaware	37	37	100	37	100	4,701	3,145	67	3,145	67
District of Columbia	16	16	100	16	100	4,948	1,505	30	1,505	30
Florida	350	230	66	230	66	55,872	43,730	78	41,409	74
Georgia	568	90	16	80	14	60,343	4,465	7	3,884	6
Hawaii (last yr's figures)	47	10	21	5	11	9,301	198	2	54	1
Idaho (last yr's figures)	128	21	16	15	12	10,889	1,967	18	1,152	11
Illinois	619	1,061	100	530	86	119,579	90,180	75	52,375	44
Indiana	324	516	100	441	100	59,660	33,891	55	23,889	40
Iowa	562	449	80	436	78	34,134	22,671	66	19,944	58
Kansas	574	395	69	393	68	27,714	19,334	70	19,229	69
Kentucky	402	80	20	75	19	32,247	4,181	13	3,334	10
Louisiana	577	257	45	172	30	44,066	19,148	43	11,598	26
Maine	151	99	66	99	66	9,769	6,096	62	6,096	62
Maryland	142	98	69	64	45	33,954	9,294	27	5,697	17
Massachusetts	NO REPORT					NO REPORT				
Michigan	536	542	100	542	100	87,901	104,023	100	104,023	100
Minnesota	495	585	100	339	68	46,370	39,527	85	24,770	53
Mississippi	511	89	17	73	14	28,707	3,797	13	2,484	9
Missouri	529	354	67	305	58	49,727	23,880	48	19,640	39
Montana	192	26	14	19	10	9,881	1,249	13	825	8
Nebraska	416	162	39	136	33	17,134	7,332	43	5,831	34
Nevada	36	19	53	19	53	3,496	1,420	41	1,415	40
New Hampshire	79	50	63	50	63	5,900	1,636	28	1,636	28
New Jersey	241	216	90	173	72	55,643	52,612	95	25,115	45
New Mexico	136	102	75	94	69	14,713	7,648	52	7,085	48
New York	816	753	92	683	84	151,483	58,223	38	51,892	34
North Carolina	818	793	97	793	97	64,005	43,920	69	43,920	69
North Dakota	333	338	100	87	26	9,173	8,917	97	5,742	63
Ohio	1,095	669	61	654	60	105,727	66,489	63	47,206	45
Oklahoma	576	302	52	302	52	31,533	16,394	52	16,394	52
Oregon	219	122	56	99	45	25,863	10,373	40	6,080	24
Pennsylvania	713	1,156	100	578	81	121,619	72,500	57	49,130	40
Rhode Island	17	16	94	10	59	7,585	1,111	15	629	8
South Carolina	366	142	39	94	26	31,874	8,841	28	2,936	9
South Dakota	251	84	33	77	31	9,243	4,273	46	4,030	44
Tennessee	470	60	13	50	11	45,729	3,325	7	2,956	6
Texas	1,402	826	59	746	53	140,508	68,525	49	45,548	32
Utah	81	99	100	77	95	14,494	14,100	97	13,415	93
Vermont	78	40	51	35	45	3,660	1,709	47	1,558	43
Virginia	423	360	85	138	33	51,913	44,817	86	10,475	20
Washington	283	157	55	99	35	39,254	13,882	35	7,147	18
West Virginia	240	121	50	118	49	25,244	4,981	20	4,838	19
Wisconsin	426	381	89	235	55	48,280	43,039	89	17,165	36
Wyoming	77	31	40	25	32	4,987	1,200	24	1,092	22
TOTAL	18,380	12,751	71	9,786	53	2,084,596	1,172,607	56	814,117	39

Published in support of the Action Program of the President's Committee for Traffic Safety by the Insurance Institute for Highway Safety.

APPENDIX B.

Dealer Policies and Procedures

FORD MOTOR COMPANY OF CANADA, LIMITED

DEALER POLICIES AND PROCEDURES

REF VEHICLE SALES #29

EFFECTIVE DATE JULY 10, 1961

SUBJECT ALLOWANCE FOR EDUCATIONAL DRIVER TRAINING VEHICLE

REPLACES VEHICLE SALES #29, DATED MARCH 31, 1960

* INDICATES WHERE CHANGE HAS BEEN MADE IN PREVIOUS INFORMATION

I. PURPOSE

To assist Dealers in the supplying of vehicles to be used for Driver Training courses conducted by High Schools, Colleges, recognized Service Clubs and public service organizations.

II. PROVISIONS

Dealers will receive an allowance of $250.00 with respect to each new Driver Training Vehicle, whether 6 or 8 cylinder engine, loaned, leased or sold to High Schools, Colleges, recognized Service Clubs or public service organizations which are conducting Driver Training Courses as a public service, provided the following conditions are met:

A. The vehicle furnished will be a current model Ford, Meteor, Falcon or Comet passenger car.

B. The vehicle must be equipped with dual controls purchased by the Dealer and safety equipment supplied by Ford of Canada, which will include padded instrument panel and seat belts supplied on a "No Charge" basis to the Dealer.

C. Claims for allowance on such vehicles will be submitted by Dealers while the Driver Training Course is being conducted.

1. In the case of vehicles supplied to schools or colleges, Claims will be submitted during the school or college year, including any special summer courses. The term school or college year shall mean the period commencing with the beginning of the regular fall term of the school or college, as the case may be, and ending with the close of the spring term the following calendar year.

2. In the case of vehicles supplied to recognized Service Clubs or public service organizations, Claims will be submitted during the period of the Driver Training Course involved, and the commencement and termination dates of the particular course will be shown on the application.

D. The Dealer will be obligated to permit vehicles loaned or leased to remain at the disposal of the recipient for the duration of, or substantially all of, the school or college year or the duration of the Driver Training Course, as applicable, and the recipient concerned will agree to retain the vehicle for the same period.

..... continued

III. PROCEDURE

A. For each new vehicle loaned, leased or sold in accordance with the provisions outlined in Section II above, the Dealer will complete a Dealer Application for Driver Training Vehicle Allowance, form 5582-2, and submit the first three copies to the Regional Office for review, with the required Dealer and recipient authorization.

B. If seat belts supplied on vehicle have been installed by the dealership, the Dealer will forward with the Application an Incorrect Material Claim to cover such installation.

C. Approved Applications (and Incorrect Material Claims, where applicable), will be forwarded to Accounts Receivable, Oakville, which will issue a cheque for $250.00, plus the value of the padded instrument panel, to the Dealer concerned. Reimbursement for seat belts will be processed through the Dealer's parts account.

IV. Listed below are suppliers of dual control equipment including types and approximate costs f.o.b. sources:

A. A.A.D.T.A. Inc.
4264 South 35th Street,
Arlington 6, Virginia.

Consists of right side steering column detachable at dash, dual brake and accelerator. For automatic transmission units only.

Available for '61 Fords and Meteors - 6 or V-8.

List Price - $220.00 F.O.B., Keyser, West Virginia.

Also available, dual pedal controls for Falcons and Comets.

List Price - Clutch, brake and accelerator - $59.50 F.O.B., Keyser, W. Va.
- Brake and accelerator - $54.50 F.O.B., Keyser, W. Va.

B. Easy Method,
3631 North Peary Street,
Arlington 7, Virginia.

Similar to the dual control system described above. It includes a chain and sprocket type drive for the right hand steering wheel, as well as clutch, brake and accelerator controls.

List Price - $345.00 F.O.B. Factory.

C. American Automobile Association,
1712 G Street, N.W.
Washington, D.C.

..... continued

FORD MOTOR COMPANY OF CANADA, LIMITED

DEALER POLICIES AND PROCEDURES

REF VEHICLE SALES #2

EFFECTIVE DATE JULY 10, 1961

SUBJECT ALLOWANCE FOR EDUCATIONAL DRIVER TRAINING VEHICLE

REPLACES VEHICLE SALES #29, DATED MARCH 31, 1960

* INDICATES WHERE CHANGE HAS BEEN MADE IN PREVIOUS INFORMATION

IV. C. (Continued)

A simple dual brake and clutch control, available for Fords, Meteors, Falcons and Comets. Consists of an extra set of suspended pedals, connected to the clutch and brake pedals by two transverse rods. Does not include accelerator control nor extra steering wheel.

List Price - Clutch and brake control - $28.00 F.O.B. Washington, D.C.
- Brake only - $22.00 F.O.B. Washington, D.C.
- Hydraulic brake control - $32.50 F.O.B. Washington, D.C.

D. Portable Dual Controls, Inc.,
5133 Grand River Avenue,
Detroit 8, Michigan.

A simple dual brake and clutch control that takes ten to fifteen minutes to install, and can be easily removed. Consists of an extra set of suspended pedals connected to the clutch and brake pedals by two transverse rods. Does not include accelerator control nor extra steering wheel.

Available for '57 to '61 Fords, Meteors, Falcons and Comets with standard transmissions, and, as above plus Mercury, with automatic transmission.

List Price - Standard transmission - $30.00 F.O.B. Detroit, Michigan
- Automatic transmission - $25.00 F.O.B. Detroit, Michigan

AGREEMENT

FOR USE OF DUAL CONTROL DRIVER TRAINING CAR

THE DEALER AGREES TO:

1. Provide the school for its exclusive use, a current model _____
(make of car)
2. appropriately lettered and properly licensed; equipped with dual controls, padded dash, seat belts, outside mirrors on both right and left hand sides, direction signals, and heater and defroster, for the period noted on this form.

2. Provide fire, theft and comprehensive insurance on the vehicle.

THE SCHOOL AGREES TO:

1. Conduct a Driver Education course which meets the requirements of the local or Provincial Department of Education where such requirements have been set up. Otherwise the minimum requirements recommended by the Canadian Highway Safety Conference will form the basis of this agreement. These are:
20 hours of classroom instruction.
6 hours of "behind the wheel" instruction.

2. Provide a qualified instructor - one who has completed a Driver Education Teacher Preparation Course by a recognized organization or is otherwise approved by the Department of Education.

3. Provide insurance for the protection of the school board, the dealer, the instructor and other users of the car. The minimum coverage should include, but need not be limited to:
$25,000.00 to %50,000.00 Public Liability
$ 5,000.00 Property Damage
$ 100.00 Deductible Collision.

4. Use the car only for giving instruction in Driver Training. Store the car in a safe garage at night and when not in use.

5. Permit the use of painting on sides and rear of car reading, "Dual Control Driver Training Car" in letters not exceeding 1 1/2" high, and also allow for the dealer's courtesy line if he so desires.

6. Return the car to the dealer at the end of the school period in first class condition and pay for any repairs necessary to put the car in the same condition as received, except for normal wear and tear.

7. Pay all maintenance and expenses incidental to the operation of the car and have vehicle maintenance, when required, done at the dealer's service department or at such garage as is agreeable to him. In the event that the vehicle is damaged, such damage must be reported to the dealer.

PERIOD OF ASSIGNMENT

The vehicle required for a period from _____ to _____
date date
This agreement shall take effect when signed by the dealer and the official authorized to act for the school.

FOR THE SCHOOL _____ TITLE _____

DEALER _____ TITLE _____

DATE _____

DEALER APPLICATION FOR DRIVER TRAINING VEHICLE ALLOWANCE

ER: Send first three copies completely filled out and certified by an official of the High School, College or other organization conducting recognized driver training courses to your Regional Office.
Include only one vehicle per application form.

ER NAME AND ADDRESS	DEALER CODE	REGIONAL OFFICE

IPTION OF VEHICLE	VEHICLE SERIAL NUMBER
	INVOICE NUMBER AND DATE
PED WITH: ☐ PADDED DASH ☐ SEAT BELTS (SUBMIT INCORRECT MATERIAL CLAIM WITH THIS APPLICATION IF SEAT BELTS INSTALLED BY YOU)	

AND ADDRESS OF HIGH SCHOOL, COLLEGE OR ORGANIZATION	DATES OF DRIVER TRAINING COURSE (IF APPLICABLE)		DATE OF APPLICATION
	COMMENCEMENT	TERMINATION	

y certify that the above described vehicle has been placed disposal of the above named High School, College or other ation conducting recognized driver training courses, to at its disposal until the close of the School or College or the duration of the driver training course, as applicable, purpose of Driver Training Instructions.

.....
Dealer Name

.....
Signature and Title

I hereby certify that the above described vehicle has been placed at the disposal of the above named High School, College or other organization. I further certify that the vehicle will be used exclusively for the purpose of Driver Training Instructions.

by.....
Signature of Official

.....
Title

.....
Date

DO NOT WRITE BELOW THIS LINE – FORD OF CANADA USE ONLY

CNAL OFFICE: If approved, send first two copies to Accounts Receivable, Oakville.

REGIONAL OFFICE APPROVAL	OAKVILLE USE	
	CHEQUE NUMBER	CROSS-REF. TO VEHICLE INVOICE
NT OF ALLOWANCE.....		
E.....	APPROVED..... (Manager, Accounts Receivable)	
DVED..... (Regional Administrative Manager)	ALLOWANCE AUTHORIZED..... (Financial Records Manager)	

t 5582-2

APPENDIX C:

Nova Scotia Policies

MANAGEMENT MANUAL
GOVERNMENT OF NOVA SCOTIA

Department of Education

SUBJECT: POLICY STATEMENT Driver Education in High Schools

BULLETIN NO.: 22-P 2

DISTRIBUTION: D

APPROVED BY: Deputy Min. H. Moffatt

DATE ISSUED: Mar. 24, 1959.

REVISION NO.

DATE REVISED

Experts in the field of Traffic Safety say that the most promising means of cutting down traffic accidents is by programs of Driver Education. In places where programs of Driver Education have been carried on for several years statistics show that the accident rate and conviction experience of drivers who have been so trained is at least 50% reduced as compared with untrained drivers.

In many parts of the United States and in some parts of Canada courses in Driver Education have been given in the public high schools, but more widespread acceptance of the program has been held up because of the reluctance of local school authorities to do anything which might affect adversely the program of academic studies in the schools.

Two years ago the Department of Education and the Motor Vehicle Branch of the Department of Highways, with the co-operation of the Board and Staff of the Digby Regional High School set up a pilot course to determine (a) if a program of Driver Education could be carried on without affecting adversely the regular school program, (b) the cost per pupil of such instruction and (c) if the instruction could normally be given by a staff member or members as an extra-curricular activity.

The experience in Digby is that the program can be carried on without affecting the time devoted to the regular school program. The classroom phase of instruction is carried on during an afternoon activity period, with behind the wheel instruction being given after school and on Saturday mornings. In schools where such an activity period is not scheduled, both phases of instruction would have to be given after regular school hours.

Due to unforseen difficulties in the program at Digby, it was not possible to process the estimated number of 40 pupils. During the first year the instructor could not find enough post school time to give 40 pupils 6 hours each of behind the wheel instruction. During the current school year a car was not available until January because of a strike. However, it is estimated that an instructor from the regular school staff can put up to 40 pupils through both phases of a Driver Education course at a cost of approximately $25 per pupil.

It is not permissible under the law to have more than one pupil and an instructor in a car on a public highway. But where schools have off the highway areas suitable for instruction, the instructor may take one student behind the wheel and two or three others as observers. This procedure, where possible, may speed up the behind the wheel phase of instruction.

Financial Support of Driver Education Courses

As a result of the experience at Digby the government has approved a policy whereby local school boards which offer a Driver Education course in their high schools will receive an assistance grant of $10.00 per pupil for each pupil who completes successfully both phases of the course provided the following conditions are fulfilled.

MANAGEMENT MANUAL
GOVERNMENT OF NOVA SCOTIA
Department of Education

SUBJECT: POLICY STATEMENT Driver Education in High Schools

BULLETIN NO. 22-P 2

DISTRIBUTION D

APPROVED BY: Deputy Min.

DATE ISSUED: Mar. 24, 1959.

REVISION NO.

DATE REVISED

Conditions

1. The course must be given under the direction of the local school board and staff.
2. The time allotted for the Driver Education course must not conflict with the regular academic classroom schedule.
3. The course must meet the minimum standard of 30 hours of classroom instruction and 6 hours of behind the wheel instruction per pupil.
4. Instructors must be classroom teachers regularly employed on the high school staff.
5. The instructor or instructors must be properly qualified to instruct in the field of Driver Education.
6. Pupils taking Driver Education must have the written consent of their parents.
7. Pupils, before taking behind the wheel instruction, must hold a Beginners License.
8. The car used for behind the wheel instruction must be equipped with dual brake and clutch controls.

Provision of Cars

The major automobile manufacturers provide a grant to any of their local dealers who make a car available for an approved course in Driver Education in the schools, and it is usually possible to secure such a car from a local dealer. It is recommended that instruction should be given in cars equipped with a standard manual gear shift.

The Government has authorized registering of such vehicles for a nominal fee of $1.00 plus $2.00 for a certificate of registration. It is a condition of the registration and the contract of loan that the vehicle be used only for purposes of Driver Instruction.

Training of Instructors

All instructors of Driver Education classes in high schools to be properly qualified must complete an approved course for such instructors. Such courses (of two weeks duration) are sponsored each summer by the Ontario Safety League. However, if a sufficient number of teachers apply, a course may be provided in conjunction with the Nova Scotia Summer School at Halifax.

Scholarships for attending such summer courses outside the province are available from the All Canada Insurance Federation and cover approximately three-quarters of the cost of attending.

All potential instructors, to be eligible for attendance at such a summer course must hold a currently valid Nova Scotia Driver's License, must have had two years' driving experience, must be recommended for the course by the School Board, and must have a good driving record.

MANAGEMENT MANUAL
GOVERNMENT OF NOVA SCOTIA
Department of Education

SUBJECT: POLICY STATEMENT
Driver Education in
High Schools

BULLETIN NO. 22-P 2

DISTRIBUTION D

APPROVED BY: Deputy Min.

DATE ISSUED: Mar. 24, 1959.

REVISION NO.

DATE REVISED

Costs

The major cost items of such a program would be:

Cost to the School Board Summer School Training (1 instructor)		$100.00
Instructional Materials		25.00
Insurance on vehicle (Including collision)	(estimate)	185.00
Gas, oil, maintenance		300.00
Dual clutch & brake mechanism (Cost & Installation)		50.00
Total (Estimated Cost)		$730.00

Part of the cost of instructional materials (textbooks) would be recovered through sale to pupils. The Dual control clutch and brake mechanism would be the property of the school and could be used on several cars over a period of years.

Equipment

In addition to the dual control cars, and pupil textbooks and tests, equipment for testing vision and braking reaction time may be made available by the Safety Division of the Motor Vehicle Branch.

Summary

1. In high schools where a Driver Education course is carried on, a grant will be paid amounting to $10 per pupil for each pupil who completes both phases of the course. (Completion of the classroom phase means passing the tests prepared by the classroom instructor. Completion of the behind the wheel phase means passing the tests required to secure a Nova Scotia Operators License.)

2. All instructors must be qualified as instructors for Driver Education Courses (Qualified means holding a Nova Scotia Operator's License, having a good driving record, and completing successfully an approved course for Driver Instructors.)

3. All pupils taking behind the wheel instruction must have the written consent of their parents and must possess a Beginners License.

4. The scheduling of time for such a course must be such that it will not take time from regular academic program of the schools.

5. Cars must be used which are equipped with dual clutch and brake controls. (Local arrangements must be made for securing a vehicle. The dual mechanism, once purchased is the property of the school board and may be used over a period of several years.)

School Boards which are interested may secure further information re administrative arrangements, supervisory assistance, summer school courses, policy of manufacturers re dual control cars, textbooks recommended, etc. by writing to The Director of Curriculum and Research, Department of Education, Halifax, Nova Scotia.

Per Pupil Cost

The cost of the program for the current school year at Digby will be approximately $987.00 made up of the following items:

Expenses Clinton MacInnes, Ontario Safety League	
Driver Education Course	$311.00
Textbooks	63.00
Tests	21.38
Freight charges	7.56
Insurance	70.80
Gas, oil, maintenance, etc.	212.02
Additional operation costs (estimate)	10.00
Honourarium (recommended)	300.00
	995.76
Less estimated insurance rebate	8.00
	$987.76

The classroom phase of instruction cost approximately $5.50 per pupil

The behind the wheel phase of instruction cost approximately $38.00 per pupil.

On the basis of the first years experience at Digby it appears that two qualified instructors from the regular school staff could completely process forty pupils. If it could be assumed that these instructors could be retained on staff for a three year period, and if pupils were required to buy their own books, the total annual cost would be somewhat as follows:

Training of instructors (1/3 of 600)	$200.00
Insurance	75.00
Gas, oil, maintenance, etd.	400.00
Honorarium (for behind the wheel instruction)	300.00
	$975.00

The per pupil cost then would be approximately $25.00.

If these cost figures can be demonstrated they are far below quotations now being made to some school boards by automobile associations.

From the files of the Nova Scotia Highway Safety Council.

MANAGEMENT MANUAL

GOVERNMENT OF NOVA SCOTIA

Department of Education

SUBJECT: POLICY STATEMENT

Driver Education Grants

BULLETIN NO. 22-P 6

DISTRIBUTION D

APPROVED BY Dep. Min.

DATE ISSUED June 4, 1959.

REVISION NO.

DATE REVISED

Effective August 1, 1959, the Regulations made pursuant to the Education Act on July 10, 1958 were amended by adding immediately after Regulation 56 the following heading and Regulation:

Driver Education Grants

56A The Minister may pay to a school board a grant at a rate not higher than ten dollars per pupil for each pupil who successfully completes a driver education course that has been provided by the school board in a manner satisfactory to the Minister and in accordance with such conditions and requirements as the Minister from time to time prescribes.

Certified to be a true copy of an Order of his Honour the Lieutenant Governor of Nova Scotia in Council made the 19th day of September, A.D. 1957.

The Governor in Council on the report and recommendation of the Minister of Highways dated the 12th day of September, A.D. 1957, is pleased to order that the registration feee for passenger vehicles used solely for Driver Instruction in High Schools be a nominal fee of $1.00 per annum plus the Certificate of Registration fee on first registrations, and that the permits issued for such vehicles be endorsed as "valid only for actual instruction of pupils".

(signed) C.L. Beazley,
Clerk of the Executive Council

PROVINCE OF NOVA SCOTIA

APPLICATION TO CONDUCT DRIVER-EDUCATION COURSE

ase complete two copies of this form. Retain one copy for your records and forward the her to:

ief Supervisor of Curriculum
partment of Education
x 578, Halifax, N.S.

Application is hereby made for permission to conduct a Driver-Education Course School in the period ,19 to ,

We certify that:

The course will be under the direction of the School Board and staff.
The course time will not conflict with the schedule of regular academic classroom work.
There will be at least 30 hours of classroom instruction and 6 hours of behind-the-wheel instruction per pupil.
The instructor(s), who is(a)/are classroom teacher(s) regularly employed on the staff of High School will be:

The instructor(s) is/are properly qualified to instruct in Driver Education.
The pupils who will take the Course have presented us with the written consent of their parents.
The pupils will have Beginners' Licenses before taking behind-the-wheel instruction.
The car used for behind-the-wheel instruction will be equipped with dual brake and clutch controls.

We agree to follow the requirements for the Course as detailed in Department Education Policy Statement Bulletin 22-P2, March 24, 1959.

On completion of the Course, application will be amde for a grant of $10 for ch pupil who successfully completes both phases.

_____ Secretary of School Board

_____ Supervisor or Principal of Schools

_____ School Section, Municipality of _____

No. 53a

PROVINCE OF NOVA SCOTIA

APPLICATION FOR DRIVER-EDUCATION COURSE GRANT

e complete three copies of this form. Retain one copy for your records and rd two copies to:

Department of Education
Box 578
Halifax, N. S.

We hereby apply for a grant of $ from the Province of Nova Scotia gh the Department of Education for a Driver-Education Course conducted, in dance with the Departmental policy, in School, from ,19 , 19 for the undernoted students who have successfully completed phases of the Course, and have passed the examinations required for a Nova ia driver's license.

STUDENTS

Number	Name	Address
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		

Date____

**If more space*

Course approved____ Ch

Approved for payment____ Direc

BIBLIOGRAPHY

BOOKS

Adler, Irving. What We Want of Our Schools. New York: John Day Company, 1957.

Barzun, Jacques. The House of Intellect. New York: Harper and Brothers, 1959.

Brody, Leon, and Stack, Herbert J. (ed.) Highway Safety and Driver Education. New York: Prentice-Hall, 1954.

Copleston, F. C. Aquinas. Baltimore: Penguin Book Inc., 1959.

Duncan, Margaret M. and Johnson, Ralph H. Introduction to Physical Education and Recreation. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1955.

Driver Education Specialists, American Automobile Association. Teacher's Handbook for Sportsmanlike Driving. 4th ed.; New York: McGraw-Hill Book Co., Inc., 1962.

Ehlers, Henry, and Lee, Gordon C. Crucial Issues in Education. New York: Henry Holt and Company, 1960.

Fuller, Edmund (ed.) The Christian Idea of Education. New Haven: Yale University Press, 1957.

Gallagher, Donald A. (ed.) Some Philosophers on Education. Wisconsin: Marquette University Press, 1956.

Harris, C. J. Quick Canadian Facts. Toronto: C. J. Harris, Ltd., 1962.

Henry, Nelson B. (ed.) Modern Philosophies and Education. The Fifty-fourth Yearbook of the National Society for the study of Education. Chicago: The Society, 1957.

Hutchins, Robert Maynard. Education for Freedom. Baton Rouge: Louisiana State University Press, 1947.

_____. Some Observations on American Education. Cambridge: Cambridge University Press, 1956.

_____. University of Utopia. Chicago: University of Chicago Press, 1953.

Kane, W. Some Principles of Education. Chicago: Loyola University, 1938.

Kerber, August, and Smith, Wilfred. Educational Issues in A Changing Society. Detroit: Wayne State University Press, 1962.

Livingstone, Sir Richard. On Education. New York: The MacMillan Company, 1956.

Maritain, Jacques. Education at the Crossroads. New Haven: Yale University Press, 1957.

Power, Edward J. Education for American Democracy. New York: McGraw-Hill Book Co., Inc., 1958.

Redden, John D., and Ryan, Francis A. A Catholic Philosophy of Education. Milwaukee: Bruce Publishing Company, 1956.

Rickover, H. G. Education and Freedom. New York: E. P. Sutton and Company, Inc., 1960.

Smith, Vincent E. The School Examined: Its Aims and Content. Milwaukee: Bruce Publishing Company, 1960.

Whitehead, Alfred North. The Aims of Education. New York: the New World American Library of World Literature, Inc., 1949.

Woodring, Paul. A Fourth of A Nation. New York: McGraw-Hill Book Co., Inc., 1957.

REPORTS, ARTICLES AND PERIODICALS

Allgaier, E., and Lauer, A. R. "Preliminary Analysis of the Psychophysical Correlatives of Automobile Manipulation," American Journal of Optometry, XVIII (February, 1941).

Bowman, Leonard S. "The Need and the Planning." Saskatchewan: Saskatchewan Safety Council, 1962. (Mimeographed).

Canadian Highway Safety Council. "Driver Education and Training." Ottawa: Canadian Highway Safety Conference, 1961. (Mimeographed).

Cattell, Raymond B. "Learning Theory, Personality Theory and Clinical Research," The Kentucky Symposium. New York: John Wiley and Sons, 1954.

Center for Safety Education. Research in Safety Education. New York: National Safety Council, 1961.

Croskery, George C., and Nason, Gerald (ed.) Canadian Conference on Education. Ottawa: Mutual Press, 1958.

Dunsworthy, Derm. "The Truth About Teenage Drivers," Star Weekly Magazine, (September 24, 1940).

Kempster, Warren A. A Teenage Pattern. Published by the Marketing Research Division of Allstate Insurance Company, 1960.

Key, Norman. Status of Driver Education in the United States. Washington: National Education Association, 1960.

Labelle, H. J. "Philosophy of Education." Saint Mary's University, Halifax, (Mimeographed for private circulation), n.d.

Lauer, Bernard I. "The Effects of Driver Education on Driver Knowledge and Attitudes in Selected Schools of Indianapolis and Marion County." Unpublished Ph.D. thesis, Indiana University, 1956.

National Commission on Safety Education. Policies and Practices for Driver Education. Washington: National Education Association, 1953.

_____. Research Needs in Traffic Education. Washington: National Education Association, 1956.

_____. Policies and Practices for Driver Education. Washington: National Education Association, 1960.

_____. Status of Driver Education in the United States. Washington: National Education Association, 1961.

National Education Research Division. A Critical Analysis of Driver Education Research. Washington: National Education Association, 1956.

Nova Scotia. Motor Vehicle Branch. Annual Report of Registrar of Motor Vehicles, 1961.

Schulzinger, M. S. "Accident Proneness," Industrial Medicine and Surgery, (April, 1954)

Stewart, Freeman K. (ed.) The Aims of Education. Ottawa: Canadian Conference on Education, 1961.

Tillman, William Anthony. "The Psychiatric and Social Approach to the Detection of Accident Prone Drivers." Unpublished Master's thesis, University of Western Ontario, 1948.

Wong, W. A., and Hobbs, G. E. "Personal Factors in Industrial Accidents: A Study of Accident Proneness in An Industrial Group," Industrial Medicine, XVIII (July, 1949), pp. 291-294.

PAMPHLETS

Allstate Insurance Company. "Killer Horses." Toronto: n.d.

Allstate Insurance Company. "Safe Driving Must be Taught." Toronto: n.d.

General Motors. "We Drivers." Detroit: Public Relations Staff, 1958.

Metropolitan Life Insurance Company. "How To Be A Better Teen-Age Driver." Ottawa: n.d.

Ontario Department of Transport. "The Case for Driver Instruction in Ontario's Secondary Schools." Toronto: n.d.

The Ford Motor Company. "Seat Belts." Toronto: n.d.

The above pamphlets are but a sampling of the many which were used in preparing this thesis. Such pamphlets are readily available from:

Canadian Automobile Association

Canadian Highway Safety Council

Chrysler Corporation of Canada Limited

Insurance Institute for Highway Safety

Nova Scotia Highway Safety Council

Provincial Motor Vehicle Branches

The Travellers Insurance Companies

OTHER SOURCES

Canadian Broadcasting Corporation. "The Age of Wheels." "The Twentieth Century," (Television Series), April 19, 1964.

Letter from C. C. Holman, Public Relations Manager, Allstate Insurance Company, Toronto.

Letter from C. E. Laybourne, Director of Safety Education, Ontario Department of Transport.

Letter from Professor Harry D. Fletcher, Driver Education Specialist, Institute of Public Safety, Pennsylvania State University, Pennsylvania.

National Safety Council Driver Education Support Materials. Personal papers of Harry D. Fletcher, Driver Education Specialist, Institute of Public Safety, Pennsylvania State University, Pennsylvania.

Personal interview with Doctor M. E. Keating, Superintendent of Schools, Halifax, N. S.

Personal interview with Ian K. Forsyth, Superintendent of Schools, Dartmouth, N. S.

Personal interview with Magistrate Nathan Green, Halifax Traffic Court, Halifax, N. S.

Personal interview with Lawrence Delbridge, Nova Scotia Safety Council, Halifax, N. S.

Personal interview with Doctor A. Morrison, Director of Curriculum, Department of Education, Halifax, N. S.

Personal interview with Doctor James Hammerling, Eye Specialist, Halifax, N. S.

Personal interview with Doctor Hand, Eye Specialist, Halifax, N. S.

Talk given to a Y.M.C.A. Driver Education Course on "Insurance" by L. Moir, Halifax, October 12, 1963.